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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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TABLE OF CONTENTS.—The list of Contents in this issue of the "Farmer's Advocate" will be found on the page preceding the Home Magazine department.

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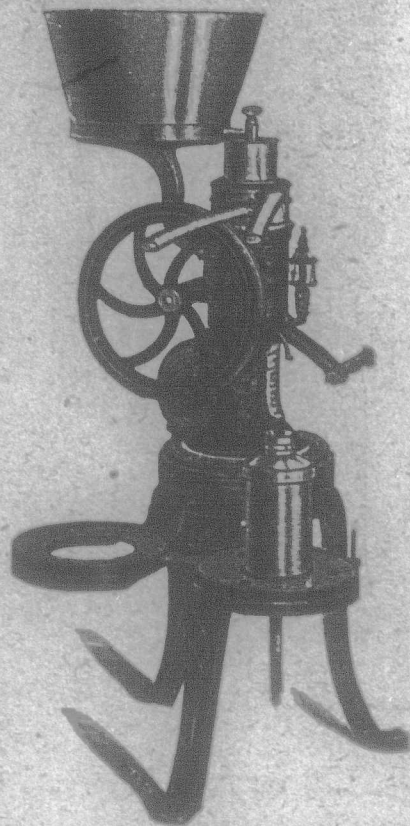
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NATIONAL.

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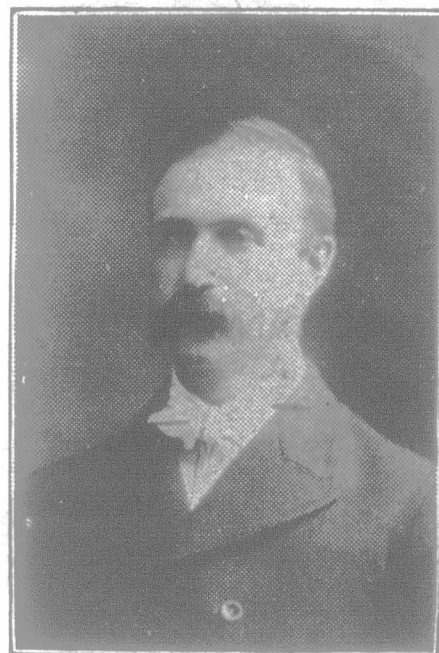
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Farmers' shipments a specialty.

DON'T HESITATE TO WRITE OR WIRE US FOR INFORMATION OF MARKET CONDITIONS, or send name and we will mail you our weekly market report.

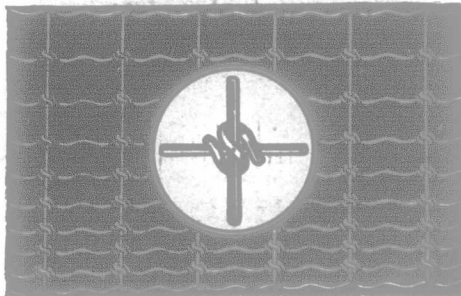
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GOSSIP.

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At the harvesting of the crop, the senator was amazed to find that the darkey had not kept to his part of the agreement, for, while he hauled away three wagon-loads of produce, he had not sent a single one to the senator's barn. Tillman called the negro's attention to the fact that he had taken the entire crop, asking:

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"You was, Massa Tillman, you was," excitedly exclaimed the darkey; "but dere's only three loads, sah, only three loads!"

A well-known judge who is as famous for his wit as for his corpulency, was much disturbed in mind by his tendency to ever-increasing stoutness. He tried many remedies, but without any success. At length a friend suggested that he should take a course of treatment at certain hot springs. He immediately set out for the place, sojourned for a few weeks at it, managed to get rid of a good deal of his superfluous flesh, and returned home in a most happy and jocular frame of mind.

On the first morning after his return, when he was wending his way to the court-house, he came to the butcher's shop where his family were supplied with meat. Marching inside, he said:

"Cut me off twenty pounds of pork." The butcher sharpened his knife and at once complied. The judge looked at the meat for a minute or two and then walked off.

"Shall I send the pork to your house, my lord?" inquired the butcher, who felt that the judge had overlooked instructions.

"Oh, no," was the reply, given with a smile, "I don't want it. I have fallen off just twenty pounds, and I only wanted to have an idea of how much it was!"--[Selected.]

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A TRIUMPH OF PERFECTION--RIGHT UP TO DATE

Not only the

CLEANEST SKIMMING SEPARATOR THE WORLD HAS EVER SEEN,

But the

HANDIEST AND EASIEST OPERATED

The 1904 Model U.S. Cream Separator has the only practical

LOW SUPPLY CAN.

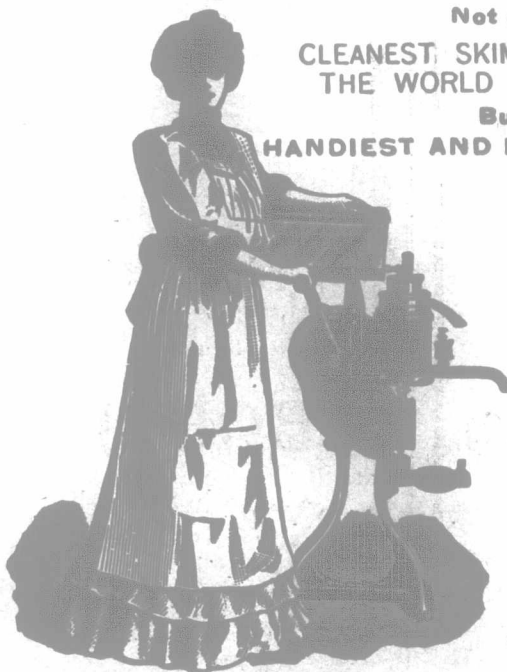
Has clutch bushing; no lost motion; and the gearing stops when crank is released.

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Built for service and efficiency.

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You will Buy None but the U.S.



Catalogues free for the asking.

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METAL CEILINGS

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Here's the Point:  
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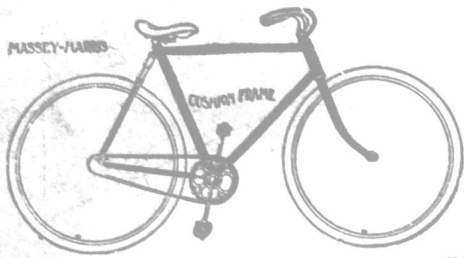
FROST LOCK

Frost Wire Fence Co., Ltd.,  
Welland, Ont.

Cleveland, Ohio.

Winnipeg, Man.

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MORE COMFORT  
COASTER BRAKE  
LESS WORK**

A boy in Claybank, Ont., says: "You may ride down a stony hill on a cushion-frame bicycle with your pockets full of apples and they won't shake out." He rode a

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The Coaster Brake saves pedaling and leaves the wheel to glide along of itself.

Write for catalogue with handsome photographs, illustrations and views.

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Limited,  
TORONTO JUNCTION.

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DeLAVAL CREAM SEPARATORS ARE THAT  
Catalog free

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FOUND IN EVERY HOME.

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## BOECKH'S BRUSHES

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The name "BOECKH" is found upon each brush. None genuine without.

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The best and cheapest

FOR HOUSE, BARN  
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Let us hear from you. We can save you money. Say what style of a wheel you want and we can fill your order. o

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We offer you now TWO MILLION ACRES to Select from

IN THE FOLLOWING WELL-KNOWN DISTRICTS

**The Famous Saskatchewan Valley**—the best known district in Western Canada.

**The Big Quill Lake Plains**—equal in every respect to the great Portage Plains of Manitoba.

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**The Dauphin Lake District**—unsurpassed in fertility.

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**The Great German Catholic Colony District in Saskatchewan**—the largest in Canada.

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**WITH WHEAT \$1.00 A BUSHEL,** the American farmer regards lands that will produce from 20 to 35 bushels of wheat per acre worth not less than \$40 an acre. The prices at which we are selling such lands explains why the American farmer is coming to Western Canada. We are the only land company in this country to-day offering to the intending purchaser such a wide range of territory to select from. We do not have to convince you of the value of this privilege of selection. All lands are accessible to railroads, and at the present time there are four railroads actually building in our territory, and the surveyed line of the Grand Trunk Pacific runs directly through the center of our lands.

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Prices from \$5.50 to \$8.00 Per Acre, on Easy Terms.

DO NOT BUY OR LOCATE ANYWHERE UNTIL YOU HAVE WRITTEN US. WE HAVE THE LAND YOU WANT.

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305 JACKSON ST., ST. PAUL, MINN.

**GOOD LIVE AGENTS WANTED.**

Please mention this paper when writing.

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# The Farmer's Advocate

## and Home Magazine.

"PERSEVERE AND SUCCEED."

ESTABLISHED 1866.

VOL. XXXIX.

LONDON, ONT., AND WINNIPEG, MAN., MAY 12, 1904.

No. 607

## EDITORIAL.

**The Duty of the Veterinary Profession.**

It might be assumed by some people that the entire cause for the lower standard of veterinary education in Canada rested with the veterinary college now in existence in the Queen City. Such, however, is not the case. Whatever may have been true in the past does not exonerate the profession from not taking a more active interest in the advancement of the profession. In other words, now that the University of Toronto and the Veterinary College have decided on a higher training in future, it is up to the veterinarians throughout Canada, and especially those in Ontario, to do something more than has been done.

No profession in Canada has been so lethargic, so utterly indifferent to progress, as has the veterinary profession, too many seemingly being contented with food and clothing, beyond which they did not care. That the profession had no social standing, and that to enter it branded one either as lacking in aims or with a predilection for liquor and fast horses, never seems to have dawned on the comprehension of many; consequently, the need for improvement was not heeded. The duty of the profession is therefore to get together and go to the Legislatures in the various Provinces and have enacted such legislation as will ensure no college being allowed to turn out veterinarians short of three years, and with the educational standing as laid in the University statute; and that no graduate from a veterinary college whose course is below the standing above mentioned be allowed to practice in Canada.

Then, many Toronto graduates go to the States to take up further studies, yet many of the three-year schools on the south side of the boundary are not what they should be by any means, being only nominally three-year schools with a corresponding standard; in fact, the only schools living up to their professions of high standard are the State-supported schools, such as Cornell, Iowa, Pennsylvania and Ohio. If, then, legislation is passed making it illegal to run a veterinary college of a standard inferior to the University statute, no hardship will be inflicted on the Toronto institution, which we understand will rise to the desired standard, but which could not be expected to raise the standard if colleges of the present low standards and type were permitted to exist and grind out graduates. Veterinarians, get together, put your shoulders to the wheel and your duccats into the hands of competent men to secure the necessary legislation at the next session of the Ontario and Territorial Legislatures.

Veterinary associations should not be condemned for contributing moneys for the erection of monuments to dead veterinarians, yet we hold that a monument in the form of legislation advancing the standard of veterinary education in Canada is much to be preferred; the dead past is gone, the living present is here, and the to-be-born future is drawing nearer, therefore concentrate on the desired end and fight (if necessary) until the requisite legislation is placed on the statute books.

**Preparing for a Corn Crop.**

The time will soon arrive when preparations for corn planting will be in order. This crop is steadily growing in favor in Canada, and most farmers now regard it as essential to the best success in feeding cattle, either for beef or for dairy production, while for young stock, as for all, it is, we believe, the cheapest and most economical fodder crop grown. The great amount per acre of palatable, succulent and nutritious food produced makes it easily, when ensilaged, the most desirable of cattle foods, while in districts where it ripens uniformly the shelled grain is most profitable to sell or to be used for fattening purposes, and the dried stalks can also be used to good purpose as fodder.

Fall-plowed land intended for corn will be all the better for being harrowed and lightly cultivated any time after this date, to keep the soil friable and to conserve moisture, as well as to start the germination of weed seeds, that they may be destroyed by the following cultivation. If manuring has not been done in the fall, or by top-dressing during the winter or early spring, fresh manure from the barnyard, if not too long or strawy, may be worked into the land by surface cultivation, and the seed sown without spring plowing. We have seen splendid crops grown with this preparation. If the land must be plowed, let it not be too deeply; use the roller freely on the fresh-plowed land a few hours after plowing, and before harrowing and cultivating, as this will reduce the soil to a fine tilth quickly. If a heavy rain comes before planting-time, causing the soil particles to run together, cultivate and harrow again before sowing. For ensilage corn, the common practice is to sow with the grain-drill in rows, not less than three feet apart, and not more than one-half bushel of seed to the acre. One peck is enough, if the seed is sound and germinates, and comes up regularly. If it is too thick, and the plants should not be less than one foot apart, repeated harrowing after it is up will do the thinning to some extent. Harrowing after planting, before the corn is up and afterwards, has an excellent effect in cleaning the land of weeds, letting the air into the soil, and keeping the moisture in it, thus giving the corn a good send-off in the early days of its growth.

Many of the most successful corn-growers for ensilage, as well as for ripened grain, prefer planting in hills, three and a half or four feet apart each way, and cultivating both lengthwise and crosswise of the field, claiming that even for ensilage they get nearly as great bulk of stalks and much better matured corn, which is acknowledged to add greatly to the sweetness and feeding value of ensilage, and to its keeping quality as well. Planting in hills requires similar preparatory cultivation to that in drills, but the land must be marked off in squares, and the seed dropped at the intersection of these markings, or, better, two or three inches from it, by means of a hand planter, or by making a hole with a hand hoe, dropping the seed from the hand and covering with the hoe. In either case it is said to be a good plan to press the ground over the seed with the foot, firming it to hasten germination and to prevent crows from scratching out the seed. Owing to the United States corn harvest being late last year, and the season wet, much soft corn resulted. It will be well to be careful to secure dry, sound seed, and it would be prudent to test its vitality before the sowing season arrives, which

may be readily done by the simple practice outlined in an article on the subject on another page in this paper.

**Managing Hired Men.**

It may be safely said that the greatest difficulty in connection with the labor problem to-day is not merely in being able to secure laborers, but in managing them properly after they are employed. Few men are born leaders of their fellow men, it is true, but the ability to properly manage hired help on the farm may be acquired and practiced very successfully by the exercise of a little common sense.

There can be no doubt that a great many difficulties that arise between employer and employed are due to lack of intelligence on the part of the latter, and to overcome them is not, of course, altogether within the power of the manager of laborers. On the other hand, it is very true that some men will get a great deal more work and satisfaction out of an employee than will others.

To begin with, men should be taught to take an interest in their work. No matter whether it be deepening a ditch or constructing a farm building, the one who can be induced to feel that he is responsible for a work that is worthy of being well done, will do better work than another not so encouraged. In this connection, too, every farmer should adopt the habit of teaching his men how to do things. It is not necessary to wait until a certain piece of work is about to be performed, to begin an explanation of how it ought to be done. Every farm should be to the hired man a school of instruction, fitting him for better work and higher wages.

Another strong factor in teaching hired men to be interested in their work is the adoption of a system of regular work, and the time at which the day's labors should begin and end. In seed time and harvest, including threshing, there is every reason for rushing work at the highest possible rate, but if men are to work from daylight until dark they should know it at the time of their engagement, and be paid accordingly. Nature will only allow a man to do so much, and if he must be kept going for sixteen hours he can certainly not do an honest hour's work every sixty minutes.

While it is only the observance of a sound business principle that farmers be exact in insisting that their men do honest work according as they were engaged, yet occasionally difficulties arise through men being expected to do an unreasonable amount of work in a short time. The hired man should not always be treated as a mere slave. Encourage him to rise above the level of those who by choice would be all their days hewers of wood and drawers of water for others, and thus aid in developing in Canada an enlightened and homogeneous agricultural people. Our fields are broad, and our acres plentiful, and is it not best to be educating a fellow man to become capable of erecting a happy home of his own, and to cultivate more of the unbroken prairie, even if you should be at the loss of a good man? There can be no nobler ambition among men than to help another to a more useful life.

# THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED WEEKLY BY THE WILLIAM WELD COMPANY (LIMITED).

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JOHN WELD, MANAGER.

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### The Reason Why.

Everybody is Pleased with the Weekly "Farmer's Advocate and Home Magazine."

James Ellis, Middlesex Co., Ont.—I think the "Farmer's Advocate" is the best paper for the farmer, for agricultural news, that he can get. Am more than well pleased, and often wonder how you can get such good reading together in such a short time.

Ben. Briggs, Melvin, Mich.—I think a great deal of the "Advocate." It is the best farm paper I ever saw. I am glad you have the Quiet Hour in the farm paper. It must do much good.

James E. Dickie, Renfrew Co., Ont.—I overlooked sending my subscription in earlier, but we could not be without the paper, nor can any one that lives by toil. May God bless the "Advocate" and its staff.

Wm. Fieghen, Jr., Grey Co., Ont.—Enclosed find \$1.50 to apply on a year's subscription for Mr. Samuel White. Mr. White wanted a paper that would be up to the times, and I told him he had better let me order the "Farmer's Advocate" for him and he would have a paper up to the times all right.

L. Copeland, Muskoka Co., Ont.—Enclosed find \$1.50 for your valuable paper. I believe it is the best farm paper I have seen.

A. Millson, Durham Co., Ont.—We would not like to do without the "Advocate." It is a welcome visitor every week.

F. R. Breckon, Halton Co., Ont.—No matter how busy a man is, fifteen minutes spent reading the "Farmer's Advocate" after dinner is time gained, not lost.

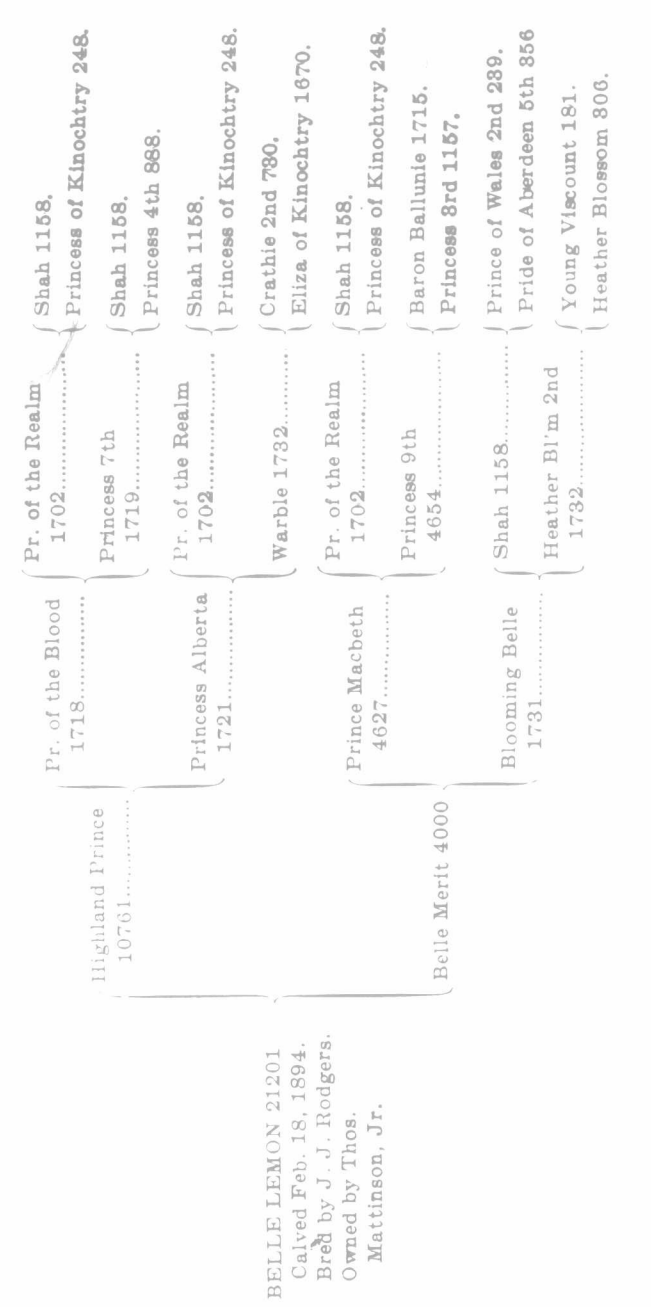
Jas. W. Calvert, Bruce Co., Ont.—Enclosed find \$1.50, my subscription to your valuable paper, which I am very much pleased with. I think the present system far in advance of that of previous years.

### Are Your Cattle Well Bred?

"What a question to ask a breeder of pure-bred stock!" everyone will say, and yet it is a pertinent one. If your cattle are well bred, how do you make other people believe your statement?

You refer them to the herdbook, your catalogue, and you produce the certificate issued by the herdbook association, and as time is money, and sufficient herdbooks are not accessible to every person, they have to depend on the certificate and the catalogue. The certificates issued by the herdbook associations should show the animal's breeding, yet it does not, only a portion of the pedigree and breeding is shown. Suppose we go back four crosses (the influence of ancestors further back, unless in exceptional cases, amounts to very little), we find that it is possible that thirty different animals have contributed to the breeding, yet the catalogues and certificates issued nowadays show only eight ancestors, out of a total of thirty, consequently the herdbook certificate gives only one-fourth, approximately, of the information it should regarding an animal's pedigree, and that within the four top crosses. Under the present-style pedigree certificate it is possible for an animal to be very much inbred and yet the certificate would not show it.

The usual pedigree certificate shows nothing whatever of the sire's breeding, nothing of the first dam's sire's breeding, and nothing of the first dam's dam's sire's breeding, and so on; yet the present-day certificate shows a string of bulls, tracing back, as we have seen in some Shorthorn pedigrees, to a son of Hubback, who lived and begat cattle 120 years ago, away back in the 18th century (this is the 20th century), and by some misguided people, usually beginners, the value of a pedigree, and, therefore, the animal's value, is measured by the length of that pedigree. We believe that the extended form of pedigree is the only sensible one, as it affords the information such should afford to prospective buyers and breeders. A comparison of the two forms of certificate is shown here, and it will be at once apparent to every reader and thinking person, the immense advantage of the extended form over the old form yet in use in Canada. The pedigree given is that of an Aberdeen-Angus cow, Belle Lemon 21201, of the Heather Bloom family:



It will at once be seen that in the fourth cross this cow is four times inbred to Shah 1158, and three times to Princess of Kinlochry 248, and that in the third cross Shah 1158 appears again, which heavy inbreeding would not have been shown in the form below, which is the form in which the certificate is usually issued:

BELLE LEMON 21201. Calved, Feb. 18th, 1894; the property of J. J. Rodgers; owned by Thos. Mattinson, Jr. —By Highland Prince 10761 Dam, Belle Merit 4000 Prince Macbeth 4627 G.D., Blooming Belle 1/31 Shah 1158 G.G.D., Heather Blossom 2nd 1732 Young Viscount 181 G.G.D., Heather Blossom 806 Elector 103, etc.

In the above form, that in general use, Shah 1158 only appears once, whereas that bull contributed five times to an ancestry of thirty members. Added value would be given in the pedigrees of parti-colored cattle (e.g., Shorthorns) if the color of each animal was given in the extended form; it would be a guide to future matings. Of course color is not the main question to be considered in mating, yet no breeder of Shorthorns can afford to disregard the question; color often influences the market price. We may add that we have seen catalogues gotten up in the extended pedigree form by breeders of Herefords and Angus cattle south of the boundary. No doubt many of our breeders will think the change too radical, yet we venture to suggest that the true breeder, of which we unfortunately have but very few as yet, will agree with us that the move is along right lines, and will assist in solving the problems which crop up from time to time to vex those engaged in the moulding of animal types to their betterment.

### Sustain the Beet-sugar Industry.

The fact that Canada consumes approximately some 200,000,000 pounds of sugar annually, which quantity will keep increasing with the rapidly growing population of the country, shows the possibilities that lie in the production of sugar beets on the farm. Late Canadian Government returns give the value of sugar imported during 1903, and the countries from which it came, to have been as follows:

Great Britain	\$ 184,203
United States	439,488
Australasia	145
Austro-Hungary	38,994
Belgium	430,763
British Guiana	571,481
British West Indies	1,444,122
China	1,592
Dutch East Indies	410,976
Danish West Indies	203
Fiji	231,333
France	153,741
Germany	3,118,296
Holland	40,056
Hong Kong	22,958
Italy	1,128
Peru	157,829
Switzerland	117
Turkey	240
West Indies (American and Cuban)	286,918
Other countries	1,307
\$7,535,890	

From the foregoing it will be seen that Germany, where the beet-sugar industry has been so long and so successfully developed, contributed almost one-half of the sugar imported into Canada, and more than twice as much as her next rival, the British West India Islands. It has already been demonstrated in the experience of Canadian farmers, that the sugar-beet crop is a most profitable one. It takes little from the soil, and it compels good clean farming. The by-products, such as "beet pulp" and "molasses cattle-food," have been proved to be very valuable in feeding fattening cattle and other live stock. The results of a feeding experiment, given in another column, will repay perusal.

Mr. M. H. Miller, writing on the subject of the quality of Canadian sugar beets, says that he has never met with their equal, except in California and Colorado. Last season, in spite of most unfavorable and unusual conditions, the Wiarton factory was able to show an extraction of 240 pounds of beautiful white granulated sugar from a ton of beets, which was only possible with beets of high quality, both as regards percentage of sugar and purity. Not only should the industry be backed up for the reasons given, by the production of sufficient beets by the farmer, but it is one that deserves well at the hands of the country generally, on the ground that it sustains a competitor with the monopolistic sugar refiner.

## HORSES.

**The General-purpose Horse.**

I have noticed several short letters in recent numbers of the "Advocate," on "What constitutes a general-purpose horse." In these articles the writers appear to consider that weight classifies; that a horse between 1,250 and 1,350 pounds is eligible for the class, but those either under or over these weights should be sent to the barn, if in competition. Now, for show purposes, where the conditions distinctly state that horses of this class shall be of a certain weight, of course the judge has no option, but must disqualify those that are either below or above the stipulated weight. In my opinion weight has much less to do with the classification than type and general characteristics. Just what constitutes a general-purpose horse," depends, to a considerable degree, upon the individual tastes of the owner, and upon the different kinds of labor he wants him to perform. However, to establish a uniformity of opinion of the necessary characteristics of the class, it is necessary that some definite type be recognized. The "general-purpose horse" is commonly understood to be an animal that is essentially a farmers' horse, and in order to avoid confusion, and explain to probable exhibitors what shall constitute a horse of this kind, where prizes are offered, the society offering the prizes usually define him in some such words as these: "A general-purpose horse is one that is suitable to go in a plow, wagon, carriage, buggy, or under saddle." In some cases weight is designated; in others not. I think it wise to mention a minimum weight, as a horse under at least 1,200 pounds certainly has not the necessary strength to give satisfactory service to a plow in heavy land, or hitched to a loaded wagon; but I do not think the maximum weight should be 1,350 or even 1,400 pounds. So long as the horse has the desired characteristics as regards type, action and manners, it is hard to limit the weight at which he ceases to be a general-purpose animal and becomes a member of another class. Neither are we justified in classifying all horses of 1,250 to 1,350 pounds as general-purpose horses. We frequently see Standard-breds, Hackneys, carriage horses, coach horses, and not infrequently Thoroughbreds, that weigh more than 1,250 pounds, and we cannot, by any system of reasoning, classify a fairly typical animal of any of these classes as "a general-purpose horse." On the other hand, we occasionally see a horse of the draft type—it may be Clyde or Shire, Percheron, Suffolk, or other draft breed—that does not weigh more than 1,350. As with the lighter classes, we cannot classify these as "general-purpose." The objection to this argument may be taken, that a horse of the draft type that does not weigh more than 1,350 is not typical. We admit that as regards weight, but in some cases he is typical in other respects, and while too small for his real class, it would be utter absurdity to call him "a general-purpose horse." Again, we may have two horses of the same type—the type we accept as correct—the same breeding, probably full brothers, one weighs 1,350 and the other 1,400 pounds. Are we justified in a case like this in disqualifying a team of typical horses because one exceeds by 50 pounds the maximum weight of 1,350? I do not think so. In such a case what class does he represent? He certainly is not an "agricultural horse," even though he be within the designated weight; he is not of the agricultural type, which is essentially the draft type. In my opinion, the agricultural horse is one with all the characteristics of the draft horse except weight. If we might be allowed to use the term "light draft" in contradistinction to "heavy draft," I think it would express what we want in the agricultural horse. The question then arises, "What shall be the maximum weight for the general-purpose class?" This is not an easy question to answer, but I think at least 1,400 pounds, or even more. A horse of the desired type, but overweight, does not then become an agricultural horse, but is simply (like many horses of different types) a horse that, while probably a useful and valuable animal, does not belong to any recognized class. Of course, agricultural societies should not try to make classes for horses of all kinds, but on the other hand should make classes for the marketable classes, and hence endeavor to encourage breeders to produce such animals as will be valuable both for show purposes and for the market. This reasoning raises the question, "Should societies recognize the class under discussion?" Is he a special type or a misfit? Can he be bred with any degree of certainty, and if so, how? He is of necessity of composite breed, and when we try to produce him the progeny may partake of the special characteristics of either dam or sire, or of some progenitor on either side, more or less remote, and be an animal of a type essentially different from what we expected. Notwithstanding all that may be said pro and con, as to the existence of this class of horse, or as to the advisability of his recognition as an animal of a special class, the fact remains, if we are going to

recognize the class, we should endeavor to establish some uniform conception as to the characteristic type, form and action desired. In my opinion, he should be a horse of the blocky type, between 15½ and 16½ hands, about 15½ most desirable, not less than 1,200 pounds in weight. The maximum weight to, at all events, be not less than 1,400 pounds. His bone should be flat, and of quantity corresponding to his weight, and there should be an absence of feathering; a tuft of long hair on the fetlock pad not objectionable. The reason there should be an absence of feathering is not because a reasonable amount of hair would interfere with his usefulness, and while we want it in the draft horse of the Clydesdale or Shire type, the "general-purpose horse" being required to perform so many and varied functions, looks must be a prime consideration, and while many horses with considerable feathering have very good action, when we see one hitched to a light carriage or buggy, or used under saddle, he looks entirely out of place, as we associate hairy-legged horses with heavy loads, and while he may be as active and light-footed as one without the hair, his looks should condemn him for the class under discussion. He should be rather a stylish horse, neat head and ears, well carried; neck rather long, but very well muscled; withers high and not too broad; shoulder of medium obliquity; back rather short, and loins strong; croup long, and not too oblique; tail well haired and well carried; the forearm rather long and strong; knee strong and straight; cannon broad, strong and clean; pasterns of medium length and obliquity; feet rather round, of medium size and good quality, and he must stand straight on them. The

**Weight of General-purpose Horses.**

To the Editor "Farmer's Advocate":

In your April 7th issue, Farmer Exhibitor asks, "Is the horse of 1,350 pounds a proper general-purpose horse?" and says he is too light. My answer is that a horse 100 pounds lighter, of the right breed and quality, is better than a 1,500 pounds hairy-legged Clyde. If there is one thing above another in horse-breeding that should be kept in view it is compactness, as much goodness as possible in a small space, to enable him to do his work with ease to himself and pleasure to his owner.

F. E. admits that 1,350 pounds would not be too heavy for a saddle or buggy horse. Now, who wants a 1,350-lb. horse for a buggy when one of 1,100 lbs. would be better? Did Colonel Dent, when in Canada buying horses, want them 1,350 lbs. for either heavy or light cavalry? Certainly not. F. E. says, "If the farmer goes to market with any kind of a load he wants a horse of some weight." I don't know what he means by "any kind of a load." The stuff that farmers take to market generally is eggs, butter, and a few chickens. I don't think it requires a 1,500-lb. horse to draw that. At Toronto he "has seen good sound horses of 1,430 lbs. sent to the stable because they were too heavy, and a team getting the prize that never saw a plow or other farming implement." That might be, but at the same time they might be the very best horses when put to it. He says, "We don't need

judge so much to judge the qualities of the class as we need a good, honest weigh-master." I don't hold with that sentiment. If weight and not quality is the consideration, then pile on the fat, and let the scales in the hands of an honest weigh-master be the judge. I agree with him when he says farmers should be encouraged to exhibit their general-purpose teams with some hope of winning a prize, instead of giving the prize to horses sired by Thoroughbred and trotting stallions. I have no faith in the trotter—in the Thoroughbred I have. If Farmer Exhibitor had a slight admixture of the Thoroughbred in his horses, they would be stronger and more active if not 15 cwt. It is well known that a slight admixture of the blood of the Thoroughbred horse has improved the heavy black horse of England. THOROUGHBRED.

Elgin Co., Ont.

**The Foal.**

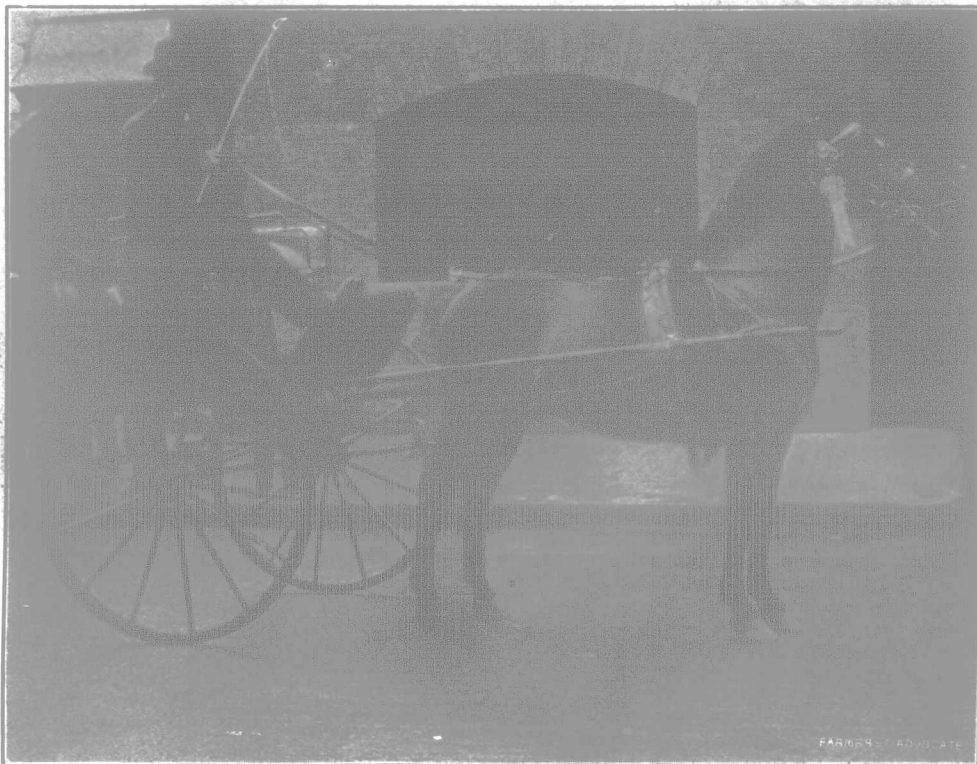
Foals are arriving now. Give the dams a bran mash, ground oats, clean mixed hay, with plenty of clover in it; plenty of pure water, and allow outdoor exercise on fine days. Do not be afraid to work in-foal mares right up to foaling time, but give them at least two weeks rest after foaling, so that the youngster may get a good start. If possible, give the mare two months run without work. Don't neglect to give the in-foal mare a light, roomy, clean box, and don't begin dosing the foal as soon as it arrives. Nature will, in most cases, set them right.

**June Horse Shows.**

Galt and Guelph, Ont., are preparing for horse shows next month. The dates for the Galt show are fixed for June 2nd, 3rd and 4th, and Guelph for 9th, 10th and 11th. Liberal prizes are offered, and it is safe to say the residents of Wellington and Waterloo Counties will have the privilege of seeing some of the very best horses of all classes at these shows.

Young Lady (to very new salesman)—"Have you a book called 'An Essay on Irish Bulls'?" Salesman—"No, miss. We haven't any works on live stock."

"WHIP."



Hillhurst Sensation —58—

First-prize high-stepping Hackney stallion, Canadian Horse Show. See report in last issue. Owned by Mr. A. Yeager, Simcoe, Ont., who was recently offered \$10,000 for him.

haunch, gaskin, hock, must be strong, well muscled and well defined; hind cannon to foot, same quality as fore. His ribs should be long and well sprung; deep through girth; breast moderately wide, and muscles prominent. In fact, he must be a low-set horse, with well developed muscles throughout. In action he must be a good walker; his tread must not have the weight of the draft horse, nor the lightness of horses of the lighter classes. He should trot well also, lifting both fore and hind feet fairly well from the ground; neither paddling nor rolling in front, nor going wide nor interfering behind. His manners should vary considerably. When at heavy work he should have the steadiness of the draft horse, and when hitched to a carriage or buggy, or when under saddle, he should assume, to as great an extent as his characteristics will allow, the manners of the light horse. In all cases there should be an absence of nervousness, fretfulness or excitability. He should be safe under all conditions; he must be suitable for his owner's wife or daughter to drive to market, or for pleasure; or for his little son to ride to the blacksmith shop or post-office, or to market with a basket. Under any and all these conditions he should so comport himself that the ordinary observer will not look and remark that "that horse is not in his proper place." Of course, we do not expect him to be typical of any particular class, but to perform the functions, both in appearance and work, of any class, in such a manner as to not be particularly noticeable under any conditions. Now, sir, you may say that I want something that cannot be produced, but there are many horses of this type, and this is my idea of what constitutes "a general-purpose horse."

## STOCK.

## Abortion in Cows.

By A. S. Alexander, V. S.

## TREATMENT OF THREATENED ABORTION.

—Instantly isolate cow in secluded box stall, and administer one ounce of fluid extract of black haw. If she is restless, add a wineglassful of laudanum. Repeat dose every two or three hours until restlessness and aggravated symptoms subside, then drop out the laudanum and go on with the black haw in half-ounce doses three times daily until vulva purses up and all remaining symptoms of threatened abortion disappear. When cow is again in the condition existing prior to alarming symptoms, she may be returned to the herd, and will then as a rule go through safely to her proper time of parturition. In extremely urgent cases the above-mentioned doses may be doubled, or given once an hour until the desired effect is obtained. Fluid extract of cannabis indica is as effective as laudanum if of first-class quality. It is, however, more expensive and less reliable in quality.

**GENERAL PREVENTIVE MEASURES.**—While we do not consider it possible to kill out the germ present in any cow fully impregnated so that the womb and Fallopian tubes have become invaded, disinfectants may afford some hope of lessening irritation and preventing further contamination or spread of germs to less affected or clean cows. The administration of pure carbolic acid in feed also has been used as a preventive, and we have for years advocated the administration of this preparation in the following way: One-half dram each other day, night and morning, to pregnant cows from first to last of pregnancy, mixing it in water and then with feed, if they will take it that way, or as a drench in water from a bottle, or sprayed upon their hay or other food, or mixed in salt when they are at grass. One dram twice daily every day for cows that have recently aborted, or that have a discharge from the vagina, constituting the disease known as leucorrhœa (whites); in the first instance the treatment to be continued for at least two weeks, and then given every other day until again bred, and in the second instance to be kept up until leucorrhœa disappears. In addition to this precautionary treatment, the cow that has once aborted and is again in calf may be kept isolated and treated with black haw and laudanum for a couple of weeks at the time when she would be liable to abort during the second pregnancy. This time is about one month later than the period at which she aborted during the previous pregnancy.

**EXTERNAL PREVENTIVE MEASURES.**—Scrupulous cleanliness must be maintained in the stable occupied by cows. Every day the vulva, inside of tail and thighs of each cow should be washed, sponged or sprayed with a two-per-cent solution of Zenoleum or similar tar product disinfectant. Gutters should be cleansed daily without moving manure along gutter from one cow to another, and the cleansing should be followed by the free use of a strong disinfecting solution, such as 1-50 solution of Zenoleum, or four pounds each of powdered bluestone (sulphate of copper) and fresh lime in forty gallons of water.

**DISINFECTATION OF BULL.**—After each service the sheath and penis of bull are to be thoroughly flushed or washed with a disinfecting solution. For this purpose, use half a gallon of a 1-1000 solution of chloride of zinc, or two-per-cent. solution of tar product disinfectant. It is best introduced into sheath by means of a nozzle attached to a six-foot length of half-inch rubber hose, fitted to a spout, let into the rim at bottom of a large clean pail, to be hoisted above animal's back by means of a small rope and pulley. Inset end of nozzle in end of sheath. Hold skin tightly about end of nozzle to cause retention of fluid, which should then be allowed to flow in until sheath is distended, when nozzle may be withdrawn and the fluid allowed to gush forth. Repeat the cleansing at least twice at each time of operating.

**TREATMENT FOLLOWING ABORTION.**—When a cow aborts, remove her to a box stall. By means of apparatus already described, flush out womb and vagina with two gallons of milk-warm disinfecting solution (1-1000 solution of chloride of zinc preferred); remove afterbirth by hand—if it does not come away promptly, repeat irrigation of womb once daily for two weeks, then every other day for two weeks, then twice a week until time arrives when cow would have been bred had she not aborted, and at which time she should again be bred if perfectly free from discharge. — [Live-stock Report.

## Well Worth \$5.00 a Year.

I would not be without the "Farmer's Advocate" for \$5.00 per year. It is well worth it to any farmer. Wishing you the very best success.  
Algoma, Ont. JOHN COWLEY.

## Profitable Pigs.

A farm without pigs, writes Mr. W. J. Malden, in the Farmers' Gazette, Ireland, is almost certainly a farm with waste, as there is food which can be best utilized as pig food. The pig is not regarded so universally as a scavenger as it was a comparatively few years ago. This is because improvement in breeding has made it possible to produce a large weight of good quality pork from a small amount of food in a short time; also, because big, old pigs sell badly, the public taste running on small, delicately-flavored pork, instead of the coarse, fat meat of fifty years ago. The threshing machine and grain-binder have, by the cleanliness of their work, lessened the offal grain. Pigs which had the run of the yard in the days of the flail picked up quite a considerable amount of grain when muzzling in the straw. Nowadays, good machines leave less grain than will keep the sparrows, and the binder has almost rendered unnecessary the horse-rake; consequently, there is less stained grain, which used to be the pigs' particular provender, and the stubbles are but little used. In spite of the change which has come about, there is much of an offal nature that pigs will consume profitably, and which if they do not eat is wasted. We like to see a number of breeding sows and a requisite number of young stores turning to profitable account the waste of the farm.

