

**PAGES
MISSING**

This Washer Must Pay for Itself

A MAN tried to sell me a horse, once. He said it was a fine horse and had nothing the matter with it. I wanted a fine horse. But I didn't know anything about horses much. And, I didn't know the man very well, either.

So I told him I wanted to try the horse for a month. He said "all right, but pay me first, and I'll give back your money if the horse isn't all right."

Well, I didn't like that. I was afraid the horse wasn't "all right" and that I might have to whistle for my money if I once parted with it. So I didn't buy the horse although I wanted it badly. Now this set me thinking.

You see I make Washing Machines—the "1900 Junior" Washer. And, as I said to myself, lots of people may think about my Washing Machines as I thought about the horse, and about the man who owned it.

But, I'd never know because they wouldn't write and tell me. You see I sell all my Washing Machines by mail. (I sold 200,000 that way already—two million dollars' worth.)

So, thought I, it's only fair enough to let people try my Washing Machines for a month, before they pay for them just as I wanted to try the horse.

Now I know what our "1900 Junior" Washer will do. I know it will wash clothes, without wearing them, in less than half the time they can be washed by hand, or by any other machine.

When I say half the time, I mean half—not a little quicker but twice as quick.

I know it will wash a tub full of very dirty clothes in Six minutes. I know no other machine ever invented can do that, in less than 12 minutes, without wearing out the clothes.

I'm in the Washing Machine business for Keeps. That's why I know these things so surely. Because I have to know them, and there isn't a Washing Machine made that I haven't seen and studied.

Our "1900 Junior" Washer does the work so easy that a child can run it almost as well as a strong woman. And, it don't wear the clothes, nor fray the edges nor break buttons, the way all other washing machines do.

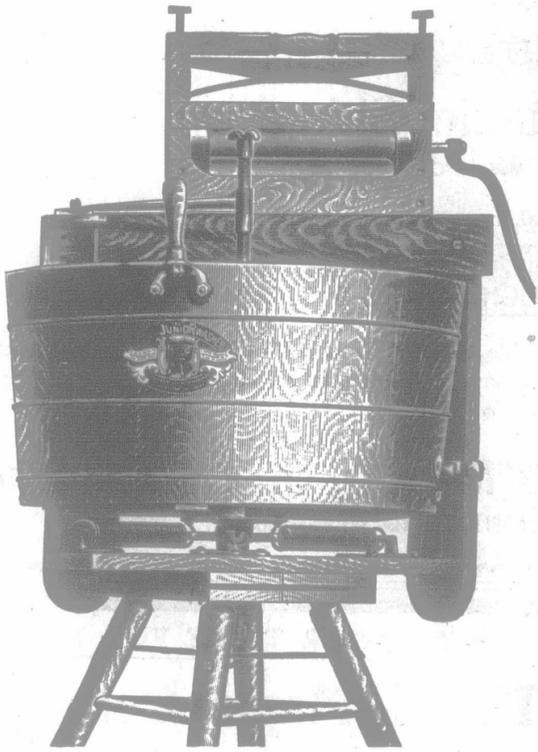
It just drives soapy water clear through the threads of the clothes like a Force Pump might.

If people only knew how much hard work the "1900 Junior" Washer saves every week, for 10 years—and how much longer their clothes would wear, they would fall over each other trying to buy it.

So said I, to myself I'll just do with my "1900 Junior" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer to do it first, and I'll make good" the offer every time. That's how I sold 200,000 Washers.

I will send any reliable person, a "1900 Junior" Washer on a full month's free trial! I'll pay the freight out of my own pocket. And if you don't want the machine after you've used it a month, I'll take it back and pay the freight that way, too. Surely that's fair enough, isn't it?

Doesn't it prove that the "1900 Junior" Washer must be all that I say it is? How could I make anything out of such a deal as that, if I hadn't the finest thing that ever happened for Washing Clothes—the quickest, easiest and handsomest Washer on Earth. It will save its



whole cost in a few months, in Wear and Tear on clothes alone. And then it will save 50 cents to 75 cents a week over that in Washerwoman's wages. If you keep the machine, after a month's trial, I'll let you pay for it out of what it saves you. If it saves you 60 cents a week, send me 50 cents a week till paid for. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance.

Now, don't be suspicious. I'm making you a simple, straight forward offer, that you can't risk anything on anyhow. I'm willing to do all the risking myself! Drop me a line today and let me send you a book about the "1900 Junior" Washer that washes Clothes in 6 minutes. Or, I'll send the machine on to you, a reliable person, if you say so, and take all the risk myself. Address me this way—F.A.B. Bach, Manager "1900" Washer Co., 355 Yonge St., Toronto, Ont. Don't delay, write me a post card now, while you think of it.

A Common-Sense Talk On Manure Spreaders

THERE'S no doubt that the right kind of manure spreader is a good thing for you to have. It is probably true that there is no other farm machine that, if right, is as valuable to the farmer. If manure is spread properly and at the right time, its money value far exceeds what you're apt to think.

But when you buy a manure spreader have a care. There are many of them on the market, and many with various "special features"—fancy affairs that do them more harm than good.

When you buy a spreader look out for these things—and avoid them. What is chiefly to be desired is strength and simplicity of construction.

Strength is essential because a manure spreader has to carry a heavy load and the rear end—the machine end—has hard work to do.

Simplicity of construction lessens the chance of the machine getting out of order and gives light draft. You know there are a good many manure spreaders that don't get out of the shed after the first year. They are too troublesome; causing much delay.

I. H. C. Corn King and Cloverleaf Spreaders

are strong and simple. The frame is carefully selected, well seasoned lumber, and is strengthened by heavy cross sills and truss rods. They have steel wheels with staggered spokes, and both hind wheels have clutches. The box is made of selected stock and is securely fastened to the frame by heavy steel cleats. Corners are re-enforced with steel plates. Everything is of the very best.

Both of the rear wheels are drivers, and insure plenty of power. A large sprocket with heavy chain drive transmits the power to the cylinder. The cylinder is large and strong, and the square teeth (extra long) are made of the best high carbon steel.

The power for driving the apron is applied on both sides, giving an even movement and making binding impossible. The rollers are attached to the under side of the slats instead of to the frame.

The vibrating rake is a most important feature, and is found only on Corn King and Cloverleaf spreaders. It levels the load and brings the manure squarely up to the cylinder—a thing which is absolutely essential to



proper spreading. The teeth on the vibrating rake are held in place by coiled steel springs so they never break but adjust themselves to the size of the load.

And as a result of simple construction, the operation is simple. Any one who can drive a wagon can operate an I. H. C. spreader, for one lever does it all. There are ten feeds, ranging from ten to thirty loads per acre. The apron stops of its own accord when the load is all fed out. By reversing the lever it returns and again stops when back in position. No need to watch it at all.

These are some of the reasons why you should investigate I. H. C. Corn King and Cloverleaf spreaders before you buy. There are many other good points about them that are explained in our catalogues. There are two kinds—Cloverleaf, an Endless Apron machine, and Corn King, a Return Apron machine; each made in three sizes.

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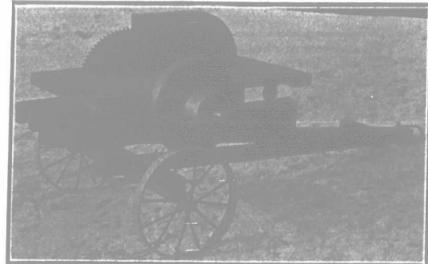
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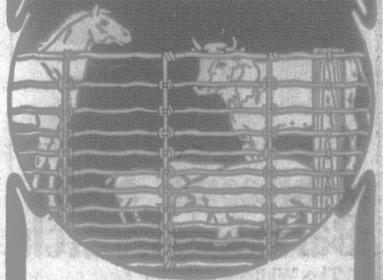


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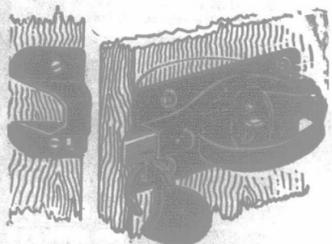
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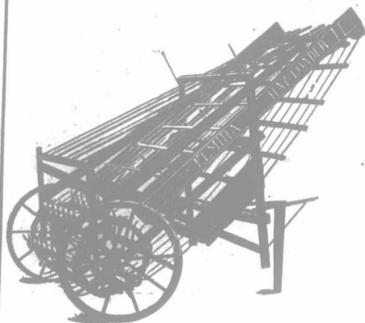
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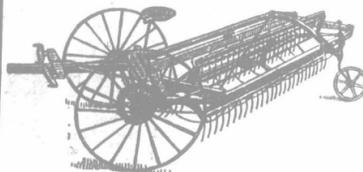
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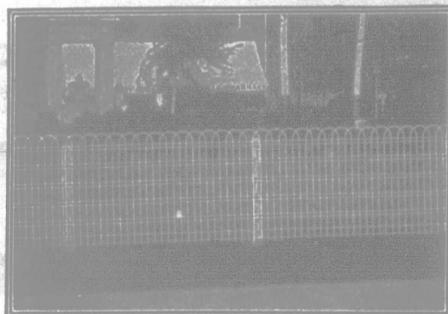
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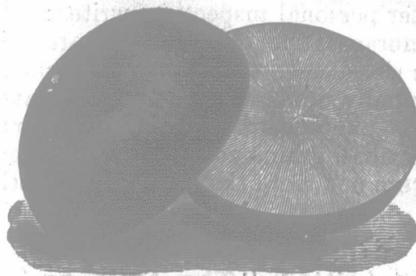


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Wm. Pearson Co., Limited,

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and Home Magazine

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Vol. XLII.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1878.
LONDON, ONTARIO, APRIL 18, 1907.

No. 760

EDITORIAL.

THE PROBLEMS OF ONTARIO EDUCATIONISTS.

Last week, in the buildings of Toronto University, the Provincial Educational Association held its annual convention. A survey of the addresses delivered, discussions thereon, and resolutions adopted, affords the public a view of the general direction in which educational affairs are moving in Ontario.

At the meeting a year ago a noticeably optimistic spirit prevailed. The first reading of a new school bill was distributed; its discussion was the paramount interest of the convention. The bill proposed an advisory council, and for rural school teachers in the average sections a minimum salary of \$500. Both prospects greatly pleased the teachers. Subsequently the proposals became law, but the advisory council was not given the hoped-for power of initiative, and the number of school sections subject to the \$500 minimum salary was greatly reduced. Assistants in small towns and villages, perhaps the most poorly-paid class of teachers, were not helped, but it was felt that raising the salaries of rural school teachers to \$450 or \$500 a year, would raise the standard all round. The male candidate for the advisory council who polled the highest vote made the raising of the assistants' salaries in villages and towns a strong plank in his platform.

But the legislators, in fixing a graded minimum salary, reckoned without their host. In the meantime they have received so stern a command from the rural voter to retreat, that, with the utmost possible promptitude they have announced obedience, and have promised to drop down to a \$300 minimum. The feeling of the Association, however, was apparently one of regret rather than anger, for it felt that the Legislature sincerely desired the improvement aimed at, and that it is now about to try persuasion instead of compulsion.

The teaching body is not sanguine of substantial betterment from the changed outlook—a fact that explains the favorable reception which the union idea received. Now and again for twenty years or more the formation of a teachers' union has been mooted, but it never reached the stage of consideration by the general Association. This year it was given the chief time and place at the Wednesday evening meeting, and a recommendation that unionizing be tried was carried with little or no opposition. The printed preamble contained, among others, the following statements:

"Previous to last year they (the teachers of Ontario) were the unprotected victims of vicious economic conditions.

"The recent statesmanlike legislation on behalf of education has aroused bitter opposition in many quarters, which threatens to cause a reversion to former unjust conditions.

"The teachers of Ontario would be unworthy of their citizenship and of their profession if in this educational crisis they are content to remain mere dependents upon the bounty of even a friendly political administration."

And so the Union was formed, not of and by the general Association, but with its encouragement. Members thought it unlikely that it could enforce its demands with the weapons of strikes and boycotts, but if it is wisely directed, it can conduct educational campaigns useful to both teachers and trustees.

On the side of the science of education, the dominant note continues to be that the development of the child's powers, through thinking and correlated doing, instead of stuffing the memory

with book-learning, is the kind of education that should be aimed at. Passing-the-examination aim strongly tempts to memory-stuffing and cramming. The reaction against it has set in, but the ebb is not entirely unobstructed. A resolution prevailed in one of the sections to restore the former public-school-leaving examination.

The Association does its work in about a dozen different sections or departments. On many subjects they agree, but not infrequently their interests or opinions clash. As an example, the Model School teachers unanimously approved of the restoration of Dr. Ryerson's principle of granting public-school inspectors' certificates only to the holders of the highest grade of public-school teachers' certificates, with five or ten years' successful experience in public-school work. At present, inspectors' certificates are not granted to anyone not holding High-school specialists' certificates. The Model-school masters waited on the Minister of Education, and pointed out the inapplicability of the H.-S. specialists' work to the inspection of elementary schools. The next day the inspectors' section passed a resolution advising the Minister, in effect, not to open the door in the way the Model-school teachers had requested.

One of the inspectors, who had visited a number of rural schools in Massachusetts and New York State, made a comparison of these with the rural schools of Ontario. People who believe that the rural schools of this Province have gone or are going to the "demnition bow-wows," would have been astonished to hear how greatly superior they are in nearly every important respect to those of the two most advanced States in the Union.

GRASS, TREES AND VINES FOR EVERY FARM.

The prime ambition of Canadian twentieth-century agriculture should be to make the country a better place to live in. We have destroyed nature's vestments, and taken comparatively little time, as yet, to clothe the unsightly scars which we have left with the verdant blanket that Mother Earth is ever so ready to weave. So far as natural beauty is concerned, the past centuries have been chiefly destructive. It is now for us to make good the loss, and strive to produce that condition happily described by the phrase, "nature idealized." Thus far, urban communities are more fully alive to the great renaissance than are most rural districts. The City of London, Ont., with its twenty thousand trees, boulevarded streets, and spacious rich-green lawns, presents a more charming blend of natural beauty than ninety-nine out of one hundred townships in the surrounding counties.

Tourists invariably contrast the finished appearance of Old Country landscapes—park-like, and restful to the eye—with the crude, raw-looking, rectangular, unfinished aspect of the new world. Our roads cut through steep hills, where naked gray clay banks offend the traveller's eye. Weeds flourish along the roadsides of Ontario and Quebec—the Maritime Provinces are a pleasing contrast in this respect—and in many cases brush obtrudes itself upon the sight. Orchards, ill-kept and innocent of spray, have to dispute the soil moisture and fertility with grass. Unpainted barns and outbuildings deface the landscape, unblushingly nude of trees. Stock trample in miry barnyards. Houses there are that look like prisons or barracks erected in the midst of commons. All these things and many others may be observed with painful frequency in many districts of the country. True, some here and there have tried to do their part by improving the home sur-

roundings, and now and then we find a man who considers there may be other arguments for maintaining a wood-lot than the mere sordid one of dollars and cents. The homesteads of these men are welcome as oases in a desert, and where we find a whole district that has been actuated by such intelligent appreciation of beauty and comfort, we have a community in which it is indeed a treat to live. Note, too, that in such districts land values are high, even higher, accordingly, than the money-making value of their farms warrant, showing that purchasers appreciate in a farm those improvements which they might not have the energy to make. The point of this argument is that it pays in dollars and cents to improve the home surroundings, besides which is the far greater advantage of enabling oneself and family to get the good out of life as they go along.

Of all classes, the farmer has the best chance to make himself an attractive home. He may not have the time to keep up many flower-beds, long rows of close-pruned hedges, or a great variety of shrubs, but these are the least desirable features of home adornment. The more important ones are gently-graded grounds, with plenty of thick, green grass, stately trees grouped or scattered naturally here and there, vines over old walls, good walks, and a general air of neatness around the homestead. These things cost little at the start, and scarcely anything to maintain; with every year they grow in beauty and comfort, becoming in time a lodestone that helps to hold the children to the farm. Of course, no matter how nice the home, the boys and girls will not all stay on it; that is impossible. But if the home inside is what it should be, and the farm so managed as to create enthusiasm in the children's minds, the chances of their becoming discontented will be very much reduced. And if they do leave, be sure they will be the better for the love that has been nurtured in them for the beautiful. Whether they go or stay, whether they seem to turn out well or ill, let their parents always be sure the few dollars' worth of time and money spent in making home attractive will repay a hundredfold better interest than ever was drawn from a bank. Be sure, too, of this, that if, in times gone by, children scorned the unattractive home, they will do so more and more from now on, because they are being universally educated to demand more.

But why dwell on reasons? The wisdom for home adornment surely needs no argument. The important point is how? For this, let us refer our readers to the series of articles prepared for "The Farmer's Advocate" by Prof. H. L. Hutt, of the Ontario Agricultural College. Prof. Hutt's recommendation as a landscape gardener is found in the admirable way in which the grounds of the Ontario Agricultural College are laid out and kept. For, while no farmer would want such extensive lawns as these, the same principles are applicable to a large extent in the embellishment of rural homes. Prof. Hutt's advice is practical. Read what he has to say, and if you cannot do all that he advises, do what you can.

And do not forget to scatter a few handfuls of clover seed along the lanes, roadsides, ditches, and any spots that were bare last year. Do not fail to plant a shelter-belt of spruce to protect the barnyard from winds, as well as one to the north and west sides of the house. Do not forget, either, to fence off the woodland this spring and keep out stock for ten or twelve years, thus making it not only a source of profit, an invaluable protection and a thing of beauty, but an ideal natural conservatory for the harboring of flowers and those invaluable friends of ours, the birds. No farm is complete without a wood-lot.

THE FARMER'S ADVOCATE AND HOME MAGAZINE

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GROWING OUR OWN BRAN.

The past twenty-five or fifty years have taught us pretty thoroughly the value of wheat bran. Its virtues are that it is a laxative; it lightens up a heavy meal-ration, making it more digestible, and last, but by no means least, it is rich in nitrogenous matter, the material that goes to make bone, muscle and milk. Excepting peas and clover, the most of our farm grains and fodders are relatively lacking in nitrogenous matter, or protein, as it is generally called. By "relatively lacking," we mean that they do not contain quite enough protein to balance up the starch, sugar and fatty substances they contain. The average ration composed of farm-grown feeds, requires the addition of something like bran, oil meal or gluten meal, in order to make a ration that will give the best and most economical results.

Of late years we have awakened to the fact that we can grow our own bran much more cheaply than we can buy it. To say nothing of clover, which should, of course, be grown in regular rotation on all arable land, alfalfa is found to fill the bill admirably. It contains a large proportion of the very element that makes bran so useful, and, like bran, it is also laxative. While not quite so valuable as bran pound for pound, it is near enough to prove a most satisfactory substitute, and the farmer who has a field of clay hill-sides has an excellent opportunity to swell his profits by seeding them to alfalfa and growing some of his protein thereon. Thus he can provide himself with a splendid feed to supplement the ordinary farm roughage, such as straw, roots and corn silage.

We often hear it argued that by buying bran we add to the fertility of our farms. It is one way of buying fertilizers, and need to be a good one. But here again alfalfa can be substituted. Its nitrogen—by far the most expensive element of fertility to buy in the form of commercial fertilizers—it takes chiefly from the air. Its phosphoric acid and lime it obtains in the form of

the subsoil. When the soil supply of these mineral elements begins to fail, they may be purchased at comparatively small expense and added to the soil. Where lime and wood ashes are available, they will supply the worst-needed elements. The farmer who does this will find it a speedy and economical means of enriching not only his alfalfa field, but indirectly his whole farm, while it will also enable him to produce large crops of the very best forage that can be harvested. Considered whether as a feed or means of soil enrichment, alfalfa is far ahead of bran in point of economy. With the latter substance hovering around the figure of twenty dollars per ton, we may well ask ourselves the question, "Why not grow my own bran on those stiff clay hills?" Try it. It pays.

OUR MARITIME LETTER.

Regularly within these late years the Province of Prince Edward Island, at least, has had, in the early days of springtime, a sort of educational exhibition called a seed fair. The Seed Grain Department at Ottawa and the local Government conspire to secure a sum sufficient to procure prizes for a modest line of grain and roots, and guarantee the expenses of expert judges and efficient lecturers. Heretofore this Fair has been held at Charlottetown, where all the agricultural meetings of a general character are usually held, and where, strange to say, they are more poorly attended than if they were convoked in the most remote of our rural settlements. This year Summerside has pushed her claims to the holding of this gathering within her precincts, with so much success that on the 27th and 28th of March perhaps the best fair of the kind so far held here was pulled off, the Commissioner of Agriculture, a number of the people's representatives in the Legislature, Supt. Fuller, of Truro Agricultural College, Seed Inspector Moore, Secretary of Agriculture Ross, and a large attendance of farmers and farmers' wives, assisting. The exhibit was larger than ever, and the samples of seeds and roots remarkably good, the judges say, although some fears were entertained of the germinating power of last year's seed on account of the drought which visited us in July and persevered till September. The grain crop was very short here, except in wheat, and, whilst it could be called a good average one, the straw was short in many cases and the grain not as large, plump and vital as the year before.

It will be well, then, for our farmers to exercise a degree of prudence in selecting native seeds this spring. It is a heavy tax on them we know, to have to resort to the complete replacing of their seeds by imported ones, but even this extremity is as nothing compared to the tragedy of consigning those of their own which are not vital to the ground, and thus losing a whole crop or nearly so. It is wonderful with what want of concern in this important matter men will sometimes act, notwithstanding all the missionary work going on amongst them. We hope that the time is not far distant when a farmer would as soon sow seed he has not tested as buy a pig in a poke. Of course, many things have to be taken on faith in this world, but it is dangerous to go very far in the seed line on this assumption. The Government has passed a Seed Control Act, which regulates to a certain extent the sale of impure seeds, but the trade has already found devices to impose on the unsuspecting, and "Government Standard Seed," in big letters, attached to bags of seeds in depots, generally trap them into a purchase of what they consider regular No. 1 seed, whereas the packages contain, in reality, a class of seeds which have simply been clean enough to meet the minimum standard fixed by Section 6 of the Seed Control Act, which allows 90 seeds of such weeds as are named in the Act in every ounce of red clover, 200 in alsike, and 200 in timothy seed.

It will thus be seen that there is great need of care with the season's seeds, if we wish our efforts to be rewarded in the harvest time. And it were well to take time by the forelock. Every man can know exactly whether his own seed is fit for the year's crop by having it tested, free of charge, by the analysts of the Seed Division, Ottawa. And, by purchasing what he needs from the seedsmen early enough, he may feel perfectly

sure that he is honestly dealt with by sending forward to the same place a sample of his purchase. It is true that, to be accurate, care must be taken to insure the representative character of the sample by mixing the seed well together from which it is taken. The size of sample sent to "The Seed Commissioner, Department of Agriculture, Ottawa," and which requires no postage, but passes free through the mails, is: "One ounce of grass seeds of all kinds, or of white or alsike clover; two ounces of red clover; alfalfa, millet, or other seeds of this size; one-half pound of cereal grains or other large seeds." If the germination test alone is invoked, a smaller sample may be forwarded, but in no case should less than one thousand seeds of cereals or two thousand of grasses and clover be forwarded.

With this opportunity of making assurances in a matter so important doubly sure, with little trouble, and absolutely free; with the monition of the experts before them as to the doubtful vitality of native seeds this year; with the conviction now full upon them, too, that it were worse than lunacy to commit to the soil bad seeds—we hope that everybody in the land who raises crops will see to it that he is not laboring in vain or contributing to our already too large spread of noxious weeds, but either test or submit to the official test, in the manner above explained, all the seeds he intends sowing this season, so that, with their proper consignment to mother earth, and the watering we may hope for from Apollo, God will give the wonderful increase which constitutes in our crops the perpetual miracle every thoughtful man marvels at more than anything else in the whole scope of his observation.

A. E. BURKE.

CO-OPERATION IN SECURING SPEAKERS.

The suggestion made at the Victoria Co. Beekeepers' Association, that neighboring County Beekeepers' Associations should arrange their meetings in circuit order, and club together to secure some noted outside talent, is a good one. Co-operation is nowhere more effective than in securing speakers for agricultural meetings. The time of good men is valuable, and they do not, as a rule, care to leave home, spending two or three days travelling, to do one hour's speaking, unless the pay per minute of dissertation is a good deal higher than most local organizations are able or willing to offer. There is this further argument, also, that an address loses nothing by repetition. Usually the second deliverance is more lucid than the first, and gains, besides, with the lecturer's increasing familiarity with local conditions. We trust the beekeepers will put this idea into practice.

HORSES.

THROWS DOWN GAUNTLET FOR THE PERCHERON.

Editor "The Farmer's Advocate":

As a farmer's adviser, we are very much pleased with "The Farmer's Advocate." It deals with the business side of farming satisfactorily, and the Home Department and Quiet Hour are most beneficial, but in dealing with the horse question, I am sorry to say you do not give the Percheron a fair shake, and many of your subscribers in this locality are of the same opinion as I am.

Now, I am not French, and am a loyal British subject, and would rather get our horses from some of the British Isles, other things being equal, but when it comes to horses they must stand on their merits.

We will first consider the feet. The Percheron has the best foundation of any draft breed, having a high-cup foot, with strong wall, and carries the weight without letting the sole touch the pavement. The bone is clean, not loaded with hair, and I have failed to see in your magazine anyone wanting remedy for scratches for a Percheron. Percherons are plentiful in this locality. They are the best-muscled draft horse in existence; strongly built; carry a short, nice coat; good thick skin, and will stand hot weather better than any other breed. I have known the Clydesdale and Shire go off their feed and feet in hot weather, and Percherons at the same work never missed a day, while the others were being nursed in the stable.

And when it comes to value, they command the highest price in the market. Two stallions were placed in our locality—one black, at \$2,250, and a gray, \$2,100. Many imported Clydes have been bought and placed for service, none over \$1,000, and most of them much less. This is a lumbering country, and the horses work all year, and none give the satisfaction the Percheron does. Much more could be said, but time and space will not permit.

Argentuil Co., Que.

J. E. ARNOLD.

TIMELY HORSE-BREEDING INFORMATION BOILED DOWN.

FOALING.

First sign is waxing of teats two or three days before. Udder becomes full and hard; position of foal alters. Abdomen becomes more pendant, and points of hips fall. Wax drops off and gives way to milk. Mare looks anxious and moves around box. Looks round at her flanks; gets up and down with care. Breaks into perspiration; ultimately lies down when labor comes on.

In ordinary course foal is born in ten to fifteen minutes. When mares foal standing there is great risk with the foal.

Mares are most anxious to foal alone. If there is any difficulty, assistance must be given. It must be carefully given, and force avoided. First see the fore legs are straight and equal in the passage, with head between them. When head and elbows have passed through, the rest of the body comes quickly.

When foal is born, remove envelope which covers the head, and free mouth and nostrils. The umbilical cord should be tied and cut two inches from belly of foal.

Tie with carbolized ligature and then cut, and apply diluted carbolic acid or other disinfectant to end of navel string.

When properly done there should never be an enlarged navel. The mare sometimes licks it till it is severed; this, no doubt, is nature's way of doing it.

THE FOAL AFTER BIRTH.

Mare should be allowed to lie down until she gets up herself.

The foal should be taken round to her head, when she will commence to lick it. This dries the foal and brings on circulation.

The foal then struggles to get up. This should not be interfered with unless in danger against wall, etc., as it expands the lungs and exercises the muscles.

The foal should not be lifted onto its legs. It should not be forced to suck until it is able; it is well able to wait for an hour or so.

When able to stand it may be supported beside the mare, and its head directed, but never forced, to suck. A little milk drawn into the hand, when nose is close to udder, will often induce it to suck.

It is most important the foal should get the first milk itself.

When teats are small and difficult for foal to get hold of, it should be carefully guided to udder.

When mares are irritable or vicious they should be held or tied up, fore foot held up, or even twitch put on, until foal has confidence and mare allows it to suck freely.

If foal's bowels do not act within an hour after birth, remove contents of rectum with the finger, on which a little oil or vaseline is smeared; rubbing with soap is also good.

THE MARE AFTER FOALING.

Give mare a nice warm mash of bran, or a warm drink, but avoid flour drinks.

The afterbirth usually comes away in half an hour to two hours; when mares foal before their time it is longer.

It should not be forced or pulled away unless it remains too long; then a veterinary surgeon should be employed.

Mares should be kept in at least three days after foaling.

Should not be let out when grass is wet, as foal may lie down and get a cold.

Mares when let out with foal frequently gallop about until foal is heated; it then lies down exhausted and gets a chill, which turns to inflammation of the lungs or joints. This should be watched and prevented.

When there is too much milk for foal, and udder becomes gorged and hard, mare should be milked twice or thrice a day until foal is able to take it all.

SERVICE AFTER FOALING.

The ninth day is the usual time. This, however, varies—sometimes it is the eighth, while others go to the tenth or eleventh day.

If not in use, horse should not be forced on her simply because it is the ninth day.

If horse is not taken then, she will run to the twenty-first day. Many never get in foal till the twenty-first day.

If forced on the ninth day they often prove barren. The fifteenth day is not of much consequence—it is often the ninth day not passed off.

The twenty-first day is the most important day, both as a trial day and as a service day.

Mares in good health, having had an easy foaling, if served on the ninth day, may be considered in foal if they successfully pass the twenty-first day.

With delicate mares, or those which have had severe or difficult foaling, the twenty-first day is the proper one, as the generative organs have had time to recover tone.

Mares not stinted on the ninth day usually come well in season on the twenty-first day, and stand to their service.

It is important to try young mares on their twenty-fifth days.

The thirty-fifth is the next important day on which mares should always be tried. If the mare passes the thirty-first day it is a strong indication that she is in foal.

She should, however, be tried again on the forty-second day. If a mare passes this successfully she may be considered safe in foal.

Many mares break at sixty days, in which case the first service has generally been cast.

To summarize, the chief days for service after foaling are the ninth, twenty-first, twenty-fifth, thirty-first, forty-second and sixtieth.

Twitching should be done as little as possible. It is not reasonable that service should stand when mares are suffering such pain as severe twitching must produce.

Lastly, all mares should be properly hobbled.—[Dr. Pallin's prize essay on horse-breeding.]

STALLION LICENSE BADLY NEEDED.

Editor "The Farmer's Advocate":

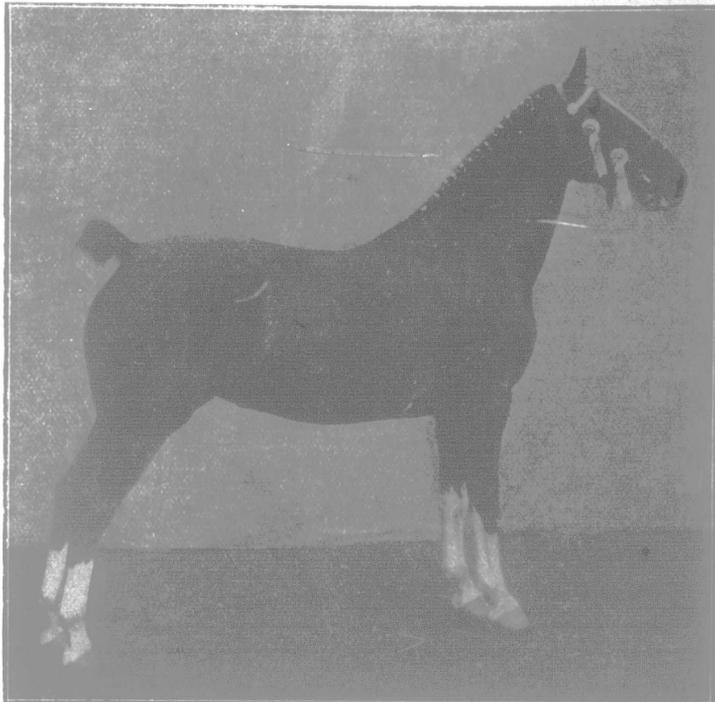
I have every confidence in the stallion inspection act. I had the honor of being appointed one of the commissioners in the Eastern part of Ontario, and the measure is needed badly down there. In one county, with six townships, I found only two registered stallions, and they were of poor quality. As for interfering with private rights, let us take an instance. One man has a scrub stallion, for the service of which he collects \$2 to \$4 as service fees. He breeds this horse to 85 mares, leaving about 60 foals. That man would think he was hurt by the proposed law, but he is only one man. The other 60 got foals that I am safe in saying would be worth at least \$50 less each at the age of four years than if the mares had been bred to good registered stallions. In two counties we went through we found some fairly good grade stallions, sired by an imported stallion and out of these common mares. They would have made geldings worth from \$200 to \$250, whereas the common run of stock was worth about \$125 to \$150.

As for the act being designed to benefit importers, it would be the means of better stallions being imported than a great many that are coming out at the present time, when the owners found their horses being rated second-class.

Now, should the inspection be done yearly? It must be done, in the first place, by men that are competent judges, and they must be men with some backbone, and the work be done impartially. The requirements for a first-class license should be that the horse must be registered, sound, of good conformation, and have good action, in order to get a first-class license. For a second-class license, a horse must be registered and sound, but his conformation and action need not be quite so good as for a first-class. For a few years—say two or three—good grade stallions, that have been leaving fairly good stock, should get a permit to travel for the time mentioned. This would be required in some places for a year or two, till there are enough registered horses brought into the country to do the business. I would recommend that the license fee be not more than enough to pay for the inspection.

Durham Co., Ont. **GEORGE GRAY,**

The first volume of the American Morgan Horse Register contains the names of some 3,000 horses, of which the heights of about 1,600 are given. Of these 72 are from 16.1 to 17 hands, 505 are 15.3 and 16 hands, 852 from 15 to 15.2, and 152 are 14.3 hands and under.