The improvement in the breeding of pigs renders them all the more suitable running as stores, because whenever it is desired to fatten them they can be put on to concentrated food, and are rapidly made ready for pork. The ordinary pig of forty years ago took a long time to fatten, and did not fatten profitably until it was of good age. We think that a good many who advocate fast feeding from birth often overlook the difference between the pigs of their youth and those of modern production. Both rapid feeding and store running before fattening are profitable according to circumstances—just as profit may be got out of baby beef where the animal has been fattened from birth, and also from those which have been kept as stores for a couple of years and then fattened. The fact is, the nature of the food available is the main consideration. A farmer with roots rough grain, dairy waste, and other bulky food generally finds it profitable to allow his pigs to attain a fair size before being put up to fatten; while the man who has less bulky food may find it more desirable to fatten from birth.

In any case, breeding sows require food which they can get by scavenging, apart from that which is more expensive. Overfattened sows do not make the most prolific mothers, nor are their young as strong as are those which are the offspring of mothers which have obtained a mixed diet in scavenging, and have attained vigor from exercise. For our own part, we like a sow to have green food, such as grass, clover, or tares. This has a tendency to purify the blood; and the food material in the forage mentioned mixes well with the starchy trough foods. Mangels and other roots are good for sows, although there are many who have a great objection to them. Succulent food is also good, but if sows receive nothing but corn or barley meal, which are starchy, much of the good which might be done by mangels or turnips is lost. The starchy roots require to be fed with flesh-forming material, not fat-making foods. Where the diet is entirely of a starchy nature, the sows have nothing to build up the frames of their young, nor to renew the loss of muscle. Where it falls to the experience of a breeder that he gets ill-luck in breeding from sows receiving roots, if he looked carefully into the matter he would see that he was trying to make his sows productive on a dietary which renders it impossible to build up a litter and carry it to farrowing.

For sows, we strongly advocate green food, especially clover or pulse crops. Who has done better with sows than when they have had an unlimited run of tares, particularly when the tares are getting ripe? The Canadian pig-keeper, on green clover or lucerne, with a small quantity of corn, runs about the nearest approach to economical pig-breeding combined with health. The roadside sow in England, finding the greater part of its living on grass, is nearly always prolific; and, with this in view, it is strange that there is not more of this carried out in enclosures.

The profitable side of pigs may be found in association with dairying; it may also be said that the profitable side of dairying is found in association with pigs. In the case of buttermaking, there is the buttermilk and separated milk to be disposed of; also, in cheesemaking there is the whey. The public do not recognize the culinary value of separated milk as they should, consequently it is fed to animals. With respect to the disposal of milk wastes to pigs, those from buttermaking or from cheesemaking are of the greatest value. Whey, owing to its fattening properties and small amount of nitrogenous matter, may be fed with more carelessness than can separated milk. While recognizing that milk is not only a valuable food, and an admirable addition to a well-constructed dietary, it cannot be too strongly urged that owing to the large amount of nitrogenous matter it contains, care is needed in arranging a dietary, especially for young pigs. It is too often forgotten that separated or skimmed milk has lost certain of its properties. Nature arranges that milk shall be an all-round food,

and the extraction of the cream makes it a one-sided one. Unless some equivalent be supplied, although a large quantity of skim milk is given, the animal does not get enough fat-forming and heat-giving substance to keep it in health. Well soaked middlings and barley meal make the safest additional foods to be given to pigs when they can first feed, and for a few weeks after if skim milk is also given.

There is little of the profitable side of pigs where the early dietary is badly arranged. Most deaths and ailments come during the fortnight before weaning and the month after. It is then that rheumatism, pneumonia, apoplexy and other ailments attack pigs. The blood becomes poisoned by an excess of nitrogenous matter. It is better to mix the skim milk with water rather than to give it in excess. Where one pig goes wrong through underfeeding many do so through overfeeding. Whey, having little nitrogenous matter, rarely gives trouble, though if fed with excessively starchy foods, such as barley meal, maize, or rice meal, and no nitrogenous food, they do not thrive as they would with the addition of bran or shorts, or even a little bean meal.

As pigs get older they require still more fat-making food. Barley meal is the standard food for the pig-feeder, and a little milk makes it practically a perfect pig food. Green food takes the place of skim milk in supplying nitrogenous matter. Consequently, tares, clover and lucerne are good additional foods for growing pigs.

During recent years the smaller breeds of pigs have fallen into disfavor, in face of the fact that small joints are in such demand. In the first place, they are so much more delicate. The principles of breeding which have been so long applied to the building up of the small breeds have tended to the weakening of the constitution, consequently they are specially liable to contract ailments when young. Beyond this they lay on too much fat in proportion to the lean, and their bacon is wasteful. So far as the indications of early maturity go, they are apparently perfect, but too much attention was given to this, and the other points being disregarded, the larger breeds have ousted them.

The larger breeds of to-day are far different to the larger breeds of a few years ago. The features of coarseness have disappeared. Instead of it being necessary for them to attain maturity before they could be fattened, they can be made up at practically any period of their life. In this way, the larger, more quickly growing breeds can be killed to meet the modern demand for small joints with delicate flavor at any age according to market demand. If left to become bacon pigs they show a good size, with fat and lean in proper proportion. There is no doubt that the larger breeds now belong distinctly to the profitable side of pig-keeping. In the endeavor to attain to early maturity, breeders must be careful how they do it. There is no doubt that, in the aim to secure the outward features of quality, great injury has been done to many strains of the Berkshire, and the repute of the whole breed has suffered in consequence. The large breeds, such as the Large White and the Large Black, make excellent farmers' pigs, and to them, in the present condition of the trade, we look to the greatest profit. They can be run as scavenging stores before being fattened, or can be brought to early maturity.

## Rape for Swine.

Prof. Carlyle, late of the Wisconsin Station, from the results of his investigations, draws the following conclusions:

1. That with pigs from four to ten months old, an acre of rape, when properly grown, has a feeding value when combined with a ration of corn and shorts, equivalent to 2,436 pounds of a mixture of these grain feeds, and a money value of \$19.49 per acre.
2. That rape is a better green feed for growing pigs than good clover pasture, the pigs fed upon the 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.
3. The pigs are more thrifty, have better appetites, and make correspondingly greater gains when supplied with a rape pasture in conjunction with their grain feed than when fed on grain alone.
4. That a plot of Dwarf Essex forage rape, when planted in drills thirty inches apart, early in May, in Wisconsin, will yield three good crops of pasture forage in a favorable season.
5. That rape is the most satisfactory and cheapest green feed for swine that we have fed.
6. That every feeder of hogs should plant each spring a small field of rape, adjoining his hog yard, and provide himself with a few rods of movable fence, to properly feed the rape to brood sows and young pigs.
7. That rape should be sown for this purpose in drills thirty inches apart, to facilitate the stirring of the ground and cultivation after each successive growth has been eaten off.
8. That hogs should not be turned upon a rape pasture until the plants are at least twelve to fourteen inches high, and that they should be prevented from rooting while in the rape field.
9. That rape is not a satisfactory feed when fed alone, when it is desired to have any live weight gain made in hogs, though it has been found that they will just about maintain themselves without loss of weight on this feed alone.



### Dr. Alexander on Warbles.

The grub is the larva of the ox warble-fly (*Hypodermis bovis*), and was "taken into" the system last summer during fly-time. The Government entomologists would have us believe that the eggs of this fly are deposited upon the hair of the chest and legs of cattle, are licked up and swallowed by the cattle, and eventually hatch out into little grubs, which penetrate the walls of the stomach, and then wiggle through the tissues until they arrive under the skin. The writer was taught differently years ago by that noted entomological authority, the late Miss Eleanor E. Ormerod, of England. She, with other entomologists of her day, claimed that the eggs were deposited under the skin of cattle by means of the "ovipositor" of the fly; that they there gradually attained full-size, and by the irritation induced the formation of pus and lymph about the abscess and under the skin, which led butchers, seeing the condition on skinning the animal, to use the term "licked beef" in speaking of such beasts. The fact that such a collection of inflammatory material is found under the skin shows that the grubs cause great irritation, and, necessarily, pain and misery to the host. When badly infested, steers have failed to fatten and cows to give a full flow of milk, while hides are injured seriously in price by the holes consequent upon the presence of these pests. We can the better understand the misery of the infected steer when it is remembered that the grub is supplied with some stiff bristles with which to irritate the tissues within reach, apparently for the very purpose of inducing secretion of pus and diffusion of lymph, which probably supplies the sustenance of the parasite. At this time of the year, feeding cattle and cows should be examined for the presence of these grubs, and means should be adopted for their removal and destruction. When fully "ripe" the grub may be squeezed out between the fingers and thumb, but a better way is to apply a nut key over the tumor and bear down hard, when—pop goes the warble! The grub should be destroyed under foot, else it will assume the form of a pupa in the ground, and later emerge an imago or perfect insect to carry on its mischievous work. Injecting a few drops of turpentine into the orifice of the tumor will also kill the grub, and the same end is attained by smearing with mercurial ointment. In using the latter preparation, however, care will have to be taken to prevent licking, as the ointment is poisonous, and the objection to both plans of treatment is that the carcass of the grub is left within the tumor to act as a foreign body and continue the formation of pus and other products of decomposition and irritation. Any application that will keep flies from settling on the backs and legs of cattle in summer will tend to prevent the formation of these warbles, whether the eggs are deposited under the skin or upon the skin, and some such attempt should be made to lessen the trouble. Miss Ormerod also advised washing the backs of cattle with strong brine in late summer and early winter as a preventive of warble formation. This we think should be done, but a strong solution of coal-tar disinfectant might prove even more effective than brine. We still incline to the belief that the eggs are deposited under the skin, and for that reason have faith in external applications. It is sad to confess that we cannot fully stomach the life-history of the warble grub as taught by modern authorities, but such is the case, and we have yet to find the man who has discovered a grub in transit from the stomach to its eventual lodging-place under the skin. Grub taken into the belly is something every feeder knows more about to date!

[A free translation of the scientific name given the warble fly is evidence that the scientists giving the name believed that the cattle hides were punctured by the fly and its eggs deposited beneath the skin.—Ed.]

### The Faker Still Tramping.

O'Neil Bros., Southgate, Ont., write: "We are in receipt of a letter from a Simcoe County breeder stating that he recently had a visit from a dark-complexioned man, under medium height, with dark, sharp eyes, and wearing a moustache, also small finger crooked, representing himself to be one of the firm of O'Neil Bros., of Southgate, Ont., and wanting to buy Hereford cattle. This is the same crook that you have exposed previously in your paper, that goes among breeders of pure-bred stock and purports to buy some, or, at least, get a few days' board. He is a fair judge of cattle, has pedigrees well off, and has been over the most of North America. He is a brilliant conversationalist, having been in the ranching country of the South-western States, and is acquainted with nearly all of the most prominent breeders, as he could pick out nearly all of them from photos. We would be obliged if you would again publish an article on first page of your valuable paper exposing this rascal, and also announce that we have not been on a purchasing tour in Ontario in the last year, as we do not know to what extent he has used our name and reputation."

I am nearing the seventy-fourth milestone in the journey of life. The "Farmer's Advocate" has been my companion for one-half the journey, and I have everything good to say of it.

Elgin Co., Ont.

ROBERT JONES.

### The St. Louis Live-stock Exhibit.

To the Editor "Farmer's Advocate":

Sir,—I regret that unjust criticism has been directed at Mr. F. W. Hodson, Canadian Live-stock Commissioner, because of the course of the Canadian breeders regarding a national exhibit of live stock at St. Louis. The action of the Canadian breeders was initiated by themselves, through the executive officers of their associations, and their resolutions endorsing the action of Live-stock Commissioner Hodson, and not to make a national exhibit at the St. Louis Exhibition under the conditions offered by the management of that exposition, were passed almost unanimously at the an-



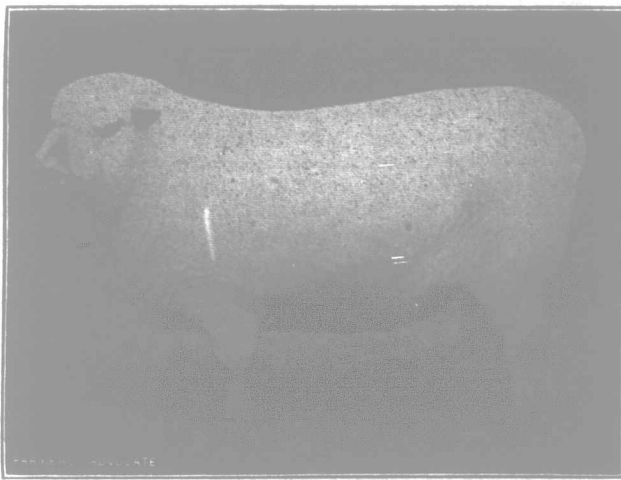
Maramere 18160.

Champion Aberdeen-Angus animal, Dumfries, 1903. Age three years and six months.

nual meetings of those associations, and whether the Canadian Live-stock Commissioner and the representatives of the Canadian Live-stock Associations who went to St. Louis to try to smooth away the difficulties in the way of a Canadian live-stock exhibit were treated by Mr. Coburn with courtesy or not had no bearing on the matter, as their decision had already been made. It may have had the effect of strengthening the breeders in their resolve not to kiss the feet of the man who had insulted them and pick up the crumbs he might throw to them.

I believe the sentiment of the Canadian breeders is that they would prefer to take their chances with the independent sense of justice of the average American, especially the live-stock breeders, in a straight, friendly competition, than submit to any indignity to any branch of the live-stock industry. Some of the obstacles have been removed in a half-hearted way since, and probably as a result of the action of the Canadian live-stock associations.

The conditions of the Exposition did not affect the sheep and swine breeders in quite the same way, and I believe they would have been willing to accept the terms offered—a statement I made to the meeting at the Rosin House, Toronto.



Shropshire Tup.

Championship best Shropshire, Dumfries, 1903. Bred by A. Tanner. Age two-shear.

Our Government informed the deputation who waited on them regarding a grant for the purpose, that a grant to assist in making an exhibit of our Canadian live stock could only be given upon condition that the breeders united and made a thoroughly representative display of our great live-stock interest.

When the conditions of the Exhibition were made so repulsive to the horse and cattle breeders that they decided they could not accept them, those stipulations could not be complied with, and it did not require a very great stretch of patriotism to have the breeders of other lines decide to stand with them, and I do not think there are many of our breeders anxious to humiliate themselves before any corporation.

A. W. SMITH.

### FARM.

#### Beet-pulp Feeding Experiment.

On the 70-acre farm of the Ontario Sugar Company, in Waterloo Co., Ont., near Berlin, there are cultivated annually 12 to 13 acres of sugar beets, but no other roots, except a few potatoes, are grown. Beets follow clover, and are followed by grain seeded to clover. It is not found necessary to summer-fallow to keep the land clean, which is easily done, accomplished as a secondary advantage in beet cultivation. Beet pulp as a stock food is fast growing into favor among the growers, who are allowed pulp free at the factory; or, in other words, f.o.b. cars. Last year (in a little more than two months) the beet-growers teamed away 3,800 large loads to their farms, where it has been fed with splendid results to growing cattle, beef cattle and milch cows. Had the car pulp orders been received sufficiently early before the storms blocked transportation, as many as one hundred carloads would have been shipped to growers outside the county.

To make up our straw into manure, we purchased last winter eleven head of yearling cattle, which were put on a beet-pulp feeding experiment, in which nothing was fed except beet pulp, oat straw and oat chaff. The results are interesting and should be of value, particularly to beet-growers who are within the county, or situated within shipping distances of the factory.

On October 14th, when the experiment commenced, the eleven animals weighed 8,100 pounds, being an average of 736 2-5 pounds. Until snow came (about the middle of November) the animals were enclosed in a two-acre paddock, which contained practically no pasture, and fed pulp only twice a day. They were then dehorned and housed in a box stall, where they received oat straw, oat chaff and beet pulp, morning and evening. No hay or grain was fed, and they took no water. Usually a little salt was sprinkled over the pulp when fed. It was very noticeable all through the six months' experiment, that the animals were at all times perfectly contented and restful, but always ready for their feed.

After three months, on Jan. 14th, 1904, the animals weighed 9,005 pounds, being a total increase of 905 pounds, or an average of 82½ pounds. Two of the animals being heifers, were together weighed and sold. Their weight of 1,740 pounds was deducted from the above 9,005 pounds to obtain the weight of the remaining nine animals, namely, 7,265 pounds. On April 14th, after another three months' feeding on oat straw, oat chaff and beet pulp, the nine steers weighed 8,300 pounds, being a total gain in three months of 1,035 pounds, or an average of 115 pounds.

Taking into consideration that these animals are remarkably thrifty in appearance, these figures show that beet pulp has a very high value as a succulent food for the economical production of growth.

A. E. SHUTTLEWORTH.

#### Sugar-beet Growing!

The best means of producing sugar beets to as near perfection as possible, is a subject that is worthy of consideration, not only from the point of productiveness, but also to encourage a home industry, and making it profitable as well to the individual farmer, who puts forth his energies to obtain the best possible results.

As regards the soil, I prefer land that is not too heavy, thoroughly drained clay loam to sandy soil. Sugar beets will do well after peas, oats, barley, wheat, clover sod and corn, but not after timothy sod or following a root crop. I prefer farm manure to artificial fertilizers, but would advise the latter to give them a quick, strong, healthy start. Still, one can obtain good results from any farm manure not containing too much straw, well rotted and evenly spread. It is better applied in the fall or winter months. If applied in the fall, harrow thoroughly in spring, with the drag-harrows first, then use disk harrow until it is well worked into the soil. The same rule is followed after winter manuring, as early in the spring as ground will permit, without being too wet and cold. The ground should be thoroughly cultivated as early in the spring as possible. Cultivate deep, and harrow, then let it remain until you are ready for sowing, which should be done from the 10th to the 15th of May, first plowing deep, the depth of the ordinary subsoil, but not deep enough to disturb the clay; then disk and harrow thoroughly, and roll, and your land will be ready for sowing.

I use an ordinary force-feed grain-drill, every third tube, which leaves rows about twenty-one inches apart. Still, eighteen inches is sufficient, sowing when the ground is in warm growing condition, using 15 lbs. per acre of seed, and I would advise more rather than less, in order to insure an even catch. Thinning should commence as soon as the plants will allow, without injury to the young plants, using a six-inch hoe, leaving them six inches apart, doing the work thoroughly, and leaving but one plant in a place, not allowing any weeds to remain undisturbed near the plants. Cultivate as often as possible, especially after each shower of rain, which will help to conserve the moisture and also keep the weeds in check. Continue

to do so until the growth of the leaves will not permit, using a one-horse lever cultivator with knives attached to the back, removing both outside teeth, and using one in the center in front.

As to the amount of acreage to grow on an average one-hundred acre farm, it would depend largely upon the amount of help available—not exceeding from two to ten acres.

One of the most essential things is to do your work thoroughly, and go about it in a regular business way, and there is no doubt one will be well rewarded for his efforts.

EDWIN L. ALLEN.

### Alfalfa as Fodder.

The merits of alfalfa clover as a soiling crop, to be cut green and carried to the stables, or to be cured for hay, are not known and appreciated in this country as they should be. There is no other fodder crop that grows so rapidly in spring and is ready to cut for soiling purposes at so early a date, while its feeding value is of the highest order. It is a crop that once well set in suitable soil will stand for several years without re-seeding, and may be cut three times each season, yielding a large amount of valuable fodder. It makes the most palatable of hay if cut before it gets ripe, and all classes of stock relish it and thrive upon it. For the best results, alfalfa should be sown alone, not mixed with other grasses, as it ripens before any other variety, and must be cut when about one-eighth of the heads are in bloom, and before the stalks begin to get woody. It should be sown as early in the spring as the soil is in fit condition to work well, but on a well-prepared seed-bed; any time about the middle of May is a suitable time to sow. It is preferable to sow it alone, at the rate of 20 lbs. to the acre, without a nurse crop, but if a nurse crop of oats or barley is sown with it, the nurse crop should be sown thin, not more than one bushel per acre, and cut for hay before it is ripe, in order to give the alfalfa a fair field in which to prosper. If sown alone, it may be cut once the first summer; if with a nurse crop, it should neither be cut nor pastured the first year, if the best conditions for future usefulness are desired. An acre or two of alfalfa near the barns will be found a great convenience for early cutting of green feed for horses, or for young cattle kept in stables, while with a piece of portable fence a part of the plot may, with great advantage, be fenced off as a pasture for pigs, calves or lambs, for all of which it provides first-class forage.

### Drainage Controversy.

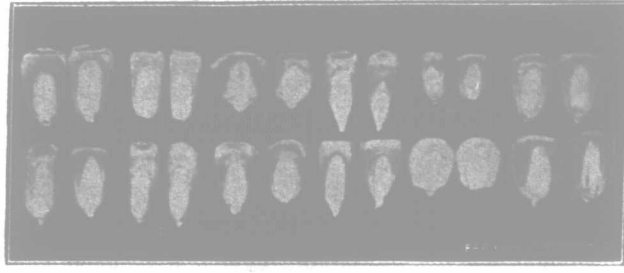
Two subscribers to the "Farmer's Advocate" have had an argument upon the article, "Drainage," by D., in the April 21st issue, and ask for a discussion of the subject. A. says drains made three to four feet deep are not as good for the purpose of drainage as are drains from one and a half to two feet. He has had fifty years' experience in Ontario, and is supported in his opinion by several practical farmers in his vicinity. B. is of the same mind as D. in the article referred to. In discussing this subject D. explained how the increased depth of drains improved their effectiveness, by lowering the water level in the soil, thus deepening the feeding ground for roots. Depth of drains, and their distance apart, are so intimately connected, however, that we cannot fix upon one without taking into account the other. A drain must be deep enough to be out of danger of frost. This is not less than two feet, though drains nearer the surface than this have done good service for some time, but cannot be regarded as safe. What is the most suitable depth will depend largely upon the soil. When drains are put down they draw toward them water from both sides, but the water level between two drains is not necessarily as low as the drains, the water level depending on the porosity of the soil; in fact, the water table is invariably a curved line, which would reach the surface, between the drains, were they far enough apart or not deep enough in the ground. The advantages of deep drains, provided they are close enough together, are a greater amount of soil is made available to crops, consequently fewer ill effects are felt from drouth, and there is room for more water in the soil in times of heavy rains, so that water may rise considerably above the drains for a short time without seriously affecting the crops. No doubt there are cases where A. would be perfectly correct in his contention, as, for instance, where the basin of land to be drained is small, and where surface water is present only on rare occasions. We shall be pleased to have for publication the opinions of readers who have had extended practical experience with tile draining upon the points raised in this discussion.

### Selection of Seed Corn.

Now, before the beech leaf, according to the old saying, reaches the "size of a mouse's ear," might be a good time for testing the vitality and character of the corn that is to be planted. If left later, the chances are that the work will not be done at all, and that, consequently, the corn-planter will lose in his harvest, though he may gain somewhat in experience. It is now accepted as an axiom that the farmer who would raise good crops of any kind must select good seed. In the plant world, as in the animal world, like follows like; given normal conditions, the progeny will resemble the parents. Misshapen seeds will produce misshapen seeds; seeds not fully ripened will produce imperfect plants; those lacking in strength and vitality will possibly, with the atavistic tendency of all things which are not in progression, produce others even more lacking in strength and vitality than themselves.

Now, no crop is more responsive to judicious and persistent selection than corn. Given little attention in this line, and it can be made miserable stuff; given care, and it may be made to improve wonderfully. Many people just plant it year after year without ever closely examining the character of the seed, others would select if they knew just how to do it. The accompanying plate, taken from Bulletin 77 of the Iowa Agricultural Experiment Station, should be a help to all who have not heretofore made seed corn a study. In it, Nos. 1, 2, 11 and 12 show the best forms in the order named; Nos. 4, 5, 6, 7, 8, the poorest. As will be seen, the finest kernels, those which possess the highest feeding value, as well as the highest vitality, are full and plump at the tips next to the cob, not long and narrow like the "shoe-peg" type; they also have a large germ, and are uniform in shape and size. This last quality shows its value when planting time comes. If kernels be of all shapes and sizes, it will be found impossible for any planter to "put in an even number per hill."

But in order to obtain the best possible crop, it will also, to an even greater degree, be necessary to examine the ears of seed corn. These should be well-proportioned, full in the middle, with well-developed



butts and tips; the rows also should run straight, and the kernels should be of uniform height. The following "ear-marks" are unfailing indexes of inferior and degenerating ears: (1) The tapering tip, running off to a sharp point. (2) Poorly-developed butts. (3) Rough or uneven surfaces. (4) Wide spaces between the rows. (5) Rows running in spirals. (6) Irregularity in size, shape and dent of kernels. (7) Nubbins or scrub ears. (8) Full development of some of the kernels and suppression of others. The planting of corn from any such ears as these will only result in a poor yield for the time and labor spent, a deterioration in character and utility of the crop. Recognizing this, the farmer should see to it that he plants only the best class of kernels, procured from the best class of ears.

One other particular is worthy of attention. Only those varieties of corn should be planted which shed their pollen and mature at the same time. The reason is this: From each ovule in the undeveloped kernel there runs a tiny strand of "silk," the aqueduct which is to carry to the nucleus the pollen liquid essential to develop the kernel into the full seed. Now, it may be readily seen that if part of the silk receives the fertilizer from the pollen of an early variety, and part from that of a late variety, the kernels will not develop evenly, the early-maturing ones growing so rapidly as to crowd the softer growth of the adjoining later maturing ones, with the result either of suppressing them, forcing them out of shape, or even causing them to split open. When such ears as these are stored, the kernels which have thus failed to ripen properly often mould, and in a short time rot. As a final word, we quote from the Bulletin: "The question resolves itself into one of getting rid of these unprofitable ears, and of planting only vigorous ear-producing ones. On an average, one stalk in every seven produces nothing because of barrenness. One acre in every seven planted to corn is worse than wasted because of these unproductive stalks. Yet, a little time and care in selecting our seed corn—not a dollar in outlay is required—will materially lessen this enormous loss. We cannot pay too much attention to the selection of our seed corn."

### Preparing for Turnips.

The season of preparation for another year's crop has come. If the land has been put into proper condition by fall plowing for the frost to do its work, the spring should find it in good mechanical condition. As soon as land can be worked in the spring, surface cultivation will form a mulch, and prevent the escape of soil moisture. This surface cultivation should be continued at frequent intervals, until the time for sowing has arrived. Another benefit of frequent shallow cultivation is the killing of weeds. This and the better mechanical condition of the soil resulting from this tillage will materially assist in the growth of the plants.

The manure should be got upon the land as soon as possible, in order that it may be thoroughly incorporated with the soil. The turnip, being a gross feeder, requires a large amount of plant food in readiness for assimilation. In the early part of June, if the cultivation is completed, drill from twenty-eight to thirty inches wide. Immediately after, roll the drills, either with a land-roller or the empty turnip seeder. This prevents the seed from being sown too deeply, and assists the soil moisture in reaching the seed, which is sown immediately after the rolling. This rolling is wasteful of soil moisture, but necessary to the germination of the seed in a dry time, and rain cannot be depended upon. The loss of moisture can, in part, be prevented by the use of the horse-hoe after the plants come up sufficiently to avoid covering them.

Huron Co., Ont.

FARMER'S SON.

### Spraying for Mustard.

ALSO DESTROYS BINDWEED AND SOW THISTLE.

With the spring comes the perennial question of wild mustard. No need to warn farmers against the pestiferous character of this weed; there may be necessity to remind them, however, that nothing but prompt and extreme measures will ever eradicate it, and that every year delayed means a task so much the harder. Bulletin 216, issued by Cornell Agr. Exp. Station, adds another testimony to the efficacy of spraying as a remedy. At Cornell it has been conclusively proved that spraying with a three-per-cent. solution of copper sulphate (about 10 lbs. to the bbl., or 40 gals. of water), at the rate of 40 to 50 gals. per acre, killed the mustard when applied when the plants were young, without injuring to any extent the wheat, rye, barley, corn, grasses, peas or sugar beets among which they grew. Beans, potatoes, turnips and rape, on the other hand, were killed or injured by the solution. It was also found that the spray killed many other species of weeds beside the mustard, such as curly dock, black bindweed, dandelion, and sow thistle, while still others were in no way injured by it.

In spraying it is necessary that the pump and all the fittings be of brass, as the solution is very destructive to iron. The vessels should be wooden, and the spray applied in bright, clear weather. In the absence of a regular apparatus, a common barrel pump can be used, placed in a wagon, with a spray nozzle at the end of a lead of hose, which may be swung from side to side behind the wagon, by means of a rod four or five feet long.

### Sow Thistle—Sugar Beets.

To the Editor "Farmer's Advocate":

In answer to reader's article on sow thistle, I would say we seldom have any bother with it if it is taken in time. We found that sowing buckwheat, and cultivating late, generally made it disappear, and at the same time you had a crop of buckwheat to pay for your work, which I consider very good as a cover crop, sown at the rate of one bushel per acre. Buckwheat paid us better than any other grain crop last year. By sowing late we avoided the drouth, and had a splendid yield.

I noticed an article in the issue of April 21st, re cultivation of beets. I have grown them on different soils, sharp and heavy clay, and had good results on both, but never did I sow more than four and a half pounds per acre—more than that I considered a sheer waste. I always drilled twenty-six inches apart, thinning out to twelve or fourteen inches in the rows, and have taken off sixty Scotch cartloads, well heaped up, per acre, time and again, of splendid beets.

Leeds Co., Ont.

WILLIAM LENEY.

### Success with Nut Trees.

I notice in the "Farmer's Advocate" some persons asking about black walnuts. I have about 2,000 of those trees growing now, some already bearing nuts, and younger walnut and butternut trees coming on. Those trees are good growers; they begin bearing nuts at ten years of age. The nuts are more valuable to sell than apples, as they fetch \$1.00 per bag. There is no hand-picking of the trees, bruises do not hurt them when they fall. The trees ornament the farm; they can be planted around for fence posts, and the mice will not girdle the bark like other trees—they do not like the taste of the bark.

STANFORD ZAVITZ.  
Middlesex Co., Ont.

### Ginseng Profits Doubtful.

The "Farmer's Advocate" has received a couple of letters recently in connection with ginseng culture. Last year we were taken severely to task for cautioning our readers about being led to embark in its culture as a "get-rich-quick" crop. From our observation and knowledge, four or five years would be required to mature a crop of roots, and that under somewhat trying conditions, and there seemed to us a good deal of uncertainty about future marketing, the demand being from China, where it has the reputation of a "cure-all." It is now stated that the Chinese market is overstocked with the cultivated roots, while the Korean ginseng, which seems to be of especial value, owing to conditions of soil and climate, is increasing so greatly that the purchasers of the last crop were obliged to destroy a large quantity in order to keep the market from going to pieces. The present quotations for ginseng look rather high, but the probabilities are that if a culture of the plant in this country were taken up at all seriously, the entire Chinese demand would be oversupplied, and the price would decline until it reached next to nothing. It is asserted that the entire export crop could be grown in a field of fifty to seventy-five acres.

## DAIRY.

### Scottish Milk Records.

A rather novel scheme for the improvement of farm dairy herds was inaugurated last year by the Highland and Agricultural Society of Scotland. It was arranged that experts in milk-testing should visit certain herds in three counties, at regular intervals of two weeks, and remain over night at each place, so as to be present at night and morning milkings, and so able to judge of all conditions. At each milking a regular form was filled out; hence at the expiration of the time set for the visits of the experts, the dairymen knew exactly what each cow was doing, and were thus enabled to detect and discard the unprofitable ones.

Several interesting facts were presented during the experiments. It was found to be the rule that the animals of medium size gave more milk than the large ones; that the large ones varied most in yield, and also required more food to keep up their milk than the smaller ones. The percentage of fat also proved to be less in the milk of the large cows than in that of either the medium or small ones.

In the testing of Ayrshire cows as regards age, there was shown to be a uniform and steady increase in the number of gallons of milk containing three per cent. of fat from the age of two years up to eight years; from nine to twelve a slight decrease was noticed, and after that a gradual decline. The difference between the quantities given by two-year-olds and eight-year-olds was shown to be an average per year of age of nearly 18 gallons. At three years old the milk was of slightly higher quality than at any other age; the difference in fat, however, contained in the milk of the three-year-old and eight-year-old cows was so trifling as to be practically not worth paying any attention to. . . . When the milking was done at regular intervals of twelve hours, there was very little difference in the quantity of fat contained in the morning and evening milkings. When, on the other hand, the milking was done irregularly, eight or nine hours only elapsing between the morning and evening milkings, and fifteen or sixteen between evening and morning, a great difference was noted, the morning milk containing a much smaller percentage of fat than that of the evening.

The difference in quality as well as in quantity of milk obtained by milkers of different degrees of efficiency was strikingly shown. In one case, where a skilful milker did the work, the milk tested a fairly high average. A poor milker succeeded to the care of the cows, and immediately the milk tested lower. Again the former attendant resumed the work, and again with the same result, more milk and of a higher quality; all of which goes to show that indifferent milking will not do if the possible profit is to be gained from cows, and that, unless one would reap the reward of the unfortunate milkmaid of the fable, who aimed too high and lost everything, one must milk systematically, scientifically, and thoroughly.

### Rushing to Canada.

The British Board of Trade returns for April show that the emigration to Canada was: English, 7,699; Irish, 487; Scotch, 2,280; foreigners, 2,260. These returns include first-class passengers. The rush to Canada continues, and steamship companies are now advertising that many steamers to sail are full up.

### Does Aeration do Any Good?

Mr. J. W. Mitchell.—Professor Dean speaks of physical advantages derived from the aerating of milk. Do his experiments lead him to believe that there is any advantage derived from aeration?

Professor Dean.—I do not know that I made any experiments on that exact point, but I can understand that if milk has a bad flavor, as a result of improper feeding, exposing it to the air will allow these gases and volatile oils to pass off. I made no direct experiments on that point, yet I can believe that, under such circumstances as I have indicated, it would be an advantage to expose milk to the air. And that would be a physical advantage.

Mr. J. W. Mitchell.—I understand that you have divided milk into two lots, aerating one part and leaving the other unaerated, and made cheese of the two.

Professor Dean.—Yes.

Mr. J. W. Mitchell.—On the whole, did you find that one made better cheese than the other?

Professor Dean.—So far as our experiments went, we found no advantage from aerating milk. But we feed on good wholesome food. I can understand that, where there might be gases arising from improper feeding, it would be an advantage. Mr. Stratton had charge of these matters, and knows more about them than I do.

Mr. R. W. Stratton.—Before I commenced the work, I was under the impression that if it was not absolutely necessary, it was certainly advantageous to aerate milk; and I was much surprised at the results. In our experiments, the night's milk was mixed together and then divided into two parts. One part was aerated, and the other was not. We also tried different aerators, and sometimes the milk was cooled and sometimes

judgment, it would be risky to cool milk. As to washing the paddles which we use in the cans, they are very easily washed. There would not be much difference in the labor as between washing these and washing a cooler, but then there is exposure of the milk to the air while the milk is passing over the cooler.

### METHOD OF COOLING MILK MUST BE SIMPLE.

Mr. Publow.—I think this is one of the most important questions to be brought up in this conference. About fifty per cent of the cans delivered at the cheese factories in Eastern Ontario stood in the barnyard and milking yard, or in close proximity to these places. The main defect in milk delivered at the factories in Eastern Ontario is that it is overripe and not clean-flavored. Fully fifty per cent. of the farmers who send milk to the factories simply pour the milk into the can and set it in its place. Some of them stir the milk, but fifty per cent. of them do no cooling whatever. If we can do anything towards the adoption of a good and uniform system of caring for milk, it would be well worth doing. But the method must be simple. The instructors with us are advocating the building of a separate stand for the milk, and combining with it an ice-house. Have the stand built with a roof, and have it in a clean place. Cool the milk immediately after milking, and while it is cooling stir it. We advocate, for use in stirring, a dipper with a solid handle, something that can be kept clean. After the milk has been cooled to sixty-five degrees, put the cover on and leave it. If we can have the milk cooled and kept in a clean place, we can do more to raise the standard and quality of cheese in Eastern Ontario than we could by sending out a hundred men next year to instruct the makers. The raw material is the first thing, and the important part is to have that right. The plan we propose must be simple and easily carried out. I believe that, under ordinary conditions, the milk should be cooled with a minimum exposure of air. I think that simply stirring the milk is all the aeration that it needs. But it must be cooled in order to make good cheese.

Mr. Chapais.—Early last season there was in Quebec, as in some other parts, a very severe drought. In making a thorough inspection of one of our districts, we found milk of poor quality, due to the fact that the cows had eaten weeds, because there was no grass, and had drunk very bad water. In every instance where the milk had not been aerated we had a very stinking curd, but where the milk was aerated we had no stinking curd. Where milk is bad through such causes as I have indicated, we need aeration; but if the milk is as good as we find it at the Ontario Agricultural College, we can dispense with aeration, if only we can get the milk cooled.

### THE MAKER DEMANDS GOOD RAW MATERIAL

Mr. Waddell.—This is a burning question with us as makers. If we could get the milk in good condition, the majority of our troubles would disappear. I think we need to instruct our patrons as to keeping the milk clean and cool. If we get the milk in proper condition, not only can we make more cheese and butter, but we can get an increased price. Aeration is all right, but in the practical instruction of the farmers, a good deal of difference of opinion arises as to what aeration is. Some say that what is called aeration is no aeration at all, the air not being pure. But if Professor Dean's ideas can be carried out, and the milk kept clean and cooled to lower than seventy degrees, we shall have little trouble. There are other things to be considered, such as feeding cattle with turnip tops, and so on, but we are not troubled so much with that as with keeping the milk at too high a temperature. (Report Conference Dairy Instructors and Experts, Ottawa.)

### Heavy-producing Jerseys.

The following references to the Jersey herds of Lord Rothschild and Dr. Watney are taken from an English exchange. In England, an imperial gallon is ten pounds. Twenty-six cows, in the Tring herd, averaged 660 gallons, figures higher than the great majority of averages of dairy farmers who keep Shorthorns and other large cattle of a known deep-milking type. Among the animals referred to was one which gave 1,280 gallons, and two others which nearly reached 1,000 gallons each. A third cow, which gave over 850 gallons, has averaged 870 gallons for five years, while the biggest milker of all has averaged 950 gallons yearly for four years. There are a few inferior cattle in the herd, and the advantage of a record is that they can be weeded out, because their work is known. Lord Rothschild owns many more Jerseys, but the twenty-six referred to are those which were in the herd for a whole year. A few of the others included purchased animals or heifers which came into the herd during the year, while a still larger number were animals which had gone out of the herd during the year, and the records of which were, in consequence, imperfect.

The details regarding Dr. Watney's herd of Jerseys are published contemporaneously with the details of the Tring-Park Herd, and once more we



Yorkshire Sow, Colston Lass.

Winner of championship medal for best pig, Dumfries Show, 1903. Age three years and six months.

not. We were not able to prove that aeration was beneficial under our conditions.

The Chairman.—Would it be safe to draw general conclusions from your experiments at the Ontario Agricultural College, where conditions are different probably from those at the average farm?

Professor Dean.—Perhaps our conditions, so far as feeding the cows and caring for the milk are concerned, are better than those of the average farm. The farmer may be compelled to feed his cows in such a way, or the cows themselves may get such feed, that aeration of milk would be an advantage. But, on the other hand, if the aeration has to be done in the barnyard, or where the cows are milked, it would be apt to do the milk more harm than good. That is my firm conviction. While cooling milk is all right, I think that, so far as the average farm is concerned, we should advocate cooling it with a minimum of exposure to the air, unless we are sure the air is pure.

Dr. Connell.—I was glad to hear Professor Dean come out so plainly in speaking of the aeration of milk. Ever since I began to take an interest in dairying, some six or seven years ago, I have not seen, either from a theoretical or a practical standpoint, any advantage in aerating under the conditions of the ordinary farm. I am willing to admit that there may be an advantage in carrying off odors in case the animals may have eaten certain feeds, or in case the animals suffer from indigestion. But I certainly would not be prepared to say that aeration in the conditions of the ordinary farm would do good. The cooling of milk, I think, is the most important part—getting the milk to a temperature below the point at which bacteria which may obtain entry can grow and multiply and bring about flavors, deleterious or otherwise.

Professor Dean.—I agree that if you have a place for the aerator where the air is pure, and if you have cold water under pressure, the system Dr. Connell speaks of would work well. But most farmers have not these things. If the cooling is done as the milking goes on, it is done in the yard or near the stable, places, in which, in my

have a wonderful result. In both cases the book-keeping is perfect, the milk produced and milk accounted for being almost balanced in spite of its quantity; and yet Dr. Watney's herd is kept entirely for buttermaking. Twenty-three cows averaged 457½ lbs. of butter per head; no less than seven cows exceeded 507 lbs., the famous Sharab yielding this quantity, and being seventh on the list, the best producer being a cow that yielded 545 lbs. With one exception, every cow yielded more than 360 lbs. of butter, and it is considered that the quantity is even above the average of most herds in England.

### Influence of Food on Milk.

"It is well known that milk may be watered through the animal body"—this is the key to an article by Allan B. Graham, published in the Transactions of the Highland and Agricultural Society of Scotland for 1904. Incidentally he touches upon variations in food rations. A series of interesting experiments was carried on by Mr. Graham, for the purpose of testing particularly as to difference in water supply. Two of these were as follows: Two cows were given the following rations per day:

15 to 18 lbs. long hay.