Hawsker Rosina (15129).

First and champion mare, London Hackney Show, 1907. Chestnut; foaled 1901. Sire Rosador (4964).



Rosador (4964).

Hackney stallion; chestnut; foaled in 1892. Champion London (England) Hackney Show, 1907, and twice previously. Sire Danegelt.

TIME MARE IS IN USE.

The natural period is four days, but many not so much. Some only remain in season one day, and should be closely watched.

It is a great mistake to send mares a long way to the horse, especially in May or June, when days are hot, and then another long journey home.

If driven off heated and excited, when in relaxed condition, the service probably passes away and the mare is barren.

Absolute quietness after mares are covered is most essential to allow the parts to restore themselves and assist in the due closing of the uterus and its appendages.

The sober, steady horse is the most successful sire.

WOULD LICENSE THE SCRUB STALLION.

Editor "The Farmer's Advocate":

I am a reader of "The Farmer's Advocate," and enjoy reading men's different opinions on stallion license. I am not in favor of taxing owners of pedigree stallions by licensing them, as I think it would be of no benefit for the farmer to have such an act in force; and then what about the man that has paid a goodly sum of money into the purchase of a pure-bred horse? I think they are the men to protect, for good horses are scarce, and bad and unsound as he may be, he is better than the scrub.

I say license the scrub, and make it a good heavy license fee, not less than fifty dollars for any horse not holding a registered pedigree, and fix a fine of twenty-five dollars for anyone using a scrub horse without a license. In this township we have only one pure-blooded horse and about ten scrubs, which charge bull fees, from \$1 to \$2.50 to insure. It is impossible for the good horse to pay expenses and buck against all those scrubs, no matter how good he may be. For instance, I have a colt one year and a half old, from the pure-bred Clyde horse, that I can get \$125 for at any time, and he is only from a pony mare, and I can show you colts from good mares and scrub stallions that their owners are offering for \$70, and can't sell them. It is high time to put a stop to such work among white people, when they are too blind to see the folly of it themselves. Give the pure-bred horse a show.

R. J. C.

Algoma District, Ont.

GOVERNMENT HORSE-BREEDING.

The horse-breeding work at the Colorado Experiment Station is progressing very satisfactorily. The stallion Carmon was bred to 26 mares in 1905, and got 24 in foal at the first service. His first crop of foals came last spring, and, while it is too early to pass an opinion on them, it can be said that they prove the horse to be a good investment as a sire. The stud has been increased by the purchase of two mares in Kentucky—one an inbred Mambrino King mare, and the other by Chester Dare, out of a daughter of Harrison Chief. They have already some Harrison Chief blood among the mares in Colorado, but this is the first introduction of that of Mambrino King, unless the claim can still be made that Mambrino King was a grandson of Mambrino Chief, whose blood is here in considerable abundance. The female line from Harrison Chief is one of the most valuable known for the production of quality, style and good conformation, and Mambrino King was one of the handsomest horses ever seen in an American show-ring. For these reasons these mares should be of great value in the breeding work.

Work in breeding Morgan horses, in co-operation with the Vermont Experiment Station, was begun in June, with the purchase of seven mares and two fillies in Vermont and two mares in Kentucky. The object of this work is to prevent the loss of the Morgan blood and preserve the type, at the same time increasing the size over that of the old Morgan. The mares were bought by a board composed of Prof. C. F. Curtiss, Director of the Iowa Experiment Station; Mr. Cassius Peck, of the Vermont Experiment Station, and Mr. George M. Rommel, the animal husbandman of this bureau. The board was very fortunate in securing mares of good size, uniformity and quality, and strongly bred in Morgan line. The mares purchased in Vermont were sired by General Gates, Denning Allen, Bob Morgan, Young Ethan Allen (a full brother of Daniel Lambert), Rocky Mountain and Gillig. Those bought in Kentucky were sired by Harrison Chief, out of Morgan dams, and give a combination of blood lines which is of the greatest value.—[Rider and Driver.

THE FIRST-PRIZE ESSAY.

Editor "The Farmer's Advocate":

Regarding the improvement of the horse industry, I have read all the letters in "The Farmer's Advocate" for three or four months, and if I were to be the judge, I would give Mr. S. J. McKnight, of Grey County, first prize for his letter, in your recent issue. He points out the only practical way of improving the trade to both the breeder and the stallion owner. It is only fair and just that the stallion owner should make a living profit if he gets a fair fee and provides a first-class horse. He will then be sure of a fair profit, without which he is likely to fall behind; and, by giving him a good fee, we will retain the best in the country, whereas, if we do not pay the price, the best horses will be sold out of the country, and the scrubs will be left for us to breed to. Let us pay the top fee, and so obtain the best that is to be had, for the best is none too good for us to Canadian breeders.

A BREEDER.

NAVEL ILL IN FOALS.

Hundreds of newborn foals are lost every year through neglect to disinfect the navel string early on the day they are born, and three or four times daily till it is shrivelled and dried up, washing the end of it often with a solution of one part formalin to ten parts water; or, carbolic acid, one part to twenty parts water. It has been discovered that the germ which causes navel ill and joint-ill in colts and white scours in calves

enters the system by way of the navel opening very soon after birth, and as prevention by the means above indicated is simple, a note should be made of this now. Prevention is cheaper and better than cure, and should be attended to promptly. Be prepared to use prevention promptly.

LIVE STOCK.**RAISE MORE BACON HOGS.**

Editor "The Farmer's Advocate":

During the past season there has been a great deal of agitation amongst prominent leaders in agriculture to induce Ontario farmers to raise more bacon hogs. This is a very important subject, and one on which speakers and the press cannot lay too much stress. It is important alike from a Provincial and an individual standpoint. "Raise more bacon hogs and fill both pockets," is the urgent appeal to which every farmer should respond this coming summer.

The average farmer, on the other hand, is rather skeptical in taking up this line of agriculture on a large scale. He is governed too much by custom. His father raised a few fat hogs, keeping them in a small pen until they weighed 300 or 350 pounds, and then sold them at \$15 to \$20 each, and the money looked big. If they were satisfied with the fat hog, then why should I not be? Perhaps 75 per cent. of the farmers of Ontario do not raise more bacon hogs for this reason. Do not forget that the fat hog then may have been in demand, but now Canada has gradually worked up a paying bacon trade with Great Britain, and because of the quality of bacon we produce, she is willing to pay a big price for it; but not so for the fat hog. The day of the fat hog has passed, and let us realize that the day of the bacon hog has come. Forget the fat hog and raise the real bacon hog, possessing the real bacon type. There is money in it.

Many of our farmers believe that there is not enough money in it to pay for the extra labor and trouble when gone into on a large scale. It has been shown time and again that, with average prices, and under ordinary circumstances, the bacon hog is a good investment, but if careful feeding and good judgment is used from the time the baby pig has learned to care for itself until it is landed into the butcher's hand, bacon-raising is a Cobalt.

PASTURING HOGS.

Last spring, on the first of May, I had in my possession thirty small bacon pigs, four weeks old. I fed them entirely on skim milk, with just a little grain. They were all kept in small yards and furnished with suitable shelter. In four weeks, however, as the strong, thrifty little fellows had rooted their yards to such an extent, I found that I would be obliged to enlarge their yards. Instead of doing this, however, I fenced off with woven wire two acres of unbroken pasture, where the brakes and ferns were very abundant. In their new quarters they were very contented, and immediately set to work digging up roots. I soon discovered they were only taking about half of the skim milk from my thirty cows since they obtained so much food from the pasture. I at once bought thirty more little fellows four weeks old, and put in with them. As the sixty grew very fast, they demanded more food; so, to meet this increasing demand, I increased their grain ration, and added water to the skim milk. Occasionally alfalfa, or green peas and oats, was thrown in as a variety. Later on a few small roots or unripe corn, stalk and all, was given to them to sharpen their appetites.

On the first of September I selected thirty of the largest and most thrifty-looking shoats and brought them to the pens. By limiting them to small yards for a few days before shutting them into small pens, their appetites were not injured by the change, and a steady growth, without any setbacks, followed. This, I may say, is a very important factor, and one which is very often overlooked. If hogs are taken off pasture and confined at once to small pens, they will either lose in weight, or stand still for a few days, rather than thrive and continuously gain in weight.

These hogs were then forced to their greatest capacity, by giving them all they could eat, without impairing their health or wasting food. A mixture of boiled turnips, skim milk, ground wheat, barley, peas and oats, made thin with hot water, was fed them twice a day. Once a day they were given whole corn on the cob. On this feed they were ready to ship in four weeks. The thirty weighed 156 pounds each, making a total of 4,500 pounds of pork. Pork was then worth 61 cents live weight, giving me a total income of \$280 for the first lot. The cost up till the time they were put in pens was very small. They were then fed entirely on home-grown products, which also reduced the cost considerably. The other thirty were then brought in from the pasture, and a complete record kept of the total gain and the amount of grain fed, which afterwards proved a very interesting experiment.

A PRACTICAL EXPERIMENT.

This second lot were very thrifty and uniform in size. They were fed on the same ration as the first lot. Upon being put into pens each hog was weighed, and the total weight in each pen recorded. The weights were as follows: Pens 1, 2 and 3, 1,474 pounds, and pens 4 and 5, 1,154 pounds. This gave a total weight of 2,628 pounds.

In 26 days they were all sold, and weighed again. Pens 1, 2 and 3 weighed 1,973 pounds, making a gain of 499 pounds; and pens 4 and 5 weighed 1,537 pounds, making a gain of 383 pounds. This made an aggregate gain of 882 pounds in 26 days, or 1.1 pounds gain per hog per day. To make this gain, 2,812 pounds of grain was fed, which I valued at \$1.30 per cwt.; this made a total cost of \$36.55. Thus, you will find it cost me four cents to put on a pound of gain. During the 26 days 5,000 pounds of skim milk was fed, which is worth at our creamery 10 cents per cwt. This made a cost of \$5.00 extra, which brings the cost of production up to 4.7 cents per pound of gain. With pork selling at 6½ cents per pound, does this pay?

Many will argue that 1½ cents per pound is not much profit, but you must consider that the grain fed is raised by yourself, and, by feeding this home-grown grain, you are selling it for \$1.30 per cwt. and reaping the manufacturer's profit of slightly over 1½ cents besides.

In connection with the same experiment, it might be of some interest to note that pens 1, 2 and 3 were situated in a well-sheltered shed, but exposed to the cold October nights, while those in pens 4 and 5 enjoyed a home in a well-heated stable. In both cases the pens averaged slightly over one pound gain per hog per day. I would not have you think by these results that hogs will do just as well in a cold place as in a warm one, under all conditions, but the point is, give a pig plenty of bedding (long straw preferred) in a pen well sheltered from draughts, rain or snow, and extreme cold, and he will gain as rapidly, if not faster, than the one shut up in a warm, stuffy, poorly-ventilated stable.

In conclusion, I would strongly advocate that every farmer fence off this spring two acres of his roughest unbroken pasture, and place within this enclosure two young bacon hogs for each cow that he possesses. At the same time plant a small piece of sugar beets or turnips to boil in the fall, tops and all, to feed the young hundred-pound shoats when they are taken off the pasture. Then feed them well in pens for four or five, perhaps six, weeks before shipping. Then, when you see what large, strong-boned, thrifty fellows that pasture has produced; what a clean, well-manured and well-plowed pasture those hogs have produced; what a nice, easily-earned bank account you possess, and if you could foresee what a great benefit our Province and our Dominion would derive from so great an increase in her bacon trade, I am confident that when the next spring arrived you would be ready to raise bacon hogs on a still larger scale. Try it, and prove it for yourselves.

A PRACTICAL FARMER.

Carleton Co., Ont.

STOCK WATERING SYSTEM.

Editor "The Farmer's Advocate":

I have read with much interest the articles published in your valuable paper on watering stock. I think I have a complete system, which cost me \$200, and for the five years I have been using it, it has cost me only \$5.00 for repairs.

The pumping power is obtained from a thirteen-foot windmill, with which I do my grinding, straw, hay and corn cutting. The water is brought from a well a distance of about 100 feet from the barn, thereby getting pure water, with no barnyard soakage. The water is then forced into a tank, buried in winter in a hay mow in the barn, which keeps the water from freezing and at a fit temperature for drinking purposes.

From the tank in the mow four pipes run, one to each row of cows (the cows facing each other, with an alley between them), one to the separator room, where the milk is cooled in the summer on hot nights and on Sundays, and one to the calf pen, where the calves and young cattle are watered. The cattle in the stable are watered from a square wooden trough, which has been in use fourteen years, and is sound and tight yet. The trough is 1½ feet from the bottom of the manger, and each cow has a recess of one square foot, with a sliding door, to drink from. The door keeps the trough from being filled up with feed, etc. When the cattle are to be watered, the taps are turned on and the doors slid up. When the cows are through drinking, all the surplus water is drained off by a waste pipe in the end of the trough, and then it is ready for a fresh supply of water.

In the summer, when the cows are in the pasture, they are watered in the daytime by a running creek, and when they come home to be milked at night, they are watered at a trough into which the water from the cooling tank is let off, thus forming a current of cool water where the milk

is cooling. At this trough the horses are also watered.

I have never had any trouble with the pipes freezing up, as I guard against it by packing around those most subjected to the cold with felt paper and sawdust.

What I consider the greatest convenience is that one can go on with his work about the buildings while the cattle are being watered, taking an occasional look at the water troughs to see that they do not overflow. There is never a time that a person need be out of water, if he takes advantage of the wind and keeps the tank full.

The cost of installation was much, but now, after five years' experience, I am perfectly satisfied with my investment. Hoping that this will prove as valuable to someone interested as it has to me.

RICHARD KIDD.
Carleton Co., Ont.

WATER TO FIRE AND LEAD TO DOGS.

Editor "The Farmer's Advocate":

I am pleased to acknowledge my appreciation of Sandy Fraser's illuminating article in regard to the dog question, which appeared in your issue of March 21st. Alex. McCaig seems to be still of the opinion that sheep-owners should insure their own sheep. He must respect those cur-keeping neighbors of his a great deal if he thinks it unjust for them to contribute to the sheep-insurance fund. In reference to his comparison with fire insurance, I would say if we restrained fire as little from doing harm as some dogs are restrained, we would soon break through the insurance companies. If Mr. McCaig wishes to advance or protect the dog industry, he had better not start a sheep-insurance company, based on a fire-insurance principle. Insurance companies are not conditional, and the conditions of a sheep-insurance company, supported by sheepmen only, are for all sheepmen to have a gun, and endeavor to shoot every dog he deems a menace to the sheep industry. You will agree, Mr. Editor, that a great many farmers are not skilled marksmen, and the dogs that escape the shot are the dogs they should insure their sheep against. Fire has its place, and dogs have their place, and the sheepman that joins the sheep-insurance company that is designed on the fire-insurance basis will have a perfect right to put the dogs in their place if they interfere with his sheep.

I believe in sheepmen insuring their sheep and paying insurance, if they will form a company and have every one that becomes a member of this company bind himself that he will have a gun, and keep it in a convenient place, and exercise as much zeal and activity when he sees a dog after his sheep as he would if he saw his house catching fire. Then they could afford to pay insurance to cover the loss caused by dogs without doing themselves injustice. I consider sheepmen marked with insanity, if they think they should pay into a fund to insure the sheep of the country against dogs owned by every Tom, Dick and Harry. As to our taxes on other things being lighter on account of paying a goodly sum to dog tax, if we shoot our dogs the general fund will be insufficient. Our taxes on other things would get heavy again in order to meet municipality requirements. We might as well keep our dogs.

In reference to Jas. A. Russell's article, I would caution you, Mr. Editor, and your readers, about paying any attention to this soft talk about dogs at the present time, when there is fear of a dog tax. If we let every man give his dogs a pedigree, where will we find the men that own the sheep-killers? From what I know of dog nature, I do not think that his dog being a friend of his own sheep is any guarantee that he is a friend of his neighbor's sheep. I suppose Mr. Russell thought giving his dog the title of collie would exempt him from the sheep-killing class. If dog owners refuse to pay a dog tax, I think sheepmen should be allowed to insure their sheep as far as possible by using lead. It is much cheaper to prevent sheep losses by the use of a little lead than it is to pay them with silver. My apology for writing this is to tell Alex. McCaig he cannot become a member of the sheep-insurance company on a fire-insurance principle till he gets a gun. Every man becoming a member of the company has to come under the rules, that he will apply lead to any dogs endangering his sheep, the same as he applies water to any fire that might endanger his house. Wishing your paper all success, I hope we may have something done to protect our most profitable animal, the sheep.

J. W. SMILEY.
Russell Co., Ont.

"FARMER'S" METHODS ALL RIGHT.

Editor "The Farmer's Advocate":

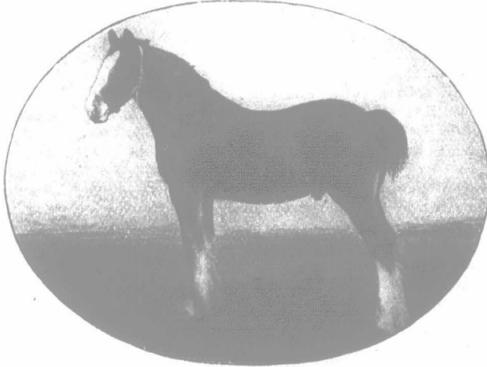
Have just read your editorial, "The Happy Medium," page 517, and while thanking you for the kind words referring to "Farmer" contained therein, I must hasten to say that what I meant to urge in my letter of March 7th was the useless time and money spent in following extremes. My cattle get good sweet clover hay, mangels and turnips, with some bran, my aim being to give as good wholesome feed as possible without going outside of the farm to purchase much of it. My barn is rarely below 30 degrees F. in winter. I consider that mangels, bran and clover hay, while

perhaps not the best ration, approximates at least the best for my conditions compatible with economy. Your issue for March 21st, containing, as it did, "Uses of Formalin in Agriculture," "Index for 1906," "Varieties of Apples to Plant," with the many other good articles, constituted the best of the many good numbers you are giving us this year.

FARMER.
Nova Scotia.

THE COLLEGE COLT.

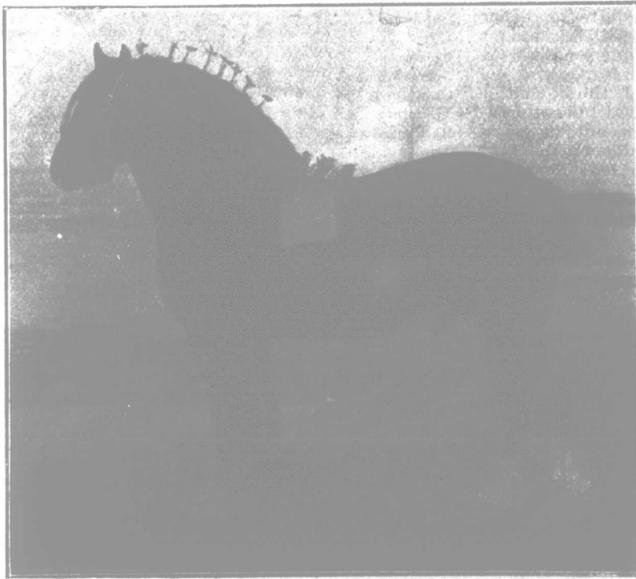
The Clydesdale colt whose portrait appears on this page, and which was born at the Ontario Agricultural College, Guelph, in June, 1906, was sired by Right Forward (imp.) [4363] (12310), bay, foaled in 1901; winner of first prize in his



Pioneer.

Clydesdale colt. Age 9 months; weight 950 lbs. Owned by Ontario Agricultural College. Sire Right Forward (imp.) (12310); dam Her Pretty Sel [5394], by Cedric (1087), by Prince of Wales (673).

class and the championship as best Clydesdale stallion, any age, at the Canadian National Exhibition, Toronto, 1906, where he was exhibited by Graham Bros., Claremont, Ont., having been purchased by them at the dispersion sale of the Thorncliffe stud of Mr. Robert Davies, Toronto, in Feb., 1906, for \$2,400. The sire of Right Forward was Prince Thomas, whose dam, Lady Lawrence, was by Prince of Wales (673). The dam of the colt, Her Pretty Sel [5394], bay, foaled



Royal Chattan (11489).

Clydesdale stallion; bay; foaled 1900. Sire Clan Chattan. Winner of Glasgow Stallion Show Premium, February, 1907.

1898, purchased for the O. A. C. at the Thorncliffe dispersion for \$1,525, was bred by the late Col. R. Holloway, Alexis, Ill., sired by Cedric (imp.) (1087), and he by Prince of Wales (673).

The colt and his mother were housed during the summer in a fairly large shed which opened out into a grass paddock. For a time both ran in and out at will, but later in the season, when the weather became hotter and the flies annoying, in the daytime they were shut within the shed, which was cool and comfortable, and then allowed out at night. The mare was fed hay in addition

to the pasture, and was allowed, besides, a liberal grain ration. Once a day she was given bran and crushed oats fed in the dry condition, and twice she was given boiled feed, consisting for the most part of oats and a little whole flaxseed mixed in. This boiled grain stimulated the milk flow, and the mare had an abundance of milk until the day of weaning. As soon as the colt would eat, the mother was tied during the meal hour, and in a separate box he was fed a little bran and crushed oats once a day, and twice a day a little of the boiled feed. A small quantity of molasses was also given to encourage him to eat.

In September the mare and foal were given the run of a pasture field, being brought in under cover during the heat of the day. Later, as the weather became cooler, they were given shelter at night, and allowed out during the day. This was continued during October, when both mare and foal were taken over to the main stable and placed in a roomy box stall. The colt was weaned about the first of December.

Immediately upon weaning, the colt was taught to take cow's milk. A little difficulty was experienced at first in getting him to take it, but he soon grew fond of it. The milk he has taken has assisted very materially in giving him his present weight and in keeping him in thriving condition. Besides hay, he has been getting a liberal allowance of grain, part of which has been boiled for him, as before, and given him once a day. He is now getting per day, at nine months old, what hay he will eat up clean, 4 pounds of oats, 2 pounds of bran, a little boiled flaxseed, 10 pounds of milk, a little molasses, and a small mangel or two.

The colt has been given regular exercise, having been turned out into a paddock for a couple of hours each day. Being of an active, energetic disposition, he has made good use of his time in the paddock, and the amount of exercise he has taken has made possible the liberal system of feeding that has been followed. He has probably not missed a meal since he was born. His development has been very uniform, and we think his photo will show his condition to be such as should give good promise for the future.

H. S. ARKELL.

PREVENTION OF CALF SCOURS AND NAVEL ILL.

"The Farmer's Advocate" has frequently warned its readers of the danger of germ infection of the navel of the newborn calf and foal, causing white scours in calves and navel ill and joint ill in foals, which carries off thousands of these young animals every year, entailing heavy loss to farmers. The prevention recommended has been the application of a disinfectant solution, such as formalin, carbolic acid or corrosive sublimate to the navel string two or three times daily, until it is dried up, and shrivelled and no raw spot remains. Now comes the opinion, backed by experience of Mr. James Peters, the English judge, who officiated at the Chicago International Show in 1901, that the danger of the entrance to the young animal's system of the germ that has caused all this mischief, may be made by the mouth as well as by the navel, and he is satisfied from observation that by washing the udder and teats of the dam with a solution of one of the coal-tar disinfectants or sheep dips, before the youngster is allowed to suck, and daily for a week or two, the danger from scours in the calf, and navel ill, joint ill and scours in the foal, is reduced to a minimum if not entirely avoided. The two precautions, disinfecting the mammas of the mother and the navel of the young, should be combined. The treatment costs but little in time or material, and is surely well worth attending to promptly and persistently. It is important to have the prescription on hand, ready for use, when occasion requires it.

A WEEKLY SURPRISE PARTY.

P. O. Collins, "Cedar Lodge Farm," Russell Co., Ont., writes: "I, like thousands of others, feel that I should like to congratulate you on the excellent work you are doing, and am surprised that you can fill a paper the size of 'The Farmer's Advocate' every week with such very valuable information, one item of which is often worth the yearly subscription price. Wishing you and your valuable journal continued prosperity."

THE FARM.

AN EXCELLENT WHITEWASH.

A piece of information that is continually in request is a recipe for whitewash that will not wash off. We do not suppose there is such a thing, but the following is considered as good an article as there is in its line. It was used by U. S. Grant to whitewash the White House at Washington. Some time ago there was published an autograph letter, written in December, 1871, by Mr. Grant, then President of the United States, to a friend in California, in which this formula was given. It has since been widely published in bulletins and the agricultural press. "The Farmer's Advocate" advises every reader to cut it out and keep in a safe, convenient place for reference. Here it is:

Half a bushel of unslacked lime. Slack with warm water; cover it during the process to keep in the steam. Strain the liquid through a fine sieve or strainer; add a peck of salt previously well dissolved in warm water, three pounds of ground rice boiled to a thin paste, and stir in boiling hot; half pound of powdered Spanish whiting, and a pound of glue which has previously been dissolved over a slow fire, and add five gallons hot water to the mixture; stir well, and let it stand for a few days, covered up from the dirt. It should be put on hot. One pint of the mixture will cover a square yard, properly applied. Small brushes are best. There is nothing that can compare with it for outside or inside work, and it retains its brilliancy for many years. Coloring matter may be put in, and made of any shade—Spanish brown, yellow ochre, or common clay.

MANURE SPREADER A GREAT LABOR SAVER.

Editor "The Farmer's Advocate":

I have read a number of letters in "The Farmer's Advocate" about the manure pile and the manure spreader, and have heard many people say that the manure spreader did not pay. I think that the manure spreader is one of the most labor-saving and profitable implements around the farm, although I do not own one yet. My next neighbor has one, which I rent for \$1.00 per day. I find that, not only is the manure spreader an economy, as a man with a spreader can do as much as three men would do spreading it in the old way, but it spreads the manure evenly, and in a way that will bring larger returns, which will soon pay for the machine. I am quite sure that in a short time manure spreaders will be used as much as any other labor-saving implements about the farm.

In regard to the manure pile, I think that a great many farmers lose a great deal by not handling the manure properly. I am not in favor of spreading it direct from the stable to the field in winter, letting the water wash most of the substance out of it in the spring. My plan is to haul it out to a pile in the field you want to spread it in, and then, after the hay is off, you can spread it on with the spreader; and, besides, piling it kills a lot of weeds, which are getting to be a great nuisance. These are my views, and I would like to hear from others.

Wright Co., Que.

A SUBSCRIBER.

ECONOMY IN CAREFUL SPREADING OF MANURE

Knowledge and thorough work will bring good results in even as simple a matter as spreading manure, writes T. B. Terry, the famous Ohio farmer. Take time to get the manure thoroughly fine and even on the ground before plowing. If you have a manure spreader, that will be a great help. If you have manure enough to spread to make one profitable, I would buy one as soon as you are able, and have a good shelter for it. But, meanwhile, you can do good work without it. Take pains in spreading from the wagon first. Then perhaps you can harrow or bush the manure, thus making it more fine and even. A piece of plank with holes in and thorn bushes wedged in may do good work. Such a manure spreader is within the reach of anyone. If there are hard chunks, go over the field with a bat and knock them all to pieces; and take a fork and spread any bunches you can find. You can, no doubt, get by so doing, perhaps twice as much out of the manure.

Many a day I worked in all these ways. Suppose you put ten tons on an acre of ground. If you can pulverize this manure so that you can get it so even that when you come to plow, the least trace of it can be seen, you have put it on in the best possible condition for cropping, so far as the manure is concerned.

OLD ONTARIO HOLDS HER OWN AT MIXED FARMING.

Editor "The Farmer's Advocate":

In your issue of February 7th, "Horseback Farmer" presents some queer figures, and gives the net profit from his farm of 195 acres, 64 acres cleared, for the year as \$1,251. Taking his own figures I doubt very much if his bank account would show a net gain of \$1,251, although if I had as much land as he, and money in stock and implements, and could not increase that by at least 50%, I would get off the horse and go at it myself or sell out. A year ago I gave you some figures along this line, and found my aggregate sales for the year amounted to over \$1,070 off this 67 acres. I became a little optimistic, and promised you a better showing another year, with an ordinarily favorable season. I will not value and estimate stock and machinery, and all that sort of thing, but give in detail the exact figures of my sales made off this small farm without buying either grain or feed for the last two years (with the exception of 50 bushels of corn in the ear, taken on a debt). I might also state right here, that my cows have not had bran, ensilage, or any soiling crop whatever, and as my clover all froze out last winter, our pasture was not up to the normal condition; the grubs thinned our corn and oats, and that terrible wind and rain storm in June beat our factory peas so badly (they were just setting) that they were only half a crop. These things, together with the loss of three fine colts (the one a registered Hackney, and full sister to Blue Bonnet, that was sold for \$500 cash at 8 months' old the fall before), and a registered Holstein calf, two ewes and five lambs, it will be seen we have had a little more than our share of what is called bad luck. We milked three full aged cows, one two-year-old heifer and one four years old.

Checks from cheese and butter factories.....	\$ 349 94
Cash for milk	8 72
Cash for butter, previous to 1st April.....	15 00
Estimated check not yet received for 1 cow	
4 weeks; 3 cows 2 weeks	10 00
	\$ 383 66

We had all we wanted to use for the family also from these five cows, average \$76.73 each.

From 6 acres sweet corn from canning factory	108 64
From 4 acres sweet peas from canning factory	79 20
For 4 Holstein heifer calves	156 00
For 1 Holstein bull calf	35 00
1/2-growth of 1-year-old heifer, sold for \$100...	75 00
1/2-growth of 2-year-old heifer, sold for \$90....	45 00
Service for bull	82 25
12 Leicester lambs	95 00
10 fleeces of wool	25 11
Service for ram	2 00
Young hogs for breeding and killing	164 82
Service for hog	3 75
Growth of 1-year-old colt, sold for \$102; profit	40 00
1/2-growth of 2-year-old colt, sold for \$65.....	15 00
Chickens	4 22
Eggs	20 20
Potatoes	5 25
Berries	4 20
Cabbage	1 60
Turnips	1 00
Radishes	40
Apples	1 75
Prize money on stock and vegetables	85 70
	\$1,434 75

There can justly be added to this the two	
best registered heifer calves kept.....	100 00
Work done with team and otherwise	38 75
19 cords wood sold off the farm	47 50
	\$1,621 00

This is the exact amount of output off this 67 acres for 1906 to March 1st, with the exception of the estimated February cheese check. As my neighbors will see, it does not include the gross price or net profits on 5 cows, 1 horse, 9 grade young cattle, 6 aged ewes, 2 aged hogs sold at sale, and half of them were fed off this place the last summer and winter.

Elgin Co., Ont.

G. H. CAUGHILL & SON.

PICTURE-STUDY IS NOT NATURE-STUDY.

Editor "The Farmer's Advocate":

On page 578 "X. I. C." refers to a certain school principal who could demonstrate by diagram and illustration the difference in foliage, etc., of all the Canadian woods, and yet, in the forest, could not tell balsam from spruce. It certainly is remarkable that a man who could make drawings of the flat, blunt, round-based balsam leaf, and of the distinctly different four-angled, sharp-pointed, sterigma-based spruce leaf, could not tell them apart when he saw them growing on their respective trees. He could not have had images in his mind of the objects he was drawing. How had he learned to draw them?

It is also surprising that "X. I. C." or anyone else who writes on education should call the teaching of diagrams and illustrations nature-study. Picture-study is very different from, if not the opposite of, nature-study. Had the prin-

cipal referred to been teaching these trees by the nature-study method, he would have taken the learners to the living examples and caused them to observe, handle, compare and know the realities, instead of showing them pictures.

The teacher who does not know his business well enough to teach a simple, tangible object such as a spruce tree, would make a very sorry job of teaching so complex a subject as "X. I. C." proposes, namely the cost, value and quality of the things the farmer has to buy and sell.

London, Ont.

J. DEARNESS.

A SURVEY OF PRESENT-DAY AGRICULTURE

We are in receipt of the initial volume of the Cyclopaedia of American Agriculture, a monumental work, prepared under the able editorial direction of Prof. L. H. Bailey, of Cornell University. It aptly defines itself as "a popular survey of the agricultural conditions, practices and ideals in the United States and Canada," and will be completed in four volumes, illustrated by 100 full-page engravings, and about 2,000 other pictures. Its design is to lay before the public the agriculture of to-day at its very best, rather than to work out new paths. Over 100 experts have contributed to the first volume of about 600 pages, and a host of others assisted in proof-reading and otherwise, in order to ensure accuracy and completeness. The first volume deals, 1st, with agricultural regions; 2nd, the layout and organization of farms, and 3rd, the environments that determine the life and character of plants and animals. The second volume is to be devoted to crops, the third to animals, and the fourth to the farm and the community, as expressed in history, biography, bibliography, education, statistics, economic and social questions. Our readers will learn with satisfaction that a good sprinkling of Canadian names appear among those who shared in the preparation of the volume before us, among them being the following: Prof. C. C. James, F. L. Fuller, J. C. Ready, A. G. Dickson, G. A. Gigault, C. A. Zavitz, W. J. Black, Ralph S. Eaton, W. C. Good, C. W. Peterson, J. C. Chapais, J. H. Grisdale, John A. Craig, Prof. M. Cumming, Prof. G. E. Day, Prof. H. H. Dean, Dr. Jas. Fletcher, Geo. Harcourt, Prof. H. L. Hutt, Hugh McKellar, Geo. Rice, Dr. Jas. W. Robertson, R. Robertson, C. E. Saunders, Dr. Wm. Saunders, and Richard Waugh. In the library of the agriculturist these volumes will rank with the Cyclopaedia of American Horticulture, prepared a few years ago under Prof. Bailey's editorial direction, and which as an achievement in technical literature for reference and for practical purposes, deservedly holds high rank. In that particular sphere Prof. Bailey naturally found himself peculiarly at home, and the experience gained has aided him in the editorship of the present more general work, which, in view of the present revival and popularity of agriculture on this continent, appears at an opportune time. It is published in attractive form by the Macmillan Company, of Toronto, Canada; New York, U.S.A., and London, Eng., a fact, coupled with its distinguished editorial direction, that assures the merit of the work.