Hot mash—

- 4 lbs. chaff (cut hay and straw, equal parts).
- 2 lbs. bean meal.
- 2 lbs. bruised oats.
- 2 lbs. bran.
- 3 gals. water, and 2 ounces salt.
- 4 lbs. decorticated cotton-cake.
- Treacle drink; 4 gals. water.

On the 4th of February, the mixed morning milk tested, butter-fat, 3.35; solids not fat, 9.7.

On 5th February, the water was increased to 10 gals. A sample of the mixed milk was tested on 11th February, the result being butter-fat, 3.2; solids not fat, 8.8.

On 3rd March 6 lbs. Indian meal was substituted for the cotton-cake, thus producing a ration less rich in albuminoids, and the cows were fed thus for five weeks. At the end of that time, a much richer ration was given, and continued for eight weeks. This time 6 lbs. decorticated cotton-cake and 6 lbs. bean meal made into a porridge were given instead of the 6 lbs. Indian meal, the hot mash in other respects remaining the same; but the water supply was reduced from 10 gallons to 6 gallons. The results of the experiment showed that during the five weeks, when 10 gals. of water were given, the percentage of butter-fat was quite low; immediately, however, after giving a ration richer in albuminoids, and decreasing the water to 6 gals., the butter-fat increased and continued much higher, till in the seventh and eighth weeks it was over 3½ per cent., the increase in the quantity in each case being in inverse ratio to the variations in the butter-fat content.

During the following summer a number of cows were put in a pasture, with an unlimited water supply, and as the summer was wet, it was supposed that the cattle took a great deal of water along with the grass. Under these conditions, even when fed 6 lbs. decorticated cotton-cake daily, the fat content of the milk was low. Indian meal was substituted for the cotton-cake, with the result of a very slight decrease in fat; hence Mr. Graham deduced that the quantity and quality of milk from cows fed on grass during a wet season cannot be influenced to any great extent by feeding, and that it is mainly by regulating the amount of water consumed by a cow that we can alter the per cent. fat in the milk. Mr. Graham also considers that overmuch water has a deleterious effect on the quality and texture of the butter made from the milk.

Regarding the question as to whether the quality of milk is increased by difference in quantity or quality of feeding rations, a summary of results attained through experiments conducted by Professors Farrington and Woll are given, which tend to show that an increase in feeding rations will not change the richness of milk, provided the cows have not been starved or underfed to begin with. The quantity will be increased, but not the quality. For the first few days after the change has been made, the milk will be richer, but as soon as the cows have got used to the new rations the milk returns to its normal quality, hence, the professors have concluded that the quality of milk a cow gives is natural to her, and that the only way of permanently improving the richness of milk is by disposing of cows that give poor milk, and keeping only those whose milk is rich in butter-fat. On the other hand, it must be remembered that, though one cow may give poorer milk than another, she may more than make up the percentage in the larger amount she yields. The persistency of a cow in keeping up the yield is also a point of importance. Hence, both cow and feeding require selection, those cows only being retained which give the highest total amount of butter-fat.

### Holsteins Healthy and Thrifty.

In the course of an address before the Holstein-Friesian Association of America, Prof. H. H. Dean, of the Ontario Agricultural College, is reported as having spoken as follows:

"First, we have found the Holstein-Friesians in our experience at the College, where we keep six or seven breeds for instructional purposes for our students, a healthy and a thrifty breed of cattle. We find that some breeds do not seem to have that strong constitution, that thrift, that inherent quality which always makes them ready for their meals, and ready for almost anything which may come up; and I consider that a very strong point, and I believe that the breeders of Holstein cattle would be making a serious mistake if they lost sight of that vigor and thrift and health and constitution which is now so important a point among this famous breed of cattle. Then we find in our experience that the calves are strong and good doers. I have never known in my experience with them a calf to come weak, or required nursing and coddling, or any extra attention. Without exception they come strong, and are good doers, and in two or three weeks we can put them on skim milk, and soon begin to feed them bran and oats, and they begin to thrive right from the start.

"Then another strong point of the Holsteins is their size. Some people say that size is a detriment in the dairy business; that if you can get a small cow to do a given amount of work, that she does not require so much feed, and that she will produce milk or butter or cheese more economically, because she is of smaller size. We have looked into this matter pretty carefully, and we find that the difference in the feed which is consumed by a large cow and a small one, for the production of a given quantity of milk or butter, is largely in the rough feed—the cheap food—and whether a cow be a large one or a small one, she will require just about a certain amount of concentrated feed, and that the difference in the food which is eaten by the large and small cows is in the cheap, rough, bulky food, and not in the concentrates. We find that a cow requires about eight pounds of meal for each pound of fat she produces in the milk.

"The next strong point of the Holsteins is that they are regular breeders. We have found in our experience very much less trouble in getting cows of this breed to breed regularly than cows belonging to other breeds, and we very seldom have any difficulty in that respect with Holsteins, a trouble which sometimes gives the dairymen a great deal of annoyance."

## POULTRY.

### Care of Laying Hens.

It is very necessary that fowls should have some place where they can dust in dry ashes or a mixture of ashes and road sweepings, with a small quantity of black sulphur in it. The birds require this to keep themselves clean and free from insects, which are fatal to their welfare. If by any chance birds have insects on them, they should be got rid of as soon as possible. There is no doubt that many more deaths are indirectly caused by insects than people are aware of; but where care and extreme cleanliness are practiced, there should be no trouble from this source.

We must not forget the birds' digestion. The gizzard is the organ mainly responsible for the preparation of the food for the nourishment of the body, but something is required to aid it in its work, and birds at liberty naturally pick up (if they can get it), by instinct, whatever is necessary to their perfect health; and if a gizzard is opened, we shall find small bits of sharp stone or other hard material. Where the land over which the birds run abounds in flint or hard bits of stone, it will not be necessary to supply material of this kind, but if there is not sufficient on the land, or if there is danger of its being exhausted after a season or two, a supply of sharp flint grit should be given, and it must always be supplied to birds in a run. Material of this kind must be hard to be of any use. Cinder or broken lime is of no use whatever. Many people confuse the use of lime or broken oyster shell with that of grit. The former is extremely good for the birds, as they need material of this kind to form the shell of the egg, but grit is necessary to the digestion. If there is any doubt about it, give birds which have been without grit for a week some hard material. They will eat it more greedily than their food. Green bones are very good for birds if they can in any way be ground up and given, and any flesh may be boiled and given with advantage in small quantities in the winter. Broody hens should never be allowed to remain in the nest, but should be removed to a coop and properly fed until they recover.—[Agricultural Gazette.

### Canker in Turkey.

A reader has an ailing turkey, and gives the following symptoms: She does not seem well, but I cannot see anything wrong with her, except that she sneezes, or coughs, and opens her bill when she breathes; or, at least, quite often. Her head does not seem to have anything the matter with it. I have sprayed her throat and nostrils with coal oil, but she does not seem to get better; does not seem very thirsty; will eat a little; is quite heavy and fat. Last fall our 27 turkeys had what we thought was roup; two died. The breasts of six of them were quite bent over to one side, and they would walk lame; some did not eat very well, and would mope about. Some had discharge from eyes. If it was roup they had last fall, will they be likely to have it again this year, and is there anything that would prevent it?

Replying to this inquiry, W. R. Graham, of the Poultry Dept., Guelph, says: "I would say that I think in all probability the trouble with the turkey is canker, possibly in the mouth, but in all likelihood in the windpipe. Canker is a form of roup; some poultrymen consider that distemper—that is, the discharge from the nostrils that is not offensive—and the canker or growth of white cheesy matter on the throat and in the windpipe, and the common roup—that is, where the head swells up and there is an offensive discharge from the nostril—are different diseases, but according to scientists they appear to be one and the same disease. I would say that I think canker is quite common in the spring and winter; roup in the fall; from October to the first of January, and earlier in the year, we see more of the distemper.

"The only thing that I know of that you could try on the turkey in this case would be to get some potassium permanganate, or some of the roup cures, such as Morgan's, of London. You would then need to dampen the blunt end of a stick, that is, about the size of a match, and dip it in the permanganate, and then get as much as possible of the permanganate off the stick onto the canker, as seen in the throat or upper part of the windpipe. Of course if the seat of the trouble is half way down, or on the lower part of the windpipe, there is practically no chance whatever of touching it.

"The disease is contagious; the trouble with the turkeys last fall was in all probability roup. The treatment of roup is not very satisfactory, and I would suggest that your subscriber get the bulletins from the Department of Agriculture at Toronto on this disease.

"As a prevention, try and keep the turkeys away from the house; that is, let them roam as much as they will, and do not house them up at night. There is nothing that will give chickens or turkeys roup quicker than to house and roost in close, stuffy, or drafty houses. Fresh air is an excellent preventive, and in some cases a cure for the disease. For instance, I have seen chickens that were slightly affected with the disease, and by changing their roosting quarters and getting them to roost in the trees, say in the months of September or the early part of October, have got them practically over the trouble.

"There is danger of the turkeys contracting the disease by travelling over the same ground as last year, but if the subscriber will disinfect the coops that he used, say with a 5% solution of carbolic acid, and where the turkeys roost sprinkle freely air-slacked lime, or what is better, take a bushel of air-slacked lime and add a pint of crude carbolic acid and stir well together, and then sprinkle the ground with this, he will remove the danger."

### "Breed Out" Broody Hens.

A subscriber asks "how to keep hens from getting broody."

I would ask, how many farmers try to "breed out" the sitting qualities? A hen wants to sit, and the farmer goes to the barn, gathers a hatful of eggs, places them under the broody hen, and that is all he knows about it. The probabilities, however, are that when he set that hen he set her with eggs laid by hens that are broody half the summer, if he only knew it, and he is breeding into the very thing he should try to breed out. The three important factors in building up a flock of hens are type, strain and selection.

A half dozen of the best-typed hens, mated with a male of good type, will give the average farmer all the eggs required for hatching purposes.

This fall, from the chicks hatched from this flock, select for breeding purposes those that develop quickly, and are of good market type. In this selection, you are building up a meat-producing fowl, such as the market demands. Then, of this selection, select eggs for next year's hatching, eggs only from hens that lay the earliest and show the least inclination to get broody. In this selection you are building up the laying qualities of the flock, and in following this selection process for two or three years you will build up a breed of the general-utility type. A. W. FOLEY.

Government Poultry Breeding Station, Manager, Durham Co., Ont.

### Rearing Ducklings.

Upon the early treatment of the ducklings a great deal depends—in fact, it may be said that the first couple of weeks is the most important time in their lives. When they are for killing immediately they are large enough, forcing food must be supplied, together with as little exercise as possible. On the other hand, when they are for stock purposes, the idea should be to allow them to grow and develop slowly, as only in this manner is it possible for them to attain a large size and a good sound constitution. In the former case the ducklings should not have access to water in which to swim, as the less exercise they are given the more rapidly will they add on flesh. When for stock purposes, they may be permitted into the water as soon as they are old enough, the age depending upon the weather.

For the first two or three days after their exit from the shell, the ducklings should be fed on hard-boiled eggs, chopped up finely and mixed with biscuit meal. Frequently one sees bread-crumbs recommended, but I have never had as good results from these as from the biscuit meal, the former having a tendency to bring about bowel trouble. The food should be moistened with warm water or milk, but not sufficient to make it sloppy. The eggs would be discontinued at the end of two or three days, and biscuit meal would form a staple diet. No better food can be given to ducklings during the first week to ten days after the eggs have been left off than biscuit meal, well soaked in hot water, and dried off with ground oats. Variety in feeding is one of the causes of success, and no one food should be supplied day after day without change. Oatmeal is perhaps one of the best possible materials for feeding to ducklings. Some are in the habit of supplying food in a sloppy condition, and when this is the case it is not necessary to give them drinking water during the first week or ten days. Personally, I have had better results preparing the food in a crumbly moist condition, and giving a plentiful supply of water.—Ex.

### Egg-eating Hens.

The question, "How to stop hens from eating their eggs?" has been asked several times through the columns of the "Farmer's Advocate," and has been answered, by "using china eggs," "trap-nests," "feeding vinegar," etc.

These remedies are worthless from the fact that egg-eating is neither a habit nor vice, but is caused by a craving for egg-forming material, of which there has been an insufficient quantity in the feed. This trouble is immediately overcome by feeding the hens oyster-shell, which can be procured from any poultry-supply house at a very small cost. Oyster-shell and grit, of which a hen will eat about one-quarter pound per week while laying, should always be within reach of the hens. Farmers would secure a far greater number of winter eggs if they would give this matter attention.

A. W. FOLEY.  
[Do other expert poultrymen agree with this doctrine?—Ed. "F. A."]

## GARDEN AND ORCHARD.

### Be Sure to Spray.

There is just a possibility that owing to the scarcity of labor, and the comparative immunity from orchard insects and diseases last year, that spraying will not be as general this year as it should be. The first application of Bordeaux for scale, and Paris green for moths, should have been given before this date, but it is not too late to begin now to spray apple, pear and plum trees. The second and third sprayings, or those just before the blossoms have opened, and after they have fallen, are the most important for apples and pears, but the first should not be neglected. For the codling moth, the most injurious insect to the apple, the falling of the blossoms is a sign to begin spraying. Spraying must now be regarded as a type of insurance, or a system of protection. The eggs of insects and spores of diseases are everywhere prevalent, and some precaution must be taken to protect the trees against them. Everyone recognizes the necessity of spraying potatoes to insure a crop, and of disinfecting a house to stamp out a contagious disease, and spraying of orchards is nothing more than these two operations combined. Where it is practicable, let several neighbors unite to purchase a large pump, hose and nozzles, and undertake the work just as they would threshing or other large farm operations. To a barrel containing forty gallons of water, add four pounds of dissolved copper sulphate, six pounds of fresh slacked lime, and four ounces of Paris green. Mix well, and apply in a thin spray. Do not attempt to drench the trees, simply spray them. After the operation is completed the leaves are colored with the dried paste of the compounds, which should be visible until at least the end of July. Usually four or five applications is sufficient for this purpose, and frequently three sprayings will be all that is required.

### Some Timely Vegetables.

By Mrs. Anna L. Jack.

It is often a surprise to find in rural districts that many choice early vegetables are excluded from the garden. Each spring finds a tempting array displayed in store and market for residents of the city. There are tender asparagus, young onions, lettuce and radishes, while spinach is brought from afar to be the principal greens at that season. All these, except asparagus, grow annually, and can be used within six or eight weeks from sowing of seed, while the advantage of having them in the freshest condition is in itself an advantage we country dwellers have over those who are dependent upon the markets; for while tilling the soil we are entitled to the best gifts it can give, and fresh vegetables early in the season are certainly of value.

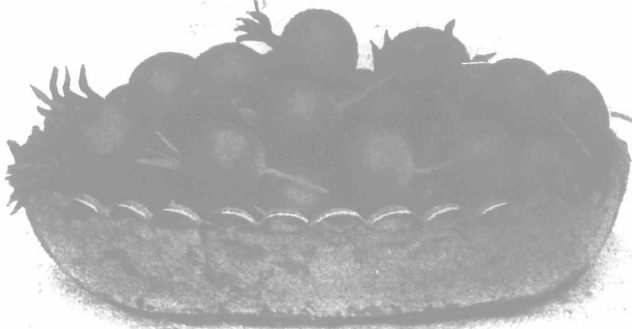
Foremost among these, for quick growth and early use, is spinach, a favorite and wholesome vegetable, cultivated for the sake of its young leaves. It is an annual, and must be used before the stem begins to develop, for the leaves become bitter and unfit for use after the plant has grown.

Spinach was introduced from Asia into Spain by the Arabs, and they were very well aware of its value as a food. It is now considered valuable as a nerve builder, and to replenish an exhausted condition of body.

John Evelyn, an old writer, says of this vegetable in 1699: "Being boiled it is an excellent condiment for all sorts and conditions of men; it may accompany a sick man's diet. 'Tis profitable for the aged, and may be had at almost any season."

In cultivating, it is a saying that lean land makes lean spinach, and it needs rich soil, so as to make quick growth.

In preparing it for the table, spinach must be well washed in two or three waters, or, rather, given a steady rinsing and drain. Then place



A Good Sample of Radishes.

it in the pot, with a small quantity of boiling water and a little salt. Press it down while cooking, which will be from ten to fifteen minutes, and drain well; then press it into a dish, with butter, pepper and salt chopped in, and send to the table fresh and hot. It is a common practice to use too much water in cooking this vegetable, which renders it insipid. Over-cooking spoils the flavor.

It is most likely we all know the value of onions, and they need no special recommendation. The essential oil has stimulating properties, and acts upon the system as an expectorant and diuretic as well.

The Jews and Arabians, who use garlic as an article of food to excess, were in the habit of employing it in dropsy, ague and asthma with great advantage.

A few seeds of lettuce and radishes sown among the onions can be pulled out early, and not be missed. Lettuce is remarkable for the large quantity of milky juice it contains, which on exposure to the air becomes a narcotic, containing the properties of opium in a mild degree. This substance has a sedative effect on those who eat largely of the plant, and is useful in nervous disorders.

Radishes are of value in scorbutic conditions of body, and are stimulating to the kidneys, being chiefly used in a salad with lettuce and endive.

The Jerusalem artichoke that lives in the ground all winter is useful in spring. It is really a species of sunflower (*Helianthus tuberosus*), but is a vegetable to be used in soup, and also boiled and mashed like potatoes, is made a substitute for potatoes where they have failed. The plant is recommended to be grown on dry arid soils that are liable to great drouth, and the tubers make excellent cattle food, for they have the quality of allaying thirst, while the tops are cured to make hay in times of scarcity. The vegetables mentioned here are such as can be grown during the spring, and also used to fill in the odd places in the garden, and give a quick return.

### The Fertility of Our Orchards.

In view of the favorable reputation which Canadian apples hold in Great Britain and the European continent, and the large and rapidly growing trade which is carried on in fruits of all kinds, but especially in apples, we, as fruit-growers, should do everything in our power to increase the quantity and add to the quality, in face of the increased competition from other countries.

The question: "How shall we maintain the fertility of our orchards?" will be asked by all. Some say, use stable manure. This is all right as far as it goes, only it is not a complete manure for orchards, having an insufficient amount of potash, and, under our present system of growing leguminous crops, it has much more nitrogen than is necessary. But the chief argument against its use for the orchard is that no farmer has more stable manure than he can apply with profit to his ordinary crops, and if he applies it to the orchard, he must skimp some other part of the farm, which system, if followed for some time, will eventually run down the farm.

This system of "robbing Peter to pay Paul" is seen to perfection in Southern Wisconsin among the tobacco growers, where it is a common saying that tobacco ruins a farm, and a man wishing to buy a farm will steer clear of one that has grown tobacco. Here, the fault is not so much with the tobacco as with the farmer.

Tobacco being a money crop, and also requiring large quantities of manure, it is a common practice to apply the entire amount of manure made on a farm to a few acres of tobacco, which practice, in a series of years, will surely run down the farm. The same argument holds good in Ontario as in Wisconsin, where they say, or, at least, the thinking farmers do, that if tobacco will not pay for its fertilizer, better go out of the business. So, before we in Ontario run down our farms, we had better decide that if fruits will not pay to buy fertilizer for, we had better dig up our trees by the roots and plant something else.

The next question would be, "What shall we use?" Those who are situated near towns can buy stable manure, but for the majority of farmers this is impracticable. Even in favorable cases it is doubtful if, for large fruit, it will pay for the reasons given above.

In some cases, poor land, or where a proper system has not been followed, it may be desirable for a time to use stable manures, but the successful farmer must get his nitrogen cheaper than paying twelve to sixteen cents per pound for it, and he can obtain it for nothing by means of a leguminous cover crop. Of all the different cover crops advocated, I believe lucerne clover to be the best, as it will make a better growth in the dry weather which we usually have in the fall, and also a better root growth than the common red clover, which is favorably known for this purpose. Lucerne is subject to being winter-killed, but this makes little difference where it is sown to be plowed under in the spring. The hairy vetch is also highly recommended for this purpose.

But I would give a word of advice. Don't sow too early in the season. Remember, it is a full apple barrel, rather than a luxuriant cover crop, which is wanted. I believe that in dry seasons the fruit-grower loses an enormous amount by stopping the cultivator too soon, and, as a rule, cover crops should be sown a month later than usually advised. Never sow a cover crop until you feel sure that the apples are safe, even in case that no rain should come until picking time. This system might not produce such a fine cover crop, but it will produce more apples. Luxuriant cover crops will provide for all the nitrogen necessary, but something else is required or we will ruin our fruit crop through unbalanced feeding. I firmly believe that the popularity of cover crops, together with the use of stable manure, has had much to do with the cry that Canadian apples are not keeping as well as they did in former years. We all know that an excessive amount of stable manure, which is largely a nitrogenous manure, will grow a large, pale, soft apple, lacking in color, flavor, long-keeping qualities, and that indescribable element often called "snap," for which Canadian apples are noted. I know for a fact that dealers are beginning to keep records, in order to find where the poor-keeping apples come from. Thus we see we can provide ourselves with an abundant supply of nitrogen and humus, but we cannot get in that way the potash and phosphoric acid which are also needed.

Experiment stations recommend a fertilizer containing two per cent. of nitrogen, nine per cent. of potash and two per cent. of phosphoric acid, but if a proper system of cover crops is followed, I think we can leave out the nitrogen and use potash and phosphoric acid in above proportions. In order to obtain these materials, "common sense" would teach us to use our own waste matters; that is, bone meal and wood ashes, which at present we ship across to the United States to improve the quality of their fruit.

In bone meal, the steamed will be found more economical than the raw, being less in price and having a higher percentage of phosphoric acid, though lower in nitrogen, which is no detriment in a properly managed orchard.

For the potash, we should use the ashes produced at the farm, and, in addition thereto, the commercial potash salts, particularly sulphate and muriate of potash, which are very high grade, containing fifty per cent. of pure potash, while ashes contain only five per cent. on an average. Weight for weight, the potash

salts mentioned are worth five times the value of ashes, and as a commercial article the former are usually a more economical source of potash than the ashes.  
Grey Co., Ont., Canada. G. FRED MARSH.

### Sod versus Cultivated Orchard.

There is a great deal more in this question than appears at first sight. I do not think it can be answered in terms of "yes" or "no," because that would intimate a general rule, and I do not believe any rule will cover the question. In the first place, I think we ought to consider just for a moment what we have in an apple; what an apple is; how an apple lives and grows; what is its life cycle; what are the conditions which bring it to maturity slowly; what are the conditions which close up its life cycle quickly, and in this way cause it to decay. An apple is as much a living organism as any other part of the tree, and there is no time in the life of that apple from the period at which the blossom falls until the period the apple has decayed and rotted, when it is perfectly at rest, unless it be in absolute cold storage. Consequently, the apple is moving on from greenness to maturity, to old age and decay.

Now, then, what connection has that statement with Sod vs. Cultivated Orchards? It is my opinion that any condition which will tend to mature an apple quickly on the tree will, therefore, tend to make it short-lived. As a general rule, our highly cultivated lands will develop apples quicker, make them grow larger, push them through their life history more speedily than orchards in sod; but not all. I have seen tilled orchards on soils so poor in plant food and physical condition that they did not produce as large growth, or as quick growth as other orchards not far distant in sod. The difference was in soil conditions. In one case there was good soil conditions; in the other case poor soil conditions. If we reverse the case by putting the orchard which was cultivated down in sod, and cultivate the other orchard, we would have a very different result; so that this whole question must be considered in terms of conditions. If one has land in such good condition, with such an amount of available plant food that he can afford to lay it down in sod and feel sure of getting apples of good size and color, and apples that will keep as well, it is all right, let him do it; but he must first prove his land. I do not think because Mr. Smith or Mr. Jones, or anybody else, is successful with tillage or non-tillage on his land, and under his conditions, that you can take it for granted you can carry into practice on your soil the same system. In the first place know your ground, what it will do; then apply those methods which will bring about the best result. In short, I think one must study conditions.

I think it is safe to lay down this general principle: An environment that causes the fruit to grow with unusual rapidity or to abnormal size, appears to cause it to pass through the remainder of its life history after it is picked, whether stored in common or cold storage, relatively faster than the same sort grown more slowly. If either system produces this type of growth it probably cuts down the keeping quality of the fruit. Orchards under tillage, and cover crops, on thoroughly well-drained and rather high land, are likely to produce fruit of long-keeping quality. On lower land, the keeping quality would probably be poorer. If the orchard is in sod in rich bottom land, a rapid growing tendency may be induced in the fruit, and the keeping quality is likely to be cut down. On the other hand, if the sod orchard is on thinner or higher land, the fruit grows more slowly and the keeping quality is thereby lengthened. So we might have a cultivated orchard in one case which will bring about that condition more rapidly than sod orchard, or vice versa.—[Prof. John Craig, before the Western N. Y. Hort. Society.]

### Weighing Small Articles.

Many farmers having a large farm scale with a capacity of from twelve to sixty hundred pounds, have no means of weighing accurately any article weighing less than, at the very least, half a pound. When it is necessary to weigh less than this, and the usual farm scales are at hand, the following method will be found quite simple, and, what is often more important, it is very accurate if ordinary care be taken. In the ordinary farm scale a one-pound weight must be put on the counterpoise to weigh articles over one hundred pounds. In other words, one pound on the end of beam balances one hundred pounds on the platform. If, then, it is desired to find the weight of a small article, it is only necessary to attach it to the counterpoise at the end of the beam and place weight enough on the platform to exactly balance it; then weigh what you have placed on platform in the usual way, and divide its weight by 100 to find the weight of the small article. Thus, it will take twenty-five pounds on the platform to balance one-quarter pound on the counterpoise, or six and one-quarter pounds on the platform to balance one ounce on the counterpoise.

In some large scales, the "100-pound" weight is marked "4-ounce." In that case, of course, four ounces on the counterpoise balances one hundred pounds on the platform, or one ounce balances 25 pounds.

## APIARY.

### Spraying Fruit Trees.

Spring, who so long delayed her coming, seems to have arrived at last, and fruit trees will soon be in bloom. The following timely resolution, with reference to spraying in full bloom, was passed by the Elgin Co. Beekeepers' Association at their spring meeting in St. Thomas recently:

"Resolved, that this convention condemn the spraying of fruit trees while in full bloom as an injurious practice, and a waste of time, labor and money, as well as a detriment to the honey-bee, an insect of value in assisting proper fertilization of the blossom, and likewise contrary to statute law."

The value of bees to blossoms is steadily becoming more generally known, but there are still many vague ideas concerning it abroad. Putting it plainly, plants as well as animals reproduce themselves by the union of opposite sexes. The parts of the flowers are, as it were, the sexual organs, the pistils being the female, the stamens being the male organs. The former contain ovules or embryo seeds, and the latter pollen, which must come in contact with the ovules before they develop into seed. Many blossoms contain both stamens and pistils, but for well-developed fruit, cross fertilization must take place; that is, pollen must come from other blossoms, preferably on other trees or plants. How can this pollen come? The wind does not carry it in the case of fruit trees or clover. It must be carried by insects. To attract insects, nature has provided blossoms with sweet nectar. Without insects blossoms are not fertilized, and there is no seed or fruit. Then to do anything to injure bees, which are the most persistent honey gatherers—and, therefore, pollen bearers—is very poor policy on the part of those who desire fruit and seed.

It has also been shown that spraying in full bloom not only does not accomplish the desired end, but is very injurious to the delicate organs of the blossoms. MORLEY PETTIT.

### How to Spread Brood.

The time of year is now coming on when a good many beekeepers will begin, to their sorrow, to spread their brood, and in other ways try to force their colonies.

I wish to suggest a simple way by which this may be done without the loss so often attending the operation. This is by simply changing ends with one frame of brood out of three, the middle one of course; or, if a very strong colony, two out of five. By this means the honey in one end of the frame is removed by the bees, and eggs laid by the queen in its place, and in a few days the same thing is done on the two outside frames of brood; or, again, outside of the brood cluster may usually be found a frame of honey with the side nearest the bees filled with pollen. Reverse this, bringing the honey close to the patch of brood. This plan answers two purposes—stimulative feeding, in that the bees themselves remove the honey from close to the brood, and also stimulates the queen to lay in the whole sheet of comb rather than in small patches in several combs.

I have found it better, at this time of the year, where colonies are weak, and have two or three combs with small patches of brood, to remove the two outside combs and give them to a stronger colony, and, later, return them whole frames of hatching brood.—[H. Fitz Hart, in Bee Culture.]

### Cleaning Bees Off Combs.

I will give you what I call a valuable kink in cleaning off the bees from extracting combs. It may be old, I haven't seen it in print. I go to the hive, take out two combs, set them down, then I move over the next one so I can get at each side with a Cogshall brush. I smoke a little, and rub the sides of the comb with the brush. The bees will tumble off and disappear in the lower part of the hive. Take out this comb, do the next the same, until all are cleaned off and taken out. Take out as fast as cleaned off. Then put the two combs first taken out back in, and brush. The combs in a ten-frame hive can be cleaned in two minutes, and not a bee outside of the hive to crawl round—no queen lost, or robbers to bother.—In "Cleanings in Bee Culture."

### Shock Loaders.

A grain shock-loader has been devised at Fort Dodge, Iowa, weighing about 1,000 pounds, and drawn by two horses, and with about the same draft as a mower. An elevated carrier takes up the sheaves and drops them on the wagon driven alongside. Judged by engravings we have seen, it is a cumbersome-looking affair.

## EVENTS OF THE WORLD.

The St. Louis Fair was formally opened on April 30th.

The caving in of a mine at Tocina, Seville, Spain, buried many miners. Fifty bodies have been recovered.

The West Indies trading schooner, Onoro, was wrecked on the Nova Scotia coast on April 29th. All on board perished.

All the Esquimaux living in the Mackenzie Basin, except ten families, have been killed by a virulent form of measles. The community consisted of forty families.

The Spanish company which is trying to raise the galleons laden with bullion which were sunk in Vigo Bay in 1702, has brought to the surface the Santa Cruz, recovering with her silver ingots to the value of \$500,000.

The Vossische Zeitung says that Emperor William has openly expressed dissatisfaction with the management of affairs in regard to the Hereros rebellion in Southwest Africa. It is expected that he will order large reinforcements to Africa immediately.

The announcement that Japan has already decided to throw open to the world's commerce the port of Antung, from which the Russians were driven on May 1st, is causing much favorable comment in Europe and the United States, as contrasted with Russia's closed-door policy.

A review of the French and Italian fleets in the Bay of Naples was the culminating event of the fete which has been held in Italy during the visit of President Loubet to King Victor Emmanuel. Naples was so crowded with sight-seers, who came from all parts of Italy to see the spectacle, that 20,000 people were obliged to sleep in the streets.

It is asserted that the Russians are about to enforce martial law west of the Liao River. The Chinese Government is determined to avert war, if possible; nevertheless, in preparation for such an emergency, the Dowager Empress has ordered the Provincial Governors to abandon her birthday celebration and use the money collected for that purpose to equip 72,000 troops.

On April 27th, the British House of Commons unanimously adopted a resolution affirming that the Government should encourage cotton-growing in various parts of the Empire. Encouraging reports were given of experiments in cotton-culture in Egypt, the Soudan, Rhodesia, Central Africa, West Africa and the West Indies. Important grants of money will be given to various associations for the purpose of pushing the industry in all favorable portions of the Empire.

The International Commission which for the past eighteen months has been delimiting the Anglo-German frontier in East Africa, has found that the boundary between the Uganda Protectorate and the Congo Free State ought to be further east than shown on the map. The result of changing the line deprives Great Britain of an important strip of territory, including the valuable salt deposits of Lake Albert Nyanza, which will henceforth be wholly in the Congo Free State. A part of the Kager River, which formerly belonged to Germany, falls to Great Britain.

The latest news from the Far East is that Port Arthur has been invested, both by sea and by land. On May the 5th, while Admiral Togo's fleet, in order to distract the attention of the Russians, made a demonstration in the harbor, sixty Japanese transports succeeded in landing a large body of troops at the village of Pitsewo, on the east coast of the Liao-Tung Peninsula, eighty miles north-east of Port Arthur, and one hundred south of New Chwang. At the same time, troops were also being landed at Cape Terminal, and at Port Adams, on the west coast of the peninsula. The Russians at these points, being outnumbered, made no resistance. Subsequent despatches state that these forces have already taken possession of the railway leading from Port Arthur to Mukden and Harbin, hence the sending of further supplies or men into Port Arthur cannot be accomplished by the Russians without a struggle. There is some speculation as to whether the Japanese will attempt simply to keep the town in a state of siege, or whether they will bombard it at an early date. The Russians, however, are by no means alarmed at the cutting off of Port Arthur. They were expecting the coup, and Admiral Alexieff and Grand Duke Boris had already left it in order to be with the active army on the Yalu. There are 23,000 men at Port Arthur, under General Stoesses, and the Russians state that they have plenty of provisions of all kinds to enable them to stand a siege for a year. There are graver fears regarding the fate of General Kouropatkin's army to the northward, which now has to oppose a total number of from 190,000 to 200,000 men. Heavy fighting has taken place at Feng-Wang-Cheng, which the Japanese have taken possession of. The Russians are also said to be evacuating New Chwang.

NOTES AND NEWS.

"Simplicity of character is the natural result of profound thought."—[William Hazlitt.]

A military inspector for Canada is to be appointed at a salary of \$6,000 per annum.

Rice and dried fish form the uniform food of the Japanese army in campaigning times.

"People seldom improve when they have no other model but themselves to copy after."—[Goldsmith.]

The steamship Ionian, the first ocean vessel of the season to arrive at Montreal, entered that port on May 4th.

The Electric Power Company's dam on the Saskatchewan River, nine miles from Brandon, was washed away on May 5th.

Over 2,000 immigrants, the majority of which are bound for the Northwest, landed at Quebec on May 3rd; 450 will settle in Quebec, and a few on Anticosti Island.

The dredges of the Iowa-Lillooet Co., working in the Fraser River, are now getting gold to the amount of \$2,000 per day. The members of the company expect that amount will be doubled.

Three parties of Canadian surveyors are to start soon for Alaska, where they will work jointly with American surveyors in delimiting the Canada-Alaska boundary under the London award of last year.

The Postmaster-General has been advised that President Diaz, of Mexico, approves of the plan to make the postal rate between Canada and Mexico two cents per ounce. The present rate is five cents per half ounce.

Sam Kee, a contractor of Vancouver, B.C., has arranged to take over 100 Chinamen to Raymond, to work on a sugar-beet farm which he will operate. He has leased 800 acres of land, and will raise sugar beets on an extensive scale.

The Toronto Street Railway Co. has begun the construction of their new transformer station, whose purpose will be to receive and utilize the power from Niagara Falls. The cost of the building will be \$20,000; that of the plant \$50,000.

Medals for conspicuous bravery have been awarded to Robert Malcolm Hill for saving Miss Jean Oman from the fire at the Mount Royal Club, Montreal, Jan. 5th, 1904, and to Mr. Edward Lane, for saving Stanley Smith from drowning at Galt.

Lord Strathcona is actively interesting himself in the extension of the system of exchange of letters between pupils in England and Canada. A conference of head-masters to discuss this and kindred Anglo-Canadian questions is summoned for May 17th. Lord Strathcona will preside.

The Upper Lake ports promise to form a vast grain center this year. At Port Arthur the C. P. R. elevator will store 75,000 bushels of grain, and the Canadian Northern elevators 7,500,000 bushels. At Fort William the C. P. R. elevators will have a storing capacity for 9,000,000 bushels; that of the Ogilvie Company 500,000 bushels, and the new Empire elevator building 2,000,000 bushels of grain.

According to a preliminary estimate by F. O. Licht, the sugar-beet area in Europe for the coming campaign will be about 403,000 to 414,000 hectares in Germany, 312,000 to 322,000 in Austria, 188,000 to 197,000 in France, 440,000 to 460,000 in Russia, 48,000 to 51,000 in Belgium, 80,000 to 84,000 in Holland, 28,000 to 30,000 in Sweden, 14,000 to 15,000 in Denmark, and 88,000 to 91,000 in other countries. (One hectare is equal to 2.471 acres.)

In order to develop commercial relations between Canada and South Africa; the Elder-Dempster steamship line has resolved to carry a quantity of Canadian cargo to the Cape free of charge. Quantities of various Canadian wares will be taken by the Steamer Monarch, which will leave Montreal about the middle of July, and will touch at every South African port. The scheme will be placed in the hands of the Canadian Boards of Trade.

"No doubt the rapid spread of weeds in the Dominion is due not only to poor cultivation and carelessness in the selecting of seed, but to the fact that so many devote their attention almost wholly to grain-sowing, with but little stock-raising, and only occasional seeding with clover. It is now generally admitted that stock-feeding and frequent seeding with red clover are essential, not only to keep land in good heart and enable it to withstand drouth, but to keep it clean as well."—[Dr. Mills.]

Hoard's Dairyman refers to the recent selling at a fancy price of Rev. J. D. Dietrich's little 15-acre dairy farm near Philadelphia, as a consummation which has "ended one of the most unique and inspiring examples of intensive farming and dairying that has ever been conducted in the United States." By intense cultivation, the constant use

of all available fertilizers, the planting of clover and peas, and soiling crops for summer feeding, Mr. Dietrich so developed his few acres that they have for several years been able to support at a profit the equivalent of thirty mature animals, two to each acre. In fact, so successful was Mr. Dietrich, and so enormous the crops which he grew, that the attention of writers and lecturers has been turned to his accomplishments, and has given them fame. Professor Chester, of the Delaware Station, who analyzed samples of the soil, reported finding four times as many bacteria in it per cubic inch as he had ever found before, a conclusion which should go to prove that the richer the soil, the more rapidly the bacteria develop. Mr. Dietrich has sold the tract in order that he may give his attention to a larger farm of 340 acres, upon which he will try his intensive system on a larger scale.

Agricultural Progress and the Washington "Heresy."

The third of May, and still nothing done on the land. The weather keeps cold, and the snowbanks disappear slowly. Roads are almost impassable. Though the catch of clover last year was not very good in many instances, what did catch has wintered pretty well. The grass fields look smooth and even, and have not suffered from winter-killing. Pasturage will likely be good. Navigation has been open here for about ten days, and considerable shipping is going on. Potatoes are the principal article of export just now, and the price is from 40c. to 45c. per bushel of 60 lbs. This will put a good deal of money into our farmers' pockets. Fat cattle are being marketed at from 4c. to 5c., live weight, and bacon hogs of best quality are worth 4½c., alive. Horses are in brisk demand. Stock in general have been well wintered, and spring feed is still plentiful. A hopeful feeling pervades the agricultural community, and everybody is anticipating a good crop and a continuance of the present good times. Farming is more intelligently engaged in than it was a decade or two ago. Everybody is asking for the best quality of all kinds of farm seeds, and will take no other. There is hope for the farmer when he does this. The soil is being better cultivated also, and better stock is being kept on the farms. We are fast reaching a higher plane in agriculture, and there is no question that the average farmer is much better off and is living better and spending more in luxuries than some years ago. This advance is a direct result of the higher education in agriculture with which our farmers have come in contact through Government experiment stations, farmers' institute lecturers, and the agricultural press of Canada, headed by the OLD RELIABLE "FARMER'S ADVOCATE," WHICH HAS DONE MORE THROUGH THE NEARLY FORTY YEARS OF ITS EXISTENCE TO ELEVATE THE CALLING OF THE FARMERS OF CANADA AND RENDER THEIR LABOR PRODUCTIVE AND PROFITABLE THAN ALL OTHER AGENCIES PUT TOGETHER. Its influence over such a long period can hardly be overestimated.

But about this "new-soil gospel" commented on in a recent number. Well, we must not call anything heresy nowadays, unless we can disprove by our practice. Many things that we accept as orthodox in our agricultural practice to-day was heresy to our fathers. But has Dr. Milton Whitney proved to a demonstration the truth of his startling theory, or has he just assumed its correctness. It does not appear to me that he has made any real scientific discovery, and I think the practical knowledge of all intelligent farmers will not be with him in saying that all land is equally fertile in its natural state. Moisture means a great deal to the farmer, but you may water some of our poor soils every day through the summer, and still not get much return in grain.

The man who discovered that the clover plant had the ability to draw nitrogen from the soil air through its roots made a scientific discovery that has been revolutionizing our agriculture, and the truth of the doctrine he taught has been proved by the practice of thousands. I think the farmers of Canada will still cultivate the clover as a soil enricher and a conservator of moisture, as well as one of the best plants for stock that is yet known to us. But as we have not seen the bulletin in question, we will reserve further remarks on question till we know more about it. W. S. Prince Edward Island.

Massey-Harris Co. Changes.

Several changes in connection with the Ontario sales department of the Massey-Harris Company have recently taken place. Mr. R. Harmer, who was manager of the Ontario branch, and who has also been a director of the Company since its inception, has found that his interests in several other industrial manufacturing enterprises demanded so much of his time that he has resigned the positions in the Massey-Harris Co. His place on the Board has been filled by the appointment of Mr. R. H. Verity, the General Superintendent. Mr. Hugh Aird, who has been assistant to Mr. Harmer for some time past, now becomes acting manager of the Ontario branch, and has been given able assistants in the persons of Mr. G. A. Whitaker, lately secretary to the general manager, and Mr. C. L. Wisner, lately cashier in the head office. The bringing in of these younger men into the active operations in connection with the sales department will no doubt have a good effect upon the business. We wish the new appointees to the staff every success.

Mr. H. S. Fallows' Sale.