SUMMER-FOLLOWING FOR QUACK GRASS.

Editor "The Farmer's Advocate":

Being a subscriber to your valuable paper, I scanned every item that the subscribers had to advance concerning quack grass, and how to eradicate it. I tried different methods I saw recommended—plowing light after harvest and deep again just before it froze up, and plowing twice again in the spring, plowing deep trying to smother it, and raking and burning the roots—but it did no good, only tickled the plants and made them grow better. The sod was so matted and thick I could not get a cultivator through to raise the roots out.

I believe the only way to make a thorough job is to summer-fallow. I plowed twice in the fall, the last time just before it froze up. I had four acres in the piece I intended to fallow, but changed my mind and only fallowed one acre and a half—the very worst part of the piece through the center of the field. The balance was in roots and corn. The piece I fallowed was so thick and matted I could hardly plow it; the roots would raise the plow out of the ground. Whenever there was a hot and dry day I would plow, cultivate and harrow to bring the roots to the top, and the sun would soon finish them. I did more cultivating and harrowing than plowing, so as not to bury too many roots. The last plowing in the fall I don't think you could find a dozen green spears. The balance of the piece I put in mangels, potatoes and corn. Mangels and potatoes are better than corn to get rid of the grass, but you have to lose some plants. I used the manure fork to lift the roots out in the thick spots. In corn it is more difficult to see the grass when the corn gets high. Some will be missed close to the stalks. In cutting the corn, I saw a number close to the stalks.

Perth Co., Ont.

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WASTING MONEY ON ROADS.

We have given enough time in investigating the value of the road drag, says Wallace's Farmer, to be absolutely convinced that, after the road is first drained and graded, an expenditure of five dollars a mile in the use of the drag will keep the roads in better condition than any living man has ever expected to see them, or that nine men out of ten believe they can be kept. We simply throw money away in allowing the roads to go un-drained and ungraded and wash out, and then get men and teams together, use an expensive grader, pile up a lot of loose dirt, and, with grass and weeds galore in the middle of the road, rendering it something to be avoided until necessity compels us to use it. This is simply folly unspeakable, and a waste of good money.

It is equally folly for us to put in wooden culverts. The time has gone by when any culverts should be made of wood. It is equal folly to undertake to build stone abutments for bridges, even though the stone were quarried and lying on the ground. These stone foundations for bridges will just as surely crumble as the years come. Twenty years ago road supervisors ceased to build stone bridges, but, instead, put in piling in iron tubes. These will stand for two or three generations. It has been perfectly clearly demonstrated that cement is cheaper than the stone quarried and lying ready to put in. Therefore, if we are to save our money, we must discard these bridges with stone foundation, put in cement; discard all the wooden culverts, using cement instead, and then, when the road is once drained by tiling or otherwise, and graded, use simply the road drag.

There is not much to the road question where the rainfall is less than twenty inches; but where the rainfall is from thirty to forty inches, we must have mud and misery three or four months of the year, unless we learn how to use our money, collected in the shape of taxes, intelligently. The great trouble is to get road supervisors to quit patching up roads or bridges or culverts and put in permanent culverts and bridges, using cement, costly as it may seem at first, but with the confidence that it will stand until their grandchildren are ready to vote. Having done this, quit patching up the roads. Drain the roads if they need draining, and grade them if they need grading, and then make it to the interest of the farmers to get out after every rain and drag the roads, using the cheapest and lightest drag that they can possibly make.

FREE ADVICE ON LAYING OUT DRAINAGE SYSTEM.

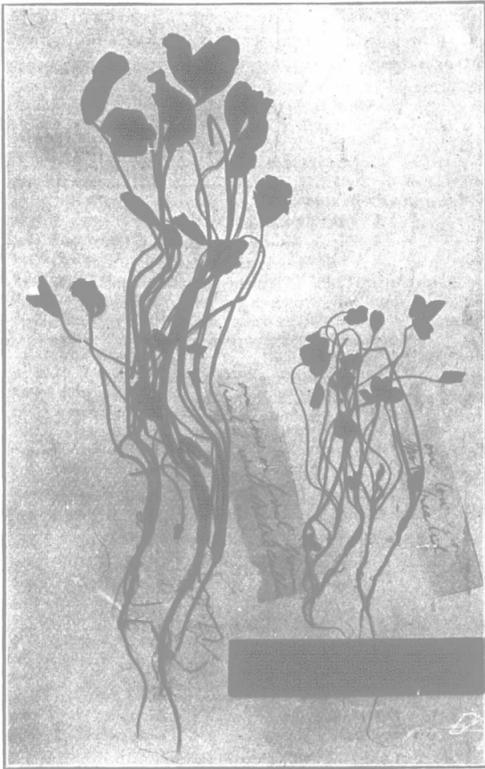
For the past two years the Department of Physics of the Ontario Agricultural College, Guelph, has been authorized by the Provincial Minister of Agriculture to go out among farmers who requested its services and take the levels of their land for drainage purposes, locate the drains for them, and give information generally on the subject of farm drainage. The only expense entailed on the applicant for aid is the travelling expenses from Guelph to the place of operation. Several in one vicinity may make arrangements to have their work done at the same time, and by each man paying only his proportionate share, the expense to each is very small. We are requested to announce that Mr. W. H. Day, B. A., the Lecturer in Physics, will be again available this summer for the purpose of laying out drainage systems, and one fact that should still further increase the demand for his services is that President Creelman has made arrangements by which members of the College staff travel at a rate of one cent per mile each way. A person living, say, 50 miles from Guelph would have an outlay of only \$1.00 for railway fare, and 25 or 50 cents for cartage of instruments, and the services of the expert will be at his disposal long enough to survey his land, advise him as to the best course of his drains, and provide him with a map showing the same. Our readers will remember the recent series of most acceptable articles by Mr. Day on the subject of "Practical Farm Drainage," and we trust that this summer, as last, a large number of our subscribers may avail themselves of this extraordinary opportunity. Apply to W. H. Day, Lecturer in Physics, O. A. C., Guelph, Ont.

NEW VARIETY OF CLOVER.

Bulletin 45, Bureau of Plant Industry, Department of Agriculture, Washington, U. S. A., describes one or two types of red clover brought from the black soil of Russia. The variety considered most promising is called Orel, and one advantage claimed for it is that it is hairless, like alsike clover, hence is expected to make less dusty hay than common red or Mammoth clover. It is said to yield well and produce much leafage, but is two weeks later than common red, coming in about the same time as Mammoth. It is not recommended as a substitute for either of these, but as a supplement to one or the other.

AN EXAMPLE OF INOCULATION.

Following the ample information published by "The Farmer's Advocate" of late on the subject of artificial inoculation of legumes, the accompanying engraving will be of especial interest. The cut shows two plants of red clover grown in the Province of Saskatchewan, one from seed that had been treated with nitro-culture, the other from untreated seed. We are not very fully in-



The Results of Inoculation in Saskatchewan.

formed about the conditions under which these clover plants were grown, except that the soil was rather low. It is, however, a safe guess that it was on a farm where clover had not been grown heretofore. Had this crop been grown on adjacent fields that were pastured by stock kept on the farm, the soil of this field would probably have been more or less supplied with the nitrogen-gathering bacteria, hence nitro-culture would not have given such marked results as it did.

One other fact that may be safely deduced from the illustration: The soil, even though low, could not have been very sour or very poor in the mineral elements, else no amount of inoculation would insure a vigorous growth. To grow clover or alfalfa successfully, all the conditions must be right, and the presence of the nitrogen-

gathering bacteria is only one of these conditions.

The practical point impressed by the picture is this: If sowing clover on a farm where clover has not been grown recently, or if sowing alfalfa on a farm where neither alfalfa nor sweet clover has ever grown before, it will, in all probability, pay to scatter over the field one load per acre of surface loam from an old-established clover or alfalfa field. If this is not practicable, send to the Ontario Agricultural College, Guelph, for a bottle of nitro-culture for the particular clover or other legume you wish to grow, and treat the seed with this. If, besides, you will make sure the soil is sweet, by applying 30 to 50 bushels of lime per acre, you have done a very great deal to insure a successful catch and a profitable crop.

THE DAIRY.

A SYSTEMATIC RECORD.

Editor "The Farmer's Advocate":

Below find record of 14 cows for 1906. Milk weighed and recorded twice daily; scales, sheets and pencil in stables. Time required for weighing and recording, about 15 minutes for 14 cows. This is our first year weighing. Milk recorded under any circumstance is to a decided advantage. Every cow every day tells her tale. It is for him who feeds and milks to take heed.

Our cows are mostly Shorthorn grades, of milking strain. Milk tested twice during season, average 3.84 butter-fat. Milk recorded as follows: Fourteen cows, 69,272 pounds; average, 4,948 pounds per cow; average test, 190 pounds butter-fat, equals 226 pounds butter each.

Cash returns as follows: Returns from factory for cream, \$626.44; for veal calves, \$25.50; kept nine calves, estimated to average ten days' each whole milk, \$25.00; 80 per cent. of whole milk (making 55,417 pounds skim milk, at 15c.), \$82; two families, using four quarts daily, for 10c. per family, for 365 days, \$36.50; gross amount, \$795.44. An average of \$56.78 per cow.

Westmoreland, N. B. ALEX. L. WRIGHT.

NOT "WORKING IN THE DARK" HERE.

Editor "The Farmer's Advocate":

Starting from January 1st, 1907, our books will show a record of each individual cow, from the date of freshening throughout the year. At the present moment we have only seven record cows, but this number will shortly be greatly augmented, until we reach fifty—our limit for the next twelve months. We shall keep a strict record of our cows, because we wish to establish a dairy herd of the greatest possible excellence, capable of giving us the highest returns; and it is impossible to know the value of a dairy cow by any other means.

The extra time required is not more than three minutes for each cow. The cows are numbered. A lad receives the milk from the milker in a pail kept for the purpose, which has been weighed. He carries it to the scales and weighs it, enters the weight on the record sheet corresponding with the number of the cow, and with a tiny dipper takes a sample of milk from the pail for the test bottle,



The Results of Inoculation.

Showing two plots of alfalfa seedling on the Agricultural College Farm, Truro, N. S. The plot on the left was grown from untreated seed; that on the right from seed that had been treated with nitro-culture. Mark on stake, 10 inches from ground, shows height of alfalfa plants in inoculated plot; same stake is to be seen in uninoculated plot.

which also bears the number of the cow. At the end of eight days the milk is tested.

Every dairyman knows that cows require individual treatment. By watching your test, you will gain a better knowledge of the treatment required, and you will know for a certainty if your food machine, "the cow," is paying for her expense, and giving you a good dividend.

To your last question, "Are milk records a benefit to a man who is already taking as good care of his herd as he knows how?" I can only say that, without records, a dairyman is, to a great extent, working in the dark, and at hazard. He may be putting the same care and expense on an animal which is a dead loss, and which should be weeded out, as on the cow which perhaps brings him in a clear profit of anything from \$50 to \$100 per annum.

C. D'ETCHEGOYEN,
Agricultural Manager for C. P. R.
Prescott Co., Ont.

PAYS TO TEST.

Tests of my cows by the Pure Milk Supply Co., at the Soo, have satisfied me that it is very important to know your cows. I found the following advantages:

1. That it is an easy matter to be deceived in a cow.

2. That actual testing is the only way of proving and improving your herd.

I tested my cows because I heard and read so much on the subject, and I wanted to know by personal proof—actual testing—that I could not be misled. I tried it one whole season, and am satisfied that it pays any man to know his cows, and that he can only do so by actual testing. Of course, to breed, feed and weed is the only way to have good cows or a good herd. You must keep or use a good sire. I believe testing by keeping a record is good for any person, as it leads on to those things.

I would not be without "The Farmer's Advocate," if I took no other paper for my family, to say nothing of myself. WM. H. EVOY.
Algoma, Ont.

TIME WELL SPENT.

I have kept individual milk records four years now, and I would not think of getting along without them. As for the time it takes, I think about four minutes per day would cover all the time for ten cows when a person gets used to it. I think at one minute per cow it would be time well spent. And, as for the good they have done me, if I have a milk cow to sell, I can turn up her record for four years, and any month in the year. My cows averaged 5,000 pounds for seven months last year, but I hope to do a lot better yet. They are nearly all Holstein grades. When I am sure a cow is paying me well for her keep, I take more interest in her than I would with one I was guessing about. I think if a man keeps milk records, and reads "The Farmer's Advocate," and puts what he learns from it into practice, he will always have enough ahead for a cold day like this. D. A. KENNEDY.
Russell Co., Ont.

ESSENTIAL TO INTELLIGENT FEEDING.

Editor "The Farmer's Advocate":

I believe individual milk records are not only beneficial, but that they are essential to intelligent feeding. I have only been keeping these records for the past season, but am satisfied that I have been amply repaid for all the time taken up by such work. I have not timed myself at this work, but I believe that, by taking two pails to the farthest cows from the scales, and milking two cows, and carrying same to be weighed and recorded, that probably about 15 seconds per cow would be the average time required. Now, as to why I commenced this, I had purchased a purebred cow, and was anxious to know what she was going to do for me for the season. I have learned which cows are paying for their extra feed and which ones are not—that is, in feeding for milk at this season of the year.

Oxford Co., Ont. T. G. PATERSON.

HALF A MINUTE PER COW.

I have been keeping daily records for the last four years. It takes about half a minute per cow to weigh the milk. Why I started the records, was to find out how many cows I had that were not giving their 5,000 pounds of milk per year. I have learned that about one-third of our herd were not doing so, and I am steadily getting rid of the non-paying cows. I think milk records are a benefit to any dairyman, and unless a man keeps a daily record of each individual cow, he does not know for certain at the end of the year what his cows have done for him. VAUDREUIL, Que. A. BARTHELEMY.

O. A. C. DAIRY SCHOOL EXAMINATIONS.

The Dairy School term at the O. A. C., which closed March 22nd, was one of the most successful in the history of the Dairy School. There was a larger proportion of those registering who took the final examinations than has been the case in any one year heretofore. The results in proficiency list only are given for the factory, specialists in buttermaking and farm-dairy classes. Students are ranked according to general standing in both practical and written examinations. Those students having a star will be required to pass a supplemental examination in the subject or subjects indicated before they may receive their certificates.

FACTORY CLASS.

Rank.	Name.	P. O. Address.
1.	F. A. Armstrong	Sardis, B.C.
2.	Wm. Rejd	Listowel, Ont.
3.	J. P. Baxter	St. Paul's, Ont.
4.	W. A. Freeman	Condersport, Pa., U.S.A.
5.	M. Noad	Crampton, Ont.
6.	W. N. Morley	Chesley, Ont.
7.	F. Baumgartner	Zurich, Switzerland.
8.	Wm. Weir	Kirkcudbright, Scotland.
9.	W. A. Boutwell	Barre, Vt., U.S.A.
10.	H. B. Lowe	Toronto, Ont.
11.	(S. Reynolds	Harriston, Ont.
12.	M. Jack	Lewiston, N. Y., U.S.A.
13.	A. J. Muxworthy	Motherwell, Ont.
14.	*W. Rice	Villa Nova, Ont.
15.	**T. V. McEwan	Sebringville, Ont.
16.	Y. Yoneyama	Schizuoka, Japan.
17.	*(1) J. F. B. Weir	Ingersoll, Ont.

*Bacteriology. **Bacteriology and Chemistry.

*(1) Chemistry.

SPECIALISTS IN BUTTERMAKING.

1.	E. B. Parsons	Barnston, Que.
2.	J. A. Logie	Nassagaweya, Ont.
3.	F. E. Reesor	Locust Hill, Ont.
4.	E. T. Smith	Markham, Ont.
5.	S. A. Hunter	Nelson, Ont.
6.	R. Barron	Elsinore, Ont.
7.	H. F. Henderson	Cherrywood, Ont.
8.	A. H. Hurlburt	Constable, N.Y., U.S.A.
9.	*M. B. Latam	Red Deer, Alta.
10.	**E. W. Raby	Gooderham, Ont.

*Bacteriology. **Bacteriology and Chemistry.

FARM-DAIRY CLASS.

1.	W. G. Johnston	Toronto, Ont.
2.	P. W. Burton	Newtonbrook, Ont.
3.	C. Calverley	Roseville, Ont.
4.	*E. Erwin	Tyrrell, Ont.
5.	**R. F. Whaley	Java, N.Y., U.S.A.
6.	M. Alvarado	Saint Juan, Argentina.
7.	**S. J. George	Java, N.Y., U.S.A.

*Bacteriology. **Bacteriology and Chemistry.

THE OIL TEST OUT OF DATE.

We notice, among the creamery reports from New England, particularly those from the northern States, and also from some sections of Pennsylvania, that there is still an occasional creamery adhering to the oil test in determining the fat content of the cream received. While this method is approximately accurate, and was a material improvement over the old method of payment by the creamery-inch system, the introduction of the Babcock test has now almost completely replaced it, owing to its greater accuracy and convenience. In making determinations by the oil-test churn, the amount of churnable fat is taken as a basis for payment, and this is directly dependent on so many outside influences, such as temperature of cream, acidity, size of sample churned, etc., that material inaccuracies are bound to creep in where the method is practiced. We would strongly advise those still holding to this method to abandon it and take up the Babcock test. The oil test is a back number.—[New York Produce Review.

THE WRONG KIND OF STABLES.

One of the things that holds many farmers back from putting in the King system of ventilation is that they do not exactly see how it is to be done with their stone-foundation stables. It was a bad mistake, in the first place, to make the stable walls of stone. They can be made cheaper and better of wood and paper. But the King system can be put in a stable of stone walls by cutting holes in the walls at frequent intervals and fitting these holes on the inside to foot-square board tubes, made double with building paper between the boards. These tubes or fresh-air ducts are long enough to discharge the air at the top of the room. There should be one of these to every four or five cows. It is a simple matter, then, to build the large, outgoing air-shaft—[Board's Dairyman.

MILK FROM COW TO CONSUMER.

From a paper by Gilbert M. Gowell, Professor of Animal Industry at the University of Maine.

Of the elements which enter into the composition of milk—water, fat, casein, albumen, sugar and ash—casein is the most troublesome to preserve. It is easily affected by acids or by rennet, a little of the latter added causing it to coagulate. Albumen changes in taste if the milk is heated to 155 degrees, hence pasteurizing gives a flavor to which people object. The tendency of sugar is to change to lactic acid by the action of bacteria, causing the milk to sour, a condition that is healthy, and vastly different from putrefaction.

The sources of flavor in milk are from the food eaten, water drunk, air breathed, change of food, indigestion, time of lactation and individualism. While there is an individualism in the work of the cow, which stamps her product as peculiarly her own, and she will overcome objectionable conditions as regards food, water and air, which for a time change the flavor of the milk, she is doing more profitable work when these conditions are normal.

If the food of a cow is suddenly changed, even if it be from poor to good food, it will interfere with the quality of the milk. There is no food product which gives such a delicate flavor as corn meal, yet, if the cow is unaccustomed to it, if not in sympathy with the food, it will cause a disturbance. So, when the cow is turned on the aftermath, the liberal quantity of clover gives an objectionable taste to the milk at first, which disappears as the cow becomes accustomed to the diet. Hence, whatever change is made in the food, should be made gradually. At the College they are able to feed three pecks of turnips at once without detriment to the milk, but they began with a quart and worked up. The bowels of the cow should be kept just right, that there may be no tendency to indigestion.

Some cows have the peculiarity of making good milk all the time of lactation; others, in six or eight months, will give that which is unfit for use. Cases have been known where the milk became unfit for use when the cow was making a pound of butter a day. In the wild cow the milk after a time becomes bitter, and the calf weans itself. By domestication the milking period has been prolonged and this period of change has been delayed. Stop milking ten or twelve weeks before calving time and the cow will store up surplus flesh and energy, which she will give down in great quantities of milk after her next calving. Stripper milk is unfit for use; it is lacking in delicacy of flavor, and, mixed with milk from the herd, depresses the quality of the whole. The cow, then, must have the purest of air and water, and the cleanest of food.

The flavor is affected, also, by odors absorbed, by dust in the air, dust from the cow's udder, dirty milkers and milking utensils. Not only is the milk contaminated by odors in the air, but it may be affected before being drawn by strong, rank odors in the stable. Dirt, from whatever source, once dissolved in the milk, cannot be gotten out. It is noticed in the butter, and even in cheese. The udder should be washed before milking, and it is a good plan to keep the under side of the cow clipped. The idea of the dirty milker touches a delicate point, but so much milk is taken uncooked that too much cannot be said upon this subject. The utmost care is exercised in the preparation of bread, which is cooked before being eaten; at the same time, the milk served with it, in a raw state, has been most carelessly handled.

Everyone ought to know how to wash utensils for handling milk. First use tepid water, then wash thoroughly in water with a little sal soda dissolved in it, and finish by thoroughly scalding with boiling water. At the College the utensils are steamed for fifteen minutes in a galvanized tank. Nothing will take the place of thorough washing; this must come first always. Straining is essential under existing conditions, but Prof. Gowell is hoping that the time will come when it will not be. The value of aerating is not fully understood. The volatile oils of the food give flavor to the milk. When it is aerated part of this flavor is lost, but enough is gained to make up for it, since air pumped in drives out obnoxious gases. As a test, a pail of milk was suspended over a pile of horse dressing for 24 hours, covered only by a cheese-cloth, and it was thoroughly permeated with the odor; after aerating eight minutes, no smell could be detected. Milk should be passed over the cooler to get rid more quickly of the animal heat that causes acidity. Milk can be dropped at once to 46 degrees. The value of aerating and cooling cannot be overestimated.

In making butter, pasteurizing the cream gives a product with no flavor, and this is especially desirable where cream is received from different sources. By planting in this neutral cream a flavor made from lactic acid, prepared by holding sweet milk, either whole or skimmed, at a temperature of 70 or 80 degrees for 24 hours, a butter of superior merit is made.

APPARATUS FOR DETERMINING THE MOISTURE IN DAIRY PRODUCTS.

Whenever a strong demand is made for any manufactured article, that demand is bound to be met sooner or later. At the time the Babcock test came out there was a very strong demand for a cheap, rapid and accurate method of determining the fat content in milk and cream.

During the past two or three years there has been a strong demand for a short and approximately accurate method of ascertaining the amount of moisture in the products of creameries and cheeseries. In Canada this has been more marked since the passing of the "Butter Act of 1903," in which the legal limit for moisture in butter was placed at sixteen per cent. A number of Canadian buttermakers have been trying to see how near the legal limit they could go. As they had no means of knowing how close they were to the "dead line," some stepped over. We heard recently of a firm who last year purchased butter from a Canadian creamery and exported the same to England. The party who bought the butter in England found it was adulterated with over 20 per cent. moisture. It took a good many shillings and a strong effort on the part of the representatives of the Canadian firm in England to hush the matter up and prevent it getting into the English courts. Had it gone to the courts, it would have been a serious matter for the reputation of Canadian butter, which is none too good now in England.

Circular No. 100, from the Bureau of Animal Industry, Washington, U. S. A., gives a description of "A Rapid Method for the Determination of Water in Butter," by C. E. Gray, Assistant in Dairy Division, Department of Agriculture.

The method is being patented, and may not be used by anyone except officers and employees of the United States. Users in Canada must pay a royalty for the right to use the method.

The apparatus consists of a balance, 5 and 10 grain weights, a 6-c.c. graduate, gas-burner or alcohol lamp, parchment butter paper 5 x 5 inches, special apparatus for collecting the moisture, and an amyl reagent.

To make the test, prepare a sample of butter by melting it in a jar at about 100 degrees F. Weigh ten grams of the butter on a piece of parchment paper, and transfer to the flask. Add 6 c.c. of the amyl reagent to the butter, connect the apparatus, and fill the condensing jacket with cool water. Place the apparatus over a flame, and apply heat to the bottom of the flask for 5 to 8 minutes. When the mixture in the flask becomes a brown color, and all the crackling noises in boiling cease, all the water has been driven from the sample. At this stage disconnect the flask, pour the water from the condensing jacket, invert the graduated part of the tube, with stopper in, and separate the water from the amyl reagent by swinging the tube sharply downwards from a horizontal position. Read the contents as soon as cool, by reading to the lower part of the meniscus. To make a determination, including weighing sample, requires from fifteen to twenty minutes.

One advantage of the Gray method over the Beaker method, as described by Richmond, in which a given weight of butter, say 20 grams, is heated directly over a flame, is that the actual amount of moisture in the sample is collected and may be seen and measured by the operator, whereas in the Beaker method the moisture is determined by difference in weight after heating. The Gray apparatus appears somewhat delicate for average creamerymen to operate. Whether or not either of these methods will meet the demand, remains to be seen after actual trial in a creamery.

H. H. D.

BECAUSE OF PROF. GRIDALE'S IMPORTUNITY.

Editor "The Farmer's Advocate":

I cannot give an experience of value, but might say that I was induced to start weighing by the importunity of Prof. Gridale, who would give no peace until we started weighing. Once started, we would not think of giving it up, as the herd is improving rapidly by the proper culling which the records make possible. For a record of the cows' work, we weigh once a week, which makes the work almost nil, while the results are as accurate as necessary for practical work. When testing cows to find their profitable feed-consuming capacity, we weigh every day, and find the interest in the work lightens the labor. When possible to do so, weighing the milk daily throughout the year is the best course to follow, as it increases interest in the work of the cows and insures better treatment and more profitable returns; but, as a help in culling out the boarders, weekly weighing is satisfactory. Experience has shown me that it is unjust and useless to pass judgment on individual cows without keeping a record.

CHAS. A. MAXWELL.

Pictou, N. S.

HOW TO MAKE DEVONSHIRE CREAM.

A leaflet by the British Board of Agriculture is clipped from the Dairy World, in which the art of making Devonshire cream is set forth, so that every dairy farmer may prepare the delicacy if he will. The writer remarks that Devonshire cream is strongly recommended by the medical profession as an excellent fatty food, and is displacing, to some extent, the use of cod-liver oil amongst invalids. Devonshire cream is very rich, containing from 50 per cent. to over 60 per cent. of fat, and this fat is of a more digestible kind than any other, being present in the cream in a finely emulsified condition. In the preparation of clotted cream, it is desirable to use rich milk, such as is produced from the Channel Island breeds of cattle; but this is not essential, and the evening's milk from Shorthorn cows will produce very good cream indeed. In Devon and Cornwall clotted cream is largely made from the milk of Devon cattle, which are admirably suited for the purpose. Crosses with Channel Island cattle are also commonly employed.

The cream is prepared as follows:

1. Whole milk, warm from the cow, is carefully strained into setting pans. The pans most suitable for the purpose hold about six quarts of milk, measuring 15 inches across the top, 7 inches in depth, and 11 inches across the bottom; they are, in fact, similar to shallow pans, only deeper.

2. The pans of milk are left undisturbed in a cool dairy for the cream to rise. In summer, twelve hours or less is the time allowed, but in winter twenty-four hours is usual.

3. The pans should now be carefully removed and scalded, great care being taken not to disturb the cream on the top of the milk. Scalding is carried out by placing the pans on a hot-



Comely Lass.

A typical English pedigreed dairy Shorthorn, and a well-known winner.

water stove, and allowing steam to play upon them until, in not less than half an hour's time, they have attained a temperature of 175 to 180 degrees F., when they are removed, and either allowed to cool naturally, or are cooled by placing them in a stream of cold running water. The scalding should not be done too quickly, otherwise the characteristic scald flavor is not produced. The heating may be carried out by placing the pans on a kitchen range or hob, but the hot-water method is preferable.

4. When cold, the cream may be taken off in a thick, clotted condition, and is ready for sale. In summer it is especially advisable to cool the pans as quickly as possible after scalding, as this insures extra keeping properties.

The cream is generally sold by the pound. One pound of cream may be obtained from 1½ gallons of Jersey milk, or less, whereas nearly two gallons of Shorthorn milk may be required to produce the same quantity of cream.

KEEPING INDIVIDUAL MILK RECORDS.

Editor "The Farmer's Advocate":

I kept individual records of the milk of each cow we were milking during the years 1901, 1902 and 1903. I commenced keeping them at the request of Mr. Gridale, of the Experimental Farm at Ottawa, and reported monthly to him for the first year the quantity of milk from each cow per month, also the kinds of grain we were using; and, as long as the conditions were favorable, kept up the taking of individual records. It was interesting, and at the same time it was a profitable way of knowing exactly what each cow was doing, and the only reliable way of building up a dairy herd. The last year we kept the records, 1903, we milked twenty cows, and received \$930 for the milk for eight months; and the first year,

1901, milked the same number of cows, and received \$452.37. Of course, milk was worth more, but not enough to account for that difference. Prince Edward Co., Ont. LEWIS P. HUBBS.

POULTRY.

THE POULTRY SESSION AT OTTAWA.

Mr. A. G. Gilbert opened the poultry session at the Eastern Live-stock and Poultry Show with an address of an hour's duration, devoted largely to reminiscences and experiences of his twenty odd years' supervision of the Poultry Branch of the Central Experimental Farm. He recalled the commencement of winter-egg production at the Station, and the difficulties which had to be overcome in building up winter-laying strains, which he claimed were necessary in addition to intelligent housing and feeding. In order to get winter eggs, highly artificial conditions were resorted to, the effect of which was found to be the weakening of the vitality of the stock to such an extent that good hatches in early spring were found impossible. The lessons were quickly learned, and the scratching-shed, with abundance of fresh air in the houses, were brought into requisition. These, with flocks of habitual winter layers, retained the vigor of the birds, with the result of strong germs in the eggs and good hatches in March. For ventilation, Mr. Gilbert recommended cotton-covered forms above and below the glass sashes. This admitted a constant diffusion of fresh air without draft, while the glass admitted the sun's rays, which were very necessary in a cold climate. The scratching-shed, Mr. Gilbert affirmed, is going out, its place being effectively taken by the screen-ventilated houses having their floors littered with straw during the winter season.

The feature of the poultry session was an address by Mr. F. O. Elford, former Chief of the Dominion Poultry Division, and now manager of the Poultry Branch of the Macdonald Agricultural College at Ste. Anne de Bellevue, Que. His subject was "How many hens may be profitably kept on the average hundred-acre farm?" Mr. Elford placed the number at one hundred, which, if profitably selected and cared for as they should be, would bring to the farmers of Canada twice as much revenue as the entire wheat crop of 1905, if sold at one dollar per bushel.

The flock, the speaker contended, should consist of 75 pullets and 25 hens of the previous year's hatching. It was claimed that for egg production, ten pullets were about equal to seventeen two-year-old or twenty-five three-year-old hens. Mr. Elford recommended breeding from yearling hens that as pullets had proved themselves satisfactory winter layers. To find out the good layers he used a trap nest and leg bands. As he liberates each hen from her trap nest he marks her leg-band number on the egg with a lead pencil. Twenty-five of the best-shaped hens that were good winter layers as pullets are selected by Mr. Elford as the breeding flock.

Discussing the question of feeding, Mr. Elford stated that the use of common sense was of greater importance than the balanced ration. A winter layer invariably possesses a good constitution, and can make good use of food if not balanced in accordance with the laws of science. Hopper feeding, the speaker stated, must be introduced gradually and with judgment. He is using it to some extent this winter, but bran is the chief feed fed from the hoppers.

Mr. Elford has under his charge 250 hens in colony houses, 14x20x6½ ft. high. The walls are of single boards, lined with building paper. It has a double roof, the space between being packed with straw. Many of the hens laid since the middle of November from 40 to 60 eggs each, even though the temperature went as low as 18 degrees below zero. About a score of the flock had not commenced to lay by March 1st, and these will lose their heads as a penalty. On cold nights a curtain is let down in front of the roosts. He has had no sickness in the flock during the entire winter. In reply to a question by Mr. Wm. McNeil, of London, Mr. Elford attributed the good health of the birds to the vigorous condition of the stock when selected in the fall, to wholesome food, and to abundance of fresh air.

Mr. W. R. Graham, of the Ontario College, referred to a few investigations at the College in 1906. He tried rearing late-hatched chickens on dry feed without water to drink, and found great success with the system. The chickens hatched in July were enclosed in wire runs in a field of growing corn, and fed by the hopper system on dry wheat. All the moisture they received was from the vegetable matter growing up among the corn. The chicks at eight weeks old weighed 2 lbs. each, and cost less than four cents per pound of

gain. He does not agree with the idea that pullets are always the best layers. One three-year-old hen at the College laid 56 eggs during January and February. A hen five years old laid remarkably well during these months. He recommended retaining the known good layers even until four or five years old.

GOOD TO THE LAZY HENS.

Editor "The Farmer's Advocate":
I saw in "The Farmer's Advocate" of March 14th an article on a young woman's method of feeding for winter eggs. My hens, like hers, have done so well through the winter, I thought I would give you an old woman's method of feeding for eggs. I have 29 Barred Rock hens. Half of them are two years old, and the others are pullets. I feed in the morning, between nine and ten o'clock, 2½ quarts of wheat, oats and barley mixed. In an hour I give a pot of warm skim milk, and often buttermilk. I let them out every day till four o'clock, and then I fed corn on the cob—just what they would clean up nicely. Very often I changed to corn in the morning and mixed grain at night. They had no meat or greens, except, when not too cold, a few apples. I did not throw the grain around in litter, but put it in little heaps, so as to give the lazy hen an equal chance with the rest. The only grit they had was the ashes sifted out of the coal; they are very fond of that. I fed a few warm mashies about the last of March. As they were eating their eggs, I took some barley chop and scalded it with strong vinegar. Two or three times is sufficient to stop them; I have tried it, and it never failed yet. My hens commenced to lay about the first of January; they all got down to business about the same time. I have sold, up till the last day of March, 63 dozens of eggs. I kept account only of those I sold, as I did not think of writing it up, or would have kept account of those I used. I am getting now from 16 to 18 eggs a day, and the hens are as chirp as if they had not worked hard all winter. Like Single Stick, I think cleanliness and regularity in feeding very important to obtain good results.
Norfolk Co., Ont. MRS. CHAS. WARD.

SOLD NEARLY A DOLLAR'S WORTH OF EGGS PER HEN IN FOUR MONTHS.

Editor "The Farmer's Advocate":
I see in your valuable paper from time to time the record of hens laying in the winter. I have 45 pure-bred Barred Rock hens and pullets. They started laying in December, when we sold 174 eggs for \$4.77; January, 474 eggs for \$11.72; February, 504 eggs for \$11.92; March, 708 eggs for \$15.55, making a total of 1,860 eggs sold for \$43.96. This does not include what eggs we used in a family of six. I did not take any extra care of my hens; I only fed hard grain, wheat, corn and oats, and gave them all the coal ashes from the house.
Hastings Co., Ont. G. M. CAMPBELL.

GARDEN & ORCHARD.

HORTICULTURAL PROGRESS.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

THE CABBAGE MAGGOT AND OTHER INSECTS.

The Cabbage Maggot and Other Injurious Insects of 1906, by F. L. Washburn, State Entomologist, Agricultural Experiment Station, St. Anthony Park, Minn.; Bulletin No. 100.

The cabbage maggot is one of the most troublesome insects which the horticulturist has to combat, and the results of any experiments to determine the most practical way of controlling it are eagerly sought for by vegetable-growers where this insect is found. In 1906 over twenty different experiments were conducted by the Entomological Division of the Minnesota Agricultural Experiment Station, the experimenters evidently trying everything that had been recommended by others, and some devices of their own as well.

The most practical and satisfactory remedy appears to have been white hellebore and water. "The roots of 44 cabbage plants were dipped June 23rd in a mixture of hellebore 1 part, and hot water 2 parts. This was allowed to cool before plants were treated, and they were immersed deep enough to also coat the lower part of the stems. They were immediately planted, and made an excellent showing. On October 1st every plant was standing." This does not seem a very practical method, as plants have usually a bulb of earth about the roots when being planted. In the Interim Report of the Department of Experimental Farms, published in 1906, by W. T. Macoun, Fletcher, Entomologist and Botanist, is given the use of hellebore as follows: "Dip the roots in a watering around the roots after uncovering them with an infusion of pyrethrum or white hellebore, 1 ounce in a gallon of water, at the time of transplanting, and again a week later."

Sawdust and glue also gave good results.

Minnesota. The experimenters believe this is the first time that this has been tried. "Sawdust was mixed with glue in the proportion of one-half pound of the former to 1 quart of the latter. The glue was not at all thick, but must represent at least 2 pounds of hard glue in 1 gallon of water, and the mixture had about the consistency of chicken feed, though rather more sloppy. It was applied warm with the hands above the base of the plant, but well up on the stem, the diameter of the mass where it came in contact with the ground being about four inches. One quart was sufficient for fifteen plants. The stuff quickly hardened, and though it softened somewhat during the summer rains, it did not disintegrate after the rain. It was applied to twelve plants on June 5th, and was still in good condition on June 22nd. The plants so treated made an excellent showing. A man can treat six to eight plants per minute. This treatment would be hardly practicable on a large acreage."

Carbolic emulsion, which has been recommended for the cabbage maggot, was not found very satisfactory. If the emulsion is in contact with the maggots long enough it will kill them, but when once the maggots are in the stalks it is difficult to reach them. "Young maggots lived in the laboratory for two hours and twenty minutes immersed in carbolic emulsion (1 part to 30 of water), and adult maggots required three hours and forty minutes." The carbolic emulsion also injures very young plants.

Some of the other remedies tried were, milk of lime, disturbing the eggs by stirring, scraping eggs away from plant, sand and kerosene, acetate of lead, moth balls, trap crops, tar-paper disks. None of these were found as satisfactory as hellebore and water.

An interesting and useful observation was that the maggots were much less troublesome in open or rising ground than where the wind was checked by woods. "The number of maggots increased in direct proportion as the protecting woods were approached. The noticeable fact about the positions of the patches is that the flies took the cabbages (they much prefer cauliflowers) which were more sheltered, in preference to going farther into the wind and getting the cauliflowers."

The planting of radishes and turnips amongst cabbage plants lessened the attack on the latter, as the insects destroyed the radishes and turnips first.

An interesting account is given of the life-history of the cabbage maggot, of which the following notes are worth remembering: "The eggs are laid by a small fly, which deposits them in a crevice between the soil and the plant near the ground during the month of May, and, if flying, may lay them as soon as the plants are set. The eggs are deposited in such a way that they are not visible when laid. The largest number of eggs found about one cabbage plant was ten, and about a cauliflower plant twenty-two. The maggots hatch from three to five days after the eggs are laid, and live for about three weeks, after which they pupate, and the second brood of flies emerge in from thirteen to fifteen days."

Some experiments in the use of hydrocyanic acid gas are recorded. It was found that from 29 seconds to 4 minutes elapse between the dropping of the charge and the first giving off of the gas, the time depending on the heat of the liquid and the thickness of the paper bags with the charge. "One can depend upon at least 20 seconds when double sacks are used."

It was proved that no fumes which are fatal rise from the jar before they are visible.

Another bulletin which appeared about the same time, bears the title, "The Cabbage and Onion Maggot"—Bulletin 200, New Jersey Agricultural Experiment Station, by John B. Smith and Edgar L. Dickerson. The life-history of the cabbage and onion maggots are described, and experiments enumerated for their control. The experiments were with tarred paper cards, carbolic acid and lime, kerosene and sand, powdered tobacco, powdered white hellebore, dry lime, bran and glue, carbon bisulphide, carbolic-acid emulsion, hellebore decoction, hand method, oil mixtures. From the results of the experiments tried, it is recommended to use ground for onions where there have been no maggots the previous year, or land that is clean or has had nothing left on it to enable the insects to be carried over the winter. Plant as late as possible to avoid the insects, which come out early, and must lay their eggs almost at once. Fertilize the plants with a quick-acting fertilizer, to give the plants a good start. One that is recommended is made in the proportion of nitrate of soda 700 pounds, acid phosphate 1,000 pounds, muriate of potash 300 pounds. When feasible, plant a trap crop earlier than the main crop for the insects to lay their eggs upon, and when these become infested, remove and destroy the plants. Protect the cabbage and cauliflower plants with the tarred paper disks or bran and glue. The most successful of the materials used in the experiments in combating the onion maggot was carbolic acid and lime. A mixture of crude carbolic acid and lime was used once a week. The application, made with

a sprinkling can or spray nozzle, was very thorough, so that the material formed a crust on the ground around the plants, and the odor of the acid was perceptible for several days after. Slake the lime to a thin cream, use three pints to a gallon of water, and to this add one table spoonful of crude carbolic acid. Apply along the rows as already mentioned, getting it well around the plants, so that the surface will be coated to the plants. It forms a covering through which the young maggots are not able to penetrate to reach their food. The young plants seem to find no difficulty in growing through the lime coating." Apply immediately after the plants are set and appear above ground, and make the first two applications five days apart, the later ones not more than a week, and continue for a month, at least. Dipping plants in dry or wet hellebore is recommended, also.

GRANTS TO ENCOURAGE CO-OPERATIVE POWER SPRAYING.

The Minister of Agriculture for Ontario has, for the past two years, had under consideration plans for further assisting the fruit-growers of the Province. Spraying has now become, in producing a superior grade of fruit, the most important operation of the year, and, while widely practiced in certain sections, has not yet been given the attention that it requires in the apple sections. The advent of the power sprayer is of such recent date that the advantages it gives, especially in the spraying of apple orchards, is not yet appreciated.

For many years the Department of Agriculture has been advocating more and better spraying. Demonstrations in the use of hand and power outfits, and the preparation and application of the most effective mixtures, have been given throughout the Province, with satisfactory results. It is now felt that such information has been sufficiently diffused, and another step forward is proposed.

The Provincial Fruit-growers' Association has, within the past three years, assisted in organizing a large number of fruit-growing associations. One of the aims of these associations has been the co-operative spraying of orchards of their members, and it is now proposed to assist these and kindred organizations in such spraying work. With this aim in view, the Minister of Agriculture has asked the Legislature for a grant of \$6,000, to be devoted to the assistance of fruit-growers in the purchase and operation of power spraying outfits. Many associations already own and are operating such machines, and these will receive the same aid as those organizing during 1907. The conditions under which the grants are available have been made as simple as possible, with the hope that a decided stimulus will be given to the proper spraying of orchards during this and coming seasons. Following are the regulations covering the payment of the grants:

A grant of \$50 will be made to any five or more farmers who unite to form a fruit-growers' association, for the purchase and operation of a power spraying outfit during the season of 1907. These associations need not be incorporated to qualify for this grant, though incorporation of co-operative associations is advisable.

Co-operative fruit-growing associations owning and operating two or more power sprayers will be eligible to draw a grant for each machine operated.

The number of such associations receiving assistance during the present year shall not exceed one hundred.

At least 25 acres of fruit trees must be thoroughly sprayed during the proper season with each outfit.

A reasonable proportion of such spraying must be done on the farms or orchards of each of the parties forming the association.

Such associations, before receiving any portion of the grant, shall satisfy an inspector of the Department of Agriculture that the above conditions have been complied with, and shall make such reports as shall satisfy the Minister of Agriculture.

Associations desirous of participating in this grant must apply to the Department not later than the first day of May.

ETHER AS A PLANT STIMULANT.

In reply to a letter of inquiry from "The Farmer's Advocate," sent a newspaper clipping, in which Prof. John Craig, of Cornell University, Ithaca, N. Y., was said to have obtained remarkable results in forcing plant growth by the use of ether, Prof. Craig says: "It is true that we have been experimenting with ether as a stimulant to plant growth for the past two years, and it is also true that we have secured some interesting results. It is not true that we have made any claims for this as an original idea, because the method has been employed in Europe in the forcing of lilacs for some time, but we have no records of its being used for the forcing of a great many other plants which we have experimented with."

THE ADORNMENT OF RURAL HOMES.

By Prof. H. L. Hutt, O. A. C., Guelph.

"One feature of farm life that is still shamefully neglected in many cases is the condition of home surroundings. Partly is this due to the lack of information, partly to uncultivated taste, and partly to inertia. We desire to furnish the information, cultivate the taste, and stimulate the efforts of our readers by publishing a few terse, practical articles on the adornment of rural homes."

With the foregoing remarks, the editor prefaces his request for a series of short articles on the above subject. In responding to the request, we fully appreciate the need for more attention to this matter, knowing the great difference it would make in the joy and comfort of country life if more thought and care were given to it.

It was quite natural that in a new country, such as even the oldest part of ours was not long ago, the settler's first efforts should be to put up buildings, clearing his fields, and subduing the surrounding forest. These humble dwellings, as they stood out in the clearing, sheltered and protected by the natural forest, were indeed homes to be proud of. They spoke volumes for the industry and thrift of the sturdy pioneers, but as time has gone on the trees have disappeared, and the country has become nearly all clearing. In most cases the pioneer buildings have been succeeded by more pretentious ones, but little or nothing has been done in the way of replacing the trees and shrubs removed. As a consequence, many of these places are now bleak, treeless, cheerless abodes, hardly worthy of the name of home. Is it to be wondered at that the boys find no inducement to remain on such farms? I verily believe that one very important factor in making farm life attractive, both for young and old, is the improvement of home surroundings. We do not need to inquire about the intelligence and thrift of the occupants of these neglected places, for the appearance and surroundings of a home are usually a fairly good index to the intelligence and progressiveness of those who live in it. It is pleasing to note that among progressive Canadians, both in the country and town, there has been a manifest desire of late years to give more attention to home improvement.

When property owners appreciate the fact that the small outlay for trees, shrubs and vines, and the comparatively little labor required to put and keep a place in an attractive condition, adds from fifty to one hundred per cent. to the value of the property, then they begin to realize that improvement of this kind pays, even from a dollar-and-cents standpoint. For the sake of the family, for the sake of comfort and convenience, as well as from a financial standpoint, home improvement is a paying investment.

One of the first things to be remembered in improving an old place, or laying out a new one, is that the adornment of the place should not be confined to the little block of land hemmed in by four fences in front of the house, and known as "the front yard." The improvement should be planned on a larger scale, and should include not only the front yard, but back yard and the entire farm. Probably one of the greatest hindrances to such improvement has been the idea that the front yard should be fenced off from the rest of the place, and that the little bit of ground devoted to lawn must all be cut with scythe or lawn mower. In improving the surroundings of a home, usually the first thing to be done is to remove all unnecessary fences—and it is surprising how few of them are really necessary—cut out dead or crowding trees, and clean out untidy corners. The grounds should then be laid out on a scale large enough to admit of the use of the

ordinary farm mower in keeping the grass cut, not only in the front and back yard, but all around the buildings and up and down the drive and roadsides. In most cases it may be found necessary to plow up and properly grade the grounds about the buildings and along the roadside. It is far more satisfactory to have this done properly than to attempt to keep in condition grounds which are not well graded. The grounds should slope away gently from the buildings to insure good drainage. It is not necessary nor desirable to bring the land all to a uniform level. If the grounds are somewhat rolling, the general effect is more pleasing than if they are on a dead level. All little inequalities of surface, however, should be levelled off, so that the mower can be used conveniently. In grading,

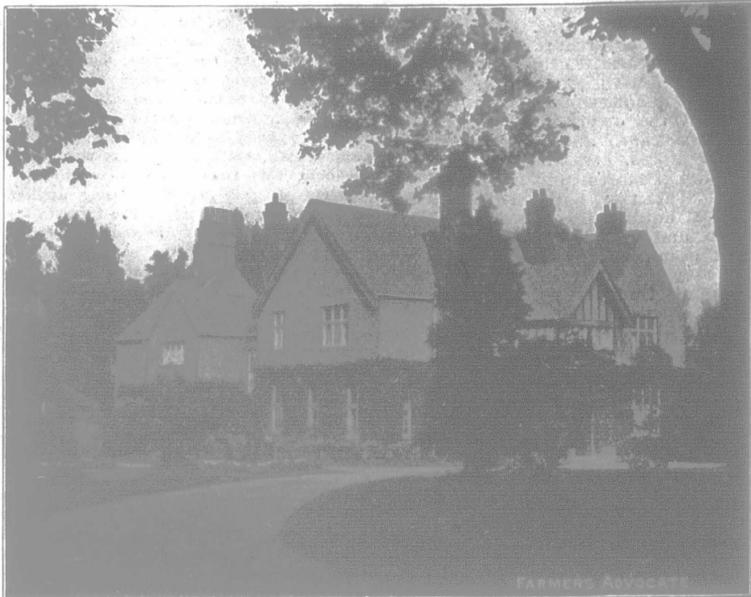
Care should be taken in sowing to get an even distribution of the seed, and it should be done on a still day, when the wind will not blow away the lighter seeds. After seeding, the ground should be gone over lightly with a rake to cover the seed, and, if the soil is dry, it is best to thoroughly roll it. This insures quick germination of the seed and leaves a smooth surface. It is better to make use of a light roller by hand, rather than use horses, which are likely to leave deep tracks in the mellow soil. The first mowing had also better be done by hand with the scythe, until the sod gets tough enough that it will not be cut up by the wheels of the mower; but after two or three months, when the sod has become firm, the mower may be used freely. Any good farm mower, with the cutter bar set as low

as possible, and the knives kept sharp, may be used to keep the lawn in excellent condition. If the cutting can be done frequently enough to avoid necessity for raking off any cut grass, so much the better; but if time cannot be spared to do this often, it should be mowed at least once a month during the growing season, and the grass raked off. Where one wishes to have a croquet lawn or tennis court, a small portion of the lawn may be closely clipped for this purpose by means of a hand mower.

One of the important items in laying out the grounds about the home is the proper location of the drive and walks. The main drive should enter at the side of the grounds, and not cut across the open lawn. It should curve around towards the building as though it were the easiest natural means of approach, or it may run fairly direct from the road to the barns, and curve in towards the dwelling in passing. It is needless to say that the drive should be properly graded, that all surface water may run off readily; and, if good gravel is available, it should be gravelled, so that it will dry off quickly. It is well to avoid having too many walks around the buildings. Those necessary usually locate themselves through the daily travel, and wherever walks are necessary, they should be made dry and clean, to avoid carrying dirt into the house.

In our next we shall treat of the selection and planting of trees, shrubs and vines about the home.

A man in Northumberland Co., Pa., named C. K. Sober, has a large chestnut grove, where he had grafted about 400 acres of wild-chestnut land to the cultivated Paragon chestnut. The grafted sprouts came into bearing very young, and are now producing heavily, the sales last year returning \$5,000.00.



An English Country Home.

Note the winding drives; the vines; the lawn, and the natural arrangement of the trees.

where any deep cutting has to be made, good surface soil should again be put on top to insure a good growth of grass or trees and shrubs, if these are planted upon it.

After the ground has been well worked up by plowing and cultivating, the levelling may be done by means of a drag or float which will leave a smooth surface. As a final preparation for seeding, however, nothing can be used which will leave the ground in better condition than the garden rake. This may seem like a small tool to attempt to go over an acre or two of lawn, but it should be remembered that this work is being done for all time to come, and it pays to do it well.

The best mixture with which to seed down the lawn is made of equal parts, by weight, of Kentucky blue grass, red-top and white Dutch clover. To insure getting good clean seed, these may be bought separately and mixed at home. This mixture should be sown at the rate of about two measured bushels per acre. In seeding down for a lawn, we want the grass to grow as quickly as possible; therefore much heavier seeding is required than when seeding for hay, where each plant has more or less room for development.



Room for Improvement.

Note the variety and dilapidation of fences; fence-corners full of weeds and rubbish; dead and diseased trees ready for brush pile.



A Picture of Neatness on an Algoma Pioneer's Farm.

Note the absence of unnecessary fences; farm mower used close up to buildings; hardwood bush for shelter; vines and flowers near doorway.

A HINT TO ORCHARDISTS.

It has been truly said that success in anything is attained only by careful attention to detail, and that the thing which we call "luck" naturally arises from an observance of this rule, which is, perhaps, unconscious in some persons. Especially is this true in agricultural work. Carefulness in every phase of labor is always repaid by increased returns. Inattention to detail in fighting the insect enemies of the garden and orchard will, in some cases, almost annul our efforts. Neglected fence corners, piles of rubbish, rotting insect-infested fruit lying about, will greatly lessen the good effects of spraying. Another thing to which too little attention is paid, also, is the matter of the wild or native trees growing around the orchard. Let us notice the dangers of leaving these trees unsprayed around or near the orchard.

MOUNTAIN ASH (*Pyrus aucuparia*, European).—This tree, fortunately, is not native, but, owing to its beauty as a shade tree, is sometimes planted near houses not far from the orchard. An American species (*Pyrus Americana*) also grows northward in cool, swampy places, attaining its greatest size upon the north shores of Lake Huron and Lake Superior. This tree, both forms of which are nearly identical botanically, is very closely related to the apple, and harbors many of its most dangerous insect enemies. Among the insects found infesting it may be mentioned the following: Scurfy Bark-lice, Bud Moth, Case-bearers and Leaf-miners, the Oyster-shell Bark-lice and the dreaded San Jose scale, the American Tent Caterpillar and the Cankerworms. Such a tree as this, planted near the orchard and neglected, as such trees too often are, will harbor large numbers of these insects, which, when they become too numerous for the trees in which they live, will pass without any difficulty to the neighboring orchard.

WILD PLUM (*Prunus Americana*).—This is one of our native trees, and is not uncommon in Ontario. It is attacked by the Plum Lecanium and other scale insects, which suck the juices of the tree; the clover mite, which feeds upon the leaves of the plum; and the two very serious diseases, Plum Pockets (*Exoascus pruni*) and Brown Rot (*Manilia pructigena*). Under the influence of the former (Plum Pockets) the plums develop into useless structures, wrinkled and dry, and without a stone, hence receiving the name, "plum pockets." This disease, once fairly established in a tree, is practically beyond control, as the mycelium of the fungus hibernates in the tissue of the wood, and the fungus is therefore perennial. The only remedy is pruning back the diseased portions, and generally the best plan is to remove the diseased trees altogether and burn them. The other disease (Brown Rot) first attacks the leaves and then the fruit, reducing it to a useless, mummied condition. The fungus does not present such difficulties in treatment as does the *Exoascus pruni*, but is not a desirable thing to have affecting fruit trees. These diseases infest wild and cultivated plums, and the Brown Rot also infests apples, so that they may be only too readily carried to the orchard.

WILD CHERRY.—Black Cherry (*Prunus serotina*); Choke Cherry (*Prunus virginiana*); Pin or Bird Cherry (*Prunus pennsylvanica*). These three trees are among the most common growing near the orchards on many farms, and are also very dangerous. In some districts there is scarcely a wild cherry tree which is not covered with the webs of innumerable American Tent Caterpillars, which almost defoliate it in many cases, and which spread with extraordinary rapidity through the neighboring orchards. The cherry is also attacked by the Brown Rot of the plum to some extent, and the Shot-hole Fungus (*Cylindrosporium Padi*), which attacks many of our fruit trees, causing circular spots in the leaves, which rot and drop out. Such diseased leaves fall early in the season, before the formation of wood has ceased; consequently there is a poor crop of fruit the following season.

Many other insects and fungous diseases attack the wild trees around the orchard. The Barberry (*Berberis vulgaris*) might also be mentioned in this connection as harboring the æcidium stage of the wheat rust. Everyone has seen the little golden cups on the leaves of barberry in the spring, and although it is believed that the wheat rust can reproduce without this stage, nevertheless there is enough room for doubt as to how long and how vigorously, that it is well, in any event, to dispense with the barberry, as its removal can be enforced by law.

The examples given here serve to show the danger of leaving these trees neglected in the vicinity of the orchard. The usual spraying—Paris green for biting insects, Kerosene emulsion for sucking insects, and Bordeaux mixture for fungous diseases—may be used upon these trees when infested, but by far the best plan, when they become badly affected, is to cut them down and burn them, thus effectually removing one of the most dangerous harbors for insect pests on the farm.

WASHING TREE TRUNKS.

Am thinking of "scraping" my trees (apple) and then washing the trunks with lime or whale-oil soap. Would you mind telling me if there is still time for these operations, and which material is best for the wash? Or could the lime and whale-oil soap be prepared in one mixture together, with advantage?

F. P. W.

I would like to ask what is your object in scraping and washing the trunks of the trees? I am afraid too many of the growers put more emphasis upon this than it really deserves, and neglect the more important operation of spraying the whole tree. Scraping off loose bark and washing the trunk with lime may be beneficial in destroying the hiding places for a number of insects, but it will not keep in check a number of more injurious ones which work upon the smaller branches, such as oyster-shell bark-lice, aphides, etc. There would be nothing gained by combining the lime and whale-oil soap; either one or the other should be sufficient for a wash for the trunks, but better than either would be to spray the whole tree thoroughly with the lime-sulphur wash. This mixture is one of the most effective in destroying the oyster-shell bark-lice, and is also good as a fungicide in destroying spores of apple scab which may be resting upon the branches. About this time there is no doubt thousands of barrels of this wash is being applied to orchards in the Niagara District. The formula for the lime-sulphur wash is 20 lbs. fresh stone lime, 15 lbs. sulphur, and 40 gallons water. The sulphur is made into a paste with a little warm water, and the lime is slaked and added while hot to the sulphur, and the whole made up to about 15 gallons. This should be thoroughly boiled for about one and a half hours, either over a fire or by means of live steam turned in from a boiler. After it is thoroughly boiled, the mixture can be made up to 40 gallons, and should be applied with a spray while warm.

H. L. HUTT.

Ontario Agricultural College.

ONION CULTURE.

The onion crop is one which, when everything is favorable, will give larger net returns per acre than almost any other that can be grown on the farm. A dollar a bushel used to be thought the standard price, and is sometimes exceeded even now, but the average price has fallen to about sixty or seventy cents. Still, even at sixty cents per bushel, a crop of three or four hundred bushels per acre gives a large money return. In some localities, where a specialty is made of this crop, and large quantities are grown, sales are easily made. If buyers can pick up car lots, they will be on hand. But in most country places, except in the neighborhood of large cities, the marketing of the crop is a serious problem. Two other objections to their culture as a farm crop ought to be considered before anyone goes in for raising onions. First, the labor involved is very great, being estimated at about \$65 per acre; and second, land needs to be specially suited or fitted before they can be grown profitably. The onion requires a liberal amount of plant food in the most available form. The quantity and quality of manures which would make potatoes, cabbages or many other garden crops profitable, will not give even a fair compensation in onion culture, unless favored by soils highly fertile in their natural state. Beginners fail more frequently, perhaps, from lack of appreciation of this fact than from any other cause.

Soils abounding in decomposed vegetable matter are generally most valuable for the cultivation of onions. Heavy clays or sandy and especially gravelly soils should be avoided. The ideal soil is one that is rich, not liable to bake, and that will withstand drought well. Where weeding is such an expensive item, as it is in onion culture, it goes without saying that weedy ground should not be used until it has first been cleaned by successive hoed crops. As a preparation of the soil, a favorite practice in some sections is to sow clover, cut the first crop for hay, allow the second to rot on the ground, and apply a heavy coat of manure and plow under in the fall. The following spring plant potatoes, and the next year grow onions.

Fall-plowing is recommended, especially for clay soils, and in all cases a heavy coat of barnyard manure should be turned under. Rotted manure is better than fresh, and too much can scarcely be applied. Seed should be sown as early in spring as the ground can be worked. If the ground has been fall-plowed, surface-working in spring is sufficient. The cultivator, disk harrow, smoothing harrow and roller or clod-crusher should be freely used until the seed-bed is very fine and smooth. Seed is generally sown with a hand drill in rows twelve to fourteen inches apart, if cultivation is to be done by hand. If horse cultivation is intended, the distance should be increased to sixteen or twenty inches. About four pounds of seed per acre should be sown. Many growers never thin the plants, regulating the thickness of the crop by the amount of seed used, the aim being to have one plant to every inch. It is probably better to sow a little more thickly, and thin to an inch and

a half. From half to three-quarters of an inch is the proper depth for the seed.

As soon as the rows can be seen cultivation should be commenced, and, until the bulbs are well grown, can hardly be overdone. For garden culture, the wheel hoe is indispensable, but where a horse can be used, the spike-tooth cultivator, after the plants are of thinning size, does a better job, and is very much quicker. With all that can be done by implements, one or two weeding by hand, or with a hand tool, will be necessary. This is what takes time, but one has just to pad the knees, straddle the row, and go at it. Boys come in most useful at such a job, and, in the vicinity of towns, can generally be hired.

When the onion-tops are mostly brown and drying, pulling should be done. Three or four rows are thrown together, and, if the weather is dry, are ready to be gathered in ten days. If the weather is unfavorable, some growers find it profitable to cure them under cover.

Onions, by liberal fertilizing, can be grown year after year upon the same ground, with increasing yields. Rotation is generally advised, however, particularly where the onion maggot and onion smut are prevalent. For the former, nothing else seems as yet to be an effective remedy.

Some enormous yields of onions have been reported. From five hundred bushels per acre up to eight hundred, and even a thousand, are claimed to have been raised. A yield of three hundred bushels per acre is, after all, a pretty fair average crop.

T.

APIARY.

VICTORIA CO. BEEKEEPERS' MEETING.

The annual spring meeting of the Victoria County Beekeepers' Association was held at Little Britain on Good Friday, and was much enjoyed by all who were present, a number of very interesting discussions following the several papers and addresses which were on the programme.

Mr. R. F. Whiteside, the retiring president, referred to several matters concerning the local Association which he hoped to see settled in the near future. One subject he touched on is of interest to all county associations. It was the idea of having several neighboring county associations arrange to have their meetings near together—within a day of each other—and having them club together to have some noted beekeeper brought to their district to address their meetings, giving an address each day for perhaps three or four days. In this way the expense would not be nearly so large as if each association brought in a man of its own account. The subject is worthy of consideration by the members of every county association.

Mr. J. L. Byer, of York Co., Ont., who is an honorary member of the Victoria Association, spoke of his success (or failure) in outdoor wintering during the past winter. He had bought some bees in hives with double walls with several thicknesses of paper between them, and left the bees without further protection, as these hives were supposed by their builder to be sufficiently warm for wintering. The loss, however, was about forty per cent., the hives showing little better results than if they had been single-walled. Mr. Byer is more than ever convinced of the importance of plenty of packing both on the sides and top of hives to be wintered outdoors. He also considers the Langstroth frame too shallow for best results in outdoor wintering, unless filled solid with honey, so that the bees may have enough to keep them through the winter without being under the necessity of moving across the frames, which they cannot possibly do in very cold weather. Others who had had experience in the matter were of the same opinion.

Mr. John Timbers, of Ontario County, was present by special invitation, and read an excellent paper on the "Production and Selling of Honey," a paper which, if followed to the letter by every producer of honey, would make a big improvement in the honey market in a very few years. The chief points referred to were: Good body (having the honey well ripened by the bees); good color (using only white comb in the supers); flavor (clean comb, and no mixing of honey from different sources); finish and aroma. He urges the cultivation of the local market, and thinks beekeepers should never sell honey on commission, backing up his statement by telling of the condition in which he saw a prominent beekeeper's product brought before the eyes of the public in a big commission house in Toronto—the cans looking more as if they contained axle grease than honey.

Mr. E. G. Hand, Victoria County, described the system practiced by him for handling bees through the honey season, without much work and no watching, a course made necessary by lack of time to spend with the bees.

These papers were discussed at considerable length, and a number of good ideas exchanged.

The officers elected for the ensuing year were:

President, Mr. James Storer, Lindsay; Vice-President, Mr. E. G. Hand, Fenelon Falls; Secretary, Mr. A. H. Noble, Cresswell. The matter of the time and place of next meeting was left with the executive. E. G. H.

THE FARM BULLETIN.

SEED, DOGS, AND OTHER MATTERS.

At the seed fair held in Summerside, P.E.I., His Honor Governor McKinnon referred to the fact that too many varieties of potatoes were grown here on P. E. I., and this is quite true. We were glad to see prizes offered at this show for that good old variety of potato, the McIntyre or Blue, and they certainly were a credit to the show. Notwithstanding all the talk against this good old potato, and likewise in favor of the Green Mountain, and other white and red varieties, the buyers who are now busy bagging and loading potatoes ready for market are quite satisfied, yea, anxious, to handle nothing but the McIntyre. The farmers of this Island have grown them side by side with other varieties for a great many years, and in almost every instance the yield is in favor of the McIntyre, especially of the marketable tubers.

Many excellent samples of grain of all kinds, as well as grass seeds, were shown at the fair, and as a result orders are coming in thick and fast to the exhibitors for lots for seed purposes, and they are willing to pay the extra price asked for good prime seed of all kinds. There has never been, to my mind, enough difference between the price of good and poor seed. The good-seed meetings which were held throughout the Island during the past winter, have done much to convince the farmer of the importance of good seed. It is unfortunate that the Government Seed Act did not come into force some years sooner. Our Province has been made a dumping ground long enough for all the poor or refuse seed of Upper Canada, until many of our best farms are overrun with weeds, and some very bad weeds, that seem almost impossible to exterminate. But now it is almost impossible to buy poor seed. Perhaps the worst weed in this locality is a variety of chick weed. It has a small white flower, and is commonly known as white-eye. In the early summer many fields look as white as snow, and where this weed has got a good hold it smothered out everything else, and it spreads very rapidly.

Now a word in defence of the poor abused dog. Every farmer who owns a good collie dog would rather part with his best milk cow than that dog. A good well-trained dog is a very valuable animal on a farm; he can save his master many steps. I do not advocate letting a dog chase the cows to the barn every milking time, but it is all right to take the dog with you when you go for the cows, and all that you need say when you open the gate is, "Bark, Lion," and the cows from the furthest end of the field will at once line up and start for the stable. In this country a great many animals are turned out in the woods and high-ways in summer to get their living, notwithstanding the fact that there is a law to the contrary, and the farmer who is fortunate enough to own a good dog is saved a lot of annoyance. I am speaking from years of experience about this stock nuisance, and the yard gate we use is a good collie dog. Because some good-for-nothing scrub-mongrel-curs get together and go and kill some farmer's sheep is no reason why all dogs should be hanged, or even taxed. Of all the animals on the farm none is so affectionate as the dog; he will fight for his master and protect him and his property, not only by day, but also during the silent watches of the night. A pack of sneak thieves have been going their rounds of late stealing oats, wheat, butter, meat, and so forth, but they took good care not to molest the owner of a good dog. The country of late years is thronged with a lot of those Italian peddlers, and some of them pretty saucy fellows too, which are a terror to the women of the house should they be alone when one of them call, and persist in opening up their pack, but if Mr. sees a good noble dog lying at the door he governs himself accordingly. These are a few of the reasons why I speak in defence of the dog. Yet no matter how much the owner may be attached to his dog, if he knew him to kill his neighbor's sheep he should not only pay all the loss, but should do away with the dog, or else guarantee to run all risk of a further outbreak.