The auction sale of the small but useful Shorthorn herd belonging to Mr. H. S. Fallows, Evelyn, Ont., was fixed for May 3rd, with the expectation that spring seeding would, as in the average years, be well over by that date, but, owing to the lateness of the spring, farmers generally had only commenced seeding, which accounted for the rather limited attendance. The cattle, however, were looking well, and, as those who attended meant business, the prices realized were, on the whole, quite as good as expected, and the owner was well pleased with the result. His advertisement in the "Farmer's Advocate" brought a large demand for the catalogue and most of the buyers, and but for the fact of seeding being so general a much larger attendance and better prices would no doubt have resulted. The pure-bred females averaged \$100, and the grade cows \$64.50. The bull calves were mostly too young for service and sold low, the average being \$61.00. Following is the list:

Mary Ann 13th; John Graham, Alvinston .....	\$180
Mary Ann 17th; A. Wier, Masonville .....	135
Mary Ann 16th; Jas. McCartney, London .....	125
Mary Ann 16th; A. Wier .....	100
Mary Ann 15th; H. Farncombe, Masonville .....	100
Victoria; J. T. Gibson, Denfield .....	100
Evelyn Velvet; D. Cowan, London .....	90
Evelyn Blossom; D. Cowan .....	90
Iona; Jas. Finnie, Wildwood .....	90
Velvet Blossom; W. Russell, The Grove .....	90
Jetty Velvet 2nd; J. H. Marshall, London .....	90
Red Velvet 2nd; H. Farncombe .....	75
Mary Ann 14th; D. Quinne, Kintore .....	75
Mattie 2nd; A. Wier .....	75
BULL CALVES.	
Improver; T. Mercer, Markdale .....	75
Subscriber; T. Mercer .....	70
Success; D. McDonald, Kintore .....	70
Onward; S. Belton, Wyton .....	55
Reliable; J. Finnie .....	55
Mystic; D. McMillan, McMillan .....	45

Too Early Pasturing.

The custom is all too prevalent among farmers and stockmen to "rush the season" by turning their stock on the grass before it has reached a proper state of maturity. The desire to dispense with as many chores as possible at this busy season, as well as the apparent saving in food, leads many astray. Especially will there be a tendency to this evil the present spring, on account of the extra hurry, owing to the lateness of the season, and on account of the scarcity of feed following the past severe winter. But if fodder is available, nothing is to be gained by making stock roam all day over the fields, exhausting vitality which, in the case of milch cows, should be devoted to milk production, in fruitless effort to find a sufficient quantity of grass. They return in the evening exhausted and hungry, because the extremely tender grass which they have eaten has no body to it, and therefore is not of itself suitable nourishment. Moreover, the taste of green food destroys the appetite for dry, and the cattle refuse to eat enough hay to make up the deficiency. The growth of grass is also seriously retarded by too close grazing before it has received a good start and by exposure of roots due to cutting up of the soft sod by the animals' hoofs. The result in the latter case is more marked if the season happens to be a dry one. D. G. Leeds Co., Ont.

Backward Season in Cumberland Co.

Spring does not seem to be in any great hurry in this section this year. Winter lasted right up to the last of March, and April was pretty cold and not very wet, so that the soil is hardly suitable for seeding yet, though some are at it. Hay is very scarce and high, and no doubt a great many cattle will be turned away to pasture too early. Cattle throughout the country are generally in good condition, though there is less beef in this section than for many years. I do not know when I ever saw horses that go into town in the wagons and carriages in such good condition, and the prices are fully as handsome as the horses. Beef is rather lower than two weeks ago. Pork seems to be about holding its own. Oats and mill feed are slightly lower than two weeks ago, but are still high. Potatoes are only worth forty-five cents per bushel. Cumberland Co., N. S., May 5, 1904. C. H. B.

U. S. Importing Beef Cattle.

A Washington despatch says: Secretary Wilson reported at the Cabinet meeting that he had granted permission to the Venezuelan Government to import into the United States one thousand head of Venezuelan cattle. The customs duty will have to be paid on the cattle. They will be shipped to New York, consigned to an abattoir. No breeding cattle are to be among the number imported, the idea being to use them exclusively for food. They will be rigidly inspected.

Manitoba Seeding.

Though later than last year, the Manitoba seeding will be practically finished this week. The area sown to wheat and other grains will be larger than last year, but the increase is not as great as might have been expected. Rapid germination is expected.

### A Budget of British News.

The season continues to develop satisfactorily. Bright days, with overcast nights, and some nice rains, have changed the face of the country. Stock is being turned out, and cows will soon be able to lie all night in the pastures. After a miserable winter, this change is particularly welcome and reassuring, as there have been prophecies of a continuance of bad weather for years to come. The sowing of spring grain proceeds apace, and the tempering effects of rain upon newly-turned furrows has assisted materially in forming a tilth. Some of the earlier sowings have come up well, and are showing first-rate in the rows. Some of the barley and oats that were put into a rough and cold seed-bed have a somewhat starved appearance, but where anything like a good tilth was made the young crops are fairly promising. The wheats have improved in appearance to some extent, but in most cases they are gappy, and in many lacking in vigor as well. It is, however, probable that with the best of weather for the rest of the season we shall have an average wheat crop.

The wheat market has remained in a very quiet condition this week, and cargoes, both of Australian and LaPlata, are 6c. to 12c. lower to sell, with indeed very little disposition to buy even at this decline. The trade seems to generally regard the Anglo-French treaty as an instrument which greatly lessens the risk of this country being involved in the Russo-Japanese dispute, and in view of the liberal shipments from Argentina, Australasia and India, is disposed to wait, in the hope of being able to do better by and bye, notwithstanding the dearth and scarcity of American and Canadian wheat. Under normal conditions it might have been supposed that the very bullish American crop report would have stirred the trade, but it has failed to do so, which may perhaps be taken as a sign that the market will be very difficult to move.

The general opinion that prevailed in and around Mark Lane, that the Chancellor of the Exchequer, in his budget on Tuesday, would re-introduce the duty on grain and flour, has proved to be entirely wrong. Party exigencies have probably induced young Mr. Chamberlain to avoid this dangerous (from a political point of view) question. Meanwhile, thinking men are wondering where the money is to come from to meet our enormously increased expenditure if a wider basis of indirect taxation for revenue is not adopted.

On the Baltic yesterday (Friday, 22nd) heavy Argentine shipments were responsible for a further drop in values, and in the meantime trading is practically at a standstill.

At Mark Lane, English wheat had a steady market, but foreign ruled inactive at unchanged prices. Flour was neglected.

From the Board of Trade returns, for the quarter ending 31st March, I have again to point out the large increase of the imports of U. S. cattle, or, at least, cattle from the ports of that country. The total for the three months is 112,235, as against 65,581 for the same period a year ago. The imports of sheep tell the same tale; 104,277 against 48,804 in 1903—considerably more than double. The Canadian figures for these show an increase over those of last year, but only to a moderate extent.

In wheat, flour, oats, peas, maize, bacon, butter and cheese, the Canadian import figures are all very much in advance of the first quarter's totals of 1903. Some of the quantities are quite remarkable. Cheese and oats are more than doubled. We have had three times as much maize and flour, while peas have increased fourfold. Hams, although received in smaller bulk, have produced more money. Eggs have gone back to about the same figure as in 1902, being only 8,756 great hundreds, against 35,805 in 1903.

The Canadian Produce Corporation, Ltd., are now issuing their prospectus, and offering their shares to the public. I had quite a pleasant chat with Mr. Walter H. Nursey, at the offices of the company, Palmerston House, E. C., this week. He is quite sanguine as to the grand success of this new venture, and waxed quite eloquent on the superiority of Canadian produce. The idea is to eliminate the middlemen, numbering sometimes as many as three or four, who stand between the Canadian grower and the English consumer.

I hear that the Duke of Argyle and Lord Strathcona have joined the Committee of the Imperial Exhibition, to be held at the Crystal Palace next year. The special object of the exhibition, which will be opened in May, will be to "demonstrate that the British Empire produces all the necessities and luxuries of life, in quantities large enough to supply the wants of all its inhabitants, while their quality is at least equal to those produced in any other portion of the globe."

The trade at Deptford Foreign Animals Wharf has improved very much of late, and prices have risen to the normal level. The consignments have been all scheduled as U. S. cattle, and prices are now ruling 12c. to 12½c., with occasionally 12¼c. for "specials." Sheep (clipped) are making 15c. to 15½c.

At Deptford to-day (Saturday) 1,939 States

cattle met a firm trade, and made 12c. to 12½c., while sheep (287 wool, 508 clipped) were sold at 14c. to 15c. per lb.

The market for bacon continues very firm, and prices all round have advanced. For Canadian bacon an active inquiry has prevailed, and buyers have been ready to pay stiffer prices in order to secure supplies, but owing to delays in and absence of arrivals, few transactions of importance have been completed. The following are the latest prices:

Leanest, 40-56 lbs., average 10½c.

Leanest, 58-62 lbs., average 10½c.

Heavy lean, 46-62 lbs., average 9½c.

Butter.—This market has a weak tendency, owing to heavy arrivals of colonial and Argentine, and the Siberian supplies are coming forward more freely. Prices are lower all round. Canadian may be quoted 18c. to 18½c. per lb.

Cheese.—The same slackness of demand and apathy that have characterized the department for Canadian cheese for some time continues, the trade manifesting little confidence in the near future, and sales have been difficult to effect, even at a repeated decline in value to 10c. to 10½c. for primest September makes. Stocks at Commercial Road Station yesterday amounted to 81,000 boxes, against 17,000 boxes as in 1903.

London, Eng., April 23, 1904.

### Forthcoming Auction Sales.

The following auction sales of pure-bred stock are announced:

June 14th—Shorthorns; Jas. Bray, Longburn, Manitoba.

June 15th—Yorkshires; D. C. Flatt & Son, at Hamilton, Ontario.

June 28th—Shorthorns; Hudson Usher and others, at Hamilton, Ontario.

### MARKETS.

Very little grain is being marketed of late, and interest centers in the trade in live stock and dairy products. During the past week many farmers visited the Toronto live-stock markets in search of short-keep feeders, and prices for this class are quite lofty and firm. Hogs show a strong tendency to hang around \$5.10. Trade in draft and agricultural horses has been resumed after the Repository was cleared out of fancy stock which accumulated during show week. The cheese market is in a most depressed condition, new cheese bringing scarcely more than half what it did at this season last year. This condition is sure to lead to a smaller production of cheese, which, in turn, may improve the price. The following are the Toronto market quotations:

#### LIVE STOCK.

Exporters—Choice, well-finished heavy exporters, \$4.75 to \$4.90 per cwt.; medium, \$4.60 to \$4.70. Export bulls, \$3.75 to \$4; medium, \$3.50 to \$3.60. Export cows, \$3.75 to \$4.25 per cwt.

Butchers—Choice picked lots, equal in quality to best exporters, 1,100 to 1,200 each, \$4.40 to \$4.70; good, \$4.25 to \$4.35; medium, \$3.90 to \$4.10.

Feeders—Short-keep feeders, 1,100 to 1,200 lbs. each, \$4.40 to \$4.60; those weighing from 950 to 1,050 of good quality, \$4 to \$4.25 per cwt.

Stockers—Yearlings, \$3.50 to \$3.75; poorer grades and off-colors, \$2.50 to \$3.25, according to quality.

Milch Cows—Milch cows and springers, from \$25 to \$55 each. Veal, \$2.50 to \$10 each, and \$3.50 to \$5.50 per cwt.

Sheep—Export ewes, heavy weights, \$4 to \$4.25; light export ewes, \$4.25 to \$4.75; export bucks, \$3.25 to \$3.75.

Lambs—Yearling grain-fed lambs, \$6 to \$6.25; barnyard lambs, \$4.75 to \$5.50 per cwt.

Spring Lambs—Prices range from \$2.50 to \$5.50 each.

Hogs—Good bacon hogs, fed and watered, \$5.10 cwt.

#### GRAIN AND PRODUCE.

Toronto Wholesale Prices.

Wheat is in good demand for home milling, and the market is firmer at 92c. to 93c. for No. 2 red and white, west or east; goose, 82c. for No. 2, east; spring, 87c. for No. 2, east. Manitoba wheat is steadier at 92c. for No. 1 hard, 91c. for No. 1 northern, 87c. for No. 2 northern, and 84c. for No. 3 northern, at Georgian Bay ports, and 6c. more grinding in transit.

Flour—Ninety-per-cent. patent, \$3.60 in buyers' bags, west. Manitoba Flour—\$5 for cars of Hungarian patents, \$4.70 for second patents, and \$4.60 for strong bakers', bags included, on the track, Toronto.

Mill feed is steady at \$17 for cars of shorts, and \$16 for bran, in bulk, east or west. Manitoba Mill Feed—\$21 for cars of shorts, and \$20 for bran, sacks included, Toronto freights.

Barley is dull at 42c. for No. 2, 41c. for No. 3 extra, and 38c. for No. 3, west or east.

Detroit—Beans, cash, \$1.60.

Buckwheat, 48c. to 49c. for No. 2, west or east.

Rye, 59c. to 60c. for No. 2, west or east.

Corn—41c. for cars of mixed, and 42c. for yellow west. American—57½c. for No. 2 yellow, 56½c. for No. 3 yellow, and 55½c. for No. 3 mixed, in car lots, on the track, Toronto.

Oats are firmer at 32c. to 32½c. for No. 1 white, and 31½c. for No. 2 white, east. No. 2 white are quoted at 31c., west.

Peas, 66c. for No. 2, west or east.

Baled Hay—There is plenty of hay offering for the quiet demand, at \$9 per ton for car lots, on track here.

Baled Straw—Car lots, on track, \$5.50 per ton.

Potatoes—The market continues firm under the influence of the demand from the other side. Quotations are steady at \$1.10 to \$1.15 for cars, on track, here. Potatoes out of store are held at \$1.25 to \$1.30 per bag.

Seeds—Local dealers quote the market for store seeds at \$4.25 to \$7.60 for alsike, \$5.40 to \$7.75 for red clover, and \$1.50 to \$2.75 for timothy, the latter for fall-thrashed, all per bushel, in job lots.

Butter—The market shows no sign of improvement. Supplies of all kinds continue to pour in, and are accumulating here. Quotations are lower for dairies, and the market is weak, and concessions on the part of the sellers is the rule: Creamery prints, 17c. to 19c.; dairy, pound rolls, choice, 12c. to 13½c.

Cheese—The demand is quiet. Plenty of new stock is coming forward, and the market is easy in tone. Dealers quote new large at 8½c., new twins at 6½c., and old large at 9½c., for job lots, here.

Eggs—Dealers in the country are busy buying eggs for pickling purposes, and the supplies coming here are light. The demand is active, and the market firm, at 14½c.

Beans are quiet, and the market is steady at \$1.60 to \$1.65 for hand-picked, \$1.45 to \$1.50 for prime, and \$1 for undergrades.

#### Montreal Wholesale Prices.

Grain—There were still sellers of No. 3, Montreal inspection, on the market at 38c. in store, and of No. 2 at 39c. in store. Peas, about 71c., afloat. May—No. 2 barley, 49c. and No. 3 extra, 48c.; No. 2 rye, 62c.

Flour—Prices a little easier on Ontario grades. Manitoba patents, \$5.10; strong bakers', \$4.80; winter wheat patents, \$4.80 to \$5.10; straight rollers, \$4.60 to \$4.85; straight rollers, in bags, \$2.20 to \$2.30.

Feed—Ontario bran is quoted at a slight decline. Manitoba bran, in bags, \$19; shorts, \$21 per ton; Ontario bran, in bulk, \$18.50 to \$19.50; shorts, \$20.50 to \$21.50; mouille, \$26 to \$28 per ton, as to quality.

Hay—The market is steady; No. 1, \$10 to \$11; No. 2, \$8.50 to \$9.50; clover, mixed, \$7.50 to \$8; clover, \$7 to \$7.50 per ton, in car lots.

Beans—Choice primes, \$1.45 per bushel; \$1.40 in car lots.

Provisions—Fresh-killed abattoir hogs, \$7.50 to \$7.75; live hogs, \$5.10 to \$5.25.

Eggs—New-laid, 14½c. to 15c.

Butter—New-made, 15½c. to 16c.; western dairy, 13c.; rolls, 13c.

Cheese—Ontario, fall-made, 8c. to 9c.; new-fodder, 7c. to 7½c.

#### Retail Prices, Toronto Street Market.

Wheat, white	.....	\$0.90
Wheat, red	.....	90 to \$0.92
Wheat, goose	.....	77 to 78
Wheat, spring	.....	90
Oats	.....	39½
Barley	.....	45
Rye	.....	61
Peas	.....	68
Hay, No. 1 timothy	.....	12.00 to 14.50
Hay, mixed or clover	.....	9.00 to 10.00
Straw, sheaf	.....	10.00
Straw, loose	.....	6.50
Dressed hogs, light, cwt.	.....	7.25
Dressed hogs, heavy	.....	6.75
Butter	.....	18 to 20
Eggs, new-laid	.....	15 to 16
Fowls, per pound	.....	10 to 11
Young chickens, per pair	.....	75 to 1.50
Young chickens, per pound	.....	14 to 15
Turkeys, per pound	.....	15 to 18
Apples, per barrel	.....	1.00 to 3.00
Potatoes, per bag	.....	1.15 to 1.25

### Horse Market.

Business at The Repository, Toronto, was brisk during the past week, all the offerings, comprising over two hundred head, being sold at satisfactory prices. The usual falling off in work horses at this season has not occurred, prices being equal to any week this season, and prospects are that the demand will continue at fair prices during the next few weeks, although parties expecting to sell will be safer in the present market than later. The sale of Cashin's lumber horses was well attended. The horses were mostly sold to contractors and railroad men, and were a splendid lot, selling from \$80 to \$180.

The following is Walter Harland Smith's weekly report of prevailing prices: Single roasters, 15 to 16 hands, \$150 to \$250; single cobs and carriage horses, 15 to 16.1 hands, \$125 to \$275; matched pairs carriage horses, 15 to 16.1 hands, \$375 to \$550; delivery horses, 1,100 to 1,200 pounds, \$135 to \$165; general-purpose and express horses, 1,200 to 1,350 pounds, \$140 to \$175; draft horses, 1,350 to 1,750 pounds, \$150 to \$260; serviceable second-hand workers, \$50 to \$120; serviceable second-hand drivers, \$75 to \$125.

### British Cattle Markets.

London.—Canadian cattle are slow, at 10½c. to 11½c. per lb.; refrigerator beef, 8c. per lb. Sheep, 12c. per lb.; yearlings, 13c.



Cheese Markets.

Tweed, May 5.—414 cheese were boarded; 6 1/2c. was offered; no sales.
Kingston, May 5.—473 white and 225 colored were registered. Offers of 7c. for white and 6 1/2c. for colored were refused.
Brockville, May 5.—The offerings were 1,054 white and 1,308 colored; total, 2,362 boxes; 7c. was bid, but no sales were made on the board.
Madoc, May 5.—118 cheese were offered, all white; 60 sold at 7 1/2-16c., 150 at 7c., 44 at 6 1/2c.; balance unsold.
Vankleek Hill, May 5.—There were 401 boxes of cheese boarded and sold; white, 6 1/2c.; colored, at 7c.
Winchester, May 5.—90 colored and 730 white were registered; none sold.
Picton, May 7.—490 boxed colored; 7c. bid; no sales.

Wool.

The weather is finer now, and more progress is being made with the clip. There is no new washed coming in yet, and dealers here do not expect any until about the end of the month. It is quoted nominal at 16c. to 17 1/2c. Some unwashed is arriving, but only in small lots. It is quoted at 9 1/2c. to 10c.

Buffalo Markets.

East Buffalo.—Cattle—Prime steers, \$5.10 to \$5.25; stockers and feeders, \$3.50 to \$4.45. Veals, \$4 to \$5.25. Hogs—Heavy, mixed and Yorkers, \$5 to \$5.10; pigs, \$4.80 to \$4.90. Sheep and Lambs—Lambs, \$4.50 to \$6.10; yearlings and wethers, \$5.25 to \$5.50; ewes, \$4.75 to \$5; sheep, mixed, \$3.25 to \$5.

Montreal Markets.

Montreal.—Best cattle, 4 1/2c. per lb.; good mediums, 4c. to 4 1/4c.; ordinary mediums, 3 1/2c. per lb.; spring lambs, \$3 to \$4.25 each. Good lots of fat hogs, 5 1/2c. per lb.

Chicago Markets.

Chicago.—Cattle—Good to prime steers, \$5.70 to \$5.75; poor to medium, \$3.90 to \$4.85; Texas-fed steers, \$4 to \$4.60. Hogs—Mixed and butchers', \$4.65 to \$4.85; good to choice heavy, \$4.75 to \$4.87 1/2. Sheep—Good to choice wethers, \$4.65 to \$5.25; fair to choice, mixed, \$3.75 to \$4.50; clipped native lambs, \$4.25 to \$5.25.

MISCELLANEOUS.

Are You Going to the Pacific Coast?

To the Editor "Farmer's Advocate":
Sir,—Mill lumber for buildings only cost, landed at the Lower Fraser Valley farm, about one-half of what it will cost on the prairies, and, owing to the abundance of cedar and the milder climate, you will only want about half the amount. Your fencing also will cost you only about one-half the amount, and firewood practically nothing.
Then, it is never necessary to leave a portion of your land fallow one year in three, so that, with the same area of land, we get fifty per cent. more crop every year, assuming that the crops were the same in bushels or tons to the acre in both cases. Where you would get, say, twenty bushels per acre of wheat or forty bushels of oats on the prairies or Eastern Canada, we should get, as a good average, forty bushels of wheat and eighty bushels of oats in the Lower Fraser Valley; one and a half tons per acre of timothy to three tons here (I have known as high as six tons); potatoes, from six to ten tons; peas, one and a half tons to two tons; and other crops in proportion. Hops, for instance, run from one-half to

one ton per acre, depending largely upon the kind grown. Dairying is carried on profitably the whole year round, and not for two or three months only. Chickens can be kept without stoves or artificial warmth all winter, and with proper care will lay all winter.

PRICES.—Hay will average, one year with another, about \$11.00 per ton, baled (at present it is \$18.00 per ton); oats run about \$22.00 per ton, say 37c. per bushel (present price is \$27.00 per ton); butter averages about 25c. per pound the year round; milk, sent to the condensed-milk factory, 12c. per gallon; hogs, 5c. to 6c. per pound, live weight, and they have cost nothing but a little skim milk and clover pasture, as they are sold to the Chinamen before they are fatted (two litters a year); eggs, from 20c. to 40c. per dozen; chickens, from \$5.50 to \$10.50 per dozen—the latter price may seem a gross exaggeration, but I can refer the reader to Mr. A. Burnet, of Langley, who recently sold two dozen Plymouth Rocks in Vancouver at 15c. per pound, dressed; potatoes vary, from \$8.00 to \$20.00 per ton; lambs, \$3.50 each; sheep, \$5.00 to \$7.00; and everything else in proportion. Small fruits, such as strawberries, raspberries, gooseberries, rhubarb, etc., return a net profit over all expenses of from \$200 to \$500 per acre, depending upon the season and business capacity of the farmer. Land which will produce such crops that will sell at such prices is cheap at \$100.00 an acre. I know large areas rented at from \$8.00 to \$15.00 per acre, and the tenants are doing very well indeed. It is absurd to say that such land in its uncleared state is dear at \$10.00 to \$20.00 per acre, and it can still be bought in fairly large blocks, four or five miles back from the river, even as low as \$5.00 to \$10.00 per acre.

Are these big crops and big prices likely to continue? There are many timothy hay fields in the Lower Fraser Valley that have been cut continuously for from twenty to thirty years, and are still cutting three tons (and often over that) per acre, and owing to the proportionately large amount of live stock kept, there is little likelihood of the land ever becoming exhausted under any sort of decent farming and cultivation. The population of the Province is four times what it was twenty years ago. It is doubling every ten years, and, judging by present appearances, will more than double again before the next census comes round. But this increase of population for the last fifteen years has been almost entirely an increase, from a farming point of view, of a non-productive population. In other words, it has been the cities, mining camps, fishing camps, logging camps, etc., etc., which have increased, and not the farming population. Big wages and ample work here, and, to some extent, the prosperous condition of farming communities in other parts of Canada are accountable for this.

The land in cultivation and the amount of farm produce raised have increased very largely, but have not kept pace with the increase of population. Fifteen years ago there was about \$2,000,000 of farm produce imported annually. It is now at least \$6,000,000, and, with the exception of tropical fruits, it could all be grown here. With the enormous undeveloped mining, fishing, lumbering and shipping resources of British Columbia, there seems no reason to doubt that the nonproductive (from a farming point of view) part of the population will continue to grow as fast as ever, or even faster than it has done in the past, and while these undeveloped resources are practically unlimited, the area of good agricultural land is comparatively small.

We are protected by a tariff wall from the farmers in the United States, a few miles south of us, and by an eight-hundred-mile railway haul from the farmers in Manitoba and the Territories. In short, there seems to be no likelihood that British Columbia will ever become an exporter of any kind of farm produce, except fruit, as we shall never be able to fill the home market, including the Klondike and other mining districts in the Yukon and the northern parts of British Columbia, which already has a large and increasing population.

The Lower Fraser Valley is 75 miles long by an average of 18 miles wide; of this area nearly two-thirds, or say 550,000 acres, is capable of being profitably farmed, when once cleared and put into cultivation, the balance being mountains, lakes, rivers, etc. Of this 550,000 acres, there is still a large area available for settlement, which is capable of sustaining at least 30,000 more population than it has at present, so that although the area compared to similar districts on the prairies is small, there is still room for a considerable influx of new settlers. The whole of this district is thoroughly opened up with good roads, railways and steamboats, and has every facility and convenience for shipping and marketing farm produce on a large scale. It is well supplied with stores, churches, schools, post and telegraph offices, and means of rapid and cheap communication with Vancouver—its chief market. The public works alone must have cost at least \$5 per acre of the land available for cultivation, and as the lowest Government price for similar crown lands in remote districts, where there are no such facilities, is \$5 per acre, the present average price of bush land is really only the upset Government price, plus the cost of Government improvements. The present low scale of land values cannot continue very long.

The rates of wages in the different industries, approximately, are as follows:

- In the logging camps, from \$40 per month and board to \$5 per day, depending on the kind of work.
Farm hands, \$15 a month and board to \$35 and board. Highest wages go to the best milkers.
Outside work on farms, \$2 per day of 10 hours, without board.
Harvest hands, \$1.75 to \$2 a day and board.
Teams and one man, \$4 a day of 10 hours.
Sawmills, from \$40 per month, without board, to \$5 per day.
Unskilled labor in Vancouver, from \$2 to \$2.50 per day.
Masons, bricklayers and plumbers, about \$5 per day.
Plasterers and painters, about \$3.50 to \$4 per day.
Carpenters, \$3.50 to \$4 per day.
Machinists, \$2.50 to \$3 per day.
Miners, \$3 to \$4 per day.
Mine laborers, \$2.50 to \$3 per day.
Section men on railways, \$1.50 to \$2 per day.
Teamsters, \$40 to \$60 per month.
Women in domestic service from \$15 to \$25 per month.

The right man never has any difficulty in getting work, and certain times of the year it is not at all easy to get labor, particularly in the rural districts. There are no more Chinamen here now than there were fifteen years ago: the number, if anything, is decreasing, whereas the white population has increased almost fourfold. Chinamen are employed in many industries, simply because we cannot get white men; but their work is not, as a rule, cheaper.

The system I have outlined in these letters of starting a farm, is, perhaps, best suited to the man of comparatively small means, who looks forward some day to owning a home of his own, on which he can work for himself and be his own boss, but who at present cannot afford to buy a ready-made farm. To such a twenty- or forty-acre farm will give a good living, and the cost of clearing one systematically is trifling, if spread over a few years.

A man of larger means often likes to start on a place already cleared, or at least partly cleared; but for every man that can afford to buy a \$2,000 to \$6,000 farm, there are dozens who cannot afford to do so, and even the comparatively wealthy man might do worse than build his farm up for himself: he has the satisfaction of seeing it gradually grow from the forest to the field.

The great majority of the bush farms on the Coast have been cleared by people from the Old Country; probably nine-tenths of the people here are British or Canadian of British descent; almost all the remainder are Americans, with a very few French-Canadians, Germans, Swedes and Finlanders. CHAS. E. HOPE. Vancouver, B. C.

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# HOME MAGAZINE



"The breezes of May are blowing,  
Laden with scent and song,  
The thrill of life is growing,  
The pulse of spring beats strong."

## A FAIR BARBARIAN.

BY FRANCES HODGSON BURNETT.

### CHAPTER XXV.—Continued.

He had resented her remaining oblivious of his presence when he stood near her, and he had resented her enjoyment of her surroundings; and now, as he led her away, leaving Lord Lansdowne rather disconsolate, he resented the fact that she did not seem nervous, or at all impressed by his silence.

"What do you want to say to me?" she asked. "Let us go and sit down in one of the arbors. I believe I am a little tired—not that I mind it, though. I've been having a lovely time."

Then she began to talk about Lord Lansdowne.

"I like him ever so much," she said. "Do you think he will really go to America? I wish he would; but if he does, I hope it won't be for a year or so—I mean, until we go back from Europe. Still, it's rather uncertain when we shall go back. Did I tell you I had persuaded aunt Belinda to travel with us? She's horribly frightened, but I mean to make her go. She'll get over being frightened after a little while."

Suddenly she turned, and looked at him.

"Why don't you say something?" she demanded. "What's the matter?"

"It is not necessary for me to say anything."

She laughed.

"Do you mean because I am saying everything myself? Well, I suppose I am. I am awfully happy to-day, and can't help talking. It seems to make the time go."

Her face had lighted up curiously. There was a delighted excitement in her eyes, puzzling him.

"Are you so fond of your father as all that?"

She laughed again,—a clear, exultant laugh.

"Yes," she answered, "of course I am as fond of him as all that. It's quite natural, isn't it?"

"I haven't observed the same degree of enthusiasm in all the young ladies of my acquaintance," he returned dryly.

He thought such rapture disproportionate to the cause, and regarded it grudgingly.

They turned into an arbor; and Octavia sat down, and leaned forward on the rustic table. Then she turned her face up to look at the vines covering the roof.

"It looks rather spidery, doesn't it?" she remarked. "I hope it isn't; don't you?"

The light fell bewitchingly on her round little chin and white throat; and a bar of sunlight struck on her upturned eyes, and the blonde rings on her forehead.

"There is nothing I hate more than spiders," she said, with a little shiver, "unless, seriously, it's caterpillars—and caterpillars I loathe."

Then she lowered her gaze, and gave her hat—a large white Rubens, all soft, curling feather and satin bows—a charming tip over her eyes.

"The brim is broad," she said. "If anything drops, I hope it will drop on it, instead of on me. Now, what did you want to say?"

He had not sat down, but stood lean-

ing against the rustic wood-work. He looked pale, and was evidently trying to be cooler than usual.

"I brought you here to ask you a question."

"Well," she remarked, "I hope it's an important one. You look serious enough."

"It is important,—rather," he responded, with a tone of sarcasm. "You will probably go away soon?"

"That isn't exactly a question," she commented, "and it's not as important to you as to me."

He paused a moment, annoyed because he found it difficult to go on; annoyed because she waited with such undisturbed serenity. But at length he managed to begin again.

"I do not think you are expecting the question I am going to ask," he said.

"I do not think I expected to ask it myself,—until to-day. I do not know why—why I should ask it so awkwardly, and feel—at such a disadvantage. I brought you here to ask you—to marry me."

He had scarcely spoken four words before all her airy manner had taken flight, and she had settled herself down to listen. He had noticed this, and had felt it quite natural. When he stopped, she was looking straight into his face. Her eyes were singularly large and bright and clear.

"You did not expect to ask me to marry you?" she said. "Why didn't you?"

It was not at all what he had expected. He did not understand her manner at all.

"I—must confess," he said stiffly, "that I felt at first that there were obstacles in the way of my doing so."

"What were the obstacles?"

He flushed, and drew himself up.

"I have been unfortunate in my mode of expressing myself," he said. "I told you I was conscious of my own awkwardness."

"Yes," she said quietly: "you have been unfortunate. That is a good way of putting it."

Then she let her eyes rest on the table a few seconds, and thought a little.

"After all," she said, "I have the consolation of knowing that you must have been very much in love with me. If you had not been very much in love with me, you would never have asked me to marry you. You would have considered the obstacles."

"I am very much in love with you," he said vehemently, his feelings getting the better of his pride for once. "However badly I may have expressed myself, I am very much in love with you. I have been wretched for days."

"Was it because you felt obliged to ask me to marry you?" she inquired.

The delicate touch of spirit in her tone and words fired him to fresh admiration, strange to say. It suggested to him possibilities he had not suspected hitherto. He drew nearer to her.

"Don't be too severe on me," he said—quite humbly, considering all things.

And he stretched out his hand, as if to take hers.

But she drew it back, smiling ever so faintly.

"Do you think I don't know what the obstacles are?" she said. "I will tell you."

"My affection was strong enough to sweep them away," he said, "or I should not be here."

She smiled slightly again.

"I know all about them, as well as you do," she said. "I rather laughed at them at first, but I don't now. I

suppose I'm 'impressed by their seriousness,' as aunt Belinda says. I suppose they are pretty serious—to you."

"Nothing would be so serious to me as that you should let them interfere with my happiness," he answered, thrown back upon himself, and bewildered by her logical manner. "Let us forget them. I was a fool to speak as I did. Won't you answer my question?"

She paused a second, and then answered,—

"You didn't expect to ask me to marry you," she said. "And I didn't expect you to"—

"But now"—he broke in impatiently.

"Now—I wish you hadn't done it."

"You wish"—

"You don't want me," she said.

"You want somebody meeker,—somebody who would respect you very much, and obey you. I'm not used to obeying people."

"Do you mean also that you would not respect me?" he inquired bitterly.

"Oh," she replied, "you haven't respected me much!"

"Excuse me"—he began, in his loftiest manner.

"You didn't respect me enough to think me worth marrying," she said.

"I was not the kind of girl you would have chosen of your own will."

"You are treating me unfairly!" he cried.

"You were going to give me a great deal, I suppose—looking at it in your way," she went on; "but, if I wasn't exactly what you wanted, I had something to give too. I'm young enough to have a good many years to live; and I should have to live them with you, if I married you. That's something you know."

He rose from his seat pale with wrath and wounded feeling.

"Does this mean that you refuse me?" he demanded, "that your answer is 'no'?"

She rose, too—not exultant, not confused, neither pale nor flushed. He had never seen her prettier, more charming, or more natural.

"It would have been 'no,' even if there hadn't been any obstacle," she answered.

"Then," he said, "I need say no more. I see that I have—humiliated myself in vain; and it is rather bitter, I must confess."

"It wasn't my fault," she remarked.

He stepped back, with a haughty wave of the hand, signifying that she should pass out of the arbor before him.

She did so; but just as she reached the entrance, she turned, and stood for a second, framed in by the swinging vines and their blossoms.

"There's another reason why it should be 'no,' she said. "I suppose I may as well tell you of it. I'm engaged to somebody else."

(To be continued.)

### IN A TWENTIETH-CENTURY SCHOOL.

Q.—If a father gave nineteen cents to one of his sons, and six cents to the other, what time would it be?

A.—Why, a quarter to two, of course.

Q.—If a postmaster went to a menagerie and was eaten up by one of the wild beasts, what would be the hour?

A.—Nothing could be easier. Eight P. M.

Q.—If a guest at a restaurant ordered a lobster and ate it, and another guest did the same, what would be the second guest's telephone number?

A.—Absurdly simple, 8-1-2.

### Travelling Notes.

Our visit to Florence has about come to an end, not that we have exhausted its beauties in the three weeks we have been here. We have been able to see a great deal, too, for the weather has been simply perfect. We find that we have grown to love Florence—its picture galleries, museums, churches, and even shops—whilst the views from the surrounding hills, and the people themselves, have been most fascinating and interesting. Moreover, we were happy and comfortable in our pension (Jennings-Riccioli), and that always counts for much. We had some very clever, bright and lively people at our own especial dining-table, which was the smallest of them all, only holding ten of the fifty people who were our fellow guests, and we could chatter unreservedly, for the waiters were Italians, and understood nothing of our conversation.

Fuller descriptions I have left to my Cousin Eleanor, who can write more understandingly than I upon the art treasures with which we have been surrounded, but I feel I must tell you of a society which aroused my keenest interest on the second day after we had arrived in Florence. We had met a procession of black-robed men, with faces concealed, and evidently in dead earnest as to the work upon which they were engaged. The answer to my questions was that they belonged to a society called the Misericordia, one most loved, most revered, and most deeply rooted in the hearts of the people. It has existed for over 600 years, and the spirit of active charity that animates its members is as strong to-day as it was in the middle ages. The tale of its origin is as follows:

The Florentine merchants in the middle of the thirteenth century were doing a large trade in woollen cloths, and the number of porters employed in delivering the goods and in conveying them from one warehouse to another used to assemble in one of the cellars in their leisure hours and play dice. One of the lead porters, an elderly and devout man, was much shocked by the oaths and profane language continually used by his companions, and to put a check upon the bad habit, he proposed that each time one of them was guilty of swearing he should pay a small fine into a box provided for the purpose. The idea was approved, and in a short time quite a large sum of money was collected. The good man next suggested that with this money six litters should be bought, and that the porters should take turns in going out with these litters to convey poor sick persons to the hospitals, and to remove victims of street accidents or brawls. This charitable proposition was unanimously agreed to, and thus the Company of Mercy came into being. They now number 1,500 members, high and low, rich and poor. The dress of the brethren when on duty consists of a long black gown, secured at the waist by a cord, and a black hood, which completely covers the face, and has apertures for the eyes like masks. Both hood and gown are made of strong, coarse

waterproof material. Beneath their uniform the brethren wear their ordinary clothes, which are entirely concealed by the black gown, and it is a common saying that only by his boots can the social status of a member be guessed at.

At all hours of the day or night the Brethren of Mercy may be seen carrying the sick and dying to the hospitals, and as the little black-robed procession passes by, not a man but raises his hat in token of respect to the Misericordia. It is a very honorable institution, and so highly respected that it is a common thing for pious and grateful citizens, if they leave no children or near relatives to constitute the society as heir to their money, so that it is also able to extend its charities, and many of the worthy poor are assisted by the order. It is wholly charitable, no salaries are paid, but a certain number are told off to do duty each week. When their bell tolls they must drop their work, or whatever they may be doing, and go at once to the call for duty.

A candidate for admission to the Company of the Misericordia must be a citizen of Florence, not less than eighteen and not more than thirty years of age. He must be a good Roman Catholic, and of irreproachable moral conduct; he must also be strong and healthy, so as to perform the fatiguing duties required of him, and he must not belong to any ignoble trade, or what is held as low or discreditable. The rich, as well as the poor, may call on the Misericordia in cases of serious illness or broken limbs, and they will, if necessary, attend once or twice a day to move the patient and make the bed, their skill in 'lifting'—acquired by a course of special training—being very valuable in a country where trained nurses as yet are not very plentiful. During the performance of their duties the brethren are forbidden to speak more than is absolutely necessary, and they may never, under any circumstances, accept any refreshment beyond a glass of water. When the members become old and helpless, and if poor—and who is not poor in Italy?—they are given a little help every week, perhaps, but not more than fifteen or twenty cents, from the institution. Now, I ask you, could anything be more beautiful than this living illustration of the Saviour's command, "Do unto others as ye would they should do unto you"; this lovely thought crystallized into loving service bearing fruit all down the ages?

MOLLIE.

**A Gentleman.**

- Never permits himself to be drawn into a personal dispute with a woman.
- Shows consideration for a woman where she misconstrues a question.
- Has no time for gossiping about a woman's family affairs.
- Speaks of his sister as though she had all the graces.
- Gives way to a woman gracefully in a discussion.
- Never shows bad temper when others choose to differ from him.
- Talks about other people's misfortunes without exultation.
- Is careful not to use forcible expressions when talking to women.

**Sentence Sermons.**

- Love is always far-sighted.
- Faith is the secret of firmness.
- Pleasure is but a weed, joy a fruit.
- Talents are tools and not merchandise.
- Secrecy is the best soil for the worst sins.
- The gain of love is lost by the love of gain.
- Kindness is born of our sense of kinship to all.
- There is no merit in sacrifice devoid of service.
- The trifling man never attends to the great trifles.
- The hypersensitive are apt to be wholly selfish.



**We've Always Been Provided For.**

"Good wife, what are you singing for? You know we've lost the hay, And what we'll do with the horses and kye is more than I can say; While like as not, with storm and rain, we'll lose both corn and wheat." She looked up with a pleasant face, and answered low and sweet, "There is a Heart, there is a Hand, we feel but cannot see— We've always been provided for, and we shall always be."

He turned round with a sudden gloom. She said: "Love, be at rest; You cut the grass, worked soon and late, you did your very best. That was your work; you'd naught else to do with wind and rain, And do not doubt but you will reap rich fields of golden grain; For there's a Heart, and there's a Hand, we feel but cannot see— We've always been provided for, and we shall always be."

"That's like a woman's reasoning—we must, because we must." She softly said: "I reason not, I only work and trust; The harvest may redeem the day—keep heart, what'er betide, When one door shuts, I've always seen another open wide; There is a Heart, there is a Hand, we feel but cannot see— We've always been provided for, and we shall always be."

He kissed the calm and trustful face, gone was his restless pain; She heard him, with a cheerful step, go whistling down the lane; And went about her household tasks, full of a glad content, Singing, to time her busy hands, as to and fro she went: "There is a Heart, there is a Hand, we feel but cannot see— We've always been provided for, and we shall always be."

Days came and went—'twas Christmas-tide, and the great fire it burned clear, The farmer said: "Dear wife, it's been a good and happy year; The fruit was gain, the surplus corn has bought the hay, you know." She lifted then a smiling face, and said: "I told you so! For there's a Heart, and there's a Hand, we feel but cannot see— We've always been provided for, and we shall always be."