That terrible gale of March 20th blew down a great number of barns and windmills on P. E. I., our own wheel sharing a like fate. After many years of experience with wind power for farm use, I will say, for the benefit of those who contemplate buying a windmill, that if you have a tall bush or a woods handy to your buildings you don't want a windmill, for I can assure you it will not give you satisfaction, but if you are located away from everything that would prevent the wind blowing fair and square at your wheel, you have a power that will do all the work on an ordinary farm, and do it more cheaply than any other power I know of. Of course there are times that you cannot do anything with this kind of a power, but in order to avoid any inconvenience caused by a calm spell, you must look out and keep the threshing and the grain crushing and such other work ahead. Have something laid by for a calm day.

Last season was by far the best, from a dairy point of view, that we have yet had, but this coming season promises to eclipse all previous years. The best evi-

dence of this is the keen bidding for milk cows at the auction sales now taking place. It is well-nigh impossible to buy cows except at those sales, and they are selling for big figures. Yet if we should have an unfavorable grass season it will lessen the milk supply to a considerable extent.

There is quite a stir in potatoes already, and vessels are being loaded off the ice, at 40 cents per bushel. Cars are also being loaded along the railway line, and we hope no loss will be sustained by shippers on account of the frost, which is liable yet to do some damage. Some were estimating that it would take all the salable potatoes on P. E. I. to supply the local need. I do not think this at all, for many thousands of bushels will be exported from this Province this spring, yet there are some sections of our Island where the potato crop was almost a total failure. Farmers who will have to buy their seed potatoes would do well not to leave it too late. Pork has advanced a little, 8¢. is now being paid. Beef is going to be a good price this spring. Some have sold for 5c. live weight, to be fed out to June 1st. Horses are very scarce, and will sell high this spring. Eggs are now 18 cents per dozen, and not likely to come much lower. Great quantities of mussel mud have been taken from our rivers and bays this winter. Farmers find this a very valuable manure, and when applied to new land, 12 to 15 loads to the acre, we can raise great crops, especially of hay. C. C. C. East Prince, P.E.I.

WM. MEHAREY'S CLYDESDALE SALE.

The auction sale at Ottawa on April 2nd of fillies imported by Mr. Wm. Meharey, of Russell, Ont., was largely patronized. There was a very large crowd of people present from Ontario and Quebec, and a large number wanted mares; the day was all that could be desired. They were a grand lot of fillies, of large size, good colors, and the best of feet and legs, and no better breeding has been offered for sale in Canada. Unfortunately, they were in poor condition. It may not be known that fillies wintered outside in Scotland are low in flesh, long haired and shaggy-looking this time of the year, and the long voyage, 16 days all told, 11 on sea and 5 on rail, did not improve their appearance, and, to make matters worse, they every one had the ship cold, some very bad, consequently they were very much shrunk and gaunted, which had a tendency to make would-be purchasers rather timid to bid. It seems the people must have the fat on before they will buy freely. The few that were in good flesh sold very fast, but it was bargain day on the thin ones, and the purchaser got big value for his money. It is hoped the fillies will do well in their new homes. Following is the sale list:

- Shapely Queen, 3 yrs.; J. A. Farlinger, Cornwall, Ont. 315
Nancy of Charlesfield, 3 yrs.; A. Spratt, Johnston's Corners, Ont. 310
Heroine, 3 yrs.; Jas. Croll, Ramsville, Ont. 455
Deaconess, 3 yrs.; Jas. E. Muldoon, Fallowfield, Ont. 265
Mary Rae, 2 yrs.; Wm. Cochrane, Russell, Ont. 285
Jemima, 3 yrs.; Geo. W. Shaw, Narean, Ont. 275
Fancy, 3 yrs.; Neil McLeod, Laggan, Ont. 280
Borry Baroness; A. Meharey, Russell, Ont. 475
Princess of Torr, 3 yrs.; Matthew Stacey, Warburton, Ont. 295
May Girl, 3 yrs.; Thos. McDowell, Shawville, Que. 270
Jubilee Lass, 2 yrs.; A. Spratt, Johnston's Corners, Ont. 285
Marmion's Queen, 2 yrs.; Geo. Cornell, Lynn, Ont. 250
Priestess, 3 yrs.; A. S. Sipes, Hallsville, Ont. 300
Junnettie, 3 yrs.; R. Spratt, Johnston's Corners, Ont. 250
Rosie Hutton, 2 yrs.; M. McMann, Ottawa, Ont. 220
Fanny Lawrence, 3 yrs.; Wm. Duncan, Hallville, Ont. 365
Rosie Ascott, 2 yrs.; David Mowatt, Merivale, Ont. 285
Lady Mitchell, 2 yrs.; Geo. Cornell, Lynn, Ont. 285
Lilly Brown, 3 yrs.; John Hamilton, Grande Priere, Que. 370
Garland, 1 year; L. Munharney, Canamore, Ont. 215
Lizzie Wilson, 3 yrs.; J. E. Muldoon, Fallowfield, Ont. 285
Average for 21 sold, \$295.50.

ADULTERATED FOOD.

The annual report of the Department of Inland Revenue for 1905-1906 shows that maple syrup was found more commonly adulterated than any other article of food that came under official cognizance. Of the samples examined by the official analysts there were 147, or nearly 50%, found to be adulterated. Three hundred and twenty-two samples of canned meat were analyzed, and only four were not marked genuine. There were 116 samples of adulterated pepper, 14 of tincture of ginger, 16 of olive oil and 82 of fruit preserves. In all 2,095 samples of foodstuffs were examined, of which 1,804 were found genuine, 402 doubtful, and 389 adulterated.

The Iowa Legislature has agreed upon a bill to provide four agricultural high schools, under control of the Board of Trustees of the State Agricultural College. Provision is made in a one-tenth-mill tax levy for the whole State, which will be sufficient to erect one of the buildings each year.

THE TEACHER'S WORK AND PAY.

Editor "The Farmer's Advocate":

Your issue of March 7th contains an article written by "A Farmer's Son," entitled, "Teachers' Salaries and the Farmer," which I read carefully and compared with other articles of former issues on this important question. Being myself a farmer's son, also a teacher, though not at present actively engaged in the profession, I beg leave to discuss this subject through your columns.

"Farmer's Son" voices the sentiment that teachers' salaries should be regulated by supply and demand. At present we know that the demand is somewhat in excess of the supply. Teachers' salaries should, accordingly, be subject to increase, but on account of the narrow-minded, niggardly trustees in charge of many of our schools this is not the case; they either permitting their schools to lie vacant or employing unqualified teachers. During the fall term of 1906, within a radius of 11 miles of home, one school has had a teacher for only a few weeks, and two other schools employing teachers without legal certificates. The teachers lack a union of their own, and, moreover, as they hold their certificate from the Government, the Government has a right to see them properly protected from incompetent outsiders who are willing to work for a pittance. Many of our teachers are migrating to the West, to the United States, or are entering some more lucrative situation. "Farmer's Son" would allow this state of affairs to continue, and employ those teachers who are either teaching for amusement or else lack the ambition to make an attempt to better their present situation. May I ask if "Farmer's Son" would consider it more profitable to engage for the coming season's work an ambitious, pleasure-seeking man, at a salary of, say, \$20 per month, or a good, pushing, energetic fellow, at, perhaps, \$28 per month? It is easy to lose all that is paid through employing a cheap, incompetent man.

A "Farmer's Son" considers \$1,500 an excessive valuation of a certificate to teach. Did he ever qualify for one and count the cost? The majority of students at a Collegiate who live in the country have to pay their board in town. Granted they are earning during the summer, they are still required to pay during a school year of forty weeks for a period of four years, at least \$3.00 per week for board, or a total of \$504. The fees, if at College, are \$4 per month, or at a Collegiate are 75c. to \$1 per month, totalling \$40. Allow \$60 for books and supplies during the four years, and at least \$50 per year for incidental expenses = \$260 outlay. The Model School training under above circumstances cannot be secured for less than \$75, which gives in all \$875—the price of a third-class professional certificate, the lowest standard which qualifies to teach. The Normal training for a second-class professional will cost at least \$200 more, raising the total to \$1,075, and considering the two years of extra Collegiate work required for the first-class certificate, at \$400 (\$200 per year), we reach a final total of \$1,475—how far short of \$1,500? This does not value the individual time whatever, and "time is money" even to a Canadian boy on the farm. The above is a conservative estimate, based on facts, and I challenge anybody to dispute it.

It is inferred that a certificate may be secured in less than four years. Probably, but "a laborer is worthy of his hire"—the extra effort put forth to secure the prize is well worth the difference. Having had some experience in this "quick-work business," I know whereof I speak. I ask "Farmer's Son" to try the experiment.

The cry during the past has been, "Raise the standard of education in public schools." Quite proper, but to accomplish this you must strike at the fountain head, and raise the standard of the qualifications of the teachers. This is an absolute necessity for success in your project. If teachers are required to have higher qualifications, they have a right to higher salaries to enable them to do so.

Last Christmas I was offered several schools, at a salary ranging from \$400 to \$500. At a salary of \$400, it will cost me at least \$175 for board, laundry and incidental expenses probably \$200, leaving me \$900 or \$225 clear. I cannot secure a man competent to fill my place at home for less than \$250 and board.

I do not intend to defend the case of morality among the teachers, but for that matter I do not consider that men or women should be paid to conduct themselves as ladies and gentlemen. The sense of honor should be sufficient to stimulate anyone in this respect.

If the trustees and ratepayers who do so much kicking were placed in a teacher's shoes; if they ever had to educate their sons and daughters to the teaching profession, or if they themselves would exercise their mental faculties about fifty per cent. as energetically as the individuals who secure teachers' certificates, they would place a somewhat different estimate on the salary of \$300 which they at present would grant their teachers.

"Get down and walk and you will change your talk, When you feel the peg in your boot."

The fate of our country depends upon the proper education of the youth of to-day. The best qualified and most energetic teachers are entering other callings where there is greater remuneration and greater scope for the exercise of those talents with which they are endowed. Would you, for the sake of a few paltry dollars, entrust the very important, yea, sacred, duty

of moulding the future of the coming generation to those teachers who do not themselves possess any desire to climb, believing that they will labor to inculcate those aspirations in their pupils? Remember, it is not possible to give what you do not possess.

Ontario Co., Ont.

MAITRE.

H. E. GEORGE'S HOLSTEIN SALE.

The auction sale of registered Holsteins, held by H. E. George, Crampton, Ont., at Napanee, on March 20th, was a great success, taking into consideration that 18 of the cows had been milking for nearly six months. Of the balance but two or three had recently calved, and their calves were sold separately from the cows, all being bull calves, and these averaged \$27, only a few days old, one being born in the car going to Napanee. There were about 1,000 people present, and everything was sold. J. Merritt Moore, of Springfield, wielded the hammer, and D. Derbyshire, M. P., gave a grand address on the prospects of dairying. This being the first sale of the kind held in the east, it is probable another sale would do still better. The greatest number of enquiries for catalogues came from readers of "The Farmer's Advocate." Following is the list of those selling for \$70 and over:

Calamity Maid Jane, 4 yrs.; M. Parks, Hawley...	\$ 150
Netherland Pietertje Pauline De Kol, 6 yrs.; A. Parks, Napanee	185
Jenny Lind, 6 yrs.; W. L. Grass, Westbrook	155
Daisy Dunham, 7 yrs.; S. Lines, Latimore	170
Phoebe E. Netherland's II., 8 yrs.; Wm. Norris, Napanee	150
Lady Hamming De Kol; W. R. Shields, Mt. Pleasant	140
Jetty, 8 yrs.; John Frink, Collier's Bay	140
Lassie Artis Beauty, 10 yrs.; D. A. Black, Kingston	135
Maid Netherland Flow, 8 yrs.; D. A. Black	150
Coloma Canary Gem, 3 yrs.; Wm. Morris	190
Uni III., 7 yrs.; D. A. Black	135
Phyllis De Kol, 3 yrs.; A. McDonald, Shannonville	125
Fairmount Queen, 3 yrs.; Wm. Pringle, Napanee	145
Mation De Kol, 6 yrs.; E. H. Hinckly, Wolfe Island	145
Jane Ykema, 5 yrs.; R. Shannon, Shannonville	145
Houttje De Kol Pauline, 3 yrs.; A. D. Black, Kingston	160
Martha Aaggie Netherland, 6 yrs.; Robt. McGuinness, Roblin	190
Bleske Calamity Jane, 3 yrs.; Wm. Doran, Roblin	175
Wietske Hengerveld De Kol Mercedes; P. J. Salby, Montreal	145
Bessie Fairmount, 6 yrs.; Ira Been, Hawley	155
Wietske Duchess Aaggie; J. A. Caskey, Madoc	140
Duchess Netherland Johanna, 1 yr.; Samuel Elliott, Tweed	70
Johanna Sarcastic De Kol, 11 mos.; Alf. Curtis, Willett's Home	90
Labelle, 7 yrs.; Lester Ballams, Strathcona, Ont.	140
Netherland Mary Yenetta, 7 yrs.; Wm. Norris, Napanee	130
Menuaue, 5 yrs.; Wm. Doran, Roblin	130
26 head averaged \$145.50.	

"Dementia Americana" is the name Attorney Delmas gave to the peculiar form of alleged insanity with which Thaw was supposed to be afflicted. We do not know just what "Dementia Americana" is, but there would seem to be a good deal of it in some States of the American Republic.

CLYDESDALE ENTRY AMENDMENT CHALLENGED

A correspondent referring to the letter in "The Farmer's Advocate" of the 11th inst., from Mr. J. W. Sangster, Secretary of the Clydesdale Association, containing a resolution passed by the Board of Directors of that association, points out that the amendment to the rules of entry in the Clydesdale Studbook of Canada, requiring that the parents and grandparents of all imported stock be duly recorded and numbered in the Clydesdale Studbook of Great Britain and Ireland, has not been legally made. Article 8 of the constitution of the association says: "This constitution may be amended or changed at any called or annual meeting of the association, with the approval of two-thirds of the members; 15 days notice of such meeting being given to each member."

From this the approval of two-thirds of the members present at this members' meeting is necessary; hence, it is inferred, that the Board of Directors has no power to change or amend the rules of entry. Apart from this, it is pointed out that, according to the National Records Act, a copy of any resolution of this sort must be sent to the Minister of Agriculture for his approval, and for incorporation in the constitution of the association. Furthermore, this action by the Board of Directors, even if the resolution had been put through in the legal way, would have an effect not expected by even the men composing that board. Our correspondent holds that if the standard for the Canadian book is to be raised for imported animals, four crosses for mares and five crosses for stallions, which is the standard for Canadian-bred animals, would be reasonable and consistent. This, it is understood, corresponds with the American rule.

EASTERN DAIRY SCHOOL.

FINAL EXAMINATIONS.

In all forty students wrote on the final examinations of the long course at the Eastern Dairy School. The subjects included in the examinations were dairy science, bacteriology, dairy chemistry, miscellaneous (boilers, engines, soldering, etc.), cheesemaking, cream separators, buttermaking and milk-testing. Besides written examinations on all of the foregoing subjects, practical examinations were given on the four last named.

The total marks obtainable were 1,100. The following is a list of the successful candidates arranged in order of general proficiency: Class I. (75% and over)—R. T. Gray, 940; W. H. Gibson, 930; W. G. Gardiner, 925; R. W. Ward, 919; W. J. Ragsdale, 915; Roy Gibson, 911; D. F. Brennan, 905; T. E. Farmer, 897; C. W. Norval, 887; A. Garratt, 886; A. M. Smirle, 884; R. Elliott, 882; H. Jubly, 878; G. H. Bensley, 877; W. Finkle, 870; H. Lackie and P. Nolan (equal), 869; F. Little, 858; G. H. Barker, 850. Class II. (60% and under 75%)—A. Macdonnell, 804; G. C. Valteau and A. H. Wilson (equal), 792; H. Howey, 790; J. J. Brennan, 787; R. Rolfe, 777; S. S. Cheetham, 766; John Snetsinger, 761; J. B. Lowery, 750; W. G. Graham, 732; H. J. Crowe, 710; C. B. Larry, 672; and J. A. McDonald, 666.

SCHOOL NOTES.

The attendance at the school during the session just closed was very large, and a record number wrote on the final examinations of the long course.

So pleased were the students with the course given that a number of the successful candidates expressed

their intention of spending a portion at least of next session at the school.

It would appear that the time is rapidly approaching when practically all of our cheese factories and creameries will be manned by dairy school graduates. Proprietors of factories are constantly applying to us for makers, and none but those holding dairy school certificates will hereafter be selected as syndicate instructors.

J. W. MITCHELL.

U. S. CEMENT INDUSTRY.

A statement issued by the American Geological Survey shows that the total production of hydraulic cement in the United States in 1906 was 50,027,321 barrels, valued at \$54,015,773. This represents an increase in production of 9,133,013 barrels, and \$18,033,524 in value over 1905. Of the total amount in 1906, 45,610,822 barrels were Portland cement, with a value of \$51,240,652; natural rock cement, 3,935,275 barrels, valued at \$2,362,140, and 481,224 barrels of Puzzolan cement, valued at \$412,921.

DEATH OF CHARLES RANKIN.

We deeply regret to announce the death, which occurred on April 9th, of Mr. Charles Rankin, of Wyebridge, Simcoe Co., Ont., a prominent importer and breeder of Shorthorn cattle and Oxford Down sheep. Mr. Rankin's death took place suddenly on the train between Barrie and Allandale, and is supposed to have been due to acute indigestion. The deceased was in his 70th year, and leaves a widow and nine children. He was one of the leading farmers in Simcoe County, and a man of sterling character, an elder in the Presbyterian church, and a Mason.

NO NAME.

Will the Yelverton, Ont., subscriber who wrote us on April 12th be good enough to forward his name, when the questions asked will be dealt with?

An Ottawa despatch of April 12th stated that the Department of Inland Revenue is completing an analysis of some thousand samples of butter collected from various parts of the Dominion, with a view to determining the quality and purity of the article being turned out by Canadian farmers and dairymen. As a whole, the results of the analysis have been quite satisfactory, but in ten cases it has been found that oleomargarine had been used as an adulterant. It is against the law to either import or manufacture oleomargarine in Canada, and the Department of Justice will prosecute the offenders.

The result of the notorious Thaw trial is seven jurors for conviction of murder in the first degree and five for acquittal on the ground of insanity. The whole miserable proceeding amounts to a mistrial. There will now have to be another trial, and very probably an acquittal. This will amount to a miscarriage or, rather, to a failure of justice.

The Montreal Horse Show is to be held at the Arena, on May 8th, 9th, 10th and 11th. Entries close on April 20th. W. Northey, Windsor Hotel, Montreal, is the secretary.

QUESTIONS AND ANSWERS.

Miscellaneous.

ECZEMA.

Yearling colt is losing its hair in great patches, leaving the hide bare, except for a thick scurf. It is not particularly itchy. Is this mange?

SUBSCRIBER.

Ans.—It is not mange, but a form of eczema. Clip him. Wash thoroughly with warm, strong soft-soap suds, applied with a scrubbing brush, and rub with cloths until dry. Then dress well, twice daily, with a solution of corrosive sublimate, twenty-five grains to a quart of water. (Remember that this drug is poison, and should be so labelled.) Give him, internally, one ounce Fowler's solution of arsenic, twice daily, every alternate week as long as necessary. We believe veterinarians do not consider eczema contagious.

MARE WITH COUGH.

Clydesdale mare, aged nine years, has a cough, which acts very much like the heaves. She has had it most of the winter.

Ans.—It is probable she has developed heaves. Dampen all she eats with lime water; feed no chaff or dusty fodder, and be sparing of hay or any bulky fodder. Do not exercise sooner than necessary after a meal, and give, every morning, a ball composed of two drams solid extract of belladonna, one and a half drams gum opium, twenty grains digitalis, and one dram camphor, with sufficient treacle to moisten.

ABOUT ROOFING.

I have to put a new roof on my barn this coming summer, and would like some information through your paper as to the best kind of roof to use. J. L.

Ans.—A large amount of information about roofing appears every issue in our advertising columns, and more may be readily obtained on application to the various firms. Peruse this, and study the subject up. We have not had experience with nearly all the different kinds on the market, and, therefore, could not undertake to advise authoritatively, even were we disposed so to do, and, moreover, between advertisers of meritorious articles we can not undertake to discriminate in print.

POULTRY HOUSE.

Would it be asking too much to ask you to send me a plan or plans of a poultry house? I am a new beginner, and would like to get your opinion.

J. G. B.

Ans.—Write W. R. Graham, Poultry Manager, O. A. C., Guelph, Ont., for a copy of Bulletin 151, entitled Farm Poultry, also to A. G. Gilbert, Poultry Manager, Central Exp. Farm, Ottawa, Ont., for his recent comprehensive bulletin on Breeding, Feeding and General Management of Poultry. We might say that the house Prof. Graham seems to favor is one made of boards, dressed on one side and battened. A large part of the roof consists of canvas curtains, which can be dropped as a protection against wind and snow on stormy days.

On other days, these may be rolled up. There may or may not be special protection for the roost, but in cold climates it would be well to have the wall behind it lined with tar paper. An earth floor will answer, and for ceiling eighteen inches or two feet of straw may be spread on poles or loose strips of board, laid on the plates. The roof, of course, should be shingled. Allow each hen at least six square feet of floor space, and do not keep more than 25, or, at most, 30, in one compartment. Roosts should be low, of 2 x 2-in. strips, with edges slightly rounded.

RHODE ISLAND REDS VS. PLYMOUTH ROCKS.

Are the Rhode Island Reds as large as the Plymouth Rocks, or larger? Are they counted as good layers, especially winter layers? X. L. O.

Ans.—The Rhode Island Reds are not quite so large as the Plymouth Rocks. Standard weights of the former are: Cock, 8½ pounds; cockerel, 7½ pounds; hen, 6½ pounds; pullet, 5 pounds. Of the Rocks, the standard weights are: Cock, 9½ pounds; cockerel, 8 pounds; hen, 7½ pounds; pullet, 6½ pounds. The Rhode Island Reds are a general-purpose, utility breed, and come in the same class as the Rocks. Their breeders claim they are unexcelled as an all-round farmer's bird. Breeders of Plymouth Rocks claim the same for their birds. Let the fanciers fight it out.

MILKLESS SOWS—GYPSUM FOR ONIONS.

1. A number of breeding sows have no milk, causing the loss of litters. What is the cause? They are fed in the usual way. What remedy would you suggest?

2. Would land plaster be a good fertilizer for onions grown for Dutch Sets? If so, would it do to apply it after onions are up? R. B. M.

Ans.—1. If the sows were fed a good proportion of bran and roots, with some shorts and kitchen swill, and had plenty of exercise, we are unable to assign a cause or a remedy. It is seldom, when sows are in fair condition and liberally fed, they are short of milk.

2. We would not expect any remarkable results from fertilizing onion ground with gypsum (land plaster), and what benefit there was would be chiefly due to the attraction of moisture and to the liberation of plant food already in the soil. Manuring with gypsum is, in this respect, something like opening the bank vaults and withdrawing part of the capital therein. It is possible that the outlay for a small application might be returned in crop increase, and we hope you will try it, working it in with the cultivator, either before or after the onions are up (try it both ways); but rotted barnyard manure and wood ashes are by far the best fertilizers for onions.

The Quiet Hour.

SUORA MARIANNA.

In a convent, old and quiet, near a little country town,
On a chestnut-shaded hillside, to the river sloping down,
Dwelt a few of those good sisters who go out among the poor,
Who must labor late and early, and much weariness endure;
And the one who did in patience and in all good works excel
Was the Sister Marianna, she whose story now I tell.
She was ever kind and willing, for each heavy task prepared;
No one ever thought to spare her, and herself she never spared.
All unpraised and all unnoticed, bearing burdens not her own,
Yet she lived as rich and happy as a queen upon her throne!
She was rich, though few would think it; for God gave her grace to choose,
Not the world's deceitful riches, but the wealth one cannot lose.
There are many heap up treasure, but it is not every one
Who will take his treasure with him when his earthly life is done.

But there came a time—poor sister!—when her rosy cheek grew pale,
And her eyes, with all their sunlight, seemed to smile as through a veil;
And her step was weak and heavy, as she trod the steep ascent,
Where through weeks of wintry weather to her loving work she went.
'Twas a foot-path, lone and narrow, winding up among the trees,
And 'twas hard to trace in winter, when the slippery ground would freeze,
And the snow fall thick above it, hiding every sign and mark;
But she went that way so often, she could climb it in the dark!
'Twas to nurse a poor young mother, by fierce malady assailed,
That she made the daily journey, and she never once had failed.
Now the short sharp days were over, and the spring had just begun;
Every morn the light came sooner, and more strength was in the sun.
Many nights had she been watching, and with little rest by day,
For her heart was in the chamber where that helpless woman lay;
There the flame of life she cherished, when it almost ceased to burn,
Praying God to help and keep them till the husband should return.
'Twas the old and common story, such as all of us can hear,
If we care to, in the mountains, every day throughout the year!
She who languished, weak and wasting, in the garret chamber there,
Had been once as strong and happy as the wild birds in the air.
She had been a country beauty, for the boys to serenade;
And the poets sang about her, in the simple rhymes they made,
And with glowing words compared her to the lilies as they grew,
Or to stars, or budding roses, as their manner is to do.
Then the man who played at weddings with his ancient violin,
With his sad, impassioned singing, had contrived her heart to win;
And one brilliant April morning he had brought her home, a bride,
To his farm and low-built cottage on the mountain's terraced side.
'Twas a poor, rough home to look at, and from neighbors far away,
But with love and health and music there was much to make it gay.
They were happy, careless people, and they thought not to complain,
Though the door were cracked and broken, or the roof let in the rain;
They could pile the fire with branches, while the winter storms swept by;
For the rest, their life was mostly out beneath the open sky.
Time had come, and brought its changes,—sunshine first, and then the shade,
Frost untimely, chestnuts blighted. Sick-ness came and debts were made;
Fields were sold, alas, to pay them; yet their troubles did not cease,
And the poor man's heart was troubled thus to see his land decrease!
Fields were gone, and bread was want-

ing, for there now were children small;
Much he loved them, much he labored—but he could not feed them all.
So he left them, heavy-hearted, and his fortune went to try
In the low Maremma country, where men gain or where they die,
With its soft and treacherous beauty, with its fever-laden air;
But as yet the fever spared him, and they hoped it yet would spare.
'Twas a long and cruel winter in the home he left behind;
Lonely felt the house without him, and the young wife moped and pined;
Still her children's love sustained her, till this sickness laid her low;
When good Sister Marianna came to nurse her as you know.
Week on week had hope been waning, as more feeble still she grew;
Marianna tried, but vainly, every simple cure she knew.
Then the doctor gave up hoping, and his long attendance ceased;
"I can do no more," he told her; "you had better call the priest.
To her husband I have written; he will have the news to-day;
If he cares again to see her, he had best be on his way!"
Now the priest had done his office; at the open door he stands,
And he says to Marianna: "I can leave her in your hands,—
I have other work that calls me; if to-night she chance to die,
You can say the prayers, good Sister, for her soul as well as I."
So they left her, all unaided, in the house forlorn and sad,
Still to watch and think and labor with what failing strength she had.
There was none to share her burden, none to speak to, none to see—
Save a helpful boy of seven, and a restless one of three,
And their little dark-eyed sister (she was five, and came between),
And a baby, born that winter, which the father had not seen.
Two days more! Her friend lay sleeping, and she watched beside the bed;
In her arms she rocked the baby, while the Latin prayers she said,—
Prayers to help a soul departing;—yet she never quite despaired!
Might not yet the Lord have pity, and that mother's life be spared?
'Twas so hard to see her going—such a mother, kind and dear!
There was ne'er another like her in the country far or near!
(So thought Sister Marianna.) Yet to murmur were a sin.
But her tears kept rising, rising, though she tried to hold them in,
Till one fell and lay there shining, on the head that she caressed,
Small and pretty, dark and downy, lying warm against her breast.
She was silent; something moved her that had neither place nor part
In the grave and stately cadence of the prayers she knew by heart.
Then she spoke, with eyes dilated, with her soul in every word,
As to one she saw before her—"Thou hast been a child, my Lord!
Thou hast lain as small and speechless as this infant on my knees;
Thou hast stretched towards Thy Mother little helpless hands like these;
Thou hast known the wants of children, then—Oh, listen to my plea,
For one moment, Lord, remember what Thy Mother was to Thee!
Think, when all was dark around Thee, how her love did Thee enfold;
How she tended, how she watched Thee; how she wrapped Thee from the cold!
How her gentle heart was beating, on that night of tears and strife.
When the cruel guards pursued Thee, when King Herod sought Thy life!
How her arms enclosed and hid Thee, through that midnight journey wild!
Oh, for love of Thine own Mother, save the mother of this child!"
Now she paused and waited breathless; for she seemed to know and feel
That the Lord was there, and listened to her passionate appeal.
Then she bowed her head, all trembling; but a light was in her eye,
For her soul heard the answer; that young mother would not die!
Yes, the prayer of faith had saved her! And a change began that day;
When she woke her breath was easy, and the pain had passed away.

So the day that dawned so sadly had a bright and hopeful close,
And a solemn, sweet thanksgiving from the sister's heart arose.
Now the night had closed around them, and a lonesome night it seemed!
For the sky was black and starless, and for hours the rain had streamed;
And the wind and rain together made a wild and mournful din,
As they beat on door and window, madly struggling to come in.
Marianna, faint and weary with the strain of many days,
On the broad, stone hearth was kneeling, while she set the fire ablaze,
For the poor lone soul she cared for would, ere morning, need to eat.
"Now, God help me," said the sister, "this night's labor to complete!"
'Twas a meal she knew would please her, which she lovingly prepared,
Of that best and chosen portion, from the convent table spared,
Which she brought, as was her habit, with much other needed store,
In the worn old willow basket, standing near her on the floor,
On her work was much depending, so she planned to do her best;
And she set the earthen pitcher on the coals as in a nest,
With the embers laid around it; then she thought again, and cast
On the pile a few gray ashes, that it might not boil too fast.
But the touch of sleep was on her, she was dreaming while she planned,
And the wooden spoon kept falling from her limp and listless hand.
Then she roused her, struggling bravely with this languor, which she viewed
As a snare, a sore temptation, to be fought with and subdued.
But another fear assailed her—what if she should faint or fall?
And to-night the storm-swept cottage seems so far away from all!
How the fitful wind is moaning! And between the gusts that blow,
She can hear the torrent roaring, in the deep ravine below.
And her head is aching strangely, as it never did before:
"Good Lord, help me!" she is saying: "this can last but little more!
O my blessed Lord and Master, only help me through the night—
Only keep my eyes from closing till they see the morning light!
For that mother and that baby do so weak and helpless lie,
And with only me to serve them,—if I leave them, they may die!
She is better—yes, I know it, but a touch may turn the scale.
I can send for help to-morrow, but to-night I must not fail!"
'Twas in vain; for sleep had conquered, and the words she tried to say
First became a drowsy murmur, then grew faint and died away.
And she slept as sleep the weary, heedless how the night went on,
With her pitcher all untended, with her labor all undone;
On the wall her head reclining, in the chimney's empty space,
While the firelight flared and flickered on her pale and peaceful face.
Was her humble prayer unanswered? Oh, the Lord has many a way
That His children little think of, to send answers when they pray!
It was long she sat there sleeping—do you think her work was spoiled?
No, the fire-wood fire kept burning, and the pitcher gently boiled:
Ne'er a taint of smoke had touched it, nor one precious drop been spilt;
When she moved and looked around her, with a sudden sense of guilt.
But her eyes, when first they opened, saw a vision, strange and sweet,
For a little Child was standing on the hearth-stone at her feet.
And He seemed no earthly infant, for His robe was like the snow,
And a glory shone around Him that was not the firelight glow.
And Himself her work was doing! For He kept the fire alive,
And He watched the earthen pitcher, that no danger might arrive
To the simple meal, now ready, with the coals around it piled;
Then He turned His face toward her, and she knew the Holy Child.
'Twas her Lord who stood before her! And she did not shrink nor start—
There was more of joy than wonder in her all-believing heart.

When her willing hands were weary, when her patient eyes were closed,
He had finished all she failed in. He had watched while she reposed.
Do you ask of His appearance? Human words are weak and cold;
'Tis enough to say she knew Him—that is all she ever told.
Yes, as you and I will know Him when that happy day shall come,
When, if we on earth have loved Him, He will bid us welcome home!
But with that one look He left her, and the vision all had passed,
(Though the peace it left within her to her dying hour would last!)
Storm had ceased, and wind was silent, there was no more sound of rain,
And the morning star was shining through the broken window pane.
Later, when the sun was rising, Marianna looked to see,
O'er the stretch of rain-washed country, what the day was like to be,
While the door she softly opened, letting in the morning breeze,
As it shook the drops by thousands from the wet and shining trees.
And she saw the sky like crystal, for the clouds had rolled away,
Though they lay along the valleys, in their folds of misty grey,
Or to mountain sides were clinging, tattered relics of the storm.
And among the trees below her she could see a moving form;
'Twas the husband home returning, yes, thank God! he came at last:
There was no one else would hasten up that mountain road so fast.
Now the drooping boughs concealed him, now he came in sight again;
All night long had he been walking in the darkness, in the rain;
Through the miles of ghostly forest, through the villages asleep,
He had borne his burden bravely, till he reached that hillside steep;
And as yet he seemed not weary, for his springing step was light,
But his face looked worn and haggard with the anguish of the night.
Now his limbs began to tremble, and he walked with labored breath,
For he saw his home before him, should he find there life or death?
How his heart grew faint within him as he neared the wished-for place!
One step more, his feet had gained it, they were standing face to face.
"God has helped us!" was her answer to the question in his eye;
And her smile of comfort told him that the danger had gone by.
It was morning now, fair morning! and the broken sunlight fell
Through the boughs that crossed above her, where the buds began to swell,
As down the sloping pathway, that her feet so oft had pressed,
Went the Sister Marianna to her convent home to rest.
It was spring that breathed around her, for the winter strove no more,
And the snowdrifts all had vanished with the rain the night before.
Now a bee would flit beside her, as she lightly moved along;
Or a bird among the branches tried a few low notes of song.
But her heart had music sweeter than the bird-notes in her ears!
She was leaving joy behind her in that home of many tears:
Hope was there; and health returning; there were happy voice and smile,
For the father at his coming had brought plenty for a while.
And she knew with whom she left them, for herself His care had proved,
When her mortal eyes were opened, and she saw the Face she loved,
On that night of storm and trouble, when to help her He had come,
As He helped His own dear Mother in their humble earthly home.
FRANCESCA ALEXANDER.

There is not any benefit so glorious in itself but it may yet be exceedingly sweetened and improved by the manner of conferring it. The virtue, I know, rests in the intent; the profit in the judicious application of the matter; but the beauty and ornament of an obligation lies in the manner of it.—Seneca.

RED ROSE TEA "IS GOOD TEA"

200 Cups of Tea

All from one pound of the Blue Label. The Tea will be as strong as you will want it—and it has that rich, pungent flavor for which Red Rose Tea is noted.

Prove it by ordering a package from your grocer.



A WONDERFUL HELP

to the busy housekeeper is a flour which is easy to use. "Five Roses" Flour is exceptionally easy to use, because it is always uniform. There is no waste of time, flour or money; no trials of temper over spoiled bakings when you use "Five Roses" regularly every baking day.

Ask your grocer for it to-day, and learn what easy baking is.

LAKE OF THE WOODS MILLING CO.,
LIMITED.

The Advice of Experts:

"It is always a mistake to plant old seed, and often it is well to procure a supply from a different part of the country, but not very remote nor too different in climate. Seeds of weeds that are hard to kill out are sometimes found in field and garden seeds, and precautions must be exercised against them."

The above is a quotation from *Farmer's Bulletin, No. 94*, of the *United States Department of Agriculture*, and its application to Canadian Growers is this:

Rennie's Seeds are fresh. They are Northern grown
and adapted to the Canadian climate. They are care-
fully selected and free from weeds. This is a plain
statement of facts,

and we stand behind it with a record of thirty-seven years' honest service to the Canadian farmer.

W.M. RENNIE CO. LIMITED.
Toronto. Montreal. Winnipeg. Vancouver.

Ask your dealer for
RENNIE'S SEEDS

OUR ENGLISH LETTER.

I am afraid that, owing to the long gaps between the appearances of my letters in our Home Magazine, and the exigencies of a limited space, they must have a somewhat patchworky aspect to our readers. I can but again ask their indulgence, and just pick up the dropped threads as best I can.

To-day I find it difficult to choose my topics, for I have had many delightful little trips around and about South Devon since I last wrote, and I want to tell you about them; but then, again, there have been many eventful happenings in the political and social world, and I should like to tell you just a little about them, too, or at least try to pass on to you what those who have been in closer touch with them all have thought or said about them. There are some very grave considerations before Parliament this session, each having its turn for discussion, but first of all, on the opening day, came that of the bill for "The Enfranchisement of Women," a bill which met, not its final doom, but its postponement, by the well-known process of being talked down, the last man holding the floor in spite of cries of "Vide! Vide!" and interruptions, until the relentless hand of the clock reached the exact moment which, by Parliamentary rule, made further discussion impossible.

Under the heading, in a London daily, of "A Great Debate," the writer says: "Never has the cause of woman suffrage been more ably presented, whilst the old jibes were conspicuous by their absence, and, in spite of its temporary defeat, to-day's debate has helped forward powerfully the whole question, which has been lifted up to a higher plane of thought and feeling. Woman suffrage has now taken its place definitely in the sphere of practical politics. There can be no recession. It won't come in this Parliament; but it will come as certainly as the sun will rise to-morrow." The Premier voted for the bill as "a declaration of his opinion that the exclusion of women from the franchise is neither expedient, justifiable or politically right." "We have outlived the idea," he said, "that woman is an outlander by predestination"; but, all the same, as it was in the case of others who as strongly favored the principle, he felt that there were many changes needed in the details of this special bill before it could be accepted as a whole.

Whilst it was inevitable that the actions and utterances of what is known as the physical-force group of suffragists, for whom the title of "Suffragettes" has been coined, should provoke just criticisms, as well as witticisms, they have not very seriously or permanently injured the movement. Even those who deplore their methods, say, in kindly excuse, that even the worm will turn; and as the quiet and dignified efforts of fifty long years have produced so little effect, it could hardly be wondered at that the patience of some would fail them and the protestation take a more turbulent form.

It seems next to impossible to judge of any subject which is brought up for legislation solely upon its own merits, whether it be the enfranchisement of women, the abolition of barmaids, or the building of the Channel tunnel; self-interest, political reasons, and, with many of the Members, a seeming impossibility to make up their minds once for all, and then to abide by their convictions. Let me tell you of a story which will illustrate my meaning: A lady had a pet chameleon that changed its colors in sympathy with its environments, and did so with wonderful rapidity. It was in charge of an old and faithful man-servant. "James, bring me the chameleon, I want to show it to Lady May." "Sorry, I canna, ma'm." "Why not?" "Well, you see, ma'm, it's this way. One o' your lady friends called while you were out. To amuse

her, I just showed her your pet." "Yes, there is no harm in that." "No, ma'm; well, I put it on a blue cushion, and it turned blue." "Yes?" "I put it on a pink cushion and it turned pink." "Yes, very good." "I put it on a yellow cushion and it turned yellow." "Yes?" "I put it on a gray cushion, and it was just as gray as your lady's dress." "Well, well?" "Then (in saddened tones), I put it on a tartan plaid, and it just bust itself!"

I see I am not going to get upon the subject of my wanderings in this letter; that must wait for next time. Instead, let me pass on to you an item clipped from the Daily Mail of 22nd February, which, being another added link between the Old Land and Canada, may be of interest to you. The lady mentioned, Mrs. Scholes, is a personal friend of my own landlady at Teignmouth, who tells me that she has not one, but two large provision stores in the neighborhood of Torquay. The item was headed, "Message in a Cheese":

"While cutting through a Canadian cheese on Tuesday, Mrs. R. D. Scholes, of St. Mary Church-road, Torquay, found a small glass bottle containing a piece of paper, on which was written the following:

"Westport, Ont., Aug. 14, 1906.

"Am enclosing a small note in this cheese, trusting the receiver will kindly answer and let me know where it was bought, the price, and also how they liked it. This cheese was made to-day, August 14, 1906, by my husband, W. C. Taylor, in Salem factory. Waiting for a reply,

"MRS. W. C. TAYLOR.

"Westport, Ont."

"The cheese is of excellent quality, and Mrs. Scholes intends to communicate with the writer to that effect."

I sincerely hope that Mrs. Taylor, whose cheese has met with such high commendation, has already heard from Mrs. Scholes, according to promise.

CASES OF LONGEVITY.

I believe I have already alluded, in a previous letter, to many instances mentioned in the public press of the great ages reached by people of both sexes in the Old Land. Since then I have come across some most interesting records, all within the last month. The Church Guardian, in a late weekly obituary list, which covers only from February 7th to February 18th, inclusive, gives the names of twenty-three who have died within those dates—all over 80, but thirteen over 90, one being 96, and three 94 years of age. Other papers of the month tell as follows of Mrs. Ann Marshall, of Liskeard, who has just died, celebrating her 103rd birthday a fortnight ago. She distinctly remembered the national rejoicings after the Battle of Waterloo. "Granny" Hudson has passed away, aged 105 years, in Lambeth Infirmary. Of Mrs. Willis, nee Frances Rayley, of Burton, North Westmoreland, who, had she lived another five weeks, would have attained her 101st birthday. The parish register at Shinfield, Berkshire, shows that she was born there on April 7th, 1806. Deceased had lived in five reigns, and was in London at three coronations. She saw Queen Caroline thrust aside at George IV.'s coronation, and remembered the city watchmen, the running of the first London omnibus, and Lord John Russell's first experience at the hustings. The Iron Duke only lived three miles from her native place. She was an enthusiastic whist-player. Of William Horne, who still lives at Swanmore, near Bishops, Waltham, Hampshire, and who retains most of his faculties at 104. Of Mrs. Ann Elizabeth Jennings, who is about to celebrate her 103rd birthday at King's Lynn. She has a son living, aged 83; has lived in five reigns, and also remembers when, as a child of five years, her parents took her to Russell Square to see Queen Caroline, who, Mrs. Jennings says, "was never Queen, because the King

would not allow her to be crowned." Another old lady, at Yatton, Mrs. Honor Coleman, celebrated a few weeks ago her 106th birthday. Her grandmother had lived to be 101, and her own mother met with death accidentally at 100; whilst it is told of Elijah Lindley, a Nottinghamshire worthy, that he has been for sixty-three years clerk and sexton of his parish; that he lives in the house where he was born, and has only been absent from the village four Sundays during his life. He has served under five vicars, assisted at 210 marriages, 1,500 baptisms and

1,000 funerals, the whole of the graves for which he has dug himself. He has tolled the bell for three sovereigns—George IV., William IV., and Queen Victoria. He was only six years old when George IV. died, but his father, who was then sexton, took him to the belfry and made him pull the rope.

With which little history I must close my letter, reserving for my next two or three the story of my pleasant prowlings through the villages and lanes of lovely Devonshire.

H. A. B.

With the Flowers.

SOME HARDY ORNAMENTALS.

By Mrs. Anna L. Jack.

After mid April, one need not be surprised on examining the flowers of the scarlet maple to find them ready to unfold, and the spice bush follows closely. Pussy willows and alders have filled the air of the swamps with the pollen from their floating catkins. The shad bush is waiting to feel a few warmer sunrays, and the flowering dogwood in warm corners shows opening buds.

In the garden, the daphne surprises us with its clusters of pinkish flowers, or a bush of pure white may be seen with their honey-sweet fragrance that is a charmed breath of spring.

Presently, the little Magnolia Stellata opens its starry blossoms all over the leafless tree, though there is danger that a frost may destroy the beauty of the venturesome treasure, and turn the petals brown. If it has been a favorable season, the golden bells of Forsythia will open next; but if severe wintry weather, there will only be the few drooping branches in bloom that were under the snow line.

Spiræas soon begin their procession, for "Arguta" often blossoms with light snow on the ground, and Spiræa Thumbergi soon follows.

What a wealth of shrubs bloom in late May, with calycanthus, golden currant, pearl Spiræa, Tartarian honeysuckles and acacias. Lilacs hold their own, and add to their reputation the old fragrant clusters, and in June we have horse-chestnut and mountain ash, while locust trees line the country lanes. Nor must the barberry and snowball be forgotten, the viburnums having a late effect of red berries that keep up a brightness all season.

Then June is the month of roses—queenliest among the flowers—that glorify while they last. The catalpa should be better known, with its orchard-like blossoms, white, with a tinge of yellow or brown; the foliage is tropical, and trees dense and graceful. The cucumber magnolia swings its seed-pods late in the season; its large leaves are clean and handsome, while the horse-chestnuts have a beauty of their own.

Hydrangea paniculata is a shrub that has taken first rank; its white sprays change to the other seasons as autumn approaches, till November finds them brown and dry.

So many shrubs and ornamental trees live a little further south, that there is always a regret for those that will not endure our winters. But an experience of shrub-planting for over forty years in Quebec Province proves that there are enough hardy plants to survive and form an attractive setting for any country home, and a procession of beauty and utility.

WILD FLOWERS FOR THE GARDEN.

Do you know the wild hepatica, the little white or bluish flower, with downy stems, that opens in the sunny hollows of the wood almost the first days of spring?

The white trillium, commonly called "white lily," which succeeds it, filling all the woodland as though a fairy had been scattering floral riches broadcast?

The dog's-tooth violet, or adder tongue, with its bright yellow blossoms and smooth, blotched leaves?

The scarlet columbine, yellow-lined, with suggestions of nectar in its knobbed flower-tubes?

The little herb Robert, odoriferous, spreading, with tiny pink blossoms somewhat resembling those of the shamrock?

The Indian turnip, or Jack-in-the-pulpit, luxuriant of leafage, with little pulpit gorgeously striped with purple and green?

The dainty dicentra, or "ladies-and-gentlemen," so distinctively different from every other flower as to seem almost exclusive?

The bloodroot, with its great cleft leaves and snowy blossoms, and stems and root-stalks ready to bleed, coral red, at a touch?

The cardinal flower, gleaming like sentinels in scarlet along the banks of the streams?

The wood violet in white, and mauve, and yellow, blooming nearly all the summer through?

The graceful Solomon's seal, and twisted stalk, cousins of the trillium?

Are not these beautiful? And do you not know that with just a little care they may, one and all, be transplanted to the shady, moist spots of your garden, where they will grow up year after year, without the slightest care, save to see that they are not encroached upon by the aggressive weeds of the cultivated plot? Even the cardinal flower will grow away from its native streams, if given a deep, rich bed and plenty of moisture. It is especially attractive when grown along with ferns, and since it will flourish either in sunshine or shade, may be planted on the north side of the house, where the ferns will do best.

Some of the most attractive gardens I have seen were composed almost wholly of these contributions from the wildwood; but in every case, nature's arrangement was followed. Wild flowers simply could not be placed in formal beds and borders; they would look like caricatures. They must be given their own sweet will, and permitted to spread and mass themselves as they choose.

Try a few of them in some out-of-the-way corner, where the necessary partial shade and accumulation of leaf mould are available, and see if the wild-flower nook will not soon become one of the most highly-prized spots in your garden. Then, some day in the future, when you have become fully impressed with the decorative value of our native growth, you may feel impelled to group skillfully about your house and lawn clumps of wild plum and cherry, flowering elder and dogberry, the Juneberry with its wealth of white bloom, the clambering grape and Virginia creeper, bitter-sweet and wild clematis; and you will wonder why your neighbor chooses to worry over and work with exotics, which require years of coaxing and wheeling to induce them to grow in a climate and soil alike unfitted to them.

M. W. A.

PUSSY WILLOW.

Pussy Willow, Pussy Willow,
Soft as any downy pillow,
Sleeping all the winter long—
Cease your sighing—
Winter's dying—
Don't you hear the robin's song?

Pussy Willow, Pussy Willow,
Soft as any downy pillow,
Standing by the little stream,
Cease your sleeping—
Spring is peeping—
Wake and tell us all your dream!

Pussy Willow, Pussy Willow,
Soft as any downy pillow,
Don't you love the children dear?
Hear their laughter—
They are after
Pussy Willows far and near.

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 omitted. 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 20 cents.

A SNAP—Choice Single-combed White Leghorn eggs; 15, 75c; 30, \$1.50; 100, \$4. Geo. Easton, Jr., Whitney, Ont.

AT Valley Mills Poultry Ranch—Fertile eggs from Single-comb White Leghorns, Buff Orpingtons, \$1 per setting, \$4.50 per hundred. Mottled Anconas, settings only, \$1. No better winter layers. Free circular. Edmund C. Apps, Box 234, Brantford, Ont.

B BARRED ROCKS—Choice stock. Eggs dollar per setting. Miss Emily Spillsbury, Colborne Ont.

BUFF ORPINGTON—Eggs for hatching from extra heavy layers \$1 per 15, \$5 per 100. Good hatch guaranteed. Hugh A. Scott, Caledonia, Ont.

BLACK Minorcas; White, Brown, Black, Buff, Leghorns; Buff Orpingtons; Barred, Buff, White Rocks; White Wyandottes; Silver Hamburgs; Pekin ducks. Eggs from winners, \$1 per setting. R. Laurie, Drumbo

B BARRED Rock eggs, from a pen of the "National strain," selected for their choice barring and persistent laying of large perfect colored eggs, and mated with two prize cockerels, vigoous, blocky, barred, to the skin. Price, \$1 per 13, or \$2 per 40. W. C. Shearer, Bright, Ont.

B BARRED Rock eggs for sale, 100 for \$3; 15 for 75c. Glencairn Kennels and Poultry Yards, West Lorne, Ont.

CHOICE Pekin duck and Pearl guinea fowl eggs, one dollar per fifteen. George Hammond, Poole, Ont.

CLOVER LEAF POULTRY YARDS—Barred Rock eggs for sale. Pen No. 1, \$1.50 for 13 eggs; pen No. 2, 75c. per setting or \$3 per 100. Extra heavy laying strain. D. Carmichael, Jr., proprietor, West Lorne, Ont.

EGGS for hatching, from S.-C. Buff Orpingtons and Pekin ducks. Write for prices. Elma Poultry Yards, Trowbridge, Ont.

EGGS—Brown Leghorns. Choice stock. Dollar per fifteen. Fertility guaranteed. R. Gardner, Britannia, Ont., Peel Co. — J182

EGGS FOR SALE—From White Wyandottes and Buff Orpingtons. Prizewinning stock. George W. Clarkson, Summerville, Ont.

EGGS—White Wyandottes (McKellar strain), Barred Rocks (Thompson strain). For two settings one dollar. W. Bryant, Cairngorm, Ont.

EGGS—Buff Orpington, White Wyandottes (Duster strain), B. Rocks. Bred for winter laying. \$1 per 15; \$4 per hundred. J. E. Fordon, Beachville.

EGGS—Single-comb White Leghorn and Buff Wyandottes; good strains; \$1 per 15. George Lewis, Bellevue.

EGGS for hatching from McCormack's prizewinning White Leghorns at \$1 per 15 upwards. Send for mailing list. Jas. L. McCormack, Brantford, Ont.

EGGS FOR SALE—My birds won at the Ontario, Hamilton, Owen Sound and Meaford, and seven fall shows, over 300 first prizes. Barred and White Rocks, White and Silver Wyandottes, Brown and White Leghorns, Buff and Black Orpingtons, Black Javans, \$1 per fifteen or \$5 per 100. Blue Andalusians and Rhode Island Reds, \$1.50 per fifteen. F. W. Krouse, Guelph

EGGS—Special y-mated Wyandottes, Rocks, Orpingtons, Leghorns, 50, \$2. Pekin, Rouen duck eggs, 50, \$3. Mammoth Bronze turkeys, Toulouse, Embden, African geese eggs, settings, \$3; two settings, \$5. Wade & Son, Sarnia, Ont.

FIFTEEN Barred Rock eggs \$1.4 Extra good stock. Entire satin action guaranteed. A. S. Werden, Annesdale Farm, Bethel, Ont.

FOR SALE—White Wyandotte eggs from prizewinning stock. Fertility guaranteed. The Daniels Bros., Valens, Ont.

FERTILE eggs from choice matings; of the proper stock to improve your poultry in standard and egg-producing qualities. White Leghorns, Black Minorcas and White Plymouth Rocks, 75c. per setting. A. Widner, Brampton, Ont.

FOR SALE—Eggs for hatching from pure-bred prizewinning Rose-comb, Brown and Single-comb White Leghorns, White African guinea fowl, Cayuga and Rouen ducks, at \$3 per setting, reduction on larger orders. Look up my winnings on above varieties at last National, Toronto. Miss Davidson, Blairwick Poultry Farm, Collingwood, Ont.

FOR SALE—Single-comb Brown Leghorn cockerels, \$2 each. Also eggs from Brown Leghorn and Barred Rocks, \$1 per 15, \$4 per hundred. S. E. Bonham, St. George, Ont.

INGLENOOK Poultry Farm offers eggs from selected pens of choicest laying strains of White and Brown Leghorns, Black Minorcas and Buff Orpingtons, also a select pen of White Wyandottes for show birds, but not tested for laying quality. Eggs either separate or assorted, \$1 per 15; \$5 per 100. W. H. Smith, 41 Spruce St., Toronto.

LOCHABAR Stock Farm and Poultry Yards offers eggs from the following varieties: Barred Rocks (Latham's strain), Buff Orpingtons, S. L. White and Partridge Wyandottes, \$1 per 13 Imperial Pekin duck eggs, \$1 per 9. Eggs from imp. Bronze turkeys, \$1.50 per 9 eggs. D. A. Graham, Wainstead, Ont.

MAMMOTH Bronze Turkeys, Silver-Gray Dorkings, Barred Rocks, from prizewinners. Pairs not akin. Alfred E. Shore, White Oak, Ont.

DINE HILL POULTRY FARM offers eggs for hatching from selected pens of choicest laying strains of Barred Rocks and White Leghorns, \$1 per 15. John Cowan, Box 223, Galt, Ont.

RHODE Island Red—Rose-comb (exclusively), bred eight years from carefully-selected heavy winter layers; large, brown eggs; \$1.50 per 15. Good hatch guaranteed. Jno. Luscombe, Merton, Ont.

WHITE Wyandotte eggs one dollar. Prizewinners in breeding pen. W. D. Monkman, Bond Head, Ont.

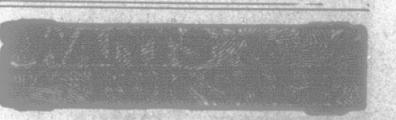
WHITE ROCKS—Eggs from my prizewinners at \$1.50 per 15, \$6 per 100. Geo. R. A. Miller, Vailentyne, Ont.

20 EGGS, \$1.75, from Silver-laced Wyandottes Prizewinners in pens. Try us. Bertel & Rogues, Hanover, Ont.

150-EGG size Reliable incubator (good as new), and two good brooders. The lot cost \$40. Will be sold for \$15. One hatch will pay it. A. Widner, Brampton.

MORGAN'S CHICK FEED
Makes chicks grow and keeps them healthy—it pays—ask for free article on "Feeding Chicks and Poultry." Use Morgan's Roup Cure, 25 cents postpaid. Use Morgan's Meat Meal. Leg Bands and Markers.

POULTRY PAYS Sur Book "Poultry for Profit" showing 10 best paying varieties mailed for 10 cents. Delaware Poultry Farm, F. E. E. Goots, Manager, Box 25, Delaware, Wis.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, Pet Stock, 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 omitted. Cash must always accompany the order. No advertisement inserted for less than 20 cents.

BUY rich farming and grazing lands in the Edmonton District, the most fertile district of Alberta. Fendleton Co., Lamont, Alta.

CLYDESDALE groom wishes to lead Clyde studs in Scotland. Apply: Clyde, Farmer's Advocate Office, London, Ont.

FOR SALE—Pet donkey: \$75 will buy cart, harness and beautiful pet donkey. No bad habits. Address: Box 793, Berlin, Ont.

FOR SALE—25,000 acres; wild lands; by 2 1/2 or full section. Adjoining homesteads—Eagle Lake District. Also improved farms. J. M. Thomson, Real Estate, Indian Head.

FOURTY leading varieties of strawberry and cane berry plants. Seven varieties of seed potatoes. Catalogue free. Jno. Downham, Strathroy, Ont.

FARM lands of all description in Manitoba, Saskatchewan and Alberta. Some excellent propositions in improved farms with cash payment, balance in half crop. Write for particulars to Western Canada Realty Co., Souris, Man.

FARMS for Sale—In and adjoining the village of Appleton, Ont. East 2, 4, 5 and 6 in 9th con. and pt. west 2, 4, in 10th con. of Ramsey, Co. Lennox, about 300 acres in all; about 40 or 60 acres high land, splendid soil; about 150 acres bush; balance pasture land. Mississippi River runs through it, and also splendid well hard water. One first-class dwelling, and three tenement houses, all with kitchens and wood-sheds attached, and all in good repair. Two fine barns (one a bank barn) with stable, cow byre, silo; hen and root houses; water-tank; sheds and implement houses; work shops; carriage house; all in good repair. Appleton is a very healthy and pleasant village to live in, four miles from Carleton Junction and six from Almonte. For further particulars apply to the proprietor on the premises. J. A. Teskey, Appleton, Ont.

GREAT bargains in fruit, stock and farm lands; in very center of garden of Canada; grapes, peaches, etc., abundant; profitable. H. V. Robins, Brantville, Ont.

HERDSMAN WANTED—Experienced, reliable, steady and industrious, for small herd of Shorthorns; willing to do general farm work; one having some knowledge of gardening preferred. Commence 15th May. References required. State wages wanted and whether married or single. N. S. Robertson, Arnprior, Ont.

NEW JERSEY Stock—5 acres good, high, dry land near Atlantic City, N. J., for \$100—\$5 down, \$5 monthly. Excellent soil and climate for raising early fruit, berries, truck, squabs and poultry. Good markets close by. Two rail roads. Near large manufacturing city. Pure air and water. Title perfect. Booklet free. Daniel Frazer Co., 728 Bayview Building, Philadelphia, Pa.

SINGLE man for farm. Must milk and plow. Apply, stating wages. Chas. Scott, City View, Ottawa.

WANTED—Experienced sober man to travel entire Shire horse. Give reference. M. W. Sexsm th, Ridgeway, Ontario.

320 ACRES; fine wheat farm; 150 acres under cultivation. Good buildings, \$25 per acre. Easy terms. 640 acres prairie land. Good location. \$15 per acre. Regina city property. 100 other good propositions. Scholt & Fromm, Regina, Sask.

36th Annual Fair

and Horse Show of the Otago Agricultural Society, will be held in Otago, N. Y., Tues., Wed., Thurs. and Fri., September 24, 25, 26 and 27, 1907. Arrangements have been made with the Customs Department for the minion of Canada for exhibition without expense to exhibitor. W. M. E. DANIELS, Pres., Ogdensburg, N. Y., U. S. A.

When You Buy Telephones Do You Consider the Quality?

Poor telephones give poor satisfaction, and is money wasted or thrown away.

When you buy telephones or telephone apparatus, buy the best, it's the cheapest in the end.

We make the best because every piece of our apparatus is made out of the very best material obtainable, and is made in our factory, and not bought here, there and all over the country.

We manufacture a complete line of telephones, switchboards, and also carry a large stock of line material and supplies.

Write for Bulletin No. 2.

Northern Electric & Manu'g Co., Limited
WINNIPEG. MONTREAL

John Chambers & Sons

HOLDENBY, NORTHAMPTON, ENGLAND



Long-distance 'phone.

Wish to inform their many friends and customers in Canada and the United States that they have established permanent headquarters in Canada, at St. Thomas, Ont., under the direction and management of Dr. Geary. A shipment of 10 stallions and 9 mares and fillies have just arrived, many high-class show horses among them, weighing up to 2,600 pounds, and full of quality and flash movers. The mares and fillies are safe in foal. Positively the best lot of Shires ever landed in Canada. Address all correspondence to

DR. GEARY, ST. THOMAS, ONTARIO



London FACE DOWN Adjustable Concrete Building Block Machine

We defy competition. Send for catalogue No. 1.

THE LONDON CONCRETE MACHINERY CO.,
 28 Redan St., London, Ont.

Largest exclusive concrete machinery company in Canada.



Wanted Men

Hundreds of men wanted to fill positions as Firemen and Brakemen. We teach and qualify you by mail, and assist in securing positions. Write to-day for booklet and full particulars.

Do Union Railway Correspondence School
 Dept. F. WINNIPEG

FARM LANDS AND CITY LOTS

EMPLOYMENT

INVESTMENTS
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TAXES PAID AND RENTS COLLECTED FOR NON RESIDENTS.

WALTER C. CLARK,

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P.O. BOX 766
 TEL 3641

REGINA, SASK.



TELEGRAMS -
 MERCANTILE, REGINA

ADVERTISE IN THE ADVOCATE.

The Ingle Nook.

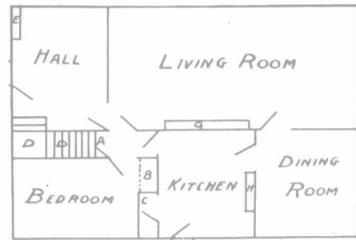


Fig. 1.—Plan for compact house: Entrance at side of hall; (A) cellar stair goes down under upper stair; (B) wardrobe; (C) closet for coats; (D) stairs going up, with turn; (G) grate; (H) built-in cupboard.

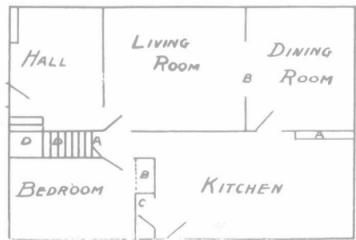


Fig. 2.—Either this plan or the one above may be used with upstairs shown in fig. 3. If a large kitchen is preferred, use this plan, and place built-in cupboard near dining-room door.

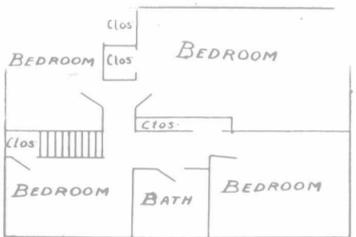
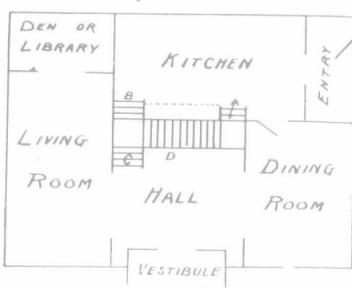
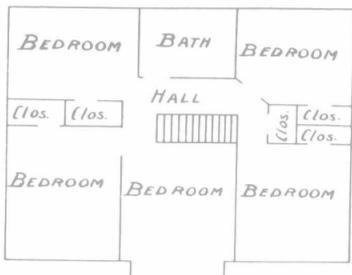


Fig. 3.—In above plan, long closet door should be more to the right to come within the bedroom. A slight mistake was made in the cut.



Figs. 4 and 5.—In above plan, note the back entry, in which coats, etc., may be hung; also front and back stairs (B and C), uniting in single stairway (D). The vestibule at the front is useful for leaving rubbers, umbrellas, etc., in; while the hall, which is here large enough for a reception hall, may be made smaller and the kitchen larger, as preferred. It is to be understood that none of the plans are given to be followed absolutely. They are merely presented as suggestions, and may be changed to suit individual needs.

SOMETHING ABOUT HOUSES.

I am afraid I got myself into trouble when I plunged into those articles on houses, for now, presto! I have been asked for some "house plans" and "hints on house-building"!!! Frankly, I do not know how much I can help you in this. I know nothing whatever of the prices of lumber and labor—except that beautiful woods always cost more than less beautiful ones, and that it pays always to have a "job" well done—and I can give no estimates as to what a house, built of such-and-such materials, would cost. However, I have a few general ideas on other phases of the subject, which are satisfactory to myself and may be suggestive to you, and since this extraordinary request came in, I have set my net and caught a few more whose virtues seem rather patent; such as they all are, you are very welcome to them.

Passing by the first essential, then, a dry site, and the second, as pleasing an outlook as possible, we shall go on to speak of house-building under the following heads: (1) Arrangement of interior; (2) lighting and heating; (3) exterior.

THE INTERIOR.

Speaking of the interior first may seem somewhat like putting the cart before the horse; yet, since it is in the interior that we chiefly live and move and have our being, this division of the subject is, perhaps, rather natural. In the first place (and, of course, this must affect the outer contour too), the house, in this climate of extremes, should be compact. Further south, where conservation of heat is no object, all sorts of rambling arrangements are permissible, and, it must be confessed, present endless artistic possibilities, but it is safe to say that in almost every part of Canada that plan which confines all rooms practically under one roof is likely to be the most satisfactory. Such a provision ensures that no room shall have more than two outside walls, and quite dies away with the old-time kitchen, which, in this respect, with its three sides exposed to the weather, was a decided mistake. An outside kitchen, with a safe chimney, will, of course, obviate all difficulty of cooking in hot weather.

Again, the interior should be arranged, if possible, to do away with the necessity for taking one unnecessary step. The kitchen door should be in the position most convenient to barn, pump, etc., and should have just within it a small closet or hall in which the "men" may hang their hats and overcoats, thus saving so much "muss" in the kitchen, while preventing the clothing from becoming chilled, as it must of necessity if hung in an outside shed. The serving pantry, or built-in serving cupboard, as the case may be, should be placed at the nearest available point to the dining-room—between the kitchen and dining-room, if possible; a back stairs would be a convenience, also a downstairs bedroom, so useful in time of illness or when there are old folk in the house; and a back porch, vine-covered, to which one might take much of one's work during the warm weather. If to all this be added a basement laundry, with stationary tubs and taps over them, and a door leading directly out on to the yard, where the clothes-reel stands, or, still better, to a porch from which a pulley clothes-line, such as that described not long ago in "The Farmer's Advocate," runs, one's joy, so far as the downstairs part of the house is concerned, must needs be well-nigh full. . . . We have not spoken of library and living-room. Some will choose to make one apartment answer both purposes, others will care to have neither, but, in place of them, the old-time parlor. Little by little, however, we are becoming educated away from this "parlor" idea; by the time the next decade has passed, we shall all probably have come to learn that houses were made to be lived in.