**How to be Happy.**

One day we met a woman on the street who had been down to the wharf to see the children off on a fresh-air excursion. A sweet light kindled her features, and her every word and movement were expressive of the serenity of contentment and happiness. At the same time we knew that this woman had nothing she could call her own in this world, and had no certainty that the next week or the next month enough bread would grace the table in her humble home to supply her wants. A few moments after we met a man who had a palatial home, with all the appurtenances of material things that are supposed to constitute happiness, and investments that were secure against the fluctuations of silver; and yet his brow was clouded and wrinkled; his eyes had a wild and restless look, and his whole appearance indicated a permanent nervous excitement. He was irritable in his family; was unconscious of the possible joy of social and domestic life; found no beauty in God's world; no pleasure in the luxuries that surrounded him; and, in fact, was simply miserable. Why this difference between the woman and the man?

Chiefly and fundamentally, the one had faith in God, and lived enclosed in His presence through His dear Son; the other seldom, if ever, had God in his thoughts, except to kick against the pricks. And because he had not taken anything of the spirit of Christ's gospel into his heart, selfishness had taken complete possession of him. He had gone after happiness as a direct pursuit, and expected to find it in money and the luxuries it brings. But the happiness had eluded him, and the very things that he had so eagerly spent toil, intellect and energy upon, had not only failed to bring what he looked for in them, but had become the sources of his misery and disquietude. They were ashes. In forgetting God he had never learned the perpetual richness of the joy of ministering to the blessed Saviour by ministering to His poor and sorrowing. But the woman, on the other hand, had not been seeking her own happiness at all. Springing from her supreme faith, there had been a steady outgiving of service for the benefit and happiness of others. Self was lost in her dear Master. Though she did not look for happiness in the world's best gifts, yet the world was very beautiful to her, and she could see nothing but the good in those around her. This is one way to be happy, as near as mortals in this crooked world can hope to reach that condition.—[Selected.]

**The Little Tasks.**

For what we cannot do, God never asks; Beyond what we can bear, He never tries, In sweet fulfillment of the little tasks, We make our preparations for the skies.

The restless heart seeks to do something great, And lets the common things of life slip by, Forgetting that the trifles indicate Which path we're taking for eternity.

Small Willie, accompanied by his father, was taking in the circus and menagerie. "Oh, papa," he exclaimed, as they stopped in front of the elephant, "look at the big cow with the horns in his mouth eating hay with his tail!"



**Disputed Possession.**

### What do You Think?

#### STATE YOUR PREFERENCES.

From time to time letters reach us commending specially various departments of the "Home Magazine" section of the "Farmer's Advocate." We desire a more general expression of opinion from our readers on this subject, in order that we may still further serve their interests. To please and to edify is our purpose. Wider usefulness is what we strive for in the "Home Magazine." We wish to know what you think:

1. About the Story department.
2. The Quiet Hour.
3. Ingle Nook Chats.
4. With the Flowers.
5. The "H. A. B." articles.
6. The Children's Corner.
7. Travel Notes.
8. Domestic Economy.
9. Fashion Notes.
10. The pictures published.
11. The Trained Nurse.

Now, will readers everywhere take a little time to think this over, and write us at once, candidly but concisely, about these departments, how you like them, which you prefer, to which you would like more space devoted, are there any new departments that would add to the value of the "Home Magazine," or any special subjects you would like to see taken up? The opinions of thoughtful, well-informed people are valuable. Please write us about the above points. Kindly write "Suggestions" across the top of your letters. For the best and most suggestive comment, not exceeding 250 words, we will give a prize of \$3.00, for the second best \$2.00, and the third \$1.00. All letters must be mailed to us not later than May 21st. Address, "Farmer's Advocate and Home Magazine," London, Ont.

### Putting Down Carpets.

The secret of carpet-laying is simple, but it is all the more worth passing on for the benefit of other homemakers. All depends on the order in which the different sides of the carpet are tacked. First, tack across the end of the room, across the end of the breadth of carpet—mind, not along their length. Tack this end firmly and rather closely; then take the opposite end, leaving the two sides loose until the end has been stretched tightly and tacked in place. By taking the opposite end for the second row of tacks one can pull the carpet true, while the average carpet put down by inexperienced hands and tacked along one end and then down the side is very apt to be pulled askew. The two ends fastened, the carpet is true to the room, and the work of tacking the sides is soon accomplished. These do not require tacking as closely as the ends, except in front of doors.

Another notion which may have some value to the younger housewives is this: If the old-fashioned rag carpet is used in kitchen or dining-room—and there is nothing which will stand hard wear better—do not have it sewed. The breadths laid in place and slightly lapped will stay in place fairly well, and they can be lifted and cleaned so much more easily that it is worth while to leave them loose. When cleaned each breadth should be pinned firmly on a clothes-line, with clothespins at frequent intervals. Whip the lower edge of the breadth thoroughly, and then unpin, and hang it up by the other edge, and whip again. In this way a rag carpet, too heavy to be well cleaned at home, can be handled and got even cleaner than is done by the carpet-cleaning establishments, even by a woman who has no masculine arm to assist her.—[Ladies' World.]



This week I am going to give up the whole "Corner" to our young correspondents, beginning with some verses in praise of the "Advocate," by Belle McKenzie. With such a Scotch name you ought not to be Irish, Belle, but surely you kissed the "Blarney Stone" before sitting down to write such nice things about our dear old "Advocate"—although I won't deny that they may be all true.

#### The "Farmer's Advocate."

We take a lot of papers,  
I'm almost certain sure,  
If I began to count them,  
I never could get through.

Among them there is one  
Which we treasure more than any.  
The others alongside of it  
Are only worth a penny.

So if you wish to know its name,  
And hear a little of its fame,  
I'll tell you!—its name is the "Advocate,"  
The finest paper up to date.

So I advise you, one and all,  
Before it is too late,  
To send in your subscription  
For the "Farmer's Advocate."

Its circulation is immense;  
Each one says it's first-rate,  
And that they won't give up subscribing  
For the "Farmer's Advocate."  
—Composed by Belle M. McKenzie.



Effie—"Silly! Dolls don't eat anything."

Bertie—"Don't, eh? Well, that one of yours that I cut open was stuffed chock-full of breakfast food."

[Drawn by James Frise, for "Farmer's Advocate."]

#### Making Maple Sugar.

We are always glad to see the spring come, as it brings the sugar weather, which every Canadian boy and girl enjoys. Last spring I invited a few of my playmates in to have a "sugar off," as we call it. It was a lovely warm day—dazzlingly bright over head and under foot. There was not a cloud in the sky, while the sun shined so brightly on the snow made it glisten like diamonds. My friends came in a big sleigh early in the afternoon. Going back to the sugar bush, we went into the saphouse, where the men had on a good fire. The boys built a fireplace of stone outside of the saphouse. When everything was ready, they started a fire. Then the men allowed us to take some syrup from the saphouse and pour it into the pot; when everything was ready they started a fire under it. When it began to boil, one of the men watched it constantly. Of course, we helped to watch it now and then; but it was so much more fun running about the woods, playing hide-and-seek and other games, that we only

appeared near the fire when we wanted to get warm.

At last the sugar was ready, and we were soon busy making wooden paddles to eat it with. The elder boys stirred the delicious stuff until it was ready to eat. When we had eaten as much as we could, we made up the rest into little cakes, several of which each of my friends took home. Then we poured more of the thick syrup on snow; although we thought we had eaten all of the sugar we could, yet, when served in this delicious form, we found ourselves eating as eagerly as though we had not tasted anything before.

All too soon the time passed, and we had to start for home. My friends all declared they had not had such a pleasant outing for a long time. On our way back to the house, we agreed that we could not express our feelings better than by the singing of that song dear to Canadians, which ends thus:

"But the land I love the best  
Is the garden of the West,  
Where the wild flower blossoms  
And the sugar maple grows."

HESSIE EVELYN MACFARLANE,  
Melrose, Ont. (Age, 12 years.)

#### A Day on the Farm.

"Up boys, up at once," called our father to us one fine morning in March. "We will do the chores this forenoon, and this afternoon we will go back to the swamp."

Down we came, and off we went to the barn. "You feed the horses, and I will clean out the horse stable," said Harry to me, "the more we can get done before breakfast, the better, for you remember father told us we would go to the swamp this afternoon."

We got a good part of our chores done before breakfast, and we were able to eat a good hearty meal (as we always are).

After breakfast, mother came out to milk the cows and father to grind some grain with a windmill. We cleaned out all the stables, fed the pigs, cattle and calves, and by half-past ten we had everything done, so we started for the other barn, which is a good half mile off. While there, we cut straw, broke the ice, and drove the cattle down to the water, and then started

for home, which we reached by dinner time.

We sat down to a meal of steaming-hot potatoes and beans, buns and milk, which ought to, I think, tempt the appetite of a king. After dinner, the three of us started for the swamp. When we got there, we found it hard work to get to the tree we wanted to cut down, on account of the deep, soft snow. Harry and father started to cut down the tree, while I went to the river to see the ice, which I found in splendid condition—as smooth as glass. When I got back, father and Harry were sawing up the tree. I at once started to trim it, and I found it easy work to keep ahead of them. By half-past four we had the tree, which was a beech, cut up, split into slabs and piled up, so we then started for home. We had to feed the stock again, bed them, and also milk the cows. We had these things done by six, and were ready for our supper, after which we read the paper for a while. Then I suggested to Harry we have a skate. He said, "All right," so we got our skates and started for the river. It was a moonlight night. We skated up the river for about three miles, and then returned more slowly, hot and tired. We pulled off our skates, and were soon afterward in bed.

ALBERT W. JOHNSTON,  
Kippen, Ont. (Age, 13 years.)

#### Little Winnie Bright.

Little dancing feet,  
Out on the golden sands,  
Making brittle houses  
With busy, eager hands.

Happy, merry glances,  
Sunny smiles to all;  
Running fast and deftly  
At everybody's call.

Little Winnie pleases,  
For she is so sweet,  
Loving, gentle, kind to all,  
Whoever she may meet.

So the children call her  
Little "Winnie Bright,"  
Because they are so happy  
When she comes in sight.

For they have a merry day,  
And Winnie loves the fun,  
Rushing about, and in, and out,  
All in the golden sun.

Then, little ones like Winnie,  
Oh! let us loving be;  
For the Holy Saviour  
Loves kind hearts to see.  
—ELIZABETH B. EATEN.

### The Story of Caliph Stork.

[An Old German Fairy Tale Translated by James Speakman, Penhold, Alta.]

#### CHAPTER III.

Sadly the enchanted storks wandered through the fields; they knew not what to do in their wretchedness. They could not get out of their storks' feathers; it was no use going back into the city to make themselves known, for who would believe a stork if he said he was a Caliph? And even if anyone had believed them, would the inhabitants of Bagdad want a stork to reign over them as Caliph? So they crept about for several days, feeding miserably on field roots, which were awkward to eat with their long bills. For lizards and frogs they had no appetite; they were afraid of spoiling their stomachs with such delicacies. Their only comfort in this sad plight was that they could fly, and so they often flew onto the roofs of Bagdad to see what was going on in the city.

For the first days they noticed great unrest and sorrow in the streets; but about the fourth day after their enchantment they were sitting on the palace of the Caliph. From there they saw a splendid procession in the street below. Drums and fifes were sounding. A man in a gold embroidered purple mantle was riding on a horse with fine trappings, surrounded by a dazzling retinue of servants. Half Bagdad was dancing after him, and all were shouting: "Hail Mizra, ruler of Bagdad!"

Then the two storks on the roof of the palace looked at each other, and Caliph Chasid said: "Do you now begin to see, Grand Vizier, why I have been enchanted? This Mizra is the son of my deadly enemy, the mighty magician, Kaschnur, who, in an evil hour, vowed to have vengeance on me. But, even now, I don't give up all hope. Come with me, thou faithful companion in my sorrow! Let us make a pilgrimage to the tomb of the Prophet; perhaps the enchantment may be loosed in that scared place."

They rose from the roof of the palace, and flew in the direction of Medina. But the flying did not go very well; the two storks had too little practice.

"Oh, Sire," groaned the Grand Vizier, after a few hours, "with your permission; I can't hold out much longer; you fly too quickly. Besides, it is evening, and we would do well to seek a shelter for the night."

Chasid listened to the prayer of his servant, and they flew down the valley to a ruin, which seemed to offer them a shelter. The place where they had settled for the night appeared to have been a castle formerly. Beautiful pillars rose out of the ruins; several apartments, still fairly preserved, witnessed to the former splendor of the palace.

Chasid and his companion went through the corridors to find a dry place; suddenly the stork, Mansor, stood still: "Lord and master," he whispered, "I hope it isn't silly for a Grand Vizier, much more for a stork, to be afraid of ghosts. I feel quite shivery, for close by

me somebody has been distinctly sobbing and moaning."

Then the Caliph also stood still, and heard quite clearly a low weeping that seemed to come from a human being rather than from an animal. Eagerly he was going in the direction of the sounds of sorrow, but the Vizier seized him by the wing with his beak, and implored him not to rush into new, unknown perils. But in vain! The Caliph, who had a brave heart beating even under the wing of a stork, bore himself loose with the loss of a few feathers and hastened into a dark passage. He soon arrived at a partly open door, through which he clearly heard sobs and wailing. He pushed the door open with his beak, but, in astonishment, stood still on the threshold. In the dilapidated chamber, dimly lighted by a small barred window, he saw a large night-owl sitting on the floor. Big tears were rolling out of her large round eyes, and in a hoarse voice she poured her complaints through her crooked beak. But when she saw the Caliph and his Vizier, who had followed his master, she raised a loud cry of joy. Gracefully she wiped the tears from her eyes with her brown-speckled wing, and to the great surprise of her hearers, she cried out in good human Arabic: "Welcome, you storks! You are a good omen to me of my rescue, for it was once prophesied to me that great good fortune should come to me by means of storks."

When the Caliph had recovered from his astonishment, he bowed down with his long neck, put his feet into a graceful posture, and said: "Nigh-owl, your words make me think that I see in you a companion in sorrow. But alas! your hope to find help through us is vain. You will see our helplessness yourself when you have heard our story." The Night-owl asked him to tell it, and the Caliph began and told her what we already know.

(To be continued.)

**A Bitter Lesson.**

Velpeau, the eminent French surgeon, successfully performed a perilous operation on a little child, five years old. The mother, overjoyed, called at the surgeon's office and said to him:

"Monsieur, my son is saved, and I really know not how to express my gratitude. Allow me, however, to present you this pocketbook, embroidered by my own hands."

"Madame," replied Velpeau, in a somewhat bitter tone, "my art is not merely a matter of feeling; my life has its necessities like yours, and sentiment must give way to these requirements. Allow me, therefore, to decline your charming little present, and, if agreeable to you, to request a more substantial remuneration."

"But, monsieur, what remuneration do you desire? Fix the fee yourself."

"Five thousand francs, madame." The lady very quietly opened the pocketbook, which contained ten one-thousand-franc notes, counted out five, and, politely handing them to Velpeau, retired.

**Humorous.**

"There is poetry in everything," mused the editor. "Now there is yonder wastebasket." And he laughed, as he sometimes did when he was all alone.

An enthusiastic professor had been advocating the advantages of athletic exercises. "The Roman youths," he cried, "used to swim three times across the Tiber before breakfast." The Scotch student smiled, at which the irate professor exclaimed, "Mr. McAllister, why do you smile? We shall be glad to share your amusement." The canny Scot replied: "I was just thinking, sir, that the Roman youths must have left their clothes on the wrong bank at the end of their swim."

"When I grow up," said little Ethel, with a dreamy, imaginative look. "I'm going to be a school teacher."

"Well, I'm going to be a mamma and have six children," said tiny Edna.

"Well, when they come to school to me I'm going to whip 'em, whip 'em, whip 'em."

"You mean thing!" exclaimed Edna, as the tears came into her eyes, "what have my poor children ever done to you?"



Dear Friends,—To judge the essays which have been sent in for the competition, "How I am going to love my garden," has been no sinecure. Not a poor essay was received, and many of them were very excellent. In consideration of this fact, we have decided to award six prizes instead of three, the prizes being equal. The names of the winners are: "Sun-glint," Orillia, Ont.; Mrs. D. MacHardy, Fergus, Ont.; Miss A. L. McDiarmid, Ormond, Ont.; "Glenore," Sheppardton, Ont.; C. F. Ransom, Ancaster, Ont.; Mrs. J. H. Pentland, Nile, Ont.

Especially excellent essays, although not prizewinning ones, were written by "Aunt Helen," "Forget-me-not," K. C. McDiarmid, S. E. Leeson, Verne Rowell, Maud Jose, Sara Smallman, Florence Dodge, "Beth," Adeline Wettlaufer. Some of these have been retained for publication at a future date.

**PLAN FOR A SMALL GARDEN.**

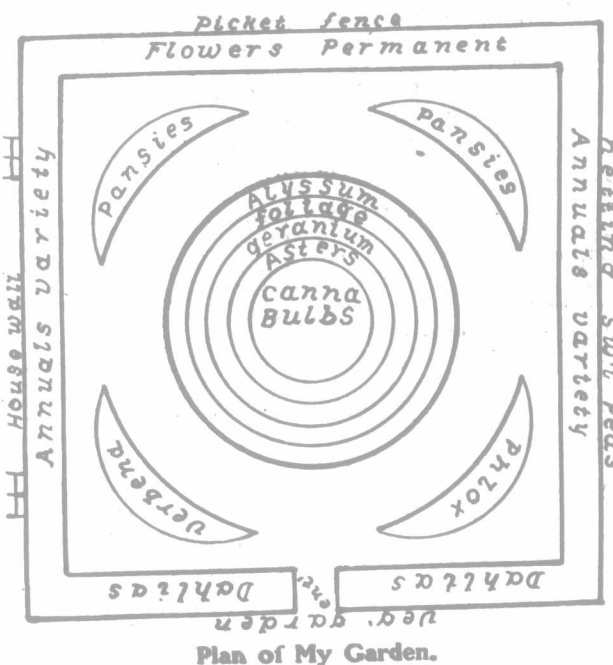
Long ago, I planned my garden for the coming summer. First let me describe it: square, about 40 x 40 feet, bounded on the north side by the wall of the house from which my two sitting-room windows look, a picket fence runs along the front, the other two sides open to the vegetable garden. In the center, a circle; four quarter moons, one on each corner; around the square, a border three feet wide. Now, this is my plan: First, I shall ask the goodman to do the spading, and enrich with well-rotted manure, also to stretch a piece of wire

plant the lovely green and white border foliage; this I also get at the florists ready to plant. Plant asters, geraniums and foliage one foot apart each way; water freely until well set. Around this I shall sow a package of white alyssum, thinning to about seven inches. Alyssum does make such a pretty border. I never can resist the temptation to sow it wherever I require one.

The two quarter moons next to the fence I shall fill with pansies, transplanted from a bed sown last fall in a corner of the vegetable garden and well covered to protect from frost; the other two with Phlox Drummond (mixed) and verbena (mixed). These spread and intertwine, forming a perfect mass of beauty; pinch off the ends that spread on walk (plant or thin one foot). Along the fence side are those varieties which, after once sown or planted, thrive and bloom year after year, with little or no care; a double pink rose bush in the center; one funkia (white lily) at either side; then tall phlox, Canterbury bells, bleeding-heart, sweet william, larkspur, gailardia, daffodils and Gypsophila (baby's breath)—this little gem is invaluable for bouquets; along this a border of pink and white daisies.

Directly opposite, dividing this part from the vegetable garden, I shall plant dahlia bulbs to form a hedge. Anyone who has grown them knows how they multiply. I started with four sent me by a friend, now I have bulbs in abundance to give away, and all I require for my hedge (for culture, read in "Advocate," March 31st).

The border by the sweet peas and next to the house, I shall fill with a variety for cutting—asters (mixed), antirrhinum, candytuft, stocks, petunias, salpiglossis,



netting along one end for sweet peas (for culture, read in "Advocate," April 7th). In the circle, I shall plant seven canna bulbs (Queen Charlotte), one in the center and six around, two feet apart each way. I can think of nothing more beautiful for the center of a lawn plot than those with their magnificent foliage and spikes of gorgeous bloom. Two feet from those, I shall plant a row of asters (Daybreak). This variety is simply unsurpassed, the flowers are round, large and full; these will make a beautiful contrast with the dark foliage of the cannas and the next row, which shall be double scarlet geraniums. As regards geraniums, I find it most satisfactory to go to a florist and buy what I require for bedding; they cost five cents each, ready rooted in small pots, and when set out soon begin to branch very rapidly, spike after spike of bloom following until frost comes. Around these, I shall

scabiosa, marigold, dianthus, nicotiana, zinnias, a gladiolus bulb here and there, and mignonette; no garden is perfect without a liberal supply of mignonette.

These I shall plant without regard to regularity, the tall varieties in the background. I think a border of flowers looks stiff if planted "just so." Close to the hedge I shall sow white alyssum; nothing is so dainty for a border, unless it be the lovely foliage used by florists, but that comes rather expensive, if one needs a large quantity. (Always allow space for branching, and keep free from weeds, as flowers and weeds do not do well together.) These, with my sweet peas, shall supply me with flowers galore for my table, to give away, a bouquet for a sick friend, a bouquet to hand over the fence to the little child gazing so eagerly through the pickets. What in this world could take the place of flowers? Any of the annuals men-

tioned may be started in the house in boxes, or sown in the open ground. Of course, if sown in the ground, one has to wait longer for the beauty. A crimson rambler rose shall find a place between my windows. In the fall, I intend to fill the border next the house with bulbs for spring bloom—hyacinth, daffodil, jonquil, tulip, crocus, and snow-drop, with a border of lily of the valley. In selecting flower seeds, I always choose those varieties which branch and bloom until killed by the frost; get my seed from a reliable florist; always get the best strain, and am never disappointed.

Anyone may have a flower garden similar to this on a larger or smaller scale, provided the fowl are not allowed to run riot; and surely every farmer's wife is entitled to a piece of ground 40 x 40 that she can call "her own." The walk between the flowers may be sodded, sown in lawn grass (which mine is), or gravelled.

I always go to the woods in the fall and lay in a supply of leaf mould to start my seeds in. I also secure a box of sand. I make out my list, and send for my seed in January. In February, I bring my box of leaf mould from the cellar, put it in an old pan, and set in the oven to kill any insects. I then go to the root-house and get some of the soil that has fallen from the roots. This is excellent to mix with the mould. I spread a large paper on my kitchen floor, and begin. First, I sift all the earth through an old colander; mix thoroughly, leaf mould, soil and sand; then fill as many small flower pots as I require. I use pots because they take up so little room. I set them among my house plants, and by the time the seedlings are ready to transplant into boxes, they can be set outside during the day, until ready for the garden. Of course, this means considerable work; but it is work that lovers of flowers delight in, for do we not look forward to the reward?

Here is an idea, which anyone can carry out; this I saw while visiting a friend in town; a veritable flower garden in a half barrel, simply a salt or sugar barrel sawn in two, lengthways, braced across each end, painted a dark green, set on a rustic sawhorse, and filled with fuchsias, geraniums, foliage, nasturtiums, wandering Jew, etc. The effect was most beautiful, and looked like a huge hanging basket. I am, with the goodman's help, going to have one of those at each side of my kitchen door, filled with nasturtiums.

Now, dear Dame Durden, if you visit this part of the country during the summer, call and pick a bouquet from my lovely flower garden.  
Fergus, Ont. MRS. D. MacHARDY.

**A LAKESIDE GARDEN.**

Dear Dame Durden,—As a prelude to my essay on "My Coming Garden," let me tell you that when I first came to keep house for my farmer, like many others, I thought I was too busy to do any outside work, being new to farm life; and after the first year, little human flowers formed a habit of dropping in on us every alternate spring, two at a time, once; so perhaps it was not a blameable thought, though at home we had always been famous for our beautiful garden. A change in my way of thinking came, when one spring someone sent me a packet of Rennie's wild flower seeds. Of course, I must sow them, and taking a look around, I selected a spot, dug a bed about four by ten feet, and sowed my precious seed. In due time, the bairns and I were rewarded by finding the tiny plants appearing, and then who so happy as I, as I pointed out the different kinds—this a pansy, that a poppy, an aster, yes, and that wee one was surely a petunia! How anxiously the children watched the growth of the ones I was not sure about, till they knew the appearance of each sprouting seed as well as I. I never once had to say, "Don't pull up mother's flowers;" they loved them as well as I did. That packet was a great success, and though I have since had "roses and lilies and daffydownillies," nothing ever gave me greater delight than my four-by-ten plot of mixed-up-edness.

Having formed the "seed-catalogue habit" in my girlhood, it is not surprising that towards the end of January every year I find myself looking forward to the advent of the first of these harbingers of spring; and as they follow each other in rapid succession, I

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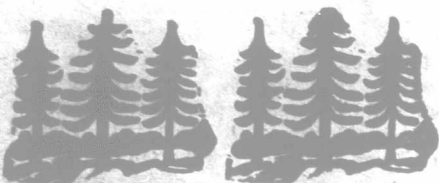
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grow almost feverishly anxious for the snow to leave, that I may begin at once the summer's operations. My plans are all laid then; and in order that all may understand the possibilities and limitations of my garden, I shall say that the only available spot lies directly in front of the house, faces the south, and slopes gently down to a rather picturesque stone wall, a grass plot beyond, and then the lake. My plan is not laid according to gardening authorities, but according to circumstances. A board walk leads down to the wall, where it turns and runs a few paces to a gate sheltered by a great old butternut. On either side of the path, tulips and hyacinths are already showing in green and brown rows, although it is only three days since the snow-blanket was drawn from their faces. To the right, I shall have a wide border of perennials—peonies, sweet williams, pinks, lilies, columbines, phlox, double buttercups, and many others. Beyond these, and shutting off the view of the currant plantation, I shall have a rose hedge—white, cream and many shades of pink; and heading the procession, a splendid thrifty Jacqueminot, that gives me its great crimson blooms from July until snowfall.

On the other side of the walk, beyond the hyacinths, I shall have another border this time of annuals, in wild disorder bent, poppies, petunias, coreopsis, mignonette, marigolds, scabiosa, and all the old-time favorites. This part of the garden will bring the most pleasure to the children, and already, in imagination, I can hear them cry: "Oh, mother! here is a new flower out, do come and see what it is." For I always try to add a few new varieties each year.

Nearer the house, and a little shaded, my pansy bed finds a place, where the sweet, velvety faces will look out like pictures of innocence. Beyond, in stately rows, I shall have the finest asters, balsams and stocks that I can obtain, each family in its own place, and in all shades and colors. Then, having reached the limit of space on that side, I shall have a long sweet-pea hedge hiding the small-fruit vines and giving me plenty of bloom for cutting and distributing to all visitors; for I, long ago, discovered that sweet peas reward a generous hand by flowering longer and more abundantly. Lastly, along the stone wall I shall have a row of double hollyhocks, all shades, from white to black. In front of these, a row of Japanese sunflowers and Rudbeckia will be most satisfying masses of golden color. With vines along the walls and over the windows, I shall have a garden that, if not exactly artistic and rather leaning to the common place, will give us a great deal of wholesome pleasure. The best of it is I can do all the necessary work in it myself, with a little help from the children, and still find time to give a good share of attention to the vegetable garden. This will be the flower garden proper, and does not take into consideration the half dozen little plots of varying sizes and shapes that occur wherever the child to whom each one belongs wishes to place them; and it all bids fair to "come true," for I have taken a tour of inspection since the snow left, and find that old winter has been very good to me, and not a plant has been winter-killed. SUNGLINT.

EASY AND BEAUTIFUL.

Although painfully conscious that the plan will hardly prove feasible this year, I would like to arrange our garden like one I saw last summer.

A vivid picture in remembrance is that of the pretty little cottage embowered in clematis and honeysuckle vines; the starry white flowers of the clematis and the bright scarlet blossoms of the honeysuckle intermingling with delightful effect.

Over the wide lawn were scattered some very fine flowering shrubs—hydrangeas, veritable fountains of white in the blooming season, spiræas and Weigelas, with dense clusters of rosy-pink and deep-crimson flowers, and a magnificent specimen of the always-lovely rose of Sharon.

A low, wet spot at the foot of the side lawn had been transformed into a perfect wild garden of lilies, iris caladiums, and other semi-aquatic plants, outlined with a fringe of the beautiful Eulalia grasses.

Toward the rear of the house, against a background of tangled shrubbery, a

memorial rose trailed its shining ever-green leaves and fragrant white blossoms over a wild rockery. An unsightly board fence separating the lawn from the kitchen garden served as an excellent support for a rampant Wistaria vine, bearing all summer long its lovely clusters of violet-blue blossoms.

One of the prettiest features of the grounds was a garland of roses, crimson and white ramblers, which was festooned along the driveway, using posts and heavy wire for support.

The grounds were separated from the roadside by an exquisite hedge of English sweetbrier, the fine fragrant foliage scenting the entire premises.

A. L. McDIARMID

SOME PRACTICAL HINTS.

In arranging for this year's garden, I shall first purchase three packets of seed of easily-grown flowers, and shall ask two of my friends to do the same. After dividing the seed evenly, we will each have nine varieties, which, with seed saved from last year, will produce as many plants as we can look after properly. When the beds are ready to receive the seeds and plants, they will receive a liberal supply of boiling water to destroy seeds and roots of weeds, and all insect life. As soon as the frost is out of the ground, I intend moving the daffodil and white narcissus bulbs to an oval bed at the east of the house, where, after their season is over, I shall plant out the geraniums and coleus from the house. Slips of houseplants will be started to grow in cardboard boxes in the house. By putting the boxes in the earth, the plants are not hindered in growth, and the cardboard soon decays. Several kinds of ferns from the woods take the place in the house of the geraniums. Cut flowers and the delicate feathery fronds of the ferns lend a charm to the home.

To have a long season of blooming roses, I shall transplant some bushes to each side of the house; those on the south and east blooming first, then those on the west and lastly on the north. In the front of our house, which faces the south, I shall have a bed of lilies—white, sweet-scented Longiflorum and cannas. To protect their roots from the sun, I shall plant mignonette, poppies and phlox Drummond. In a round bed, four feet across, I shall have a plant of the castor-oil bean, around it coreopsis, asters and portulaca. A crescent-shaped bed will contain pansies, with border of parsley, which will be useful for decorating many dishes for the table. Around two large black walnut trees I shall train climbing nasturtiums and morning-glories to entirely cover the trunks with a mass of shining green foliage, bright with flowers; and if our side veranda is completed in time, I expect to hang three hanging baskets (painted cans, if I cannot procure baskets), one in the center and one at each end, with geraniums, portulaca, ivy and morning-glories planted in them. The baskets will be joined together by a slack wire for the trailing vines to cling to. By keeping the stray ends of vines tied to wire, or clipped off, I shall soon have lovely festoons of green foliage. I have read that to have finely-colored sweet peas, the sun must not shine on them all day, so I have decided to have a hedge of these fine flowers running north-east by east to south-west by west, to allow the sun to shine on each side of the row morning and afternoon alternately. The sweet peas will be planted in a double row, four inches apart, in a trench, with woven-wire netting to support the vines.

As the woodshed is plainly seen from the drive, I intend planting scarlet runners and morning-glories to hide the wall. A strip of wood will be fastened on the ground with cords from it to the top of shed for vines to run up. In the front of the vines, dahlias will be planted, with border of phlox. On the north side of the house I will set out begonias, lilies of the valley and myrtle. The rest of my flowers, including nicotiana, marigold, and petunias will be planted in a border on the west of house. When the crocuses die down, I intend taking up the bulbs, letting them dry a few days, then planting them here and there over the lawn, where, next year before the grass is more than green, the dainty purple and white flowers will peep through the cold earth, gladdening the hearts of all who see them.

Directly opposite the kitchen window is a thick cluster of lilacs, which, I think, can be used in making a cosy nook for the children to play in. Two posts, six feet apart, will be placed one at each end of the lilacs. Two more will be placed four feet east. The tops of the posts will be joined by scantling; over this and crossing on the sides will be strands of wire, over which scarlet runners and wild cucumber vines, which grow rapidly, will soon spread, and afford a protection to the little folks from the sun's rays. I do not intend to do all this at once; but it is astonishing how much one can do in an hour. Help will be required occasionally to water the plants in dry weather, as well as in making the garden. It is time well spent, in which the cares and worries of house-keeping are forgotten in admiration of the beauties of the flower world. The bread-winner will surely find his work a pleasure, if he finds his helpmeet striving to make their home beautiful.

GLENORE.

AN EASY GARDEN.

In these times of scarcity of help, it is unfortunately very hard for an ordinary farmer and his family to spend very much time upon beautifying his home and its surroundings. Still the pleasure and the elevating influence of an attractive garden is well worth a struggle to obtain. There are so many hardy shrubs and perennial plants which can be permanently planted with splendid effect, and which will, without any attention save a little hoeing to keep back the grass, or a mulch of strawy manure, yield a profusion of bright coloring all summer. Now, to describe a garden laid out to the best advantage, let us take our stand at the front door. If our garden slopes to the south, so much the better, for nearly all plants revel in the sunlight, and without it, will, like ourselves, be weak and sickly. Our porch is covered with the well-known clematis Jackmanii, grand during the later summer with royal purple. Opposite to us, as a centerpiece, is a large oval bed, filled with the brightest of scarlet flowers—geraniums. Shirley poppies are almost as brilliant, and have the advantage of costing but a few cents. Down near the front are two beds, one to the right, the other to the left, which have been planted with hardy perennials. The large double pink peonies are a grand mass of sweet blossom in their season; later on the various German irises will be in their glory, and the golden glow of Rudbeckia will gleam with the touch of Midaas. Along the garden boundaries which converge in a semi-circle are flowering shrubs: The Japanese quince, with its beautiful foliage coming on after it has been ablaze with blossom, the earliest of fall; the pink variegated wigelia and hydrangea paniculata, whose flowers remain for many weeks late in autumn; spiræas, and the best is Van Houttei, are fountains of whiteness. Nearer to the house and somewhat in the background are large shrubs of that most satisfactory of syringas—the lilac, of which Charles X. and the white are the best species.

On the right, and close to the house, in the angle where a path leads from the drive (which goes to the back) to the front door, is our rockery, in whose crevices we have the common ferns from the woods, mixed with the purple and the common red wild columbines. Close by is a clump of the old friend of our English childhood's days, the pink foxglove. On the garden side of the drive, which runs down along the bank of flowering shrubs to a gate at the corner, is a long narrow bed filled with stocks and asters.

C. F. RANSOM.

AN EARLY BEGINNER.

Our flower garden is located on the south side of the house, and just behind the lawn; as I never approved of scattering flower beds here and there wherever it comes handy, for "spotty" planting is never attractive. I have my flowers as much together as possible.

Last autumn I had my garden spaded and enriched, and all roots and stems of annuals removed; thus leaving the ground in readiness without further work for the spring planting.

The garden and lawn are surrounded by a close wire fence, for previously I have

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

had trouble with the hens, but now this fence keeps out all such marauders.

One bed is semicircular, while the other two are triangular. They are separated by a gravel walk, which leads to a gate in the aforesaid fence.

Perennials are a necessity: everyone should have some, as they bloom early and late, and require little care. What a brightness the golden daffodil or the yellow or red cowslip add to a garden in the early spring, even before the annuals have sprouted. I always have the dahlias started in a box in March, and when spring comes they are sprouted and ready to transplant when all danger of frost is past.

As vines are so beautiful and so easily grown, I have several varieties against the house at the back of my garden. Few people realize the attractiveness that climbing plants add to a dwelling, as the dark green of the ivy makes a pleasing background for the brilliant flowers in front. As soon as the snow is gone, I plant my seeds of asters, in their different colors, one of the prettiest of annuals, and marigolds, balsams, dwarf hollyhocks, petunias, which blossom in great variety of color and continuity of bloom, the fragrant mignonette, indispensable for bouquets, the California poppy, with its dazzling blossoms, the mimia, which succeeds in any soil, and the sweet pinks, the border of candytuft, white and mauve alternatively, always taking care to have the tallest flowers to the back of the bed, so as not to obstruct the view of the others. When the weather gets warm and bright, I bring out my geraniums and set them in the places reserved for them. In one bed are tulips of all colors, while the other triangular bed I devote to the culture of pansies alone, and what a never-failing source of pleasure they are to me.

Then, in addition to these beds, a fence of chicken wire stretching from the east corner of the house to the fence that encloses the lawn, covered with sweet-pea vines and those of the climbing nasturtium. My method of planting sweet peas is this: open a furrow, six or eight inches in depth, rake into the bottom two inches of very fine black soil; drop the peas in either single or double rows, at intervals of about an inch; cover with two inches of fine soil; this leaving at a finish a furrow three or four inches deep. This furrow is to be gradually filled in by successive hoeings, after the peas have germinated and grown out of the ground. Provision for the running nature of the sweet pea had better be made at the time of sowing. They require but little further care, except occasional tying up when they commence to run.

And now, to close, I should advise everyone to have a garden, for it will not fail to be "a thing of beauty" and a joy for three or four months of the year. (Mrs.) J. H. PENTLAND.  
Nile, Ont.

**The Critic.**

By Henry Coyle.

The critic stood with scornful eye  
Before a picture on the wall;  
"You call this art? Now, see that fly,  
It is not natural at all.

"It has too many legs, its head  
Is far too large—who ever saw  
A fly like that, so limp and dead,  
And wings that look as if they—  
pshaw!"

And with a gesture of disgust  
He waved his hand, when lo! the fly  
Flew from the picture. "Ah! some  
dust."  
The critic said, "was in my eye."

**Character of a Happy Life.**

How happy is he born and taught  
That serveth not another's will;  
Whose armour is his honest thought,  
And simple truth his utmost skill.

This man is freed from servile bands  
Of hope to rise or fear to fall;  
Lord of himself, though not of lands;  
And having nothing, yet hath all.  
—Selected.

Let us dread most of all to be build-  
ers for Satan with those powers which  
the Father gave us to build with for  
Him.

**Fashion Notes.**

A pretty, attractively-dressed child is the best picture the world can look upon. The Russian blouse for the "tiny man" is always pretty and becoming. The little coat has a wide collar, and the knickerbockers are full at the knee, being hemmed over an elastic band. These little suits, made of summer materials, are very pretty indeed, and can be easily laundered.

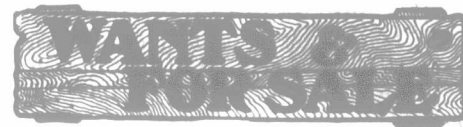
The "little maid" has as many frills and ruffles on her summer dresses as has her mamma. A pretty style is the French dress, which has a long waist and short skirt. The yoke is made of lace or insertion, and cut either round or square. The neck is finished with narrow beading (insertion), in which is run narrow baby ribbon. Around the bottom of the yoke is a frill of the material edged with narrow lace. The skirt is formed of two frills, one wider than the other. These, too, are edged with lace. They must be gathered very full in order to give them the proper fluffy appearance. With this dress a wide sash is worn. Some very dainty ribbons are shown now that make very pretty sashes, many of these are flowered and dotted.

The little frills of fashion are what give freshness and beauty to the dress. They are to the dress what the blossoms are to the plant. It is wonderful what the smart girl can do with a few yards of ribbon. She makes little bows to fasten the front of her shirt-waist. At the back of each bow is fastened a small safety pin, and in this way they are pinned to the waist. All sorts of bows are made for hats. Not only one bow, but numerous little ones are made and put around the crown of the hat at regular intervals. A hat of navy blue straw is very pretty, trimmed with corn-colored silk, which is folded and put around the crown, with a large rosette in the front. These little bows are made of navy blue satin ribbon, about one inch or an inch and a half wide, and placed around the crown. This makes a very smart-looking hat for every-day wear. A nice bow cannot be made from a "skimp" piece of ribbon. Remember, all the beauty of the bow lies in its freshness and crispness. Rosettes are used a great deal for trimming hats. From one and a quarter to one and a half yards of ribbon are required to make a rosette, the ribbon being from one to one and a half inches wide. Ribbons, which are not the same on both sides, for instance, velvet ribbon, must be given a sharp twist in order to keep the right side foremost in making bows and rosettes.

The separate shirt-waist, though not considered so smart as the waist made of the same material as the skirt, is by no means out of fashion. A waist made of woollen material, the same as the skirt, is too warm for summer wear, therefore the shirt-waist still remains popular. Light materials, such as chiffon, lousine, liberty silk, organdie and muslin, the same shade as the skirt, make pretty and effective waists. If made quite plain, a large lace collar is all the trimming required. The yoke may be left unlined. A rounded or V-shaped, transparent yoke is always becoming, and cool. On the thin lawn and muslin waists, which are very elaborate and handsome, tucks, shirrings and lace are used in abundance. AUNT LYN.

"What time is it, my lad?" asked an American traveller of a small Irish boy, who was driving a couple of cows home from the fields.  
"About twelve o'clock, sir," replied the boy.  
"I thought it was more."  
"It's never any more here," replied the lad, in surprise. "It just begins at one again."

Brother Jones was noted for his long and laborious prayers, and although the good people of the church respected him, they were not at all pleased to hear him pray in meeting. The new minister was not aware of Brother Jones's unpopularity as a "prayer," so he had no idea why a ripple of amusement passed over the congregation when, after a hymn had been sung, he said, "Brother Jones will lead us in prayer," and in a fervent tone added—"and may God help us."—[Lippincott's.]



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.

\$800.00 a year and expenses for men or energetic women to visit our agencies, to establish new ones, procuring names and addresses, to advertise our goods; experience not necessary, but honesty and industry. Bradley-Garretson Co., Limited, Brantford, Ont.

WANTED—Salesmen for Auto-spray—best compressed-air hand sprayer made. Splendid seller. Liberal terms. Cavers Bros., Galt, Ont.

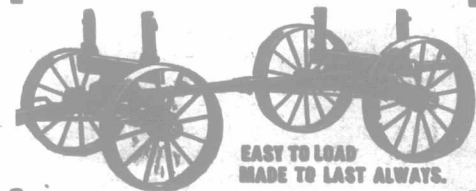
FARM for sale—Township of St. Vincent, County of Grey, 450 acres; 200 acres cleared; good outbuildings; well fenced; well watered; well timbered. Suitable for dairy and stock farm; or would rent. Apply to J. W. G. Whitney, Estate Agent, 25 Toronto Street, Toronto.

BUFF Orpington eggs, \$1 per 15. My own importation. Grand layers. C. E. Brown, Hayville, Ont.

EGGS FOR HATCHING from B. P. Rocks bred from a winter laying strain; also Rouen duck eggs, price \$1.00 per setting. Musgrove Bros., Wroxeter, Ont.

FISHEL WHITE ROCKS, BROWN LEGHORNS. Eggs, \$1.50 per setting. Stock for sale. BARNET BROS., FERGUS, ONT.

**The Wagon-wise Farmer**



EAST TO LOAD MADE TO LAST ALWAYS.

is a ready customer when he sees a point to his advantage. Offer him a proposition that will enable him to haul larger loads with less horsepower and load them with less man power. He'll see the point as quick as any man on earth. The Electric Handy Wagon equipped with low steel wheels and wide tires embodies every feature of wagon wisdom. Wheels of any size and width of tire. Neither shrink, swell nor need repairs. We also furnish any size steel wheels to fit any old wagon. Any width of tire. Portable Grain Elevators, Combination Hay, Grain and Stock Racks, Hero Fanning Mills, Hay Presses, New Model Harrow Carts, Lawn Swings, etc. Write for further particulars to The Western Implement Mfg. Co., Ltd., Box 787, WINNIPEG, Man.

**STAMMERERS**

THE ARNOTT INSTITUTE, BERLIN, CANADA, for the treatment of all forms of SPEECH DEFECTS. Dr. W. J. Arnott, Superintendent. We treat the cause, not simply the habit, and therefore produce natural speech. Write for particulars.

**AYRSHIRES & YORKSHIRES**

Choice February and March calves, sired by Prince of Barcheskio (imp. in dam) and deep-milking dams. Cheap if taken soon. An extra good yearling bull. Write us. Yorkshires of different ages. ALEX. HUME & CO., Menie P. O., Ont.

\$2.25 FOR THIS Beautiful \$4 JAPAN TAFFETA SILK WAIST.

direct from our Waist Factory. Any color or size, made with large or small tucks, as preferred, tucked back nice full sleeves, fancy strapped box pleat, button trimmed; same waist in luster \$1.50, velvet \$1.95. The above waists lined or not as desired.

Linen waists, same style, all colors, \$1.25. Lawn waists, same style, all colors, \$1.00. Chambray waists, same style, all colors, \$1.25. We have the same waist as shown in Linen, Lawn and Chambray, trimmed with insertion. State which preferred. Give Bust measure and sleeve length under seam, add 15 cents for postage. Money refunded if any waist not satisfactory. Mention this paper, and its date.

Southcott Suit Co., London, Can.

**GOSSIP.**

Mr. Richard Gibson, Delaware, Ont., advertises four young Shorthorn bulls for sale, two of which are imported, a Cruickshank Lavender, and a Marr Emma of rich breeding, with individuality to match. He also offers Yorkshire boars and sows, bred from imported stock. Write, or call and see him at his Belvoir Farm, near the city of London the less but beautiful.

Messrs. Duncan Brown & Sons, of Iona, Ont., have recently purchased from Capt. T. E. Robson, Ilderton, the imported Duthie-bred cow, Scottish Rose, by the great breeding bull, Lovat Champion, and in calf to Imp. Prince Sunbeam, first-prize two-year-old bull at the Dominion Exhibition, Toronto, 1903. Mr. Brown had retired from breeding Shorthorns some two or three years ago, but his love for good cattle is such that he is not quite happy without them, and he has started right again, by going for the best in type and breeding.

A short distance from Copetown Station lies the farm of Mr. Elmer Dymont, upon which Mr. Dymont has established a first-class flock of Dorset sheep. He says he can make more money out of Dorsets than any other branch of live stock that he has tried. His flock was established by representatives from the McLees flock, R. H. Harding's, Col. McGillivray's, and others. Mr. Dymont is an enthusiastic breeder, that wants nothing but the best. He is also breeding Yorkshire pigs, using nothing but the best imported boars. Intending purchasers should give him a call, or write. Always mention the "Farmer's Advocate."

Regarding the new Toronto Exhibition arena, announced in last week's "Farmer's Advocate," Dr. J. O. Orr, manager and secretary, writes us: "We have decided to erect on our Exhibition grounds, in time for next year's exhibition, an arena for the exhibit of live stock, at a cost of about \$125,000, with a seating capacity for 20,000 people. This building will be to the live-stock industry of Canada what the Manufacturers' Building is to the manufacturing industries of the Dominion. We are desirous of planning the building so that it will prove entirely satisfactory to the live-stock interest, in whose behalf it is especially being constructed."

**AN IMPORTANT SHORTHORN SALE.**

The announcement in the advertisement in this issue of the joint sale by auction, on June 29th, at Hamilton, Ont., of 62 head of high-class Shorthorn cattle, selected from half a dozen first-class Canadian herds, will be of special interest to breeders and farmers desirous of improving their stock. The season selected for this sale is certainly favorable for buyers. The spring seeding, including corn and roots, well over, there should be leisure for an outing, and no more pleasurable time could be selected. Stable-feeding being past for the time being, and pastures showing up well, there could be no better time to add a few good things to the herd with the least inconvenience. The herds contributing to this sale rank among the very best in the Dominion in breeding and individual character, being deeply-bred in the most approved blood of the present day, and having long had the benefit of the best type of sires. From what is known of these herds, the class of cattle kept, and of sires in use, we are confident the catalogue will show as good breeding in the pedigrees of the animals offered as that of any public sale held in Canada in recent years, and we are assured that the contributors have made it a point to offer only such selections as will be creditable to themselves, and such as they are confident will give satisfaction to buyers. The catalogue is now about ready for mailing, and will be sent to those applying for it through Mr. Hudson Usher, Queenston, Ont.

**SHORTHORN BULLS FOR B. C.**

Mr. T. Mercer, Markdale, Ont., has orders for 100 young Shorthorn bulls for British Columbia, most of which have been purchased from various breeders in Western Ontario, and will be shipped in four cars, under the personal supervision of Mr. Mercer, who knows the road and the lay of the Pacific province, having made an exhibit of Shorthorns at the leading shows there last year.

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

GOSSIP.

Mr. Justice Anglin has given judgment dismissing the action of James Rennie, Blackwater, Ont., against the Toronto Industrial Exhibition Association for a prize of \$25 and \$2,000 damages because of prizes retained.

"I want five cents' worth of glory divine," said a flaxen-haired tot, looking intently at the clerk in a drug store. Everybody within hearing of the infantile voice either laughed or smiled, while Mr. Gray, the drugman, looked serious, and appeared to be thinking.

"Are you sure it is glory divine?" he asked the little one.

"Yes, sir," was the response.

"For what does mamma want it?" was the next question.

"To throw around the room and into the backyard," said the little tot, innocently.

"Isn't it chloride of lime she wants?" asked the drugman.

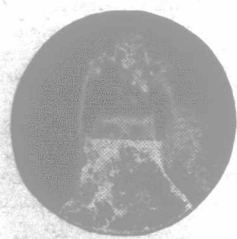
The little girl nodded her assent, and soon she was on her way home to her mother.

On the occasion of a recent visit to the home of Mr. Hudson Usher, of Queenston, Ont., the "Farmer's Advocate" field man found there an excellent herd of 45 head of Shorthorns in capital condition, including representatives of a number of the favorite Scotch-bred families, and headed by the superb imported bull, Derby 32059, a Sittytton Secret, by the Bruce Rosemary bull, Jemidar. Derby is one of the thickest, mellowest bulls it has been our pleasure to handle, and that he is proving a prepotent sire of the right sort is amply evidenced in the young stock in the herd, which are uniformly true to type and of first-class quality of flesh. Mr. Usher is contributing twelve head to the combination sale to be held at Hamilton on June 28th. They are mostly young cows with calves at foot and in calf again to the great breeding bull, Imp. Derby, and they are a right good lot in excellent condition.

VALUE OF A CHARACTER.

What shall a man ask in exchange for his character—the one asset that is greater than all other assets? In every walk of life the man who is sought after is the honest man. To him all things are possible. Not only in banks, but in every branch of the manifold activities of business and of daily life, the strictly honest man is indispensable. He may have many good points, but unimpeachable integrity is his great qualification. Confidence is the corner-stone of business. Reputation is the superstructure, and it can be raised only on a well-grounded foundation. Let a man be thought to be worth watching, let him once come under the shadow of suspicion, and his commercial value falls far below par. Often, no doubt, the mistrust is unmerited, but time proves all things, even the moral fibre of every man.

**AYRSHIRES FOR SALE**  
Some choice heifer calves. Price, from \$15 to \$25 each. Registered.  
JOHN FERGUSON, Camlachie, Ont.



"PERFECTLY DELIGHTED

with the results, they work marvels. My skin is clearing beautifully, in spite of the reverse action of hard work." This shows what our

**ACNETINE AND DERMO-NERVINE**  
(PRICE \$2.50, EXPRESS PAID)

will do for a bad case of Pimples, Blackheads and Fleshworms. It is only a sample of the letters we are receiving daily testifying to the great benefits received from using our remedies.

SUPERFLUOUS HAIR.

Moles, etc., removed permanently by Electrolysis. Satisfaction guaranteed. Send 10 cents for book and sample cream.

Graham Dermatological Institute,  
o Dept. F, 502 Church St., Toronto.

**ABERDEEN-ANGUS.**

No bulls for sale at present. Will sell some females bred to Imp. Klondyke of the Burn. Drumbo Station, om  
WALTER HALL, Washington, Ont.

TRADE TOPICS.

**AN IRON SUSPENSION BRIDGE,** 86 feet long, planked, and in good order, is advertised for sale by C. S. Hyman & Co., of the tannery, London, Ont.

**LAME HORSES.**—See what the Dunlop Tire Co., Toronto, have to say in another column on rubber foot-pads for horses. It may help you and the horse both.

**CIDER AND JELLY MACHINERY.**—The Boomer & Boshert Press Co., of Syracuse, N. Y., have issued their thirty-first annual catalogue, descriptive of presses, evaporators and other machinery for making cider, vinegar, apple jelly, apple butter and other products. It is very complete and fully illustrated. Persons interested should write them for copies, mentioning the "Farmer's Advocate."

**A THRESHING REFORM.**—One of these days there will be another big grain crop in Canada to take off and thresh, and the farmers should insist upon threshermen having up-to-date machinery. One of the finest labor-saving devices of the day is the combined thresher and cutting-box perfected by the Geo. White & Sons Company, London, Ont., who also turn out self-feeders, blowers, traction and portable engines. Farmers in several parts of the country have testified through the "Farmer's Advocate" of the value of a machine that will thresh and cut the straw in one operation. The advantages of the plan were very carefully described in our issue of March 10th last. It reduces the trouble of threshing time to a minimum, puts the straw into the smallest possible space, the straw is in good shape for feeding, and the manure is "short" and in better condition for spreading on the fields in winter and early spring. Read the White announcement in this issue, and write at once for their descriptive circular.

**THE CREAM OF IT.**—One of the finest booklets that we have seen is being sent out by the Empire Cream Separator Co., who have instituted the Empire way in dairying. The booklet is illustrated throughout with engravings in keeping with the subject matter. The Empire people have the faculty of presenting their arguments in a very interesting way, and of their several recent publications, the catalogue here referred to, is the best. Readers interested in dairying should send for this booklet, which is free. Address, Empire Cream Separator Co., Bloomfield, N. J.

The auction sale on April 13th of selections from the Shorthorn herds of Messrs. Geo. Freeman and W. T. Garne, of Gloucestershire, England, was a very successful affair, thirty head from Mr. Garne's herd averaging £78 14s., or \$408, and 39 from Mr. Freeman's herd, £59 7s. The highest price, 230 guineas, was paid by Mr. Cesares, for South America, for the bull, Medlar, by Bapton Crown, bred by Mr. Deane Willis, and used in Mr. Garne's herd. Princess Royal, of Mr. Freeman's offering, sold for 155 guineas to the same buyer, the highest price for a female.

GREAT SHIPMENT OF YORKS.

"On April 15th Mr. D. C. Flatt, of Hamilton, Ont.," says the North-British Agriculturist, "shipped from Glasgow on the Donaldson liner, Tolaca, one of the largest consignments of pigs that ever left this country. The lot consisted of 85 head of Large Yorkshires, which has been selected with great care, and includes some of the best animals of the breed that were to be found in the country. Forty head were selected from the herd of Lord Rosebery, at Dalmeny, and these included a dozen animals which are to be exhibited at the great St. Louis International Exhibition. The other 45 included the pick of the best herds in England. Two of Mr. Daybell's Royal winners of last year were in the lot, and among other herds which had been picked in making up the selection were those of Sir Gilbert Greenall, the Earl of Ellesmere, and Messrs. John Barron, Albert Armitage and Mr. Stuart, Brockvale, Sowerby, etc. Quite a number of the animals in the lot were in preparation for the leading English shows this year."

If You Only Knew

How vast is the adulteration of China and Japan teas you would not use them as a gift.

"SALADA"

CEYLON tea is Rich, Delicious and Absolutely Pure. Black, Mixed or Natural Green.

Sold only in sealed lead packets. By all Grocers.

**Sunshine Furnace**

**Easy to Shake.**

More than half the drudgery of tending a furnace is in the shaking down. Enough to break a man's back, and certainly no work for a woman, is the job of shaking down some furnaces.

With a Sunshine Furnace you stand up and oscillate a gently working lever that a child could handle. It's so easy you won't believe it, if you've been used to the common back-breakers.

And the Sunshine is a hygienic, coal-saving, practical housewarmer in every way that a good furnace ought to be.

Sold by all Enterprising Dealers. Write for booklet.

**McClary's**

London, Toronto, Montreal, Winnipeg, Vancouver, St. John, N.B.

Turn Your Apples Into Dollars.



J. E. Johnson, of Simcoe, with a **SPRAMOTOR**, turned the product of 300 trees into \$1,500 last year.

While his neighbor, Mr. Fick, from 1,500 trees, got no perfect fruit.

You can do the same.

But should remember that to get **Spramotor** results you must use a **Spramotor**, and not any Spray Pump.

It is just as important to use a **Spramotor** as it is to use good chemicals.

Full particulars free.

**SPRAMOTOR CO.,**

68-70 King St., LONDON, ONT.

SWELLING OF THE JOINTS

Usually a strain or some other injury produces swelling of the joint and lameness. As soon as you notice this in your horse apply

**DR. CLARK'S WHITE LINIMENT**

This will promptly reduce the swelling and make the limb supple. There is no better liniment made. Sold by all dealers.

Price 50c. per bottle.

The **MARTIN BOLE & WYNNE CO.,** Sole Proprietors, WINNIPEG, CANADA.

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



FIRST QUALITY GOODS

# Threshermen!

Get a Challenge Thresher with cutting-box attachment if you want to please your customers.

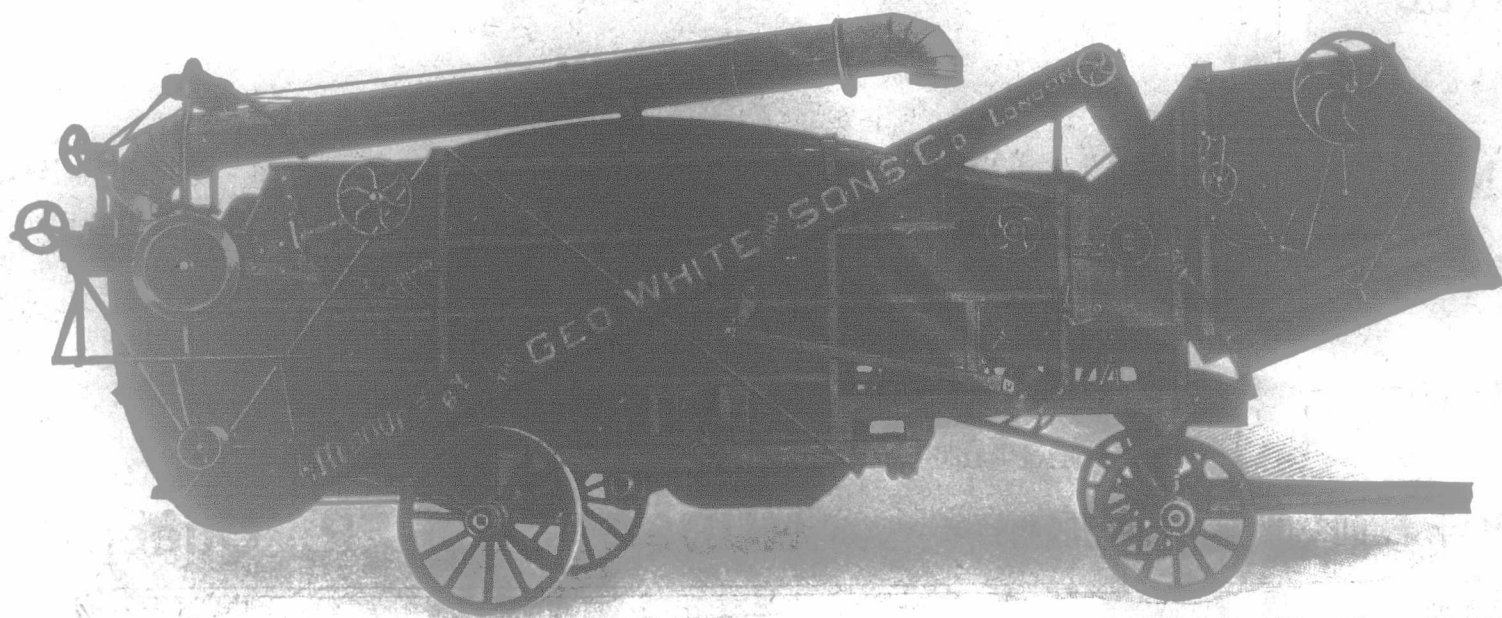
# Farmers!

See that your thresherman gets a Challenge Machine with cutting-box attachment to do your work. Saves time. Saves money.

FIRST QUALITY GOODS

The Machine That Does Two Days' Work In One.

## The NEW WHITE CHALLENGE WITH CUTTING-BOX ATTACHMENT



The Machine That Saves Fifty Per Cent. Of Labor

TRACTION ENGINES. PORTABLE ENGINES. ENGINEERS' SUPPLIES.

SEE OUR 1904 CIRCULAR FOR PARTICULARS. WRITE US FOR INFORMATION.

### The George White & Sons Company, Limited

LONDON, . . . . . ONTARIO.

JOHNSON SELF-FEEDERS. HART WRIGHTS. THRESHERS' SUPPLIES.

#### 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.

#### Veterinary.

##### TONGUE LOLLER.

Colt keeps her tongue on top of the bit, and allows it to hang out of her mouth. C. J. M.

Ans.—Your harness-maker will get you a bit made especially to prevent this habit. V.

##### ECZEMA AND BRONCHOCELE.

1. Horse has numerous small scabs all over his body. They are easily removed by grooming; but soon reappear.  
2. Horse's breathing is seriously affected by enlargement of the glands of the throat. A. A. L.

Ans.—1. This is eczema. Wash the body thoroughly with strong, warm, soft soap suds, applied with a scrubbing brush. Give one ounce of Fowler's solution of arsenic night and morning for two weeks, cease for one week, and repeat, if necessary, etc.

2. The glands can usually be reduced by injecting into them the tincture of iodine, and applying, internally, once daily, compound iodine ointment. It is also good practice to give one dram iodide of potash twice daily every alternate week. In case this treatment fails, the glands can be dissected out. V.

#### Miscellaneous.

##### CONCRETE VS. STONE BUILDINGS.

Can you let me know if a concrete ash-house is as good as a stone one? I use both coal and wood, and would be glad to see a plan for screening the coal ashes under cover; also a separate part

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS

MAXWELL TEDDER SIDE DELIVERY RAKE & LOADER.

MAXWELL

ST. MARY'S, ONT. CANADA

IS THERE AN AGENT IN YOUR DISTRICT? IF NOT ADDRESS THE FIRM DIRECTLY.

DAVID MAXWELL & SONS, ST. MARY'S, ONTARIO, CANADA.

ADVERTISE IN THE ADVOCATE.

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

for wood ashes, if you have any. The ordinary coal ash seems too dusty, when screened in barrels. C. W. H.

Ans.—Concrete is fully as serviceable as stone. If sifted in a covered box with sliding sifter, there should not be much dust.

#### BREEDING OF A HORSE.

Could you give me the breeding of a blood horse named Royal Leopard, owned, I think, near Orchardville, Ont.?

R. W. O.

Ans.—Certificates of registration of trotting horses are issued by a private concern in Toronto, but are not recognized by thorough-going breeders. Registering trotting horses in this country has been sadly neglected, and if Royal Leopard has a certificate of any value at all, which is hardly probable, it was issued by the American Trotting Register, with headquarters in Chicago. If you care to investigate further, get as many particulars as possible, and send them to W. H. Knight, Secretary American Trotting Register, Ellsworth Building, Chicago, Ill.

#### BREEDING OF TEMPEST.

1. Can you give the breeding of a horse by the name of Tempest, his number and volume; also of Glencoe Warrior?  
2. Own a stallion, sired by a registered stallion, his dam is by Chicago Volunteer, grandam by Tempest, great grandam by Glencoe Warrior. One of his dam's progeny has a track record, 2.28 1/2. Can the horse be registered?

A SUBSCRIBER.

Ans.—Tempest was by Royal George, a well-bred blood horse, but not registered in any recognized book. At the time of Tempest's colthood, there was not much attention given to registering trotting stock, and we hardly think he got a number. The same may be said of Glencoe Warrior, although we cannot recall his sire's name.

2. Write to W. H. Knight, Secretary American Trotting Register, Ellsworth Building, Chicago, asking for blank forms of application for registration. Fill these out as far as possible, and forward to him. If accepted, remit fee for registration.

# GRAND COMBINATION SALE

IN SALE PAVILION, STOCK-YARDS, HAMILTON, ONT., ON

**TUESDAY, JUNE 28.**

**62 HEAD  
IMPORTED  
AND  
CANADIAN-BRED  
SHORTHORNS.**



**56 FEMALES,  
6 BULLS.**

**CONTRIBUTORS:**

- W. C. Edwards & Co., Rockland.
- A. D. McGugan, Rodney.
- Chas. Rankin, Wyebridge.
- D. Milne, Ethel.
- T. E. Robson, Ilderton.
- Hudson Usher, Queenston.

A choice collection of high-class individuals in type and breeding. For catalogues and all information, address

Auctioneers: CAPT. T. E. ROUSON, THOS. INGRAM.

**HUDSON USHER, Queenston, Ont.**



## IN EVERY HOME

there are different tastes. Some like violin solos, others military band marches. Some like grand opera appeal to one, the old familiar ballads to another—there are times when hymns and sacred music are fitting; evenings when the young folks want music to dance to. If there is a in that home every member can have his or her desire. There are Gram-o-phone Records of everything worth hearing in music, song and speech. Records that will outwear any others ten times. Records that, like the Gram-o-phones, are made in Canada. **BERLINER GRAM-O-PHONES** are sold with a 5-year guarantee.

**BERLINER GRAM-O-PHONE** Gram-o-phone Records of everything worth hearing in music, song and speech. Records that will outwear any others ten times. Records that, like the Gram-o-phones, are made in Canada. **BERLINER GRAM-O-PHONES** are sold with a 5-year guarantee.

Sold on easy payment plan if desired. Read coupon carefully and cut out and send to us. Cash Prices for Berliner Gram-o-phones, \$15 to \$45. These prices include 3 seven-inch Records of purchaser's choice. Full catalogue of Gram-o-phones and list of over 2,000 Records sent free on request.

Any style of instrument sold on the easy payment plan at a slight advance over cash prices, with option of paying in full at end of 30 days for spot cash price. Cut out Coupon and mail it to us.

The **BERLINER GRAM-O-PHONE RECORDS** (don't forget the dog on the back) are made specially for it by musicians who are masters of their instruments. Bands and Orchestral selections, Choral Pieces by full choirs, including the famous Papal Choir. The Band selections have been made specially for the Gram-o-phone by the Co stream Guard's, the Grenadier Guards, Godfrey's, Sousa's (plays only for the Gram-o-phone) and other famous American and European Bands, Civil and Military, Instrumental Solos on Piano, Violin, Banjo, Mandolin, Cornet, Trombone, Bagpipes, Clarinet, Piccolo, Flute, etc. The latest songs as well as the old-time favorites—Religious, Patriotic and Sentimental airs—as well as Coon Songs, Minstrel and Comic Ditties, Plays, Waltzes, Polkas, Two-Step, Schottische, Quadrille, Lancers, Jigs and Reels for dancing—never tires.

Manufactured only by  
**E. BERLINER,**

2315 St. Catherine Street,  
**MONTREAL.**

**SEND  
"A" COUPON  
TO-DAY.**

**E. BERLINER,**  
2315-19 St. Catherine St.,  
Montreal, Que.

Enclosed find one dollar in payment on the Standard Berliner Gram-o-phone, type A, complete, with 16-inch japanned concert horn and 3 records. If satisfactory after five days' trial, I agree to pay eight monthly payments of two dollars each. If not satisfactory, I will return the Gram-o-phone, and this order is null and void.

Name.....  
Occupation..... P. O. Address.....

Express Office..... Province.....  
If you wish a spun brass horn instead of the japanned horn, enclose two dollars extra. Also send free of charge the following three records:..... F. A. Lon.

**GOSSIP.**

Mr. R. Ness, Jr., of the firm of Robt. Ness & Sons, Howick, Que., has landed at Quebec with an importation of 21 head of high-class Ayrshire cattle selected by himself from leading Scottish herds.

When Senator Burrows was practising law in Michigan he went one day to a court in a small town. A country lawyer was arguing before an aged and solemn Justice of the Peace.

"Now," said the lawyer, if it pleases your Honor, the defendant says he paid the money to the diseased, but I am going to show you that the diseased never got the money. He didn't receive one cent, the diseased didn't."

"Say," broke in the Justice, "what is this man diseased of? Why don't you bring him here?"

"Because, your Honor, he is diseased of death."

Representative J. Adam Bede, the Minnesota wit, says one of the funniest incidents he ever knew of in the district of Columbia was about a negro servant.

"We had a servant in our family," said he, "who early one week applied to get off the following Saturday. She wanted to attend a funeral.

"Is your friend dead yet?" she was asked.

"Oh, no," came the stolid reply.

"Well, how do you know the funeral will be Saturday?"

"'Coz," replied this far-seeing servant, "he's done goin' ter be hanged on Friday."

One day a well-known politician was enjoying a chat with a friend at a London hotel, when a strange young man came up and said:

"Can I see you for a moment, Mr. Dash?"

"Certainly," answered Mr. Dash, rising.

The young man led him across the room and seemed to have something important to say to him. Arrived in a corner, the stranger whispered in the politician's ear:

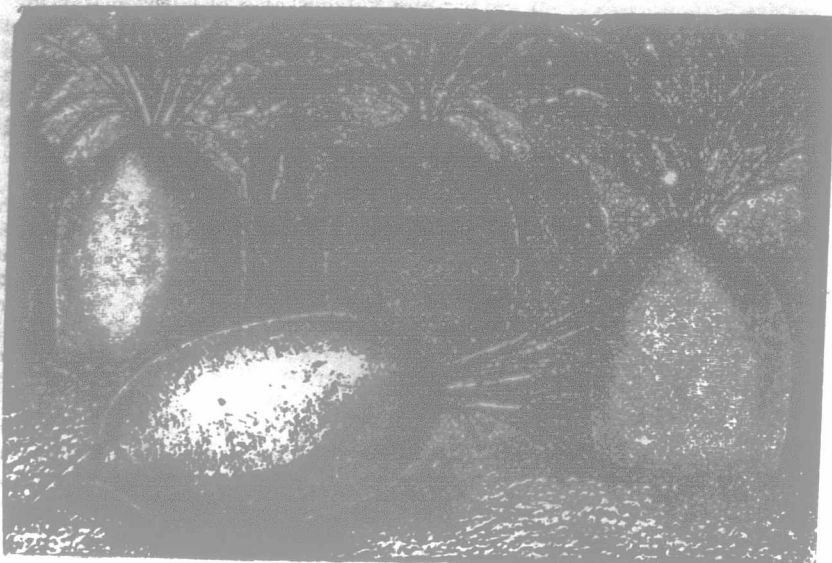
"I am on the staff of an evening paper, and I should like you to tell me what you think of the situation in the east."

Mr. Dash looked a little puzzled at first, than he said:

"Follow me."

And, leading the way, he walked through the reading-room, down some steps into the drawing-room, through a long passage into the dining-room, and drawing his visitor into a corner, behind the hat-rack, he whispered:

"I really don't know anything about it!"



## Bruce's Giant Yellow Intermediate Mangel.

This grand Mangel, which we introduced in 1891, is without doubt the favorite with all cattle men at the present day, and there has been such an increase in the demand each successive year, that we have usually sold out entirely before the close of the season, though we estimated that we had ordered enough to provide for the increase each year. The large size of the roots, their uniformity, handsome shape; bright, smooth, yellow skin, flesh of the most solid texture, nutritious and splendid keeping qualities, make it the most valuable introduction of recent years. While in point of size they will not equal the best of the long varieties, yet in the yield per acre they have frequently produced as much, and in richness they far exceed the best long varieties, added to which they are much more easily harvested, about half of their length being above the ground. We have kept our stock fully up to the original high standard, and it will pay every grower to procure our grand strain of this unequalled variety. 1-4 lb. 10c; 1-2 lb. 15c.; 1 lb. 25c.; 4 lbs for 80c. postpaid. Write for our beautifully illustrated up-to-date catalogue (88 page-) of "Everything Valuable in Seeds." Free to all applicants.

Established 1860 **JOHN A. BRUCE & CO. HAMILTON, CANADA.**

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

**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**OWNERSHIP OF SLABS.**

1. If A takes logs to B's mill to get cut, it being steam power, do the slabs belong to A or B?  
2. If the mill were water power, would it make any difference? ONTARIO.

Ans.—1. To A, unless there was some express or implied agreement to the contrary.  
2. No.

**FERTILIZER FOR TURNIPS.**

We are contemplating planting our turnips on lowish ground, containing considerable deep, black soil. We would like to ask, through the columns of your paper, what would be the best chemicals to use for their growth, in combination with farmyard dressing? J. E. H. Me., U. S. A.

Ans.—On such soil we doubt the advisability of adding farmyard manure. What such soil really needs is phosphoric acid. It is already rich in nitrogen, one of the most plentiful elements in farmyard manure. Not only does the soil require phosphoric acid, but turnips respond readily to a dressing of this fertilizer. Where used for turnip-growing, it is quite common to apply a dressing of 200 lbs. of phosphate to the acre, which it is claimed increases the crop five tons to the acre. Superphosphate is probably the best form in which to apply phosphoric acid, and should be added when sown, or when the turnips are quite young, as it enables them to develop a rank resistant growth before the fly arrives.

**SOW EATING PIGS.**

Sow about a year old, six days ago gave birth to 13 pigs; nine are still living, but the only way we can get them to suck is to catch the sow and hold her down, as she will bite and kill them if left alone with them. Is there any way to make sow quiet with pigs; also, would she be apt to act same way if kept to have another litter? J. H. M.

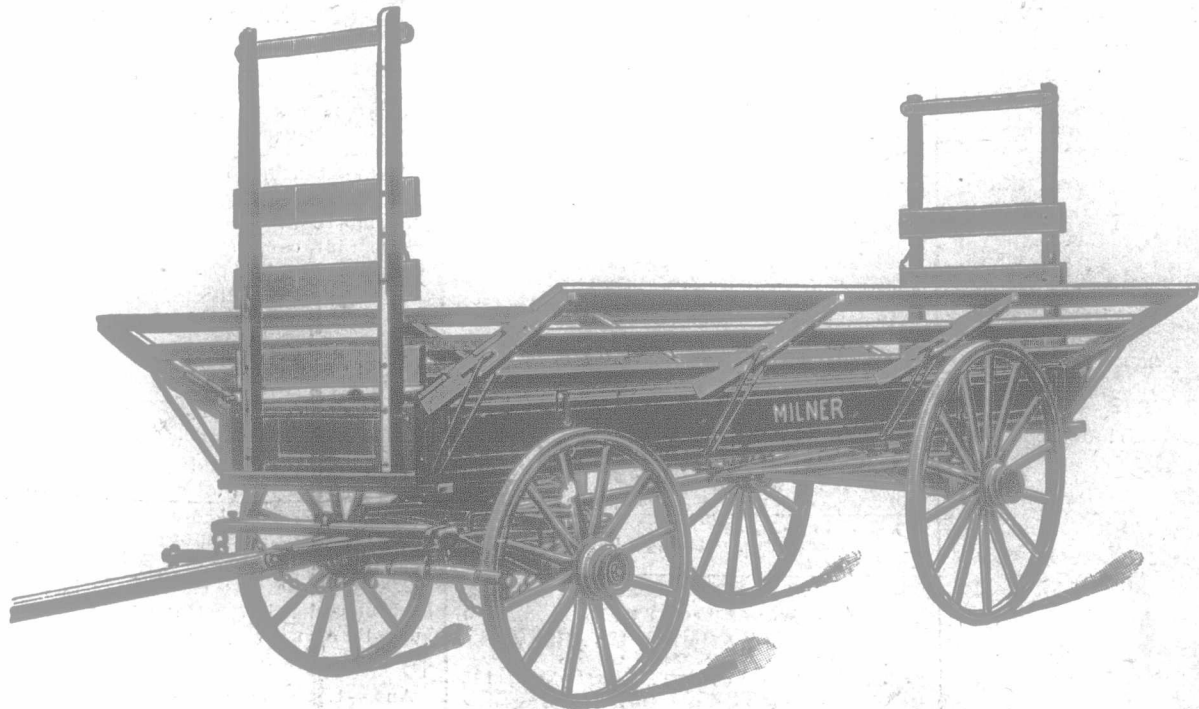
Ans.—Put sow in crate, with lower side boards cut out so pigs can suck and sow cannot get at them. Feed bran slop to relax sow's bowels, and give her some salt fat pork or other flesh to eat. Examine teeth of pigs, and if side tusks are sharp, break off with pincers or clip-pers. A reader says he cured a sow of this vice by slowly pouring cold water on her head, and had known others cured in this way. The probability is that the sow may not act so with next litter, especially if running out on grass before farrowing. It is probable that constipation, or it may be a craving of system for earth or grit, accounts for the trouble, or the sharp teeth of pigs pricking her udder may have started it.

**GOSSIP**

The Zenner Disinfectant Co., of Detroit, Mich., advise us that they have Zenoleum now well placed in the drug stores throughout Ontario, so that farmers and stockmen can readily obtain a supply.

Messrs. W. C. Edwards & Co., Rockland, Ont., near Ottawa, in ordering change of advertisement of Shorthorns and Shropshires, call attention to the splendid character of the sires in service in their herd, namely, Marquis of Zenda, bred by Marr, of Uppermill; Village Champion, bred by Duthie, of Collynie; Missie Champion, a son of the \$6,000 Marr-bred cow; Missie 153rd, and Clipper King. One imported bull and four superior home-bred bulls are offered for sale, and the firm have placed 15 females, imported and home-bred, in the joint sale to be held at Hamilton, Ont., on June 28th.

Mr. T. J. Berry, Hensall, Ont., portraits of whose imported draft stallions, Florizel and Prior's Hero, appeared in our May 5th issue, writes: "You have made a slight mistake in the age of the Clyde horse, Florizel, in your Gossip notes. He is six years old this spring, instead of four, as you have it. His card, which I sent you, reads: When three and four years old he had the Argyle tenantry premium, and this year he has been selected for the Leshmaghow premium. He has travelled three seasons in the Old Country, and I brought him here in the fall of 1908."



**MILNER PETROLIA WAGON CO., LIMITED**  
PETROLIA

This cut represents our

**Farm Truck**  
with Combination Stock and Hay Rack.

Height of wheels: Front, 3 ft. 6 in.; Hind, 3 ft. 10 in.

It is a very popular wagon for all general purposes. Sold with or without the rack.

We make all kinds of FARM and TEAMING WAGONS, from one to eight tons' capacity.

In EXCELLENCE OF DESIGN, WORKMANSHIP and QUALITY OF MATERIAL they are unsurpassed.

ASK YOUR DEALER FOR THIS KIND. TAKE NO OTHER.

**Calves CARNEFAC**

Those who visited Guelph and Winnipeg Fairs last year will not need to be told what Carnefac will do for calves. This year we offer prizes for Carnefac-fed calves aggregating \$250. Send for particulars. Carnefac calves won all the prizes at Winnipeg last year. Have you not one which might be a winner this summer.

Suthwyn, Man., July 23rd.

W. G. Douglas & Co.:

Dear Sirs,—I have used your Carnefac Stock Food on my calves for several months back, and find it a good article for keeping them in good condition. One calf weighs 525 and the other 510 pounds. Calves born this year on January 2nd and 21st, 1903, respectively. Yours truly,

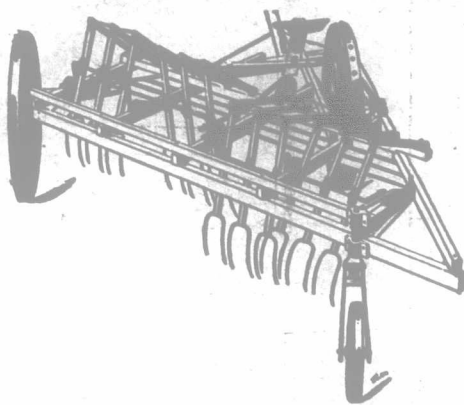
(Sgd.) A. MCBAIN.

Carnefac is Canada's Food Tonic for Canada's Stock.

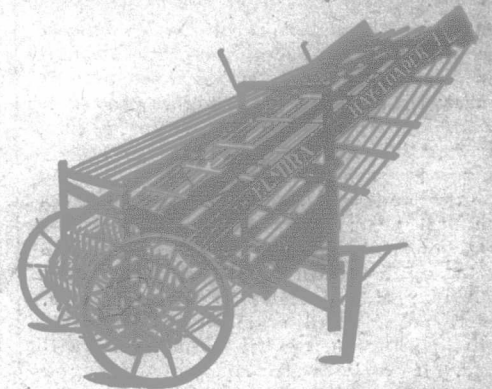
Send for Booklet, "About Carnefac."

**CARNEFAC STOCK FOOD CO., Winnipeg, 65 Front St. E., Toronto**

**ELMIRA HAY-MAKING MACHINERY.**



THE SIDE-DELIVERY HAY RAKE and HAY LOADER are the Greatest Time and Labor-saving Implements of the day. They will repay for their cost in a short time by curing and saving the hay properly, and in saving of extra labor.



Substantially built. Will last a lifetime. Write for circulars, prices and terms.

**THE ELMIRA AGRICULTURAL WORKS CO., LTD., ELMIRA, ONTARIO.**

**TRADE TOPICS.**

**FARM FERTILIZER** is advertised in this paper by the old and reliable firm of W. Freeman Co., Hamilton, Ont., who have made a study of this subject, and have had experience from which they are in a position to advise farmers and gardeners as to the best fertilizer for any specific crop. Write them for their circular and the information required.

**CATTLE SALESMEN.**—Maybe & Wilson, Toronto, live-stock commission dealers at Western Cattle Market and Toronto Junction Stock-yards, advertise in this paper. All kinds of cattle are bought and sold on commission, and a specialty is made of farmers' cattle. Write them for any information desired regarding the markets, and they will promptly reply.

**CALF FOOD.**—When the milk goes away to the cheese factory the calf must suffer, unless some cheaper class of fat is substituted for that in the milk. This demand of the calf for a prepared food has necessitated the manufacture of Blatchford's calf food, a mixture of essential food nutrients, to take the place of milk. Keep sending all the milk to the factory, but feed the calves this cheaper substitute. Address Chas. Cowan, London, Ont.

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

QUESTIONS AND ANSWERS.  
Miscellaneous.

BOOK ON CORN.

Would you tell me through your paper, whether in Canada or the United States, I can obtain a book on the subjects of corn and the cultivation and breeding of the same.

W. R. R.  
Ans.—Yes; Book of Corn, by Myrick, price \$1.50. Order through this office.

CONCRETE OR STONE SILO.

We are going to build a silo in one end of our root cellar, building concrete on top of walls.

1. Would common lime do for the concrete, plastered inside with cement, or would cement concrete be necessary?

2. If lime concrete would not do, would an ordinary stone wall be as cheap and as good as cement concrete? J. R. W.

Ans.—1. Lime would not make a strong enough wall. Nothing would be as satisfactory as a concrete wall plastered inside.

A NEW PLUM

I saw in the "Farmer's Advocate" of Feb. 4th, on page 273, mention made of a new plum, Large Orange plum. I would like to get one for a trial, if there are any to be got. If not, something to equal the above in quality, as a good plum is a luxury.

E. De R., P. M.  
Ans.—Write Prof. F. C. Sears, School of Horticulture, Wolfville, N. S., or some of the nurserymen advertising in the "Farmer's Advocate."

TWITCH GRASS.

Would you kindly tell me the difference between twitch grass and quack grass, and give a practical way of clearing land of same.

T. M. D.  
Ans.—Agropyrum repens is commonly called couch grass, twitch grass, quack grass, quitch grass, quick grass or wheat grass. It is characterized by having pointed rootstalks, and a flower spike from three to eight inches long, zigzag in shape, pointed and channeled, with spikelets alternating at each joint, and placed flatwise to the stalk. The stalk of rye grass resembles that of couch grass, but the spikelets are placed edge-wise on rye grass. As soon as a crop is off, plow, harrow and cultivate to shake the roots free of dirt, then rake them together and burn them. Afterwards follow a similar treatment to that recommended in our April 21st issue for sow thistle.

BOKHARA OR SWEET CLOVER.