A few years ago, the fashion of "arches" struck the country like a cyclone. In some of the best houses, there were arches everywhere, between hall and parlor, parlor and dining-room or library, etc., ad infinitum. At first, these openings were supplied with folding doors; later curtains took the place of the folding doors, and the palmy days of chenille, damask and velours came on apace. Of late, however, curtains have begun to withdraw, gradually, into the background. It was found that they

HOUSES.

into trouble articles on have been plans" and Frank I can help g whatever bor—except cost more and that it job" well ates as to at-such ma- I have a ases of the y to myself and since ame in, I a few more ent; such welcome to

were very efficient dust-gatherers, and the suspicion arrived that they might also harbor "germs." So, nowadays, in the very most up-to-date houses one finds neither folding doors nor curtains, but, instead of them, grills made of turned wood, or slender pillars, each side of the opening, with provision between for palms, etc. I shall be on the lookout for pictures of some of these archways, which may be reproduced in these columns. Of course, these grills and pillars give no privacy whatever to a room. They simply serve as a sort of furniture, give a semblance of division into apartments, and often confer upon an interior an aspect of grace and airiness that is very attractive. They certainly possess the virtue of making a house look large. As regards the advisability of having many such openings in a country house, however, I am still somewhat in doubt. It would depend somewhat, perhaps, upon the number of inmates and the amount of work to be done. If you have a house divided into rooms by good staunch walls, provided with doors that may be tightly closed, you will find it quite possible to "clean a room a day," if necessary, shutting each off from the others while the cleaning is in process, and so preventing the dust from flying through, as it must of necessity if only archways with pillars and grilles intervene. As for folding doors—personally, I do not like them at all. They always look to me like a device that should be confined to institutions—but "every man to his taste." The only place where I should tolerate them would be in a large bedroom, which, in time of necessity, might thus be converted into two rooms. As for the archways with grills, I do like them, very much. Only I realize that there might be conditions under which they would not be advisable.

Coming more directly to the upstairs, the first observation might be that every house should be supplied with a bathroom, a matter which is easily accomplished by having a tank in the attic, with pipes leading therefrom. A small coal-oil heater beside the bath-tub will form a very convenient and speedy means of heating the water. It is quite possible also, provided the water supply is good, to have an inside privy, a cess-pool being arranged at some distance from the house for disposal of the sewage. Where the water can be pumped to the house by a windmill, this arrangement is simplified.

A second necessity for the upstairs is that each bedroom be provided with a closet, or, if it be necessary to economize space, with a built-in wardrobe in the wall, in which to hang clothes. In many of the houses in California, where architecture has made rapid strides, the closets are made quite large. At one end is the washstand. At the other are shelves with drop fronts, in which to lay white clothes, etc., while in the wall are wardrobes for clothes, boots, etc. This does away with the necessity of having a dresser in the bedroom, its place being taken by a full-length mirror fixed in the closet door, with a few shelves near for toilet articles. This arrangement has much to commend it. The lack of heavy furniture in the bedroom reduces cleaning it to a minimum; the absence of the dresser leaves room, even in a small apartment, for the little table so necessary when reading or writing, or sewing, or for the couch which does so much to save white counterpanes from being soiled. Last of all, but not least, there is nothing in a house which can give the uplift to good taste and personal tidiness that is given by the full-length mirror. You really can have no idea what you look like, in entirety at least, until you see yourself in a full-length mirror.

As regards the finish of the interior, I should have, if possible, hardwood floors, simply stained, or waxed without any staining at all. Of course, they "cost," but they are so sanitary, and they save the price of carpets. If I couldn't have hardwood floors, I should still have bare floors, stained or painted, with rugs for covering. There is nothing repulsive about a few glimpses of bare floor, but, when one thinks of it, there is certainly something very repulsive about the idea of a tacked-down carpet with its inevitable under layer of dust, a light layer, perhaps, if the carpet be good and finely woven, a very thick one if the covering be cheap and loose. Then the

big center-rugs, or art squares, are so pretty! Of course, the prettier they are the more they cost; yet I can only repeat what I have said so often before, that rag rugs, which are not expensive, may be very artistic; it all depends on the coloring chosen for them, and whether it blends harmoniously with the general color scheme of the room or not.

As for the other woodwork—the "real" wood, if handsome, is, of course, prettier than anything else. If you cannot have handsome wood, then do not torture ordinary pine, etc., into a semblance of it. Stain it, or paint it soft green, or brown, or gray, or paint it pure white, or ivory, always in accordance with the color scheme of the room.

"But," does someone say? "You have been describing an expensive house." In some respects, perhaps so. A bathroom with fittings, a garret tank, a basement laundry—all these things cost, and may, perhaps, be done without. Yet it is my place to describe the best arrangements. Those who read this must, of course, use such hints as appeal to them, or are practicable to them, rejecting all others. There may be some who can take advantage of every suggestion, others who can use but one or two. The editors of "The Farmer's Advocate" must cater to all classes.

In closing, however, may I emphasize my idea that pantries and washrooms, as usually seen, are an invention of evil for multiplying labor. A large basement laundry is, of course, to be recommended, but it is a very different thing from the little, huddled, besplashed cubby-hole usually dignified by name of washroom. Better do the washing in the middle of the kitchen, and store the tubs in the wood-shed, than be bothered with it. Every extra room, no matter how small, means another room to be cleaned, and who would not rather "do" a whole kitchen than one little crowded washroom or pantry? Much better then, I say, have no washroom, and spacious built-in cupboards instead of a pantry.

Heigh-ho! I'm really becoming enthusiastic! Be it upon your heads, Chatterers, if you turn me from an editor into an architect! . . . Next week the subject will be continued,—if you can stand any more of it.

DAME DURDEN.

Some Practical Hints from Jack's Wife.

Dear Dame Durden,—May I come again for a few minutes; one is so busy with sewing and incubators and housecleaning peering over the fence that there is little time for chats now. I am glad that you like "built-in" things. One of my ideas has been built-in wardrobes, instead of those "black holes" called closets. Have a wide shelf, the full size of the wardrobe, and screw hooks in a single row about six inches apart down the center of the under side; make hangers for each garment—wire ones are nicest, but pieces of barrel hoops will do—then hang each garment on a hook by itself, and you will be surprised how many garments can be put in a small space without being crushed.

Another hobby of mine is to dispense with carpets in bedrooms (and in other rooms, too, when I can get the floors in "shape"). Paint the floors, use whatever rugs you can afford, use a mop of old stockings or underwear instead of a broom.

Did any of you Chatterers ever try making short skirts of duck or galatea for morning wear? Have them quite short, four or five inches from the ground. They are much neater than long ones turned up, or pinned up, and so handy for going up and down cellar, and out into the yards when the grass is damp. To keep a skirt from sagging, and a waist from drawing up, take a piece of strong material three or four inches square, fold cornerwise, then fold again so that the long side is the side of the square, and the opposite point the center of the square. In this point work a button-hole; sew the long side of the triangle to the waist line of the waist—inside for dressing-sacks, outside for shirt-waists. A button on the skirt makes the connection.

Now, a wrinkle for the mothers, and I am done: Take a large packing-box, not more than two feet deep, but as large as convenient on the floor. Line this with old quilts or carpet; put in baby's choicest toys, and then put in baby. He is safe from drafts, and can kick about all he likes without being stepped on; and if you have to leave the room for a few minutes, you know he is safe.

I just had this finished when "The Farmer's Advocate" came along. Many thanks to all who sent names for our home. We called it "Hillcroft," as it is only a small place. I hope others got some ideas for names as well as we did.

Since recipes for "chaps" seem to be in order, try a few drops of vinegar on the hands, if you are obliged to use hard water or anything with lime in it.

Butter Tarts.—Mix, thoroughly, one-half cup flour, 1 cup sugar, and a little salt (depends on the saltiness of butter); put into each shell enough of this mixture to more than half fill it; flavor a little cold water with any extract, or use without flavoring if you like; put into each tart just enough water to moisten the mixture; drop in each a small piece of butter (size of a small hickory nut), and bake as usual. Of course, shells are baked after being filled. Tell us more of your travels, "New Chum." Aunt Nan, I hope you will come again soon, and tell more of your experiences. I quite agree with you that women should know some of the simple details of outdoor work to be ready for emergencies. In the same way, a man should know indoor work.

JACK'S WIFE.

A Correction.

Dear Friend, J. E. T.—I beg your pardon for my mistake in the recipe I sent for bread. I forgot to say to add half a yeast cake dissolved in warm water, when the mixture for yeast is cool enough. I hope neither you nor anyone else has tried it the way it came out in the issue of April 4th. ALICE. Elgin Co.

THE BLOSSOM.

(Henry Van Dyke.)

Only a little shrivelled seed— It might be flower or grass or weed; Only a box of earth on the edge Of a narrow, dusty window ledge; Only a few scant summer showers; Only a few clear, shining hours— That was all. Yet God could make Out of these, for a sick child's sake, A blossom-wonder as fair and sweet As ever broke at an angel's feet.

Only a life of barren pain, Wet with sorrowful tears of rain; Warmed sometimes by a wandering gleam Of joy that seemed but a happy dream; A life as common and brown and bare As the box of earth in the window there, Yet it bore at last the precious bloom Of a perfect soul in a narrow room— Pure as the snowy leaves that fold Over the flower's heart of gold.

UNBELIEF.

There is no unbelief. Whoever plants a seed beneath a sod And awaits to see it push away the clod, Trusts be in God.

Whoever says, when clouds are in the sky, "Be patient, heart; light breaketh by" and bye," Trusts the Most High.

Whoever sees 'neath winter's fields of snow The silent harvest of the future grow, God's power must know.

Whoever lies down on his couch to sleep, Content to lock each sense in slumber deep, Knows "God will keep."

CRUEL.

Cholly.—The dentist told me I had a large cavity that needed filling. Ethel.—Did he recommend any special course of study?

GRAY AND FADED HAIR restored to its original color in ten days when Princess Hair Rejuvenator is used. It is neither greasy nor sticky, clear as water, free from all injurious ingredients, prompt to act, easy to apply, safe to use, sure in its results. Price \$1.00, express paid. PRINCESS DANDRUFF CURE prevents premature grayness and baldness, promotes a healthy condition of scalp, and clears it of dandruff. Price \$1.00, express paid. Superfluous Hair, Moles, etc., eradicated forever by our method of Electrolysis. There is positively no other treatment that will destroy hairs on face and arms. Satisfaction guaranteed. Send stamp for booklet "F." Established 15 years. Graham Dermatological Institute, 502 Church Street, Toronto.

\$12 WOMAN'S SUITS, \$6. Suits to \$15. Coats, raincoats, skirts and waists at manufacturers' prices. Send for samples and fashions. Southcott Suit Co., Dept. 27 London, Can. Send for our catalogue, which lists everything you wear.

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 in urgent veterinary or legal enquiries, \$1 must be enclosed. Miscellaneous.

YEAST TREATMENT FOR BARRENNESS.

1. Kindly repeat the prescription of the yeast treatment for barren mares. 2. Where can I get a stallion registered? S. P. Ans.—Dissolve the half of a common yeast cake, as found in grocery stores, in a pint of warm water. Allow to stand for twelve hours; then strain and put in a can, place cover on, and screw it down tight. Prepare this about two days before you expect mare or cow in heat. When this occurs, place the strained yeast solution in a half-gallon of hot water, and an hour later inject into the vagina, using either an injection pump, or a piece of rubber hose about 18 inches long, inserting about 10 inches in the vagina, and using a funnel to pour the liquid in, raising the outer end of hose as high as possible, and removing the hose very slowly to insure all of the liquid passing into the vagina. 2. Write the Accountant, National Live-stock Records, Department of Agriculture, Ottawa; ask him to send you form for registering a horse of the breed to which your horse belongs.

Breeders and farmers looking for first-class heavy draft mares and fillies should make a note of auction sale on April 24th of 18 imported Clydesdale mares and fillies, consigned by Dalgety Bros., of Dundee, Scotland, to be sold at the Fraser House, London, Ont., on the above date. This consignment, we are assured, is quite equal to former shipments by this firm in size, type, quality and breeding, which is a pretty good guarantee that they are well worth looking after, for this firm have made an enviable reputation by the uniform high-class excellence of the horses and mares they have brought to this country.

SALE DATES CLAIMED. April 24th.—Dalgety Bros., Dundee, Scotland, and Glencoe, Ont., imported Clydesdale mares, at Fraser House, London. May 9th.—W. J. Thompson, Mitchell, Shorthorns. May 23rd.—G. A. Gilroy and G. H. Manhard, Holsteins, at Brockville, Ont. May 24th.—Jas. I. Davidson, Balsam, Ont., dispersion sale of Clydesdales and Shorthorns.

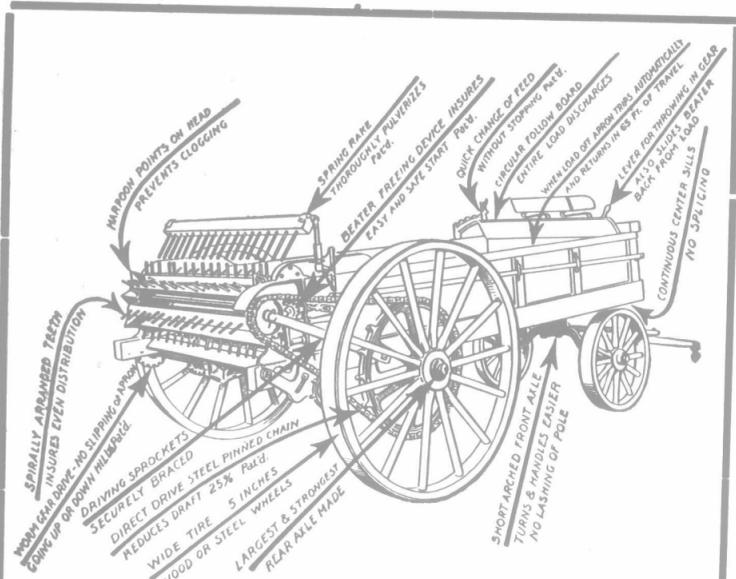
8,000 FARMER STOCKHOLDERS.
Won Out Again for the Harvest of 1906.



The Farmers' Binder Twine Co., Ltd.

We want farmer agents in every locality between the Atlantic and Pacific Oceans. No others need apply. Also advise any other territory adjacent where we should be represented. Write instantly you see this advertisement. Remember, we are the last left of all the co-operative family, fighting the most virulent opposition ever pitted against the Canadian farmer, his home and children. Our Red Star and Special Manila said to be equal to anything out against us in twine of any length or price. Look out for the wily ways of the opposition.

JOSEPH STRATFORD,
 General Manager, Brantford, Canada.



Costs Practically Nothing.

"Success" costs practically nothing. It quickly pays for itself by increasing the crop yield. Fill out the following blank spaces and send this ad. to us, and we will show you why you should own a "Success":

I have the following number of 50-bushel loads of manure per year:

..... loads cow horse hog sheep.

Name

P. O. Province

The Paris Plow Company, Limited, Paris, Ont.
 Western Branch: Winnipeg, Man.

The only medium which conveys weekly to the farmers of Canada, the advertiser's place of business, 52 times a year, is THE FARMER'S ADVOCATE AND HOME MAGAZINE. Subscription, \$1.50.

GOSSIP

A NEW SHIPMENT OF SHIRES.

Admirers of the great English draft horse, the Shire, will be pleased to learn that one of the leading firms of Shire breeders in England, Messrs. John Chambers & Sons, of Holdenby, Northampton, whose several shipments to Canada in the past have been so much admired, and have proven so profitable an investment to those fortunate enough to secure them, have opened up permanent quarters in Canada, at St. Thomas, Ont., for the better accommodation of their many friends and customers in this country and the United States. The Canadian end of their business will be entirely under the control and management of Dr. Geary, a veterinary surgeon of many years' experience and of high repute in his profession, and a gentleman in the fullest sense of the term, in whom the public may place the utmost confidence. Every animal sold by Dr. Geary will be sold under the most reliable guarantee, and should anything turn out not right, it will cheerfully be remedied, as the Messrs. Chambers are in the Canadian market to stay, and will constantly have a stock of their noted Shires on hand at their St. Thomas stables. The latest shipment, consisting of 10 stallions and 9 mares and fillies, arrived a few days ago, and, when seen by "The Farmer's Advocate" representative, were in splendid fettle after their long journey, not one of them even having the almost inevitable sea cough, so frequently found in new arrivals. Prominent among the stallions in this consignment is the massive 2,600-lb. black King of Anglesey, sired by Mere Boy, dam by Woodland Prince. King of Anglesey stands over 17 hands high, on the best possible kind of feet, ankles and legs, and is rising five years of age; as a model of the breed and a high-class show horse, he has had few equals in England. In 1902, he won first at the Anglesey Show, at Llangefni. In 1903, he was h. c. at Hollyhead. In 1904, he won first at the Anglesey Show, at Llanerchymedd, also first at Llangefni. In 1905, he won second at the Anglesey Show, a record of winnings, year after year, that proves him to be what he is—one of the best Shire stallions alive. Bay Prince 9th is a bay, rising four, by Lokinge Forest King, the premier Shire stallion of England, many times champion and grand champion, and whose book is now full for 1907, 1908 and 1909 at 15 guineas a mare, dam by Leake Superior. Mr. Chambers says this horse is the best Shire that ever left England. He is a marvel in conformation, size, style, quality and action. Trenathan Prince is a black, rising five, by Trenathan Marquis, dam by Merkeaton Loyal Harold. This horse is richly bred on winning lines, both his sire and grandsire being noted winners, and he has won second at Campbellford and Launceton shows. He, also, will be a revelation to Canadians who think Shires have not style and quality enough. One word fitly describes him, "superb," as he has faultless form and action, with a thick, heavy body. Space will only allow mention of one other, although there are others equally as good: Champion 30th is a chestnut, rising five, by Colonel 5th, dam by Ashton Briton. This is a horse of great scale, exceptionally smooth, with massive, flat bone and grand good ankles. One thing that particularly struck us was the marvellous action of every one of them. This, combined with their great size, natty, stylish carriage and grand quality of bone and ankles, stamp them as certainly away the best lot of Shire stallions ever landed in Canada. Others in the lot are: Milnthrope Victor Chief, a black three-year-old son of Holker Chief. This colt is a cracker. Major 19th is a three-year-old chestnut son of Nailston Royal Harold, and is a show horse all over. Cramore Girton is a three-year-old bay son of Girton Harold, a big, flash-quality colt. Bramshall Violet is a black three-year-old son of Blythwood Spark. This colt has several first prizes and a reserve championship to his credit, and is certainly a rare good one. Cardyke Prince is a black four-year-old, by Hendre Crown Prince, another grand good horse. Among the mares and fillies are:

one rising 9, by Nailston Cœur-de-Leon, heavy in foal to Exton Harold. Queen of Sheen is a brown, rising 9, by Lincolnshire Boy; she is safe in foal to Birdsall Gallant. Stunney Gaeta is a brown, rising four, by Hitchin Drayman 2nd; she is in foal to Girton Senator. Morning Hold Handy is a brown, rising six, by Hallmark 2nd; she is in foal to Princeps. Golden Queen and Vengeance are a well-matched pair of two-year-old browns, both in foal, and a mighty nice pair they are, with style and flash action galore. Ashly Princess is a bay two-year-old, by Colehill Paxton; she is in foal to Colehill Carbon. Favernate Charm is a bay two-year-old, by Elverden Pioneer; she is in foal to Extraordinary. Singleton Rose 4th is a brown two-year-old, by Wigenhall Spartan, the last two being the only ones not in foal. Here are a lot of mares and fillies that will certainly delight the eye of draft-horse admirers. They combine great size with strong, flat bone and the flashiest kind of action, and quite contrary to the impression of a great many people, these Shires have ideal ankles, and, all around, they are an exceedingly choice lot, and without doubt the best lot ever seen together in Canada. They will be sold well worth the money, and the mares being safe in foal make them doubly attractive as an investment. Address all communications to Dr. Geary, St. Thomas, Ont.

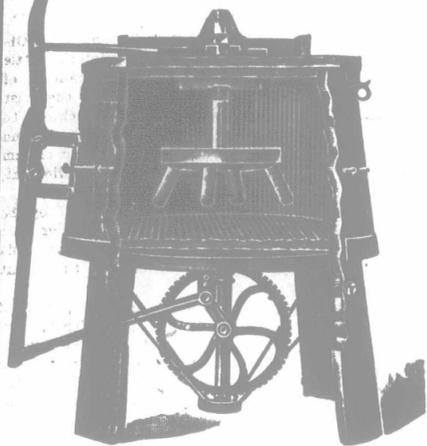
TRADE TOPICS.

A \$500 FARM.—Five hundred dollars for twenty-five-acre farm of good productive land, close to large markets in Old Virginia, is the proposition offered in our advertising columns elsewhere in this issue. It is not even necessary to pay all cash, for terms of payment can be arranged to suit the circumstances of each purchaser. Readers who are interested are requested to write F. H. LaBaume, Agri. and Indl. Agent, N. & W. Ry., Box G. D., Roanoke, Va., for the two pamphlets, "Back to the Country" and "What \$500 Will do in Virginia." They contain full description of these lands, with maps, etc. In writing, please mention "The Farmer's Advocate."

PREFERS THE SWINGING STANCHION.—Commenting upon an answer to a question, "Chains vs. Stanchions," in "The Farmer's Advocate" for April 4th, Mr. Jas. R. Dunn, of Pictou Co., Nova Scotia, writes, commending the Maritime stanchion, which he devised a few years ago, and which is in use at the Truro Agricultural College, the quarantine barn at St. John, N. B., and adds that Prof. Grisdale has ordered some for the Experimental Farm stable at Ottawa. A very strong advantage of this stanchion, as compared with the old style of rigid stanchion, is that it overcomes the serious difficulty of cattle receiving a jar or strain when getting up and lying down, and it is also easy to unfasten. This stanchion was advertised in "The Farmer's Advocate" last year by the Baily-Underwood Co., New Glasgow, N. S.

A NEW FENCE FACTORY.—The factory of the McGregor-Banwell Fence Company, Walkerville, Ontario, was recently destroyed by fire, but the same energy and push that has always characterized this representative Canadian manufacturing concern, simply utilized the disaster for an improvement of their facilities, so that now they have one of the best-equipped plants known. A late letter from the firm philosophically says: "It is not as bad as it might have been. We were fairly well covered with insurance. The fire occurred on the 16th of March, and by April 5th we had built another factory, and had the looms at work weaving new fences by April 8th." While a large amount of fence stock on hand and a considerable quantity of hard steel wire was seriously damaged, much of the fence and fence wire was only slightly damaged, some of it only in appearance. This is on sale at reduced prices in order to move it quickly and make room for the new product. This is a pointer on where to get fence bargains for a short time. All the fence is the large wire "Ideal" fence, made of No. 9 hard steel wires. The McGregor-Banwell people say they hope, by working double time, to be able to fill all orders for new fence promptly.

The illustration below is a half tone made directly from a photograph. Notice the thickness of material used the corrugated bottom and walls and the heavy-turned dolly or clothes agitator. Special attention is also called to the substantial legs, and round-iron braces attached to the upright gear-wheel support.



ONE MINUTE WASHER (Sectional View).

See the fly-wheel under the bottom of the tub? That's a feature of the "One Minute" Washer exclusively its own. This fly-wheel is driven by the gear-wheel with crank attached and revolves on little steel balls just like the wheels on a bicycle. You'd be surprised how hard it is to stop the machine when once this wheel gets up speed. Two strokes of the handle is usually sufficient to get under headway—then the fly-wheel does half the work.

"ONE MINUTE" WASHER

Admitted by all to be the best washing machine yet invented.

The tubs are constructed of clear-grain Louisiana cypress lumber.

The castings, upon which there is any strain, are malleable.

- Three Great Features:
1. Not Hard on the Clothes.
 2. "Very" Easy to Operate.
 3. Moderate in Price.

Sold Everywhere in Canada

Write us to-day for free circular, and the name of the dealer in your locality who sells them.

White, Ehrhardt & Company,
Toronto, Canada.



How to Raise Young Chicks

The difficulties encountered in raising young chicks are numerous. Disease and lice are said to destroy nearly 50% of the annual poultry crop. Errors in diet and unsanitary conditions also help to decrease the poultry profit. But you do not need to suffer these losses if you will give poultry half the care you give other stock. Besides

DR. HESS POULTRY PAN-A-CE-A

is guaranteed to prevent and cure gapes, cholera, roup, indigestion, etc., allaying fermentation and destroying the germs of disease. By its special tonic properties it increases the powers of digestion and assimilation and compels the system to appropriate the maximum amount of food to egg production, also making the young grow fast, healthy and strong. Besides increasing growth and egg production Dr. Hess Poultry Pan-a-ce-a has special curative properties peculiar to itself. Take no so-called poultry food as a substitute. Remember that Dr. Hess Poultry Pan-a-ce-a is the prescription of Dr. Hess (M. D., U. S.) and bears the endorsement of leading poultry associations in the United States and Canada, and is sold on a written guarantee. It costs but a penny a day for about 30 to 40 chicks. Feed Poultry Pan-a-ce-a as directed, sprinkle Instant Louse Killer on the roosts, nests and into the dust bath, and we guarantee you will have no loss from disease.

1 1/2-lb. package, 35 cents; 5-lb., 85 cents;
12-lb., \$1.75; 25-lb. pail, \$3.50.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK, Ashland, Ohio, U. S. A.

INSTANT LOUSE KILLER KILLS LICE.

GOSSIP.

Official Records of 120 Holstein-Friesian cows were accepted by the American Holstein Association, from March 12th to March 22nd, 1907, three being official records begun not less than eight months from calving, and twelve being semi-official records. All made seven-day, thirteen made fourteen-day, and nine made thirty-day records. The forty-eight full-aged cows averaged: age, 6 years 5 months 18 days; days from calving, 24; milk, 468.8 lbs.; per cent. fat, 3.52; fat, 16.499 lbs. The first eleven cows in the list producing an average in the seven consecutive days of 560.8 lbs. milk, containing 20.918 lbs. of butter-fat; showing an average of 3.73 per cent. fat.; an average of over 80 lbs. or nearly 40 quarts milk per day, and almost 24 1/2 lbs. of best commercial butter per week.

Segis Aaggie De Kol Beets leads this fine list of full-aged cows, with 25.645 lbs. fat from 607.2 lbs. milk in seven days, and 100.215 lbs. fat from 2,617.4 lbs. milk in thirty days; thus displacing Pietje 22nd for third place in the seven-day division, but falling behind her in the thirty-day division, and gaining fourth place.

The following Canadian-owned cows are included in this report:

Rachel Schillaard Clothilde 64144, age 5 years 3 months 4 days; days from calving, 37; Milk, 577.5 lbs.; per cent. fat, 3.62; fat, 20.915. Fourteen-day record, days from calving, 39; Milk, 1,136.0 lbs.; per cent. fat, 3.52; fat, 39.825 lbs. Owner, H. Manhard, Manhard, Ont.

Inka Sylvia De Kol 52722, age 7 years 5 months 1 day; days from calving, 46; Milk, 605.8 lbs.; per cent. fat, 3.44; fat, 20.837 lbs. Fourteen-day record, days from calving, 39; Milk, 1,194.5 lbs.; per cent. fat, 3.29; fat, 39.247 lbs. Owner, G. A. Gilroy, Glen Buell, Ont.

Rose Rattler 68640, age 5 years 8 months 6 days; days from calving, 46; Milk, 464.6 lbs.; per cent. fat, 4.17; fat, 19.359 lbs. Thirty-day record, days from calving, 36; Milk, 1,945.8 lbs.; per cent. fat, 4.09; fat, 79.678 lbs. Owner, Geo. Rice, Tillsonburg, Ont.

Coral De Kol's Pet 50982, age 7 years 9 months 12 days; days from calving, 12; Milk, 449.0 lbs.; per cent. fat, 4.02; fat, 18.044 lbs. Fourteen-day record, days from calving, 7; Milk, 865.8 lbs.; per cent. fat, 4.10; fat, 35.540 lbs. Owner, G. H. Manhard.

Carmen Sylvia 4th 56791, age 6 years 12 days; days from calving, 44; Milk, 451.3 lbs.; per cent. fat, 3.70; fat, 16.699 lbs. Owner, G. A. Gilroy.

Aaggie Grace Manor Josephine 58714, age 5 years 9 months 2 days; days from calving, 39; Milk, 529.3 lbs.; per cent. fat, 3.21; fat, 16.674 lbs. Fourteen-day record, days from calving, 35; Milk, 1,020.6 lbs.; per cent. fat, 3.16; fat, 32.269 lbs. Owner, G. A. Gilroy.

Countess Chase 50913, age 8 years 11 months 4 days; days from calving, 14; Milk, 420.5 lbs.; per cent. fat, 3.68; fat, 15.468 lbs. Owner, G. H. Manhard.

De Kol Madura Clothilde 57044, age 6 years 3 months 22 days; days from calving, 26; Milk, 360.0 lbs.; per cent. fat, 4.03; fat, 14.492 lbs. Owner, G. H. Manhard.

Dirkie Pel 66945, age 4 years 10 months 4 days; days from calving, 7; Milk, 507.0 lbs.; per cent. fat, 3.24; fat, 16.455 lbs. Owner, G. H. Manhard.

De Kol Imperial Duchess 63940, age 3 years 10 months 14 days; days from calving, 15; Milk, 346.5 lbs.; per cent. fat, 3.55; fat, 12.305 lbs. Owner, G. H. Manhard.

Corinne Albino De Kol 71825, age 3 years 2 months 18 days; days from calving, 25; Milk, 330.2 lbs.; per cent. fat, 3.71; fat, 12.238 lbs. Thirty-day record, days from calving, 25; Milk, 1,369.6 lbs.; per cent. fat, 3.70; fat, 50.766 lbs. Owner, Geo. Rice, Tillsonburg, Ont.

Johanna Netherland Lassie 72812, age 2 years 2 months 20 days; days from calving, 69; Milk, 252.0 lbs.; per cent. fat, 3.98; fat, 10.023 lbs. Owner, G. H. Manhard.

Rhoda Crowning Shield Colantha 79747, age 1 year 8 months 18 days; days from calving, 25; Milk, 280.3 lbs.; per cent. fat, 2.97; fat, 8.311 lbs. Owner, Geo. Rice.

Mr. C. D. Wagar, of Enterprise, County of Addington, Ont., recently purchased, from Mr. Peter White, of Fembroke, the choice young Shorthorn bull, **Starry Morning**—58887. This is a grand animal, and should greatly benefit Mr. Wagar's Maple Grove herd.

THE BULLYING LAWYER.

Joseph H. Choate recently said, at a lawyers' dinner:

"We lawyers couldn't do better than resolve, on the new year, to be gentler in our cross-examinations. Rudeness in cross-examination never, never pays. This is a truth that I once saw proved in a damage suit.

"In this suit a cross-examining lawyer shouted at a witness in overalls:

"You, there, in the overalls, how much are you paid for telling untruths?"

"Less than you are," the witness retorted, "or you'd be in overalls, too!"

The imported Shire stallion, **Birdsall King** [478] (23999), English studbook, the double champion, whose portrait appeared in "The Farmer's Advocate" for March 28th, has been purchased by Messrs. Jonathan G. Moore and John Bilton, near Mount Forest, and whose P.-O. address is Conn, Ont., for the sum of \$2,500. **Birdsall King** was imported by Hamilton & Hawthorne, Simcoe, Ont., and exhibited by them at the Canadian National Exhibition, Toronto, Sept., 1906, where he won first prize in his class, and championship as best stallion, any age, in strong competition, and was also first and champion at the Western Fair, London, 1906, and first at the Ontario Horse Show, Toronto, Feb., 1907. He was bred by Lord Middleton, **Birdsall House**, York, England, foaled in 1904, sired by **Birdsall Caliph** (21128), dam **Violet**, by **Grafton II** (18120). He combines size with quality, weighing 1,900 lbs., coming three years old, and is a straight, true goer. The farmers of Wellington, Grey and Bruce are to be congratulated in having the services of so excellent a horse within their reach.

QUESTIONS AND ANSWERS. Miscellaneous.

SALE OF UNSOUND COW.

A, being a cattle buyer, bought a lot of fat cattle from B. A shipped them to Montreal. A young cow of the lot was condemned as having tuberculosis. The hide and inspector's certificate were returned to A. Can A compel B to refund price of cow, or what is customary to do in such a case? Nothing said at time of sale about guarantee. B sold in good faith, thinking that cow was all right.

J. A. W.

Ontario.
Ans.—We do not think that A is in a position to enforce a refund by B of the price paid for the animal.

RETENTION OF PLACENTA.

As I am a subscriber to your valuable paper, I thought I would write to you for advice concerning cows retaining the afterbirth, having six out of eight which did so. They were fed clover hay, oat chop and roots all winter, and are tied with stanchions. Can you give any cause for it, and a remedy?

A SUBSCRIBER.

Ans.—Sometimes this is due to the existence of contagious abortion in the herd, retention of the placenta being more common in cases of premature birth. We can assign no other cause, though we have known similar cases where the cows have been well fed. Not knowing the cause, it is difficult to suggest a preventive. A feed of oats heated in the oven, blanketing, and placing a bag of hot salt over the loins, will often hasten the coming away of the placenta. If the afterbirth does not come away in 24 hours, it should be removed by introducing the oiled right hand into the uterus, and, with the fingers and thumb, gently release the membranes from the button-like cotyledons, while drawing the placenta gently with the left hand till it is entirely released from the buttons. It is wise to use carbolic oil on the hands and arm to avoid blood-poisoning. Anyone with a little practice can successfully perform this operation, and it should not be neglected.

The Ontario Farmers' Weather Insurance Mutual Company

Organised May, 1904. **The First Company of Its Kind in Ontario.** Incorporated August 18, 1904.
HEAD OFFICE: GRAND VALLEY, ONT.

President, William Park; Vice-President, W. A. Wansbrough;
 Managing-Director, John W. Rounding.