Is bokhara clover a great yielder of nectar? Is honey made from that plant as delicious as any? Bees seem to relish it very much. Although very hard to exterminate, I intend to sow some on a small piece of my property. What do you think?

H. L. P. Q.  
Ans.—Bokhara, or sweet clover, can be recommended as a first-class honey plant for waste lands. It grows from six inches to as many feet high, and it is covered with an abundance of bloom, yielding in most seasons a large supply of nectar which produces honey of good quality and color. It does not bloom the first year; but commences about the first of July of the second year, and keeps up a continual bloom until frost kills it. If you desire to test its value, do it on a small scale. When once it gets possession of the ground, it will stay, if allowed to ripen. When you wish to get rid of it cut after it blooms, before seed forms, and follow with a hoed crop. Bokhara clover sends its roots down deep into the hardest, driest soils, thus enabling it to withstand severe drouths as no other plant can. This gives it great value as a fertilizer. It recommends itself for reclaiming soils too poor for raising crops. It has a habit of taking possession of vacant lots, and roadsides, which has caused some alarm to those unacquainted with it. I would recommend you to sow sanfoin clover instead of bokhara on your cultivated land, as sanfoin makes an excellent fodder and fertilizer, and from what I have seen of it, I think it will produce more honey. JOHN FIXTER, Central Experiment Farm, Ottawa.

POULTRY AND EGGS

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 pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

**BUFF** Orpington eggs from imported Ontario and Industrial winners, \$3 per 12. Write for free catalogue describing them. J. W. Clark, Cainsville, Ont.

**BARRED** Rock eggs for hatching, Royal Blue and Ringlet strains, the kind that wins. \$1 per setting of 15. Guarantee 10 chicks, or replaced at half price. J. B. Cowieson, Queensville, Ont.

**POULTRY**, cat, dog and bird supplies. Large catalogue free. Morgan's Incubator Works, London, Ont.

**A. E. SHERRINGTON** WALKERTON, ONT.


Importer and breeder of **BARRED P. ROCKS** exclusively. Eggs, \$1.00 and \$1.50 per setting of 13. **White Wyandottes** and **Buff Orpingtons** Eggs \$1.50 per 15, cash with order. O. W. BEAVER, "Pinegrove," Prescott, Ont.

**Eggs for Hatching** from a pen of 42 hens, B. P. Rocks, "National strain"; large, healthy birds, choice markings, persistent layers of large eggs, having run of orchard Price \$1 per setting, or \$3 for 3 settings. Safely packed. W. O. SHEARES, Bright, Ont.

**BARRED ROCKS** Eggs for hatching from a pen headed by a cock bred by E. B. Thompson, N. Y., \$1.00 per setting; also from a pen of Thompson's pullets, \$1.50 per 15. Write O. & J. CAESSTERS, Cobourg, Ont.

**Snelgrove Poultry Yard Barred Rocks** exclusively. Eggs for hatching \$1.00 per setting, three settings \$3.00. W. J. CAMPBELL, Snelgrove F. O., Ont.


**The Daniels Incubators**



Are of the 20th century make, right up to date. Our **50-EGG CYCLE INCUBATOR**, PRICE \$6, is the wonder of the age. Perfect ventilation and operation. We have a 100-egg machine, \$12. We make 7 sizes. Used and endorsed in all the Dominion Government Experimental Stations and Colleges. Just drop a postal card. Our new catalogue is free, and tells you all about us and our goods.

**O. J. DANIELS**  
196-200 River Street, TORONTO.

Dirt Means Death to Dairy Profits.




When a New Century American Cream Separator enters your dairy, all the old dirt-collecting devices go back to the ancient age from whence they came.

Modern methods of making big profits demand absolute cleanliness. Write for our catalogue. It tells all.

**C. RICHARDSON & CO.,**  
P. O. Box 1048. ST. MARY'S, ONT.

**"PERKINS" AMERICAN HERBS**  
THE GREAT BLOOD PURIFIER,



is guaranteed to cure Constipation, Rheumatism, Sick Headaches, Nervous Troubles, Kidney Disorder, Liver Complaint, Stomach Troubles, Female Complaints, Neuralgia, and all skin diseases. Price 50c and \$1. Write for free booklet and samples. The National Herb Co., 173 Spadina Av., Toronto, Can.

Dr. J. H. Perkins, AGENTS WANTED.

**Canadian Dairying,**  
BY PROFESSOR HENRY H. DEAN,  
of the Ontario Agricultural College. A thoroughly practical book, illustrated; price, \$1.00, postpaid. William Briggs, 29-33 Richmond St. West, Toronto.

Miscellaneous.

TO TIE COWS QUICKLY.

What is the best contrivance for tying a cow quickly? M. D. W.

Ans.—Stanchions are probably the readiest fasteners, as it requires only the pushing to of the moving side stanchion, which is caught by a fastener, which drops behind it; but the stanchions, unless the patent swinging sort is used, are stiff and confining to the cow. We are not aware that the equipment for either is sold in Canada.

BAD WEED—THRUSH.

1. I have a bad weed on my farm, known here as wild jack. Could you give me any information as to how would be the best way to destroy it? Will heating the manure kill the seeds of same?

2. My horse has thrush. What is the best cure for it? Have been using salt and lime with poor results. Will his mate take it from him? G.

Ans.—1. Send sample for identification.

2. Cleanse the foot thoroughly, and keep in a clean stall. Wash with castile soap and warm soft water; dry well, and apply a lotion, consisting of sulphate of zinc, six drams, in a pint of water.

PASTURING ALSIKE—PLANTING CEDARS.

1. Would it be advisable to pasture alsike clover intended for seed?

2. I would like to know what time is best to plant cedar for hedge. W. S.

Ans.—1. If the soil is low and very rich, and the season one that produces a rank growth, a better crop of seed would be had by pasturing until about the middle of June, or, better still, cut with the mower about this time, as it gives all the plants, an even start for the second growth. In an ordinary growing season, on the average soil, alsike will not grow long enough the second crop to make it easily handled.

SEED POTATOES.

How long should seed potatoes be cut before they are planted? Which are the best potatoes to plant, large ones cut, or medium ones left whole? N. S. P.

Ans.—The sooner potatoes are planted after being cut, the better. In plants, there is a tendency for like to produce like. If large potatoes are planted, it is probable large tubers will be produced; but large-sized potatoes are not always the largest yielders. For a big crop and tubers of a good size, we would recommend average-sized potatoes cut in two or three pieces, having not less than two eyes to the piece. If left for a few days after cutting, land plaster should be sprinkled on them, and the pile turned over and spread out thin to prevent bleeding and heating.

**Spavin and Ring-bone**

Once hard to cure—easy now. A 45-minute treatment does it. No other method so easy, quick and painless. No other method sure.

**Fleming's Spavin and Ringbone Paste** cures even the very worst cases—none too old or bad. Money back if it ever fails. Lots of information if you write. Book about Spavin, Ringbone, Curb, Splint, Bog Spavin and other horse troubles sent free.

**FLEMING BROS., Chemists,**  
45 Front Street, West, Toronto, Can.

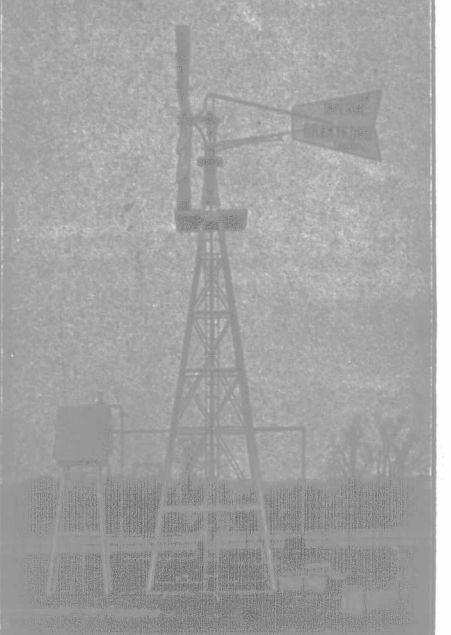
**BAWDEN & McDONELL**  
Exeter, Ont.

IMPORTERS OF  
**Clydesdale, Shire and Hackney Horses**



Our new importation has arrived, and we have now about 20 stallions for sale, ages from 2 to 7 years; the best that could be purchased in Scotland and England.



**CUT OF "IMPERIAL" PUMPING WINDMILL**



Outfit which won the CHAMPIONSHIP OF THE WORLD against 21 American, British and Canadian manufacturers, after a two months' thorough trial. Made by G. GOULD, SHAPLEY & MUIR CO., Limited, Brantford, Canada.

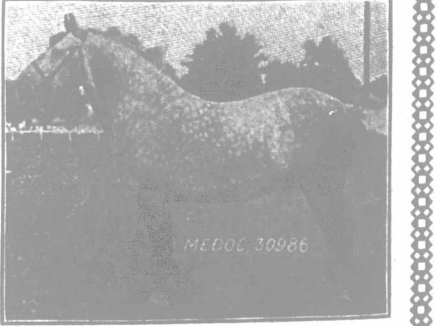
**Imp. Clydesdales and Shorthorns**

**MESSRS. SMITH & RICHARDSON,**  
COLUMBUS, ONT.,

Importers of Clydesdale horses and Shorthorn cattle, are now offering 10 imported stallions, including sons of the renowned Baron's Pride, Prince Thomas, Royal Carrick and Mountain Sentinel; also 10 mares, 6 of them imported, and the balance from imported stock. Shorthorns, imported and home-bred, all ages. Stations:  
**Oshawa & Brooklin, G. T. R.; Myrtle, C. P. R.**  
40 miles east of Toronto.  
Long-distance Telephone at residence, near Columbus. Telegraph, Brooklin.

**LARGEST STUD IN THE WORLD OF AMERICAN-BRED PERCHERON, SHIRE and HACKNEY STALLIONS AND MARES**



Won more First Prizes and Gold Medals in past 3 years than any firm in America; ages 2 to 6 years. Prices to Canadian buyers for next 30 days will run from \$600 to \$1,200 for choice of my barns, except 2 horses which are not for sale; also R. R. fare to my place and expenses while here. Time of payment made to suit customers. Every stallion sold to get 60 per cent. of mares in foal, also a safe delivery.

**LEW W. COCHRAN,**  
607 West Main St., CRAWFORDSVILLE, IND.

# TRUMAN'S CHAMPION STUD.



INTERNATIONAL WINNERS.

## SHIRE, PERCHERON, BELGIAN, SUFFOLK AND HACKNEY STALLIONS.

Seven importations within the past twelve months. More select prizewinning Shire stallions than all our competitors. Seven stallions sired by the 1904 London champion, Blaisdon Conqueror, for sale. Twenty-six years importing Shire stallions.

We have opened a **BRANCH STABLE at LONDON, ONT.,** for the convenience of our Canadian customers.

Will charge no more for our first-class stallions than others are doing for common stock. Write for new catalogue.

## Truman's Pioneer Stud Farm

Address **H. W. TRUMAN,** Care City Hotel, London, Ont. **BUSHNELL, ILL.**

## A New Record

For draft geldings of any breed was made in the Chicago Auction Market on March 23rd last, when a high-grade Clydesdale Gelding was sold for \$665 to Messrs. Armour & Co.

We are the oldest and largest importers of **Clydesdales** in America, and are now offering extraordinary bargains in this breed, and also in **PERCHERONS, SHIRES, SUFFOLKS, HACKNEYS and GERMAN COACHERS.**

**ALEX. GALBRAITH & SON,** JANSVILLE, WIS. BRANDON, MAN.

If your district is not supplied with a good stallion, write at once to **MR. JAMES SMITH,** Manager Manitoba Branch.

## Advertise in the Farmer's Advocate.



## Varicocele Cured to Stay Hydrocele Cured in 5 Days

**VARICOCELE** Under my treatment this insidious disease rapidly disappears. Pain ceases almost instantly. The stagnant blood is driven from the dilated veins and all soreness vanishes and swelling subsides. Every indication of Varicocele vanishes and in its stead comes the pleasure of perfect health.

I cure to stay cured, Contagious Blood Poison, Kidney and Bladder Troubles, Nervous Debility, and allied troubles. My methods of treatment and cure are original with me and cannot be obtained elsewhere. I make no experiments. All cases I take I cure.

**Certainty of Cure** is what you want. I give a Legal Guarantee to cure you or refund your money. What I have done for others I can do for you. My charge for a permanent cure will be reasonable and no more than you will be willing to pay for benefits conferred. **I CAN CURE YOU at Home.**

**Correspondence Confidential** Write me your condition fully and you will receive in plain envelope a scientific and honest opinion of your case. **FREE of Charge.** My home treatment is successful. My books and lectures mailed **FREE** upon application.

**H. J. TILLOTSON, M. D., 255 Tillotson Building, 84 Dearborn Street, CHICAGO.**

### QUESTIONS AND ANSWERS. Miscellaneous.

#### REMOVING WARTS.

Is blue vitriol good to remove warts from a horse's nose? **H. H.**  
Ans.—It is not recommended for that purpose. Veterinarians advise, instead, glacial-acetic acid, applied once daily. Many little warts will disappear without treatment.

#### RIGHT TO PROCEEDS OF CHATTELS.

A has a chattel mortgage on B's implements. B gives an order to the auctioneer in favor of A for full amount. C buys some of the chattels, and does not settle at the close of sale, and when asked to settle with A, says B owes him a bill for nearly the amount, and will not settle with A. Can A collect it? **J. A. W.**

Ans.—We think so.

#### SHEEP-SHEARING MACHINE.

Do you know of anything better for shearing sheep than the old-fashioned sheep shears? If so, would you please let me know? **L. E. H.**

Ans.—The sheep-shearing machine manufactured by the Chicago Flexible Shaft Co., 110 La Salle Avenue, Chicago, Ill., is used by some Canadian sheep breeders, who have given flattering testimonials of its working and efficiency. It is similar to the horse-clipping machine, and requires one man to turn the crank and another to hold the clipper.

#### PAYING FOR STALLION.

A has a mare, and he promised to let me have the colt, if I paid the service of the horse, and gave him so much. I asked him if I am sure to get it, and he says, "Yes, there is nobody else." I find out afterwards that there is a chattel mortgage against her and all increase. Can they make me pay for the use of the stallion? **READER.**

Ans.—Yes, if you contracted with the proprietor of the stallion, direct or through A; otherwise not.

#### SALE OF HOGS—BREACH OF CONTRACT.

1. If A sells ten hogs to B, B paying five dollars down; C offers A more money than B, so A resells the hogs to C, can B collect damages from A?  
2. A hires B at \$20 per month for eight months. B comes and works two days and leaves. There was just a verbal agreement. Can A do anything with B? **READER.**

Ans.—1. He is entitled to do so.  
2. He may sue him for damages.

#### PRINCE ATTRACTIVE.

A horse called Prince Attractive took first prize at the World's Fair in Chicago. Do you remember if his photo was in the "Advocate"? If so, and you have the number, kindly send it to me. **G. B. M.**

Ans.—Prince Attractive 7195, Am. C. S. B., was shown at the Columbian Exhibition by Col. Robt. Holloway, and won first prize in two-year-old class. He was sired by Cedric (1087), by Prince of Wales (673), dam Belle Tarbroch 2860. No photo of Prince Attractive has appeared in the "Farmer's Advocate."

#### DIFFICULT CHURNING.

During the winter I had a difficulty in churning. When I let the churn stand, the butter would rise to the top, but when I tried to gather it, it would all separate again. Was the cream too warm, or too cold? **H. K. D.**

Ans.—The difficulty is probably caused by two things: First, the cream is too thin, that is too much skim milk in it, and it is probably at too low a temperature for churning that particular form of cream. If subscriber will obtain a cream richer, either by adjusting the outlets of the separator, if he uses one, or by allowing it to stand for a longer time before taking off the cream, being careful to remove as little skim milk as possible, and will churn at a temperature of 68 degrees, possibly 70 degrees will be necessary, I think he will have no difficulty in getting the butter to gather properly. If a portion of the buttermilk were drawn after the butter breaks he would find that the butter would gather, even in this thin cream. However, this plan usually means considerable waste of butter in the buttermilk, and it is preferable to have the cream richer and the temperature right before commencing the churning. **H. H. DEAN.**

## "THE REPOSITORY"

WALTER HARLAND SMITH, Prop.



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 conducted. 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.

## IT SAVES TROUBLE

and annoyance many times to have

## ABSORBINE



handy in case of a bruise or strain. This remedy is rapid to cure, pleasant to use, and horse soon ready for work. No blister, no hair gone.

**ABSORBINE** removes any soft bunch from animal or mankind. \$2.00 per bottle, delivered, or of regular dealers. W. F. Young, F. D. F., Springfield, Mass. **LYMAN, SONS & CO.,** Agts. for Canada. MONTREAL

## FONTHILL STOCK FARM

50

SHIRE HORSES AND MARES to choose from.



**MORRIS & WELLINGTON,**

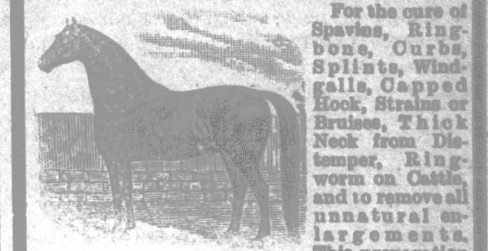
FRONTHILL, ONTARIO.

## Clydesdales & Hackneys

We handle only the best of their representative breeds. We have on hand more good young stallions and mares than ever before. Large importation just arrived. Correspondence and inspection invited. Farm only ONE MILE from station.

**Graham Bros., Claremont, Ont.**

## Dr. Page's English Spavin Cure



For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hoof, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blister. 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. FREDERICK 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.

**FOR SALE: CLYDESDALE STALLION, 3 years old, registered (4151) Vol. 13, Clydesdale Studbook. Apply to WILLIAM WOODLEY, Dundas, Ont., near G. T. R. Station.**

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

GOSSIP.

Elder Dippen—Brudder Smiff, what fo' yo' allus s-singin'?

A little chap in a country school wrote the following composition on heads:

A man once berated his Hebrew debtor for not having included him among his preferred creditors.

On April 15th, Messrs. D. C. Flatt & Son, of Millgrove, Ontario, shipped from Glasgow to Canada an extensive and valuable consignment of Large Yorkshire pigs.

The school was celebrating Lincoln's birthday, and the principal had invited a distinguished citizen to speak to the pupils.

Sir Archibald Geikie has just published his Reminiscences—a volume full of stories about the Scots.

"Weel, Tam, are ye gaun hame wi' your wark?" was the invariable greeting of a doctor to a tailor of his acquaintance.

Descanting on the changes in life and work brought by time, a farmer said:

"When I was young, I used to think my father hadna muckle sense, but my sons look on mysel' as a born eedit."

"At a funeral in Glasgow, a stranger who had taken his seat in one of the mourning coaches, excited the curiosity of the three other occupants, one of whom at last asked him:

"No, that either. To tell the truth, I've no been weel mysel', and as my doctor has ordered me some carriage exercise, I thought this wad be the cheapest way to tak' it."

He tells, for instance, of the Highlander who had been to Glasgow and seen that wonderful invention, the telegraph.

"Then there is the story of the blacksmith who said to his minister:

Sharples Tubular SEPARATORS

We want you to know Tubular Cream Separators as they are.

The low can, enclosed gears and ease of turning are shown in this illustration from life. Tubulars have neither oil cups, tubes, nor holes—they oil themselves.



Canadian Transfer Plates Winnipeg, Toronto, Quebec, St. John, N. B., Calgary, Alberta, Address

Hampshire Down Sheep. GREAT ENGLISH PEDIGREE SALES,

July, August & Sept., 1904

Waters & Rawlence, Salisbury, Eng., will sell by public auction, during the season, upwards of

50,000 Pure-bred Ewes, Lambs, Rams,

including both rams and ewes from the best registered prizewinning flocks in the country. Commissions carefully executed. Address

Waters & Rawlence, Salisbury, England

Rose Cottage Stock Farm SHORTHORNS Royal Prince = 31241 = at the head, assisted by Sir Tatton Sykes = 49402 =, Royal Prince, the sire of Fair Queen, winner over all beef breeds at Chicago International Fat-stock Show, 1903.

ABORTION and Failure to Breed Kellogg's Condition Powder

FREE TO BOYS

This Baseball Outfit and \$25.00 Cash

Illustration of a baseball outfit including a bat, ball, catcher's mitt, and various accessories.

GOSSIP.

Senator Depew, while acting as president of the New York Central road, was approached for a pass to Syracuse three years in succession by a man with the same pitiful tale of a mother's illness and the strong desire of the applicant to see her once again.

"How dare you come here again with that old story?" he exclaimed.

The cloud fell from Chauncey's face, a smile overspread his features, which remained until the pass was signed and handed over to the applicant.

Back in the 70's, when Dewey had command of a ship of the old Hartford type, he was lying in the harbor at Genoa.

"No, sir, I won't leave. I am an American citizen, and have a perfect right on this vessel. I pay taxes in America, I am on my own property; part of this ship belongs to me!"

A story is told of an eminent New York lawyer receiving a severe reprimand from a witness whom he was trying to browbeat.

"Your memory, of course, is not as brilliant as it was twenty years ago, is it?"

"Well, sir, about twelve years ago, you studied in Judge B——'s office, did you not?"

"The lawyer said, 'Yes.'"

"Well, sir, I remember your father coming into my office and saying to me: 'Mr. D——, my son is to be examined to-morrow, and I wish you would lend me twenty dollars to buy him a suit of clothes.' I remember also, sir, that form that day to this the money has never been paid. Will that do, sir?"

People who take things literally are apt to tread on other people's toes, says Tit-Bits.

"Look at this watch for 40 shillings."

"I looked at it," said he, "and now I want £2."

The most amusing incident we have heard is that of the countryman who, while sauntering along a city street, saw a sign:

"Please ring the bell for the caretaker."

"Are you the caretaker?" asked the bell-puller.

"Yes; what do you want?"

"I saw that notice, so I rang the bell, and now I want to know why you can't ring the bell yourself?"

BABY'S OWN SOAP Pure, Fragrant, Cleansing A Safe Soap for a TENDER Skin A good Soap for ANY Skin

THOROLD CEMENT AND PORTLAND CEMENT FOR BARN WALLS AND FLOORS, HOUSES, SILOS, PIGPENS, HENHOUSES; AND SEWERS, TILE, ABUTMENTS AND PIERS, FOR BRIDGES, GRANULITH SIDEWALKS; IN FACT, FOR ALL WORK THAT CAN BE DONE WITH CEMENT.

Aberdeen-Angus GRADES have topped the highest markets for beef in NORTH AMERICA for 14 years in succession, through good times and dull times.

JAMES BOWMAN, ELM PARK, GUELPH. 6 young registered HEREFORD bulls and 1 fine stock bull 4 years old, for sale at reasonable prices.

INGLESIDE HEREFORDS 100 Head. Calves to 6-year olds. If you want to start a small herd, write for particulars. The quality and breeding is of the best. A good foundation means success, and here is where you can get it at prices and terms to suit your purse.

HIGH-CLASS HEREFORDS We have for sale the following choice young stock, which have been bred from imported stock, which have been bred from imported stock.

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

**QUESTIONS AND ANSWERS.**  
**Veterinary.**

**SPRAIN.**

Mare worked all winter. She stood five or six days in stable, and when taken out, the right front foot gave away. She had no strength in the fetlock, and it swelled. It is still swollen and weak. G. R.

Ans.—It is a sprain of some of the ligaments of the joint. Give her absolute rest; bathe the joint well with cold water three times daily; then rub well with camphorated liniment, and in an hour apply a bandage moderately tight. Keep this treatment up until she recovers. V.

**LUMP JAW.**

Heifer has quite large lump under throat, quite close to the jawbone, but the bone does not appear to be involved. It is quite sore, and broke the other day, and is discharging a little puss. S. E.

Ans.—This is an actinomycotic tumor, a case of lump jaw, in which bone is not involved. The best treatment is to have the tumor carefully dissected out; the wound stitched, and then treat with a five-per-cent. solution of carbolic acid, until healed. Give the heifer, internally, one dram iodide of potash three times daily, and gradually increase the dose until her appetite falls, she refuses water, or runs tears from her eyes and saliva from her mouth. When these symptoms or any of them appear, cease giving the potash. V.

**DISCOLORED URINE.**

1. What is the best remedy for kidney disorder in horses? Urine is discolored. 2. Mare foaled April 24th. Mare and colt doing well. When may I put the mare to work? T. M. D.

Ans.—1. The treatment for diseases of the kidneys must, of course, depend upon the disease. Many diseases of these organs cause discoloration of the urine. I presume you refer to that condition in which there is a partial inactivity of the kidneys, and the urine becomes somewhat thick and milky in appearance. If this is the case, give one ounce nitrate of potash once daily for two doses. If this is not the condition, give particulars and I will prescribe. 2. The mare may, if necessary, go to work when the foal is three weeks old; but the longer rest you can give her, the better for both. V.

**NERVOUS IRRITABILITY.**

1. Three-year-old colt jerks his head; in fact, his whole body appears to be affected. He bobs his head downwards sharply, and his bowels appear to be convulsed at the same time. He tires easily, and is then worse. 2. Cow calved January 1st. She has shown constant heat for six weeks, but will not stand for service. J. B.

Ans.—1. Cases of this kind are occasionally met with, and in some cases are incurable. Sometimes the apparently nervous actions are due to irritation, caused by the bridle on the poll, or too long hairs in the ears. In other cases, there is actual nervous irritability. Clip the foretop off and mane as far back as the poll strap reaches; trim the long hairs out of ears. Purge with eight drams aloes and two drams ginger. Follow up with one ounce bromide of potassium twice daily. 2. Perpetual heat denotes disease of the ovaries, for which nothing can be done. I would advise you to hold her for service, and, if she does not conceive, and constant heat continues, feed her for the block. V.

"A certain friend of mine," remarked Irving Bachelor the other day, "was entertaining some bachelor friends at his home one evening. The host's wife did not appear at the party, which was entirely a stag affair. After the high balls had held sway for an hour or so the topic of matrimony fell under discussion. Many views were expressed. The host when his turn came, pounded his fist on the table and said: "'Boys, when you get married, follow my example, and be a Julius Caesar in your own home!'" "Just then there came a voice from upstairs: "'Julius Caesar, come to bed—immediately!'" "And he went."

**When Danger Signals**  
your liver out of order, constipation, or your stomach not working right, it's a sign of distress which, unheeded, will lead to trouble—it is time to take

**Beecham's Pills**

Sold Everywhere. In boxes 25 cents.

**FEED IS SCARCE**

The long and cold winter has necessitated feeding larger quantities of grain, etc., than usual. The best means of making what you have left go double as far is to feed

**Worthington's Canadian Stock Tonic,**  
10-LB. BOX, 50C. 50-LB. SACK, \$2.

Manufactured only by the Worthington Drug Co., Agricultural Chemists, Guelph, Ont.

**SHORTHORNS**

For sale: Young bulls from six to sixteen months; two sired by Red Rover (imp. in dam), and one sired by Village Champion (imp.) owned by W. C. Edwards & Co. Also a few females for sale. Inspection invited. N. G. ROBERTSON, o ARNPRIOR

**HIGH-CLASS SHORTHORNS.**

8 heifers, in calf to an imported Scotch bull; 6 bulls ready for service; about 15 heifer and bull calves, from 3 to 13 months old. Prices very reasonable, considering quality. Inspection invited. FRANK W. SMITH, Walnut Farm, Scotland, Ont. o

**Shorthorns & Scotch Collies FOR SALE** at reasonable prices. Also a quantity of Strawberry Dent Corn for seed at 2c. per lb., shelled, in 2-bush. lots and less; 24 bush. orders and upwards at \$1 per bush., 66 lb. J. K. Hux, Rodney P. O. and Sta., (M.C.R.R. and L.E. & D.R.R.) **ROB. DE. O.**

**FOR SALE: STOCK BULL**

Captain Bruce, quiet, active and sure. Also four young bulls, three roans and one red, from 10 to 16 months, of the low-down, thick-fleshed sort. Anyone wanting a first-class animal should come and see them, or write for prices. o WM. McDERMOTT, Living Springs, Ont., Fergus Station.

**SCOTCH SHORTHORNS.**

7 bulls, 9 to 16 months; cows and heifers in calf. Also, Berkshire pigs, 11 months old. Prices right, and terms easy. DAVID MILNE, Ethel, Ont. o

**PROSPECT HILL FARM High-class SHORTHORNS**

FOR SALE: 8 bulls, from 6 to 18 months old; 2 sired by Aberdeen Hero (imp.), 6 by Royal Duke, he by Royal Sailor (imp.). Also some heifers. J. R. McCALLUM & SON, Iona Sta., Ont. o

**Shorthorns, Borchshires and Leicester.**

FOR SALE: Choice two-year-old heifers, well gone in calf; also yearling heifers, bull calves. Bess and cows fit for breeding, and young pigs. ISRAEL GROFF, ALMA, ONTARIO. o

**J. WATT & SON,**

Scotch Shorthorns for sale. Royal Archer (imp.), 14 mos. old, sired by Golden Prince—83900—(a son of Golden Fame), dam Lady Linta, by Belisarius (74051). Royal Wonder 2nd, 15 months old, by Royal Wonder, dam English Lady 12th by Royal Sailor (imp.), next dam by Bampton Hero. These bulls are good workers and very sure. Also heifers and cows in calf and calves at foot to imported bulls. P. O., Salem, Ont., Elora Station, G. T. R. & C. P. E. o

**SHORTHORNS**

For sale: Two extra good bulls, 17 months old, both red. These bulls are above the average, and anyone requiring a first-class animal should see them. Also some good heifers. Come and see them or write HUGH THOMPSON, Box 556, St. Mary's, Ont., one mile from station. o

**SHORTHORNS and GLYDESDALES**

Present offerings: Spicy Count (imp.), Dutch; 15 bulls and heifers of his get, from 10 to 18 months old; also a few cows in calf to S. C. Pair heavy draft, rising three years old. o

**J. S. McARTHUR**

Pine Grove Stock Farm. GOBLE'S, ONT. o

**BARREN COW CURE**

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

**RAISE YOUR CALVES**

cheaply and successfully on Blatchford's Calf Meal AND SELL THE MILK. Free Pamphlet - How to do it. ADDRESS CHAS. COWAN, LONDON, ONT. o

**GOSSIP.**

Aberdeen-Angus bulls are offered in his change of advertisement by Mr. James Bowman, Guelph, Ont., whose herd of this grand beef breed ranks among the best in America. Those interested will do well to look up the advertisement, and write, or call on Mr. Bowman.

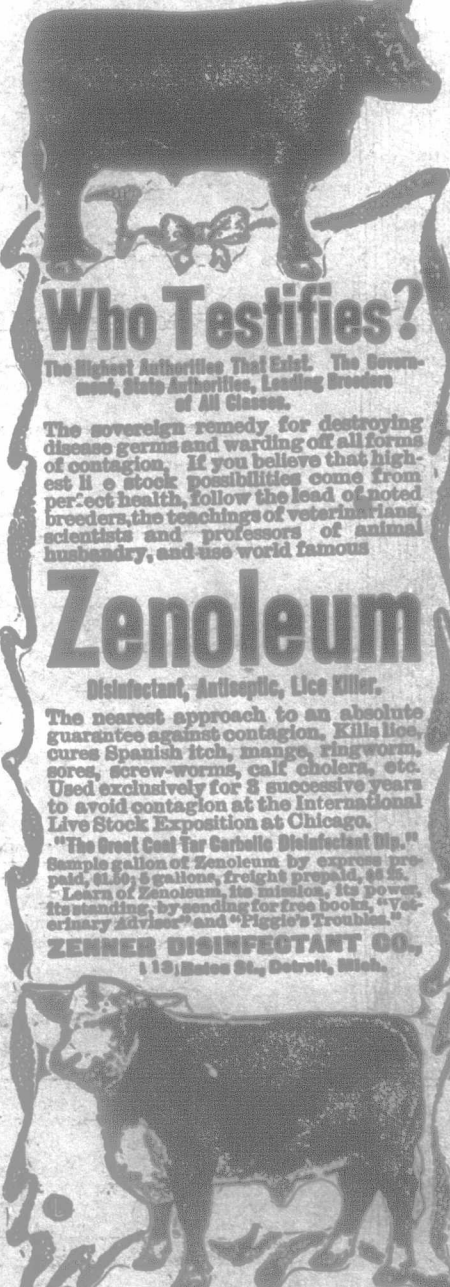
Mr. John Russell, barrister, of Winnipeg, brother of Messrs. J. & W. Russell, Richmond Hill, Ont., died suddenly of heart failure, on May 2nd, and was buried at Markham, May 6th. Mr. Russell was manager of the Standard Trust Company, an alderman of the city, chairman of the Civic Finance Committee and ex-president of the Winnipeg Board of Trade. Mr. Russell was a widower, his wife, a daughter of the late Geo. Miller, of Markham, having died some years ago. He is survived by one daughter, Miss Lena, living with her uncle and aunt, Mr. and Mrs. John Isaac, Markham.

It is reported that the North American Galloway Association has made application for Dominion incorporation. The applicants are: D. McCrae and Wm. McCrae, Guelph; Robt. Shaw, T. Lloyd-Jones and T. A. Cox, Brantford; John Lloyd-Jones, Burford, and Donald Duff, Rockwood. Robt. Shaw is named as president; Wm. Martin, Morris, Man., as vice-president, and David McCrae as secretary-treasurer. The head office to be at Guelph, and the annual meeting to be held there the first week in December. Life members pay a fee of \$20, and annual members an entrance fee of \$5, with an annual dues of \$1.

At the Kellogg combination sale of Jersey cattle held at Hoboken, New Jersey, April 26th, 21 head sold at from \$200 to \$700 each, the highest price being realized for Monplaisir's Lady Kent (imp.), a three-year-old cow, contributed by Mr. F. C. Ward, and purchased by Gedney Farm, N. Y. One hundred and seventy-one head, including young calves, brought an average of \$101; 66 cows, three years or over, averaged \$125, and 50 heifers, two years old, \$130. The best brought good prices; but plainer ones sold low, cutting down the average.

Mr. H. K. Fairbairn, Thedford, Ont., changes his advertisement and reports his herd of Shorthorns in fine form this spring, with the excellent Crimson Flower bull, Royal Prince =31241=, a son of Imp. Royal Sailor, as chief stock sire at its head, assisted by Sir Tatton Sykes, a recent acquisition, sired by Sir Tatton =28797=, a Cruickshank Cecelia, of whom great expectations are entertained. The heifer calf, full sister to Fair Queen, winner of the championship at the Chicago International last year, now in her seven-months-old form, is regarded as even better than her famous sister was at same age. A few good bull calves, four and five months old, and some heifers, held for sale, and should find ready buyers.

Mr. Arthur Johnston, Greenwood, Ont., changes his advertisement this week, and reports some progress in his bull sales. He writes: "We have recently sold some extra good young bulls of the true Scotch type as well as true Shorthorn character and finish, from several of which we have most satisfactory replies. The following may be quoted as one of the most pleasing of many. It is from the well-known firm of Messrs. J. H. & F. Snary, of River Bow Stock Farm, Croton, Ont.: 'Having allowed Merry Morning time to straighten up after his long stay on the cars, we have given him a thorough looking over, and must say we are pleased with him. He is the best bull we have ever known to be in this part of Ontario. He is ahead of what Chief Captain was at same age; has plenty of size, and yet no coarseness, as is often the case with bulls with the size he has. We have used him some and he is a capital worker. You will remember Daisy Chief you sold to A. J. O. Shaw some years ago, he had the best hind quarters we ever saw on a bull, and we are sorry we did not use him more, as all his stock were good.'"



**Who Testifies?**  
The Highest Authorities That Exist. The Government, State Authorities, Leading Breeders of All Classes.  
The sovereign remedy for destroying disease germs and warding off all forms of contagion. If you believe that highest life stock possibilities come from perfect health, follow the lead of noted breeders, the teachings of veterinarians, scientists and professors of animal husbandry, and use world famous  
**Zenoleum**  
Disinfectant, Antiseptic, Lice Killer.  
The nearest approach to an absolute guarantee against contagion. Kills Lice, cures Spanish itch, mange, ringworm, scabs, scree-worms, calf cholera, etc. Used exclusively for 3 successive years to avoid contagion at the International Live Stock Exposition at Chicago.  
"The Great Cost for Carbolic Disinfectant Dip." Sample gallon of Zenoleum by express prepaid, \$1.50; 5 gallons, freight prepaid, \$7.50. Learn of Zenoleum, its uses, its power, its standing, by sending for free book, "Veterinary Adviser" and "Piggie's Troubles."  
**ZENNER DISINFECTANT CO.,**  
119 Bates St., Detroit, Mich.

**IMPORTED SHORTHORNS AND GLYDESDALES**  
15 imported Scotch Shorthorn heifers, all in calf or calves at foot; 3 imp. bulls, best in pedigree and individually these animals are gilt-edged. Four three-year-old imported Glydesdale fillies, very large and AI quality.

ALEX. ISAAC, o Cobourg P. O. and Station

**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 Sta., G. T. R. o Tyrone P. O.

**High-class Shorthorns**—Two bulls ready for service. Also young cows and heifers of different ages, of the Lavinia and Louisa families. For prices and particulars apply to BROWN BROS., Lakeview Farm, Onono P. O. Newcastle Station, G. T. R. o

**HILLHURST FARM**  
(ESTABLISHED FORTY YEARS)  
**SHORTHORN** herd numbers 30, with Imp. Broad Scotch (Sittlyton Butterfly) in service. Some choice young bulls and heifers for sale, by Joy of Morning, Scottish Bear, and Lord Mountstephen. Also imported and Canadian-bred dams of HAMPSHIRE flock 80 ewes; milk strains. 15 lambs all sold  
Jas. A. Cochran  
HILLHURST P. O., o COMPTON CO., P. O.

**W. G. PETTIT & SONS**  
FREEMAN, ONT.,  
Importers and Breeders of

**Scotch Shorthorns**

110 head in the herd, 40 imported and 70 pure Scotch breeding cows. Present offering: 3 imported and 6 pure Scotch from imported sire and dam; 6 Scotch-topped from imported sire; also imported and home-bred cows and heifers of the most popular type and breeding. A few choice show animals will be offered. o Burlington Jet. Sta. Telegraph & Telephone

**SHORTHORNS and BOROPIRES**  
FOR SALE: Young bulls and heifers from best blood. Shearlings and lambs bred from imp. stock on side of sire and dam. Prices reasonable. o R. E. FUCH, Claremont P. O. and C. P. E. Sta.

**Good Bulls! Cheap Bulls!**

One red, ten months old; one roan, three months old; well bred and good individuals. I am quoting these at prices that will tempt you to buy. Write at once for description and prices. Grand crop of LAMBS from imported and home-bred ewes.  
A. D. McGugan, Rodney, Ont.

**Don't Throw Away Money**  
and don't work yourself to death. You can save time and labor and money by using the

## Empire Cream Separator

Please don't say you can't afford it. You can't afford to do without it. It will make you more money than any other separator because it is simpler in construction; more easily turned; more easily washed and more satisfactory in every way.

*That's Why It's the Most Popular Cream Separator in the World.*

Send your name for our free books on the Empire Way of Dairying. If you enclose four cents in stamps we will send you a handsome Empire Goldline Pin.

**Empire Cream Separator Co.**  
28-30 Wellington St., West, Toronto, Ont.



**TROUT CREEK**

## SHORTHORNS

**SPECIAL OFFERING:**

Two imp. bulls with superior breeding and individual merit. Also a few imported Scotch heifers and home-bred bulls and heifers. Send for Catalogue.

**JAMES SMITH, W. D. FLATT,**  
on Manager. Hamilton, Ont

## W. B. Watt's Sons

BREEDERS OF SHORTHORNS and GLYDESDALES

Don't miss the chance to get a grand cow or heifer, in calf to the \$1,200 Scottish Beau (imp.), from the herd that has produced more champions and won more herd prizes than any other herd in Canada. A fine blocky pair of bull calves and a yearling stallion for sale at once. Write for particulars.

Elora Sta., G.T.R. & C.P.R. Salem Post and Tel. Office. Phone connection.

**SHORTHORN BULLS FOR SALE.**

We have three choice young Shorthorn bulls now on offer, one Cruickshank Mysie, and one Scotch Jessamine, each 12 months old and sired by Spicy Robin; and one Cruickshank Orange Blossom, from imported sire and dam; also females of all ages. Herd headed by imp. Joy of Morning (7829), winner of 1st prize at Toronto Exhibition, 1903; also S.-C. White Leghorn eggs for sale at \$1 per 13.

**GEORGE D. FLETCHER, Binkham, Ont.**

**DOMINION SHORTHORN HERDBOOK WANTED.**

The Dominion Shorthorn Breeders' Ass'n will pay \$1 each for any of the following volumes of their herdbooks: Volumes 7, 8, 9, 10, 11, 12, 13, 14, 15; also 1st vol. Clydesdale Stud-book, and 1st vol. Dom. Ayrshire Herdbook. Send by express if possible, unpaid (if by post, postage will be returned with price).

**HENRY WADE, Sec'y, TORONTO, ONT**

**Scotch Shorthorns and Berkshire Swine AT VALLEY HOME STOCK FARM.**

For sale: 3 young bulls of superior breeding and quality, from 10 to 18 months old, the low-down sort and good heavy animals; will sell cheap to make room for our increase in young stock. Also Berkshires of all ages, 3 young boars and a fine lot of sows, due to farrow in one month's time. Stations Meadowdale or Streetsville Junction, C. P. R., and Hampton, G. T. R. Visitors welcomed. Address **S. T. FEARSON, SON & CO., Meadowdale P. O. and Telegraph.**

**SHORTHORNS.** 8 young bulls, 11 heifer calves, yearlings, two-year-olds and young cows for sale. Several Miss Ramsdens and the very best families represented. Prices moderate. **G. A. BEODIE, Bethesda, Ont.,** Stouffville Station.

## 16 Shorthorn Bulls

All pure Scotch, two imp. in dam, 7 from imp. sire and dam, others by imp. sire and from Scotch dams of popular families. Herd numbers 72; headed by imp. Greengill Victor, a Princess Royal; bred by W. S. Marr. Present offering also includes a number of Scotch heifers and imp. cows in calf. If you want a herd header, or cows that will produce them, write us.

**R. MITCHELL & SONS,**  
Nelson Ont., Burlington Jct. Sta.

**FOR SALE:**

## Shorthorn Bulls

Two imported—a "Cruickshank Lavender" and a "Marr Emma"—bred in the purple, and individually as good as the breeding would suggest. Also two grand young bulls about ready for service. Yorkshire boars and sows from imported stock. Prices right. Come and see me.

**RICHARD GIBSON, DELAWARE, ONT.**

**The Ontario Veterinary College, Limited.**

Temperance Street, Toronto, Canada.

Affiliated with the University of Toronto.

Patrons: Governor-General of Canada, and Lieut.-Governor of Ontario. Fee \$65.00 per session. Apply to **ANNAN SMITH, F.R.C.V.E., Principal.** 18-9-7-om

**TRADE TOPICS.**

**WALNUT TREES** grown from nuts planted two years ago last autumn are advertised for sale in this paper by Mr. A. Shaw, Walkerton, who has 2,000 of these, good, strong plants, ready for transplanting.

**FOR TOURISTS.**—A profusely illustrated booklet, of 40 pages, descriptive of St. John and New Brunswick, containing maps and useful information for the traveller, has been received from the Secretary of the New Brunswick Tourist Association at St. John, N. B., Mrs. R. E. Olive, from whom copies can be obtained free.

**INTERNATIONAL STOCK FOOD.**—Mr. Savage, of the International Stock Food Co., informs us that he has been obliged so add sixty new typewriters to his office force since the first of this year. In all two hundred and twenty-five people are now engaged in the office of the International Stock Food Co., at Minneapolis, Minn.

**BINDER TWINE.**—Blue Ribbon and Red Cap are names too familiar with the binder twine trade to need an introduction to the public. They stand for full length, strength of fibre, and satisfaction generally. These and the Tiger, Golden Crown, Standard and Sisal are made by the Consumers' Cordage Co., of Montreal. To give satisfaction is the object of this company. There may be other twines on the market, selling for less money per pound, but the above-mentioned brands have strength and length combined to suit the purpose for which they are made.

**UNLOADING APPARATUS.**—If there is one thing more than another about farm work that has added to the ease and pleasure of harvesting, it is the introduction of unloading apparatus. For the small cost for which these appliances can be placed in a barn by M. T. Buchanan, of Ingersoll, there is no occasion for the strenuous labor incident upon harvesting operations of a few years ago. Remember the make, and notice the advertisement on another page.

**THE SUCCESS OF THE ROOT CROP** is as much dependent upon the quality of seed sown as upon any other one condition. Gaps in the row, and weak, scraggy plants are to be avoided. When it costs no more to secure good seed than poor, why not patronize the old reliable seed house of J. A. Bruce & Co., Hamilton, Ont., who advertise in this issue a selected line of mangel seeds.

**HAY RAKES AND HAY LOADERS.**—The machines that will claim most attention during the next few weeks are the side-delivery hay rakes and hay loaders. Several different makes of these machines are upon the market, among the lead being those made at the Elmira Agricultural Works, Elmira, Ont. This company gives particular attention to the manufacture of these implements, and are meeting with a large degree of success in supplying the agricultural community with haying tools.

**REFUSED TO SERVE.**

A Frenchman went to a brother member of his lodge and said to him: "What does a polar bear do?" The brother answered: "What does a polar bear do? Why, he sits on the ice." "Sits on zee ice?" "Yes," said the brother; "there is nothing else to sit on." "Vell, vat he do, too?" "What does he also do? Why, he eats fish." "Eat fish—sits on zee ice and eats fish. Then I not accept." "You don't accept? What do you mean?" "Oh, non, non. I does not accept. I was appointed to act as polar bear to zee funeral."

"Did you go into that speculation you were talking to me about?" "Yes." "What do you expect to realize from it?" "Just at present there's a strong prospect that I may realize what a fool I was."

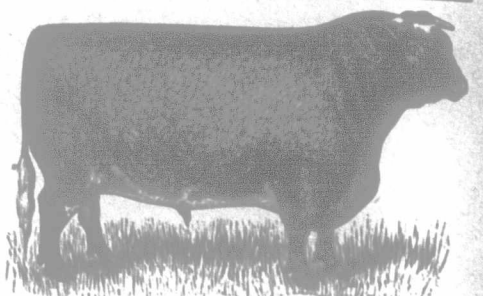
## Day's Aromatic Stock Food



Saves feed by assisting stock to digest their food. A small dose in the usual food twice each day. It contains no drugs; purely aromatic.

**3 LBS. 30c. 36 LBS. \$3.10.**  
Ask your dealer or write us.

**The Day's Stock Food Co.,**  
STATION C. TORONTO.



## High-class Shorthorn Bulls For Sale

3 imported bulls.  
4 bulls from imp. cows and by imp. bulls.  
The others from Scotch cows and by imp. bulls.  
21 Scotch cows and heifers, including 9 imp. animals.

**ARTHUR JOHNSTON, Greenwood, Ontario.**

**SHORTHORN CATTLE** and Oxford Down sheep. Imp. Prince Homer at head of herd. Present offering: Young bulls and heifers from imported and home-bred cows; also a choice lot of young rams and ewes from imported sire.

**JAMES GIBB, Brookdale, Ontario.**

Breeder of high-class SHORTHORN CATTLE (imp.) "Brave Ythan" at head of herd. Stock for sale.

## 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. 49, at head of herd. Royal Albert (imp.) 20367, at head of stud. Farms 2 1/2 miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

## SHORTHORNS FOR SALE.

I am offering for the next month, at exceptionally low prices, several young bulls, heifers and bred heifers of choice Scotch breeding and good individuality. These are rare bargains. Write for my prices, I feel sure they will tempt you. Address **H. SMITH, Exeter, Ontario.**

## Shorthorn Cattle and Lincoln Sheep

Scotch Heifers for sale: Clippers, Miss Ramsdens, Maids, bred to imported Governor-General = 28865-, and imported Proud Gift (84421). They have both breeding and individual merit.

**J. T. GIBSON, Denfeld, Ontario.**

## Shorthorns, Clydesdales, Yorkshires

Special offering at present: Young Yorkshire pigs, either sex; pairs not akin, and of right type.

**A. E. HOSKIN, Cobourg, Ont., P. O. and Station.**

## SHORTHORNS.

Importer and breeder of choice Shorthorns. Scottish Hero 156726 at the head of herd. **JAS. A. CREERAE, Shakespeare, Ont.**

**BELL BROS., Cedar Stock Farm, Bradburn, Ont.** Breeders of Shorthorns, Clydesdales, and Shropshire sheep. Present offering: Two bulls, 9 and 14 months. Stock always for sale.

## T. DOUGLAS & SONS,

STRAITHROY STATION & P. O.

**BREEDERS OF Shorthorns and Clydesdales**

85 Shorthorns to select from. Present offering: 14 young bulls of splendid quality and serviceable age, and cows and heifers of all ages. Also one (imp.) stallion and two brood mares.

Farm 1 mile north of town.

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



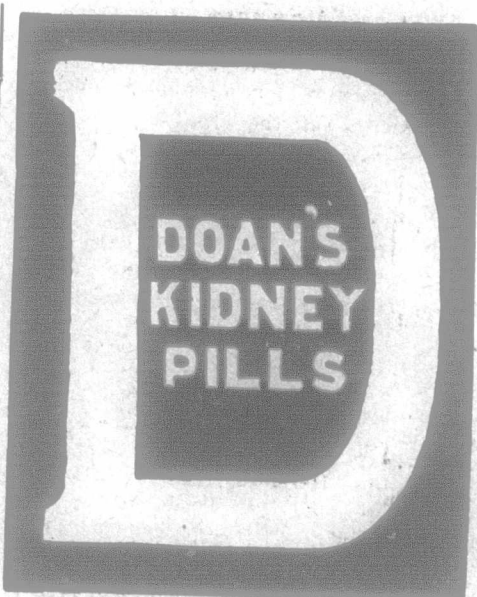
GOSSIP.

Hereford cattle are advertised for sale on another page in this issue by Mr. R. J. Mackie, of Oshawa, Ont., who has had an extended experience with this breed, and has frequently acted as judge of Herefords at leading shows in Ontario. Parties looking for young bulls, cows or heifers of this breed of stock should correspond with Mr. Mackie, or call on him at Oshawa, some 30 miles east of Toronto.

Speaking at the Welshmen's dinner in London the other day, Lord Rosebery told the following anecdote of Mr. Gladstone: I remember, many years since, going to pay a visit to Mr. Gladstone in Wales. Mr. Gladstone was then Prime Minister, and he had on his mind many anxious and troubled questions. I was, therefore, not surprised to see him looking peculiarly harassed. I said to him, "You look a good deal worried, Mr. Gladstone." "Yes," he replied, "I am." "Well," I said, "of course anyone can understand that. There is Egypt, there is Ireland," and I forget what else—but I remember those two questions, each of which had then attained colossal proportions. He at once waived me aside. "It is not that," he replied. "I am harassed at this moment with the task of finding a Welsh-speaking bishop for a Welsh see." (Laughter.) Now, I do not want you to gather from that that Mr. Gladstone was indifferent to the other great questions which weighed upon him; but those were part of his daily bread, and the sudden appearance of this phantom of a question—this new question—of discovering a Welsh bishop for a Welsh see was one which he felt was the last burden upon the camel's back. (Laughter.)

The Dumnglas Stock Farm, at Uxbridge, Ont., owned by Lieut.-Col. J. A. McGillivray, and managed by Mr. F. Silverside, is becoming noted as a breeding ground for Shorthorns, there being now in the herd nearly 70 head, Scotch and Scotch topped, headed by Scotland's Fame (imported by John Isaac, Markham) and Lord Gloster, a Cruickshank Duchess of Gloster, by the champion, Abbotsford. These bulls are of choice breeding and conformation, Scotland's Fame weighing about 2,500 lbs. in ordinary condition. There are a few young bulls on hand ready for work that will, no doubt, give good returns to whoever gets them. Mr. McGillivray has several imported cows of very fashionable breeding that were bought at high prices, that are doing well for their owner, one of them, a Nonpareil, having to her credit a nice pair of twin calves. Several noted families are represented here, among them being the Miss Ramsdens, Clarets, Nonpareils, and Cruickshank Glosters. Col. McGillivray contemplates holding an auction sale some time during the year.

As a breeder of imported Dorset sheep of high quality, Col. McGillivray is well known, having been one of the principal and most successful exhibitors in Canada and at the largest exhibitions in the U. S. for several years, including the Chicago World's Fair, the Pan-American, at Buffalo, and the International, at Chicago. He also expects to exhibit at the principal Canadian exhibitions and at St. Louis, and judging from the appearance of his flock, he will make his presence felt. He also expects to import some of the best that he can buy, which will further strengthen the quality of his flock and increase his chances of winning.



Are a sure and permanent cure for all Kidney and Bladder Troubles.

BACKACHE

Is the first sign of Kidney Trouble. Don't neglect it! Check it in time! Serious trouble will follow if you don't. Cure your Backache by taking

DOAN'S KIDNEY PILLS.

PINE GROVE STOCK FARM. Breeders of high-class Cruickshank, Marr and Campbell Shorthorns, and superior Shropshire sheep. Headed by imported "Marquis de Zanda," bred by Marr, assisted by imported "Village Champion," bred by Duthie; also "Missie Caspian," son of "Missie 153rd," and "Clipper King," a superior young bull, full of the blood of the Cruickshank Clipper family. One imported and four superior young home-bred bulls, ready for service, fit for herd headers, for sale. On June 28th next, we sell at public auction, in conjunction with other Canadian breeders, at the Sale Pavilion, Hamilton, Ont., fifteen of our imported and home-bred cows and heifers. W. C. EDWARDS & CO., Limited, Proprietors; Joseph W. Barnett, Manager; Rockland, Ontario, Canada.

MAPLE LODGE STOCK FARM, 1854

Am offering a very superior lot of Shorthorn Bulls and Heifers as well as something VERY attractive in Leicesters.

Choice ewes got by imported "Stanley" and bred to imported "Winchester." Excellent type and quality. A. W. SMITH, MAPLE LODGE, ONT.

SHORTHORNS

Some extra good young bulls for sale. Catalogue. JOHN OLANOY, Manager.

H. CARGILL & SON, CARGILL, ONTARIO.

We are offering 18 BULLS from 4 to 10 months old, sired by imported Diamond Jubilee - 28861. Also a few females, all ages, of good Scotch breeding.

FITZGERALD BROS., Mount St. Louis, Ont.

Shorthorns, Leicesters and Berkshires. For sale - 1-yearling bull, bull and heifer calves; Berkshire boars and sows, ready for service, and suckers ready to wean. Write for wants, or come and see E. Jeffs & Son, Board Head P. O., Bradford and Beeton Sts., G.T.R.

MANITOULIN SHORTHORNS

Edwin Beck, Gore Bay, Manitoulin Island. Breeder of SCOTCH and SCOTCH-TOPPED SHORTHORN CATTLE. A few choice animals.

ONLY THE BEST.

Eight young bulls and 10 heifers of the purest Scotch breeding and of the low-set kind, as good as I have ever offered, for sale at prices that will induce you to buy. Most of the heifers are in calf to imported bulls that stand as high as any in the world in breeding and individual excellence. High-class Shropshires for sale as usual. ROBERT MILLER, Stouffville, Ont. Representative in America of Alfred Mansell & Co., Shrewsbury, Eng. The largest exporters of live stock in the world.

GOSSIP.

Snelgrove Poultry Yards, W. J. Campbell, Snelgrove, Ont., proprietor, advertises eggs for hatching from his selected flock of Banded Plymouth Rock fowls, which has been kept up-to-date by the introduction of prizewinning stock from year to year.

Mr. Richard Gibson, Delaware, Ont., recently returned from a meeting of the executive committee of the Chicago International Live-stock Show Association, reports that all breeds of sheep will be recognized according to competition. There must be at least three or more flocks represented, all bona-fide separate flocks, to get a full entry. To put it plainer, one entry, one prize; two entries, two prizes may be awarded; three prizes, where three or more flocks compete.

"Excuse me, sir, but can you tell me what railroad runs through Umpscueamagoggchuck?"

"They don't have many railways over there, and besides most of the tracks have been torn up during the war."

"War? There isn't any war there, is there?"

"Sure. The Japanese and—"

"There's no Japanese in Maine."

"Maine?"

"Of course. I want to go to Umpscueamagoggchuck to visit my sister."

The imported Guernsey cow, Hayes' Rosie, owned by Mr. F. L. Ames, Massachusetts, has made a year's record for a cow of the breed for milk and butter production in the Advanced Register, having given within the year, from April, 1903, to March 31st, 1904, 14,633 lbs. milk, with an average test of 4.92 per cent. fat; highest test, 5.95, in Jan., 1904, and containing 714.31 lbs. butter-fat. Hayes' Rosie dropped twin calves March 28th, 1903, and commenced her record on April 1st. In April, after starting her record, she became sick and fell off considerably in her yield, but rallied quickly, and gave 60 lbs. milk daily for some time.

Mr. Israel Groff, Alma, Ont., reports the following recent sales of Shorthorns from his herd: To W. D. Platt, Hamilton, the imported cow, Olive Wenlock 2nd, and the two-year-old heifer, Duchess of Athelstane 4th; to W. J. Mallow, Yattan, ex-warden, Wellington Co., one yearling bull; to Jonathan S. Snyder, Waterloo, two-year-old heifer, Esther Maid, and a beautiful heifer calf, by Victor's Roan Duke; to E. L. Davis, Davisburg, Mich., Crimson Knight, 11 months bull calf, by Royal Hero. This calf is full brother to, Crimson Hero, first-prize bull call at Toronto, 1902. Berkshire sow, Matchless Queen, to same buyer. Mr. Groff has an extra good twelve-months-old bull calf for sale, by Royal Hero, and from a Stamford dam; granddaughter of Young Abbotsford, the World's Fair champion.

Mark Twain was the man being spoken about.

"Ever hear of his trick with a book clerk, when he was a publisher?" asked one. "You know, the trade gives a discount on purchases to publishers, authors, and friends of the proprietor, and all that. One day Twain saw a book in a store window and wanted it. He entered."

"How much is that book?" he asked the clerk. "Well," said he, when he received an answer, "as I'm a friend of your proprietor, I expect the usual discount."

"The clerk told him he could have it. 'Also,' said Twain, 'I expect the publisher's discount.'"

"The clerk said this also would be granted. 'And the author's discount,' went on the humorist."

"Again the clerk was acquiescent. Twain rattled off the several discounts to which as author, friend and publisher, to say nothing of several other things, he was entitled, and finished by saying: 'And now, what is the price I am to pay for the book?'"

"The clerk figured. 'Nothing, sir,' he said, finally. 'I find our firm owes you 18 cents.'"

THE MOST NUTRITIOUS.

EPPS'S COCOA

An admirable food, with all its natural qualities intact, fitted to build up and maintain robust health, and to resist winter's extreme cold. Sold in 1 lb. tins, labelled JAMES EPPS & Co., Ltd., Homoeopathic Chemists, London, England.

EPPS'S COCOA

GIVING STRENGTH & VIGOUR.

JERSEYS For quick buyers, we are going to sell 15 bulls and 25 females. Owing to the natural increase of our herd and so many heifers coming into milk, we make the above offer. Stock of all ages. State what you want and write to-day to B. H. BULL & SON, on C. P. R. and G. T. R., Brampton, Ont.

Ridgedale Farm Holsteins - Bull and heifer calves, bred from rich milking strains, on hand for sale. Prices right. Write for what you want. R. W. WALKER, Utica, P. O., Ontario. Shipping stations: Port Perry, G. T. R., and Myrda, C. P. R., Ontario County.

Holstein Bull Calves

Sired by Beryl Wayne Paul Concordia, whose sire's dam has an official record of 27 lbs. 14 oz. in 7 days. His sire's sire, De Kol 2nd's Paul De Kol, is sire of 32 cows with official records averaging over 20 lbs. each. Eight bull calves and two-year-old bull for sale.

BROWN BROS., Lyndale Stock Farm, LYN, ONT.

Brookbank Holsteins

15 to 25 lbs. of butter in 7 days' official test are the records of this herd of Holstein cows. Heifers of equivalent records. Bulls for sale whose sire and dam are in the Advanced Registry, with large official butter records.

GEORGE RICE, TILSONBURG, ONT.

If You Want a Bull (under 1 year) to show and win with this fall, bred from officially tested stock, write H. BOLLEET, Cassel, Ont.

Riverside Holsteins

30 head to select from. Young bulls whose dams have official weekly records of from 17 to 21 lbs. of butter, sired by Victor De Kol, Pietertje and Johannes Bus 4th Ltd. Write for prices.

Matt Richardson & Son, Caledonia P. O., and Station.

SPECIAL OFFER - BULL CALVES out of such dams as Cherry of Hairlock and Morjorie, one of the best Silver King cows in herd. These calves will be sold at very low prices, quality considered.

ISALIGH GRANGE FARM, J. N. Greenfields, Prop., Danville, P. Q.

FOR SALE - 35 HOLSTEIN SPRING CALVES of the famous De Kol and Abbecker breeding, from deep-milking dams, for March, April and May delivery; also cows and heifers.

H. GEORGE & SONS, Brampton, Ont.

HOLSTEIN BULLS - For sale: From 4 to 7 months old, having sire in their pedigrees from such strains as Inka, Motherland, Royal Angrie, and Tritonia Prince, and out of imported females that have proven their worth at the fair. THOS. B. OAKLAW & SON, Warkworth.

TREDINNOCK AYRSHIRES

4 imported bulls from the best milking strains in Scotland head the herd of 75 head. Winnings for 1903 at Toronto and Ottawa: The gold medal and 4 first prize herds; 38 prizes in all - 18 firsts, 6 seconds, 5 thirds, 9 fourths. In the Pan-American milk test, the 3 first Ayrshires were from this herd. Quality, size, milk and tests is our aim. Young bulls and heifers for sale. Price and particulars apply to JAS. BODEN, Manager, St. Anne de Bellevue, P. Q. G. T. R. and C. P. R. stations on the farm. 22 miles west of Montreal.

"Nother Lea" Ayrshires.

Deep-milking strains. Three choice bulls, fit for service; 6 bull calves, from 2 to 10 months old; also choice heifer calves, from 2 months up. Napoleon of Auobenbrain (Imp.) at head of herd, whose dam has a record of 72 lbs. per day. Write T. D. McCALLUM, DANVILLE, QUE.

AYRSHIRES for sale, all ages.

Some extra fine bulls, coming one year old, and heifers of all ages. Also my stock bull, Sir Donald of Elm Shade, just 3 years old. DONALD CUMMING, Lancaster, Ont.

DAVID LEITCH, CORNWALL, ONT.

BREEDER OF

AYRSHIRE CATTLE.

A few choice bulls fit for service, and bull calves and heifers, sired by Roseland of St. Anne - 8901 - and from deep milkers, with good udders and tests. Cornwall 5 miles. G. T. R. and O. N. Y.

For Sale - Ayrshires, all ages, and eggs for hatching from Leghorns, Hamburgs, Dorkings, ducks and Bronze turkeys. Also five Collie pups. For further particulars write to Wm. STEWART & SON, Meale, Ont.

Advertisement for Hed-rite Cures Headache. It speaks for itself! Hed-rite 25c. CURES HEADACHE. Guaranteed to Cure within 30 Minutes, or money refunded. All Druggists or mailed. The Herald Remedy Co., Montreal.

In answering any advertisement on this page, kindly mention the FARMERS ADVOCATE

AYRSHIRES From winners in the dairy test, five years in succession. Dairyman of Glenora, bred from Imp. sire and dam, at head of herd. Young bulls fit for service and bull calves and females for sale.

AYRSHIRES AND YORKSHIRES



YORKSHIRE Boars and sows, four to eight weeks old, \$5.00 each at farm, \$1.00 extra crated and shipped.

YEARLING AYRSHIRE BULL, fit for service, \$65.00. SEND FOR CATALOGUE. J. G. CLARK, Woodroffs D. and S. Farm, Ottawa.

IMPORTED AND HOME-BRED AYRSHIRES The average butter-fat test of this herd is 4.8. A few young bulls and females, all ages, FOR SALE.

Robt. Hunter & Sons, Maxville, Ont. Farm one mile from Maxville station on C.A.R. Homecroft Farm, High-class Ayrshire Cattle, Chester White Swine, Barred Rock Eggs

STOCKWOOD AYRSHIRES are bred for size, beauty and profit, from imp. and home-bred stock with high milk records and extra high test. Young stock always on hand. Prices right. David M. Watt, Allan's Corners, Que. Brysons, G.T.R., 4 miles; St. Louis St., C. A. R., 2 miles.

3 Ayrshire Bulls one year old, fit for service, all prizewinners last fall at Ottawa Exhibition. Females any age. Shropshire sheep, Berkshire pigs; a fine lot of young ones, both sexes, and B. P. Roosters. Eggs for hatching. J. FULL & SONS, Carleton Place, Ont.

SUNNYSIDE AYRSHIRES. Are prizewinners as well as enormous producers. I have for sale 4 young bulls, sired by the Pan-American winner. Dealer of Masseybank; females all ages, of true dairy type. JOHN W. LOGAN, Allan's Corners P.O., Que. Howick St., G.T.R.

AYRSHIRE HERD-HEADER. I offer the grand imported bull, Royal Peter of St. Annes, an A No. 1 bull, both individually and as a sire. Also three yearlings and a number of calves, including three last August bulls. W. W. BALLANTYNE, STRATFORD. "Widdieth Farm" adjoins city.

Pennabank SHROPSHIRE and SHORTHORNS A number of extra good and well-covered yearlings of both sexes, sired by Imp. Budyard ram. Also two extra nice young bulls. Prices reasonable. HUGH PUGH, WHITEVALE, ONT.

Holwell Manor Farm SHROPSHIRE FOR SALE. Twenty shearing rams; twenty shearing ewes; twenty-five ram lambs; also twenty Cotswold rams, shearings and lambs. These are animals of choice quality. Prices very low, quality considered. Scotch cattle puppies from first-class stock. D. G. GANTON, Elmvale P. O., Ont. Ont.

Dorset Horn Sheep THE largest flock in America. The most celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand. John A. McGillivray, Uxbridge, Ontario.

"MODEL FARM" SHROPSHIRE Everything sold that has been offered for sale. Am booking orders for rams and show flocks. August delivery. Write for prices. W. S. CARPENTER, PROP., SIMCOE, ONTARIO.

FARNHAM OXFORDS We had the champion flock of Oxfords in 1903. Importations annually. Animals of all ages and sexes, both imported and Canadian-bred, for sale at all times at reasonable prices. HENRY ARKELL & SON, ARKELL, ONTARIO.

HILLOREST HERD OF LARGE ENGLISH BERKSHIRES Founded upon imported stock and Canadian show animals. Various strains represented and new blood introduced at intervals. Each purchaser gets registered certificate of pedigree, and any animal failing to prove a breeder is replaced. JNO. LAHMER, VINE, ONT., Vine St., G.T.R., near Barrie.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEVERING, Secretary, Lafayette, Indiana. ON

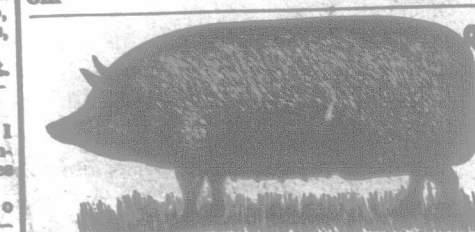
TAMWORTHS AND HOLSTEINS Boars fit for service, sows bred and ready to breed, 20 boars and sows from 2 to 4 months; a fine lot of March pigs. Pairs not akin. BERTRAM HOSKIN, Grafton Sta., G. T. R. The Gully P. O.

GLENHOLM HERD OF TAMWORTHS We are now booking orders for spring litters. Have 5 boars and 5 sows, 6 months old, left, and a fine lot of young ones. F. O. SARGENT, Eddystone, Grafton Sta., G.T.R.

Newcastle Tamworths & Shorthorns Herd of We have for quick sale a lot of choice Boars and Sows, Oct. and Nov. litters, the produce of our Toronto Sweepstakes Stock and the undefeated Boar, "Colwill's Choice" 1343. We are also booking orders for March and April Pigs, the choicest of breeding. We also offer for quick sale 2 or 3 choice Shorthorn Heifers, 12 to 15 months old; also one 2-year-old in calf; all first-class stock, got by bull weighing 2,500 lbs. Write quick if you want something good at moderate prices. COLWILL BROS., NEWCASTLE, ONT.

YORKSHIRES Boars fit for service, at reduced prices. Sows in farrow and ready to breed, and young stock on hand. Write for prices. WM. HOWE, North Bruce, Ont.

MAPLE LODGE BERKSHIRES. Although leaving Willow Lodge Farm and moving to Brampton, we will still be in a position to supply the same type and breeding as usual, with some fresh blood added, and in a few large numbers as ever before. Have a few young boars left, ready for service, and some fine young sows ready to be bred. Our young pigs are coming in good form this spring. Am booking orders right along. Old customers, as well as new, will find me, after 1st April, at Box 191, Brampton. WILLIAM WILSON, Brampton, Ont.



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

ENGLISH BERKSHIRES. For Sale: Young boars of Bacon-type. Choice young pigs; pairs not akin supplied. Short-horn bulls, also calves of both sexes. JOHN RAOBY, Jr., Lennoxville, Que.

RIVER VIEW FARM ROBERT CLARKE, Importer and Breeder of Chester White Swine Pigs shipped not akin to each other. For price and particulars, write 41 COOPER STREET, OTTAWA, ONT.

Yorkshires, Collies and Poultry This month we are offering something extra in Yorkshire boars and sows, 6 weeks to 4 months. Will sell 10 yearling W. Wyandotte hens and two cocks, all fine stock. Choice pedigreed collies. J. A. & A. E. ARMSTRONG, Warkworth, Ont.

IMPORTED AND CANADIAN-BRED YORKSHIRES. Sows bred to farrow March and April to imp. show boars. Also boars ready for service, and young pigs, all ages, shipped not akin. The sweepstakes sow and sweepstakes young herd at Chicago were bred by me. H. J. DAVIS, Importer and Breeder of YORKSHIRES and SHORTHORNS, WOODSTOCK, ONT.

LARGE ENGLISH YORKSHIRE pig, direct from imported stock, bred to imported boars; boars fit for service, same breeding as sows; boars and sows three and four months old from imported stock, pairs not akin. Write JAS. A. RUSSELL, PRECIOUS CORNERS, ONT.

FOR SALE—Ohio Improved Chester Whites, the largest strain, 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; pedigree and safe delivery guaranteed. Address E. D. GEORGE, Putnam, Ont.

GOSSIP. A clergyman, having performed the marriage ceremony for a couple, undertook to write out the usual certificate, but being in doubt as to the day of the month, he asked: "This is the 9th, is it not?" "Why, parson," said the blushing bride, "you do all my marrying, and you ought to remember that this is only the fourth."

At the Spring Show of the Royal Dublin Society, held at Ball's Bridge, April 20th to 24th, the entries of Shorthorns numbered 458; Herefords, 194; Aberdeen-Angus, 136. Mr. J. Deane Wilks, of Bapton Manor, Wiltshire, judged the Shorthorns. The championship and Chaloner plate for best bull of the breed went to Mr. Robt. Taylor, Pitliverie, Carnoustie, for the roan four-year-old, Collynie Conqueror (78609), bred by Mr. Duthie, and sired by Bapton Conqueror. Mr. Taylor also won the Leicester cup for best group of Shorthorns, with Collynie Conqueror and three females.

The Fairview herd of Shorthorns and flock of Shropshires, owned by Mr. John Campbell, of Woodville, Ont., scarcely requires being brought before the notice of "Advocate" readers at this time; but as our field man recently made a short call, when passing through that section, it is only just that we report things as we find them. We found 90 head of Shropshires, with their summer garb on, they having just laid off their winter clothing a few days ago. To say that they looked well would be putting it mildly, as they are the outcome of years of careful study and breeding. A higher-classed lot than a combined wool and mutton standpoint would be difficult to find in any country. The flock is headed by three excellent imported rams, viz., Fair Star Rose 145189, which clipped 17½ lbs. of wool recently; Royal President, and Shenstone Star. The first-mentioned is the sire of most of Campbell's winners in 1903. At Toronto, his stock won six firsts and three seconds; at Ottawa, three firsts, three seconds and one third; American Shropshire specials, six firsts, one second and one third; at International, Chicago, three firsts and two seconds; truly a wonderful record for the get of one sire. The other two sires, Royal President and Shenstone Star, were selected from the first-prize pen at the Roal in 1902, and like Fair Star Rose, they are producing the right kind of stock. The entire flock, including the young lambs, are looking excellent.

The Shorthorns, which are a real useful lot, are headed by Golden Count, an eighteen-months-old Dryden-bred bull, of the Cruickshank Duchess of Gloster and Brawth Bud families, and a choice, thick-fleshed one he is. Most of the females that are of breeding age, are in calf to this bull. The foundation stock is of the Strathallan family, crossed upon by sons of Imp. Indian Chief and Prime Minister. Barred Rock fowls are also made a specialty at Fairview, where we noticed a couple of pens of very nice ones, one for breeding cockerels from, and the other for breeding pullets. Eggs are also sold for hatching.

TRADE TOPICS. THE G. W. M. S.—What do these initials stand for? You will find out by turning up page 653 of this issue, and reading carefully the announcement of the Wilkinson Plow Co., of Toronto, regarding the great Western manure spreader. Look it up, and write at once for a descriptive catalogue, which will be mailed you free.

Through the courtesy of the American Hereford Association and their secretary, C. R. Thomas, of Kansas City, Mo., we have received Vol. XXV. of the Record of their Association, containing entries 145001 to 165000. The presswork is very good, and the method of registration is very clear, as is described in our issue of April 27th. This Association is up-to-date, and very pushing, and is enthusiastic over the merits of their favorite breed—the whitefaces.

A Lasting Cure of Itching Piles.

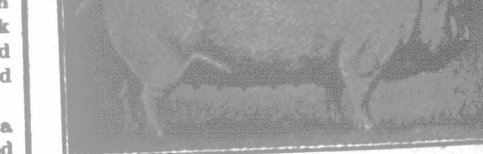
A Chronic Case of Unusual Severity and Long Standing Cured by Dr. Chase's Ointment.

Throughout Canada there are hundreds of cases similar to the one described below in which Dr. Chase's Ointment has proven a positive and lasting cure for the most severe form of itching piles. Mr. Alex. McLaughlin, for 30 years a resident of Bowmanville, Ont., writes:— "For twenty long years I suffered from itching piles, and only persons who have been troubled with that annoying disease can imagine what I endured during that time. About seven years ago I asked a druggist if he had anything to cure me. He said that Dr. Chase's Ointment was most favorably spoken of, and on his recommendation I took a box. "After three applications I felt better, and by the time I had used one box I was on a fair way to recovery. I continued the treatment until thoroughly cured, and I have not suffered since. I am firmly convinced that this ointment made a perfect cure. "I consider Dr. Chase's Ointment an invaluable treatment for piles. In my case I think the cure was remarkable when you consider that I am getting up in years, and had been so long a sufferer from the disease." Dr. Chase's Ointment, 60 cents a box, at all dealers, or Edmanson, Bates & Company, Toronto. To protect you against imitations the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.



If you were sure you could buy for 60c. per foot a satisfactory hog trough good for 10 years' hard usage, you would buy quick, wouldn't you? Leal's Patent Steel Trough will fill this bill easy. Honestly made, heavy and strong, nice rounded edges. It's a winner. Money back if not as represented. Every foot guaranteed. Get catalogue from WILBER S. GORDON, TWEED, ONT.

Improved Yorkshires



Over three hundred for sale. The last three years our herd has won ninety per cent. of the first prizes at the leading shows, competing against American and Canadian breeders. We have more imported animals in our herd than all other breeders combined in Canada. We have the best blood from the leading herds in England and Scotland. Prices reasonable. D. C. FLATT & SON, MILLGROVE, ONT.

LARGE YORKSHIRES GLENBURN HERD—upwards of 100 fine spring pigs, sired by imported Holywell Hewson. Also a few 6 month s'boars. Prices reasonable. DAVID BARR, JR., RENFREW, ONT.

YORKSHIRES. Six sows to farrow this month to imported boars. Orders booked for pigs at weaning. EGGS—M. B. and W. H. turkey, \$2.50 per setting. B and W. Rock, B. Orpington, B. Wyandotte, and Rouen duck eggs, \$1. T. J. COLE, Box 188, Bowmanville, Ontario.

YORKSHIRES FOR SALE From the pioneer herd of the Province of Quebec. Both sexes and all ages. Satisfaction guaranteed on all mail orders. Also Pekin Duck Eggs for sale, \$1.00 a setting, or \$1.75 for two settings. Address, A. GILMORE & SONS, Athelstan, Que. Railroad stations: Athelstan, N. Y. C.; Huntingdon, G. T. R.

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It is the fence that has stood the test of time—stands the heaviest strain—never sags—the standard the world over. Order through our local agent or direct from us.  
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## A MESSAGE TO THE WEAK



**ARE YOU** a weak man? Are you nervous, fretful and gloomy? Is your sleep broken? Have you pains and aches in different parts of your body? Is your back weak and painful? Have you lost the vigor of youth? Is your vital power growing less? Are you rheumatic and gouty? Have you Varicocele? These are the result of the waste of vital force. The gentle stream of electricity from Dr. McLaughlin's Electric Belt going into the nerves and weak parts for hours every night soon replaces all the lost energy and makes every organ perfect. It cures permanently in every case.

Don't allow this daily waste and drain to take away all the pleasure of living; don't see yourself losing your nerve force, your manhood, when a cure is at hand, and that unless you cure yourself now you will soon be a wreck. You have pains and aches, dizzy spells, despondency, losses by night and by day, confusion of ideas, weak back, varicocele, and are growing weaker in every way. Cure yourself now and enjoy happiness for the rest of your life.

"Let every man know it. I will preach the merits of your wonderful treatment wherever I go; it has been worth its weight in gold to me; I will never cease shouting its praise."

Such are the messages of gladness sent to us from patients restored to health and strength by my Electric Belt. They come in daily and nearly always after other treatments have failed.

### READ WHAT SOME OF THE CURED HAVE TO SAY:

Dear Sir—I have used your Belt for rheumatism, and have been completely cured. Yours truly, M. Douglas, Pickering, Ont.

Dear Sir—I am pleased to tell you that I have been greatly benefited by the use of your Belt. I have not had a night's loss since I last wrote to you, nor fluttering of the heart. My food digests as good as ever it did, and I feel better in every way. Your Belts are all right when used according to directions. Wishing you every success, I remain, yours truly, Samuel J. Parr, Granton, Ont.

Dear Sir—I am glad to know that you have taken such an interest in my case. I will gladly answer your request by saying that I am feeling fine and strong, and I am sure I will remain in that way. Hoping you will ever prosper in your good work, I will now close. Yours truly, Thos. Graham, Box 538, Inglewood.

Dear Sir—I got your Belt for Sciatic Rheumatism. I suffered very bad from it before I got your Belt, and had tried different remedies and got no benefit, but I decided to try again. Your Belt has completely cured me in less than two months. Yours very truly, Wm. South, Brindale, Ont.

Dear Sir—In answer to your letter, I wish to state that I am still in the best of health, and gaining in weight every week. I recommend the Belt to everyone I know for the best permanent cure to be had. I remain, yours truly, L. Roy, 149 St. Andrew street, Ottawa, Ont.

Dear Sir—I have been using your Belt for six weeks, and have been greatly benefited by the use of it. My wife has been using it also, and it has completely cured her of constipation of eight years' standing. You may use my name, or I will answer any letters about the Belt to any part of the world. Yours very truly, Edgar Anderson, Dunnville, Ont.

Such are the cures my Belt is performing every day. I have hundreds of just such statements from patients all over the country. Anyone who will secure me can use my Belt on the condition of

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**CAUTION**—Beware of old-style, burning electrode belts, which are using an imitation of my cushion electrodes. My office contains hundreds of these old belts, discarded as useless and dangerous by persons whose bodies have been seared and scarred by the bare metal electrodes. I will make special terms to anyone having one of these old back-burners.

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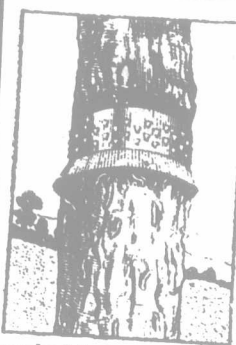
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**SIMPLE, EFFECTIVE, INEXPENSIVE.** Absolutely the most positive preventive against all creeping and crawling insects. It will save the trees. Save time and labor. Save money.

This simple brass band is patented and put upon the market as pre-eminently the very best and surest device yet invented for preventing the encroachment of all creeping and climbing insects. It is made of brass, does not corrode or rust, does not take an expert to place on a tree, and when once on overcomes all the difficulties met with by other methods of tree protecting, and lasts for years. No chemicals used. The Arndt Tree Protector comes in coils of twenty (20) feet, neatly and securely packed in boxes, with brass fasteners and cotton wadding, and with full directions for using on each box.

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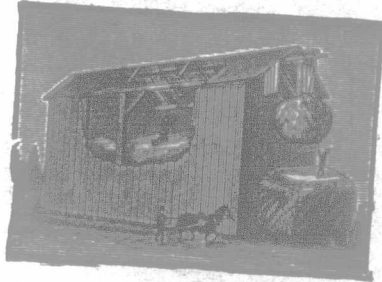
F. V. PARSONS, Manager.  
Office: Standard Stock Exchange Bldg., No. 43 Scott St., Toronto, Ont. Live agents wanted. Write us for pamphlets giving full particulars and rates.

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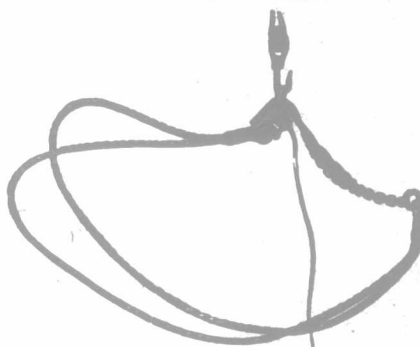
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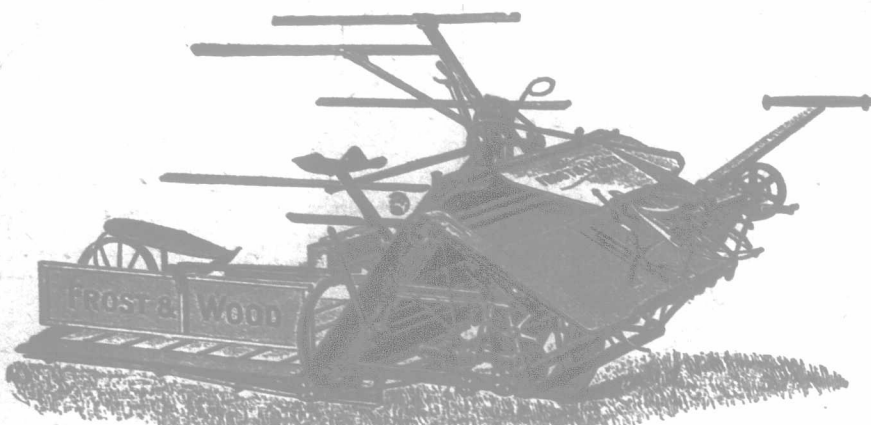
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