Policies in Force, 2,300. Assets, \$75,000.00. Insurance in Force, over \$2,500,000.00.

This Company insures dwellings and outbuildings against loss or damage by wind storms, cyclones and tornadoes. Vehicles, farm implements and live stock are held insured against loss or damage by the blowing down or partly blowing down of any building insured by this Company, the same being in or around any of the buildings insured by this Company, without being specially mentioned.

Purely a Farmers' Company.
 Live stock are held covered against loss or damage by the blowing down of trees.

AGENTS WANTED IN ALL UNREPRESENTED DISTRICTS.

STAMMERERS

Stammering Positively Cured

The Arnott Method is the only logical method for the permanent cure of stammering and speech defects. It treats the cause, not merely the habit, and thus insures natural speech. The Arnott Method easily and permanently cures the failures of other institutes and schools. Full information, pamphlet and references sent free upon request. Write today.

THE ARNOTT INSTITUTE, BERLIN, ONT.



SMITH'S OVARY TONIC

MAKES HENS LAY

When eggs are 40c. and 50c. a dozen, there is good money in them. That is the time YOU will have plenty of EGGS TO SELL, if you give your hens Smith's Ovary Tonic regularly once a week.

It makes hens lay, Winter and Summer. Of course, if you want eggs all the year round, you have to give hens Smith's Ovary Tonic all the year round. Start NOW.

25c. and 50c. a bottle. At dealers.

NATIONAL DRUG & CHEMICAL CO., LIMITED, MONTREAL.



What do Your Crops Cost?

IT IS not what your crop brings on the market so much as what it costs you to raise it that counts in farming.

If you are farming on high-priced land under the most trying difficulties—if your soil has begun to fail, and your crops are not so large as they used to be—if it takes so much high-priced help to produce and harvest your crops that there is no profit left, you are not making much money farming.

Why don't you sell out at the high prices you can now realize and invest your cash in land where you can get five or ten times as many acres for the money, of better, newer soil than that you own at present?

When you bought the farm you now own, it was cheap—the rise in land values made you rich. Why not do that same thing over again?

In Southern Alberta, Canada, is to be found as rich land as there is anywhere. It will raise anything that your land will raise, with possibly one or two exceptions. It is the greatest live stock country on earth, and the markets are just as good as the markets you now patronize.

Canadian Pacific Irrigation Colonization Company, Limited,
 109 Ninth Avenue, West, CALGARY, ALTA., CANADA.
 Sales Department, Canadian Pacific Railway, Irrigated Lands.

In this new country you can raise crops at a small percentage of what it now costs you to raise them, because climatic conditions are such that one man can attend as many acres as in your country, and each acre will produce from two to four times the quantity one of your acres will produce if you are farming without irrigation.

On the vast irrigated tracts of Alberta you can find a farm that will just suit you, and you can rest assured that if you farm it fifty years you will never have a crop failure. No waiting for rain—no chance at all to take—just a certain, sure crop every time you put seed in the ground, and a bigger crop than you can hope to raise on unirrigated ground.

If you are interested in very fertile land, at low prices, with a certain harvest every year, we can sell it to you on terms that are so easy there is no excuse for any man being without a farm.

Write us for full particulars, and let us tell you how to see Alberta and this land at very little cost for the trip—let us tell you how to become independent in two years.

GOSSIP.

Last year's lambs sold in Chicago Stock-yards market, on April 8th, at \$8.50 per cwt., and clipped ones at \$7.15.

A PROLIFIC EWE.

A ewe belonging to Mr. Wm. Boyd, Colvend, Scotland, has this year given birth to five lambs. Last year she had four, and the year before three lambs; a total of 12 lambs in three years.

At a meeting of the Directors of the Canadian Hackney Horse Association, held in Toronto, on April 3rd, Mr. H. M. Robinson, 8 Albert St., Toronto, was elected Secretary-Treasurer of the Association.

In ordering a change of advertisement, Messrs. W. G. Pettit & Sons, Freeman, Ont., writes: "Since we last wrote, we have had a good enquiry for stock, and report the following sales for the past two weeks: To Messrs. Peter Young & Sons, Red Mountain, Que., the choice yearling bull, Villager, of the Cruickshank Village Blossom tribe. This is a young bull of grand quality, and as he is to be used by a farmers' club, he should be a great benefit to the neighborhood he goes to. Messrs. J. L. Rockwell and H. N. Hubbard, of Troy, Pa., came to buy a herd bull to take the place of the one they purchased from us five years ago. They selected the choice Broadhooks bull, Broadhooks Champion, whose quality and breeding make him suitable for any herd. He is sired by our Princess Royal bull, Prime Favorite, and his dam is a half-sister to the renowned bull, Royal Emblem, which, after winning the highest show-yard honors in Great Britain, was exported to the Argentine, where he sold for the highest price of any imported bull ever sold in that country. They also took the show heifer, Avene 12th. Messrs. Jos. Gray & Son, Sandhill, Ont., purchased an extra good eleven-months-old bull calf of the Marr Roan Lady family, which was so much thought of in the herd of the late W. S. Marr. A. A. Cunningham, of Ardrea, Ont., paid us a visit and selected one of our imported Yorkshire sows. She is a perfect type and cannot fail to produce good results for Mr. Cunningham. As our advertisement shows, we still have a number of bulls to offer, and as we have a large crop of young calves coming along, we are offering our older bulls very reasonably in order to make more room for this season's crop. Any persons in need of females for either show or breeding purposes will do well to visit us before purchasing. We are also offering a choice four-year-old imported Clydesdale mare, due to foal May 1st."

TRADE TOPIC.

PROTECTION FROM STORM.—One of the results of the destruction of the forests of the country has been to increase the number and violence of storms, with consequent loss to farmers through the destruction of their property. "The Farmer's Advocate," in season and out of season, has, therefore, been urging re-foresting and the preservation of existing wood-lots. But the work of restoration is slow, and, in the meantime, the tornadoes do not abate. As elsewhere, Canadian farmers find it now a needful precaution to insure their property against such losses, just as they do against fires, and on the same principle. How this idea is growing may be seen from the fact that the Ontario Farmers' Weather Insurance Mutual Company, of Grand Valley, Ont., organized a few years ago on a strong basis, has now in force no less than \$2,500,000 insurance on such properties as houses, outbuildings, vehicles, implements and live stock. The latter are also covered against loss or damage through the blowing down of trees. It is purely a farmers' company, the officers being Wm. Park, President; Wm. A. Wansbrough, J. W. Rounding, Managing Directors; G. W. Rounding, Inspector, and G. H. Gray, Solicitor. The attention of our readers is directed to the company's announcement in this issue, which, in view of the approach of the season of storms, should receive careful consideration. Any information regarding rates, etc., may be obtained by writing the company's officers at Grand Valley.

Baby Was Choking With Cold in Chest

Parents in Great Anxiety, When Dr. Chase's Syrup of Linseed and Turpentine Was Obtained and Brought Quick Relief and Cure.

Mr. W. F. Smith, 864 Nepean St., Ottawa, Ont., writes: "My sister's little baby, Albert McDermott, four months of age, was so bad with a cold on the chest that we were afraid he would choke to death. Dr. Chase's Syrup of Linseed and Turpentine was obtained, and I am happy to say that it brought relief almost at once.

"The baby was completely cured by the use of three bottles, and my sister and her husband are very grateful for this cure. We shall all recommend this great medicine."

Pleasant to the taste, and composed of simple, yet powerful, ingredients, Dr. Chase's Syrup of Linseed and Turpentine is especially suited as a treatment for children suffering from croup, bronchitis, whooping cough, and severe coughs and colds.

Because there are imitations of Dr. Chase's Syrup of Linseed and Turpentine, be sure you see the portrait and signature of Dr. A. W. Chase on the bottle you buy; 25 cents a bottle, at all dealers, or Edmanson, Bates & Co., Toronto.

But speak quick

Will you accept a FREE copy of a book that tells facts you need to know about poultry for profit? Better send for your copy to-day—there are few left, and you want to read this book if you are interested in poultry at all. It is different from any poultry-book you ever read; it tells plain truths that not many people really know about. Written in plain English, and sensibly illustrated,—interesting, every page of it. Send your name and address on a postcard—the book will come postpaid, free. Send for it to-day—NOW. Address:

When Poultry Pays

The Lee-Hodgins Co., Limited
 5 Pembroke St., Pembroke, Ont.

You cannot possibly have a better Cocoa than

EPPS'S

A delicious drink and a sustaining food. Fragrant, nutritious and economical. This excellent Cocoa maintains the system in robust health, and enables it to resist winter's extreme cold.

COCOA

Sold by Grocers and Storekeepers in ½-lb. and ¼-lb. Tins.

PARROTS WANTED

Have you a talking parrot to sell? Tell us the breed, age, color, and list of words your bird will say. Write at once, stating lowest cash price and address.

COTTAM BIRD SEED
 38 Bathurst Street, London, Ontario.

Now is the Time to Ship Butter, Eggs & Poultry.

Prices good. Returns quick.

QUEEN CITY PRODUCE COMPANY, LTD.
 100 Front St. E., TORONTO.

WM. AGAR, MANAGER.

TRADE TOPICS.

COMFORTABLE LOW-COST HOME.—Everybody is interested in home-building these days. For that reason, our readers will be interested in a brief reference to Chas. W. Killer's new residence, Preston, Ont. The house is 29 feet by 30 feet in size, including bay window in front. The spacious double veranda is not counted in these measurements. The house contains seven large rooms, with a bath-room which could be utilized as a single bedroom where there are no waterworks. The interior woodwork, throughout, is ash, with weathered oak finish. There is a fine cellar (7 feet clear of the joists) under the entire house, and the garret is large enough for three good-sized rooms. The exterior of this house, which is strikingly handsome in appearance, is finished entirely with galvanized steel, except for the veranda railing, which is of wood. The Metal Shingle & Siding Company, Limited, of Preston, Ontario, supplied the deep stone siding, Safe-lock shingles, window and door caps, and all the ornamental metal work on the building, and they have built a number of residences in Preston along similar lines. This house stands on a half-acre lot, and the cost, complete, including the lot, was only \$2,034. It was built last summer.

A GREAT HORSE REMEDY.—Kendall's Spavin Cure was compounded and used in a small way about 30 years ago by Doctor B. J. Kendall, in the then obscure village of Enosburg Falls, Vt. Since then the name of Kendall's Spavin Cure has gone to all parts of the world. The merits of the remedy have done it. While Dr. Kendall was practicing, he wrote a little book entitled "A Treatise on the Horse and His Diseases," which was originally handed out to the horsemen with whom he came in personal contact, and it said that upwards of 12,000,000 of these little books have been published and gratuitously distributed. The cures of spavin, curb, ringbone, splint, wire cuts, sores, etc., and the expense and labor saved to horse-owners by Kendall's Spavin Cure are beyond comprehension. For the greater part of these 30 years, Kendall's Spavin Cure has, with thousands of horsemen, been the only remedy used for its purpose. It is not confined to North America. It is decidedly a world remedy. With the little book mentioned above to guide, and with Kendall's Spavin Cure at hand to treat promptly any case of sprain, wound, lameness, incipient bone growth, etc., the ordinary horse-owner is well fortified against all the common ailments to which horseflesh is liable. It is unquestionably an efficient remedy, and adapted to the cure of a wide variety of horse ailments—more, the manufacturers claim, than any other in the world.

GOSSIP.

Mr. J. W. Burt, Coningsby, Ont., breeder of Aberdeen-Angus cattle, writes: "We have recently been doing a little business, and our sales have been very satisfactory. We shipped last week to Mr. John Eldridge, of Hepworth, one bull and one cow, and to Mr. Albert Maw, of Horning's Mills, one bull and four beautiful cows. Mr. Maw is a new man in the Angus circles, and is a first-class feeder. He has started out with a fine lot, and they will, no doubt, give a good account of themselves. We also sold one bull to Mr. Norman McLaughlan, Caledon P. O. I think probably the people have been holding back until spring to make their purchases. We have four nice young bulls yet.

The imported Shire stallion, Berrywood Drayman (22107), whose picture appeared in "The Farmer's Advocate" for April 4th, and who won the first prize in the aged class at the Ontario Horse Show, Toronto, Feb., 1907, in strong company, is owned and was exhibited by Mr. Thos. Skinner, of Mitchell, Perth County, Ont., was foaled in 1902, bred by Messrs. W. & S. Spokes, Upton Lodge, Northampton, sired by Iceland (16734), by Hecla, dam Berrywood Smiler, by Carlton Valiant. He is a horse of good size, conformation, quality and action; comes of high-class ancestry, and should prove a capital sire of the big, high-selling class of horse. The farmers of Perth and adjoining counties are fortunate in having so good a horse brought within their reach.

GOSSIP.

Mr. E. F. Park, Burgessville, Ont., writes that his recent auction sale of Cotswold sheep was fairly successful. The highest price was for a pair of yearling ewes, prizewinners at the leading fairs last fall, which sold for \$150, bought by A. B. Moore, Otterville. Mr. Moore bought ten head; one choice ram at a good price, from imported stock. Mr. Woolnaugh, Pt. Dover, bought some high-priced ones. The 50 ewes sold, including lambs, averaged \$22.50. Only a few rams were sold, but at good prices.

Mr. Hugh Thomson, St. Mary's, Ont., writes: "I send change of advertisement, as I have sold all the young bulls I advertised. Mr. Jos. McMillan, Shakespeare, Ont., was the purchaser of the red bull, Nonpareil Kuroki. To Mr. Harvey Scott, Cobble Hill P. O., Ont., went the roan Clementina Lancaster =63870—. To Mr. Joseph A. Lang, St. Mary's, the richly-bred young Broadhooks bull, Roan Champion =64617—; to James Kyle, Ayr, Ont., the yearling heifer, Rosy Cloud =78479—. Would advise all breeders to advertise in 'The Farmer's Advocate.'"

Mr. Wm. Colquhoun, of Mitchell, Ont., the well-known importer of Clydesdale horses, reports the demand for the right sort of Clydesdale stallions and fillies as quite unprecedented in his many years' experience, his two importations in the last six or eight months being all sold and distributed over a very large extent of country, which very satisfactory state of affairs he, to a very large measure, attributes to his advertisement in "The Farmer's Advocate." He is now offering for sale the high-class Hackney stallion, Imp. Davie, an eight-year-old chestnut son of Dainty Boy, and out of that great show mare, Fantail. He is a horse of extra quality throughout, an all-round natural actor, and one of the best - broken horses in Canada. A child can drive him, and, as a sire, he has had few equals in this country. He is safe, active and sure, and can be bought very reasonable.

IMPORTED SHORTHORNS BY AUCTION.

On Thursday, May 9th, the farmers of this country will have an exceptionally favorable opportunity of buying choice imported Scotch Shorthorns by auction, as on that day, as advertised, will be sold by auction the entire herd of Mr. W. J. Thompson, of Mitchell, Perth Co., Ont., a few miles west of Stratford, on the Goderich branch, G. T. R. The importing of Shorthorns is, for the present, impracticable, as they are worth much more money in Great Britain than they are worth here, consequently none are being imported, and none are likely to be for some years at least. In Canada, just now, good Shorthorns are selling for prices that place them within the reach of the average farmer, and the prospect is that they will soon be selling much higher, as recent sales in the United States have brought much improved prices, and the heavy losses of cattle in the West, owing to the severe winter, will raise the price of beef cattle and of Shorthorns for breeding purposes. Mr. Thompson's herd consists of 35 head of straight Scotch Shorthorns, 16 of the cows being imported, and all very richly bred, all in splendid condition, and either well on in calf or having calves at foot. The balance of the herd are sons and daughters of these—young, a few days to two years of age—and all got by his stock bull, the massive six-year-old roan son of Clan Alpine, Rustic Chief (imp.). Fuller particulars of the breeding of this gilt-edged herd will appear in next week's issue. The terms of the sale are six months' credit, or five per cent. off for cash, and conveyances will meet all morning trains at Mitchell Station on day of sale.

A

Remarkable Invention FOR THE CULTURE OF HAIR.



THE EVANS VACUUM CAP is a practical invention constructed on scientific and hygienic principles, by the simple means of which a free and normal circulation is restored throughout the scalp. The minute blood vessels are gently stimulated to activity, thus allowing the food supply which can only be derived from the blood, to be carried to the hair roots, the effects of which are quickly seen in a healthy, vigorous growth of hair. There is no rubbing, and as no drugs or chemicals of whatsoever kind are employed, there is nothing to cause irritation. It is only necessary to wear the Cap three or four minutes daily.

60 DAYS' FREE TRIAL!
The Company's Guarantee.

An EVANS VACUUM CAP will be sent you for sixty days' free trial. If you do not see a gradual development of a new growth of hair, and are not convinced that the Cap will completely restore your hair, you are at liberty to return the Cap, with no expense whatever to yourself. It is requested, as an evidence of good faith, that the price of the Cap be deposited with the Chancery Lane Safe Deposit Company of London, the largest financial and business institution of the kind in the world, who will issue a receipt guaranteeing that the money will be returned in full, on demand, without questions or comment, at any time during the trial period.

The eminent Dr. I. N. LOVE, in his address to the Medical Board on the subject of Alopecia (loss of hair) stated that if a means could be devised to bring nutrition to the hair follicles (hair roots), without resorting to any irritating process, the problem of hair growth would be solved. Later on, when the EVANS VACUUM CAP was submitted to him for inspection, he remarked that the Cap would fulfill and confirm in practice the observations he had previously made before the Medical Board.

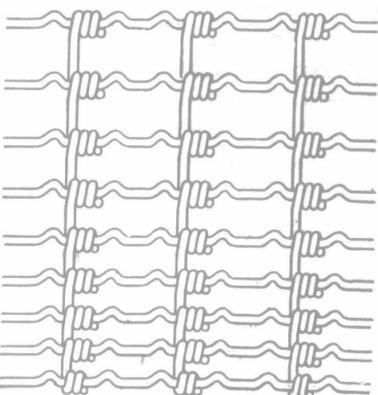
Dr. W. MOORE, referring to the invention, says that the principle upon which the Evans Vacuum Cap is founded is absolutely correct and indisputable.

An illustrated and descriptive book of the Evans Vacuum Cap will be sent, post free, on application.

THE SECRETARY, EVANS VACUUM CAP CO., LTD.,
REGENT HOUSE, Regent St., London, Eng.

AMERICAN FIELD FENCE

All No. 9 Galvanized Wire
Made for All Purposes



Note the hinge joint makes the "American" fit the hills and hollows, the tension curve provides expansion and contraction.

Consider Quality When Buying.

Special steel, hard, stiff, springy wire used in the "American" Woven Wire Fence.

MANUFACTURED BY
The Canadian Steel & Wire Co. Limited.
HAMILTON, CANADA.

When Writing Advertisers Kindly Mention this Paper.

DON'T BUY GASOLINE ENGINES Until You Investigate "THE MASTER WORKMAN," a two-cylinder gasoline, kerosene or alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Costs Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or tract on engine. SEND FOR CATALOGUE. **THE TEMPLE PUMP CO., Mfrs., Meagher and 15th Sts., Chicago.** THIS IS OUR FIFTY-THIRD YEAR.

CLYDESDALE

Mares and Fillies

DALGETY BROS., Dundee, Scotland.

To be sold by Public Auction at the FRASER HOUSE,
King Street, London, Ont., on

WEDNESDAY, APRIL 24th, '07

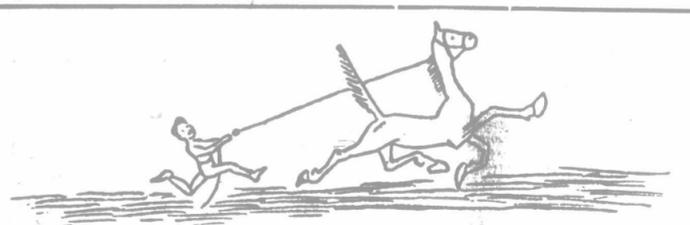
At 1.30 p.m.

Eighteen extra choice imported Clydesdale mares and fillies, several of which are in foal. This is an essentially high-class lot, with abundance of size and quality and very richly bred. A number of them are show animals, and, we think, the best lot we ever imported.

Address all correspondence to

CAPT. T. E. ROBSON,
Auctioneer.

JAS. DALGETY,
Gencos, Ont.



Unreserved Sale of Rawlinson Bros. Hackneys.

In consequence of MESSRS. RAWLINSON BROS. having sold their ranch, and who are leaving the country, their entire stock of highly-bred pedigree Hackneys must be disposed of, and will be sold by auction in JULY next at the ranch, 11 miles west of Calgary. The pedigree Hackneys consist of 3 IMPORTED STALLIONS, 6 HOME-BRED STALLIONS, 48 BROOD MARES, 12 FOUR-YEAR-OLD FILLIES, 9 THREE-YEAR-OLD FILLIES, 2 TWO-YEAR-OLD FILLIES, 12 YEARLING FILLIES, ALSO 97 HEAD OF UNREGISTERED MARES, FILLIES AND GELDINGS. Nearly all the best mares the champion Robin A'air ever got in this stud are included in this sale, together with the full sisters to Saxon, Priscilla and Minora, who won every thing in it at all the eastern shows, including the championships of both sexes at the St. Louis World's Fair. It is the greatest collection of high-class Hackneys that is ever likely to be offered again in Canada for many years. Catalogues of sale will be ready for distribution on June 1st, 1907, and may be obtained from

Jordison Bros., Auctioneers, P. O. Box 1172, Calgary, Alta.

CANADIAN NATIONAL HORSE SHOW

St. Lawrence Arena | FOUR DAYS
Toronto, Ont. | MAY 1, 2, 3, 4

NEARLY \$7,000 IN PRIZES

Harness, Saddle, Hunters, Roadsters, Pony and Special Classes.

ENTRIES CLOSE SATURDAY, APRIL 20th.

Address: W. J. STARK, Sec'y, Sovereign Bank, Market Branch, Toronto.

GEO. W. BEARDMORE, M. F. H., Chairman. W. J. STARK, Secretary. STEWART HOUSTON, Manager.



Be Careful

and do not buy a Cream Separator
until you see

The "Maple Leaf"

It means most profits with least labor. Send a post card now, we want to prove it to you at your own home.

THE CANADIAN MANUFACTURING CO., LTD.,
182-186 SHEARER ST., MONTREAL, CANADA.

REGISTERED CLYDESDALES for sale.
One four-year-old, one three-year-old, and
two two-year-old stallions and one three-
year mare. All bred from first-class imported
stock, with good style and action. Prices reason-
able. McDougall Bros., Fatenurst, Que.

For Sale REGISTERED CLYDESDALE STALLION, Wild
America (4183); foaled June 10th, 1902. Full
particulars will be given upon writing to
A. GRADY, CASTLEMORE, ONT.

QUESTIONS AND ANSWERS Miscellaneous.

CUTTING SHADE TREE BRANCHES.

I have maple shade trees along road, inside fence. Please inform me if Bell Telephone Co. or electric-light company has any right to cut limbs off those trees, where limbs extend over fence on roadside and interfere with wires?
Ont.

Ans.—We think so. The cutting must, however, be done judiciously and unnecessary damage avoided.

SMALLPOX QUARANTINE.

How long can a health officer, or a M. D., keep a man quarantined after being exposed to smallpox, provided there is no sign of development the 15th day after exposure?

A SUBSCRIBER.

Ans.—The period of incubation is 12 to 14 days, and it is unnecessary, we are informed, to detain one longer than that after being exposed, but no time is specified as a maximum period of quarantine, the matter being left to the discretion of the health officer.

A YEARLY TENANT.

A owns house. B has it rented for \$75 a year, and has lived in it for several years. His year is up on June 1st. A wants to raise the rent. What notice can B claim?

Ans.—B appears to be in the position now of a tenant from year to year, and, as such, entitled to half a year's notice to quit—the period of such notice to end with some year of the tenancy. It follows, therefore, that he cannot be legally required to leave the premises or pay a higher rent for same before June 1st, 1908.

LUXATION OF THE PATELLA.

Caps on colt's stifles are loose (noticed when two months old), on part of the time, and off part of the time, according to how it walks. Is not lame, but has not the proper use of its joints. There are small puffs in front of stifle; both are alike. Is there any remedy for it, or will they come right in time?

SUBSCRIBER.

Ans.—This is luxation of the patella, or partial dislocation of the stifle joints. Keep quiet in a comfortable box stall, and blister the joint on the front and inside. You may have to repeat the blister several times, and it is probable it will come all right in time.

CLEANING BRASS MOULDINGS.

Could you please give me a recipe for cleaning brass picture moulding?

A. C.

Ans.—Brass may be cleaned as follows: Rub the surface of the metal with rottenstone and sweet oil, then rub off with a piece of cotton flannel and polish with chamois. Tarnishes may be removed by a solution of oxalic acid. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. The above mixtures must not be used on gilt, only on brass mouldings. Gilt mouldings may be cleaned by washing with old ale, or by rubbing with oil of turpentine.

THE LAW'S DELAYS.

1. In regard to cases in the Court of Chancery, is there a limit of time in which they are to be settled? If so, what is the limit?

2. Can the defendant urge a settlement at the expiration of the time? If so, how would he proceed?

Ontario. A SUBSCRIBER.

Ans.—1 and 2. There is no Court of Chancery now in the Province of Ontario. Its successor is the High Court of Justice. And there is no arbitrarily fixed period of time within which a case must be disposed of. There are, sometimes delays, and avoidable ones. For some of these the parties to the litigation are themselves responsible, for some the solicitors or counsel, and for some the judges. But, generally speaking, serious delays are, nowadays, usually due to the circumstances of the particular case. The only suggestion of general application that we can make is that the litigant who feels that his interests are being prejudiced by a seeming want or dilatoriness of prosecution of the case is to urge his solicitor on, or change him for a more diligent and aggressive practitioner.

Ring-Bone

There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser
Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable, bound, indexed and illustrated. Make a right beginning by sending for this book.
FLEMING BROS., Chemists,
75 Church Street, Toronto, Ontario



VIRGINIA FARMS \$10 and Up Per Acre

In "THE GREEN FIELDS OF VIRGINIA" you can grow better crops and raise finer stock at less expense than elsewhere. Close to large eastern markets. Excellent church, school, and social advantages. Abundance of water and grass; short, mild winters; cheap land and labor; and excellent shipping facilities make this section very attractive to homeseekers and investors. You can buy a COMPLETE FARM FOR \$500 with comfortable, new three-room cottage, and 25 acres for vegetables, fruit and poultry. Write for our beautiful pamphlet, lists of farms, and excursion rates.

F. H. LA BAUME, Agr. & Indl. Agt., Norfolk & Western Ry., Norfolk & Western Ry., Box 60 Danville, Va.

FREE to RUPTURED A QUICK NEW CURE

I have made new and important discoveries in the cure of Rupture, and for the next thirty days will give every ruptured person who follows these directions a chance to try this remarkable home cure. FREE. Mark on the

picture the location of your Rupture, answer the questions, and mail this to DR. W. S. RICE, 85 CHURCH ST., BLOCK 306, TORONTO, ONT.
Age.....Time Ruptured.....
Does Rupture pain?.....
Do you wear a Truss?.....
Name.....
Address.....

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Over 70 Head to Select From.

Best of breeding.
True to type.
Show-yard quality.
Visitors welcome.

H. D. Smith, Hamilton, Ont.

FOR SALE IMPORTED SHIRE STALLION

Foaled 1900. Registered in Studbooks of Great Britain and Ireland also in American Shire Book as No 7117. This horse is a great individual and leaves extra good stock. Stock can be seen in neighborhood. Pedigree and any information furnished by addressing

BOX 64 Harrietsville, Ont.

FOR SALE!

Hackney Stallion, Calvin

A. H. S. B. 306,

By the champion Matchless of Londesboro and out of champion mare, Dagmar, by Denmark. For particulars address: SHELburne FARMS, Shelburne, Vt., U. S. A.

Gombault's Caustic Balsam

The Worlds Greatest and Surest
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HAS IMITATORS BUT NO COMPETITORS!

SAFE, SPEEDY AND POSITIVE.

Supersedes All Cautery or Firing. Invaluable as a CURE for

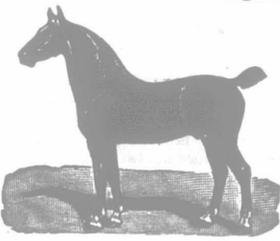
- FOUNDER,
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 - THRUSH,
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 - SKIN DISEASES,
 - RINGBONE,
 - PINK EYE,
 - SWEENEY,
 - BONY TUMORS,
 - LAMENESS FROM SPAVIN,
 - QUARTER CRACKS,
 - SCRATCHES,
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- REMOVES
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 - CAPPED HOCK,
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SAFE FOR ANYONE TO USE.

THE BEST FOR BLISTERING.
I have used GOMBAULT'S CAUSTIC BALSAM quite a good deal, and for a blister it's the best I ever used. I wish your remedy every success.
CHAS. MOTT, Manager,
Mayfield Stud Farm, Leesburg, Va.

We guarantee that one tablespoonful of Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin mixture ever made. Every bottle sold is warranted to give satisfaction. Write for testimonials showing what the most prominent horsemen say of it. Price, \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use.

The Accepted Standard VETERINARY REMEDY
Always Reliable.
Sure in Results.



None genuine without the signature of
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Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O.

CURED CURB WITH TWO APPLICATIONS.
Have used your GOMBAULT'S CAUSTIC BALSAM to cure curb. I blistered it twice, and there is no sign of it any more. The horse is as good as ever.—DAN SCHWEB, Evergreen, Ill.

Sole Agents for the United States and Canada.
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TORONTO, ONT. CLEVELAND, OHIO.

40 WAVERLY HACKNEYS 40

Imported Stallions and Fillies.



Every one a high-class actor and a show animal. Splendidly-matched pairs and singles. Positively the highest class lot of Hackneys to be found on any one farm in America. All ages. Also 4 imported Clydesdale fillies. A big, flashy lot, full of style and quality.

ROBERT BEITH,
Bowmanville P. O. and Station.
Long-distance Phone.

323 PERCHERONS FRENCH COACHERS

Best Collection Stallions in America
Most Reasonable Prices
Safest Guarantee

4 IMPORTATIONS SINCE JULY 1, 1906.

SEND FOR CATALOGUE.
WE PAY FREIGHT AND BUYERS FARE.

DUNHAM & FLETCHER, Wayne, Ill.

Clydesdale Stallions!

first-class Hackney.

I have on hand for sale another choice lot of Clydesdale stallions, newly imported, ranging in age from two to six, with plenty of size, style and good true action. Also one Wm. Colquhoun, Mitchell, Ont.
Phone to residence.



Graham & Renfrew's

CLYDESDALES and HACKNEYS

Our Clydes now on hand are all prizewinners, their breeding is first-class. Our Hackneys, both stallions and mares, are an exceedingly high-class lot. We also have a few high-steppers and carriage horses. Yonge Street cars pass the door every hour. Phone North 4488.

GRAHAM & RENFREW, BEDFORD PARK, ONT.

QUESTIONS AND ANSWERS. Miscellaneous.

TENANT IN DEFAULT.

A rents a house to B, and he (B) and family leave it in November, but leave all furniture in house, and take the key. Rent was to be paid monthly, and taxes yearly. A has written, but got no answer. B has neither paid rent nor taxes since he left; A having a chance to sell.

1. Can he enter the house without consent of B?
2. What is best to do?

Ontario.
Ans.—1. Yes.
2. A should make a formal demand, on the premises, for the amount of rent overdue. This should be done in daytime, and—the demand not having been complied with—A should, thereupon, dis-train the furniture for the rent and costs of distress. He may, of course, employ a bailiff for the purpose. The matter of distress having been duly attended to, A should formally re-enter upon the premises and notify B, in writing, that he has done so in consequence of the latter's abandonment of the premises and default in non-payment of rent.

SHEEP ASTRAY—HIRED MAN'S HOLIDAYS.

1. Where a township has a by-law, allowing sheep to run on the highway, and the sheep stray off the highway, through an open gate or unlawful fence, on to the property of other resident of said township, could said resident impound the sheep and recover damage, if any?
2. When a man is hired on a farm for the term of one year, and no mention is made of holidays or Sundays, what days are his?
3. Has he a right to do any chores on Sundays?

Ans.—1. Going strictly upon your statement of the case, we would say, yes; but it may be that the township by-law is so wide as to render such an answer incorrect, and we, accordingly, recommend a very careful perusal of the provisions of such by-law before deciding upon any course in the matter.
2. Subject to the doing thereon of "chores," he is entitled to observe as holidays the following: Sundays, New Year's, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, Thanksgiving Day and Christmas, also any day duly proclaimed as a public holiday, or for a general fast or thanksgiving.
3. Yes.

PRUNING CURRANTS.

Would you kindly let me know through your valuable paper how to treat currant bushes? They are strong and healthy-looking, but don't bear fruit. They are in clay loam.

A SUBSCRIBER.

Ans.—You have omitted to say whether your currants are red, white or black, and without knowing this, and more particulars regarding them, I cannot say definitely what may be the cause of their lack of bearing. Usually the red and white currants bear heavily every year, whereas the black currants are often more likely to be unproductive. Just what may be the cause of the lack of productiveness is hard to tell. In all cases, the bushes should be pruned regularly, either in the fall or spring, and old and new wood thinned out so as to enable the canes left to set full crop of fruit, and bring it to perfection. We usually prefer to leave six branches to the bush in pruning currants. Two of these should be two- or three-year-old wood, two others of one- or two-year-old wood, and the other two new canes of last season's growth. If at the annual pruning, these older canes are removed, and two new ones allowed to take their places, a gradual annual renewal of the wood is kept up, which insures more regular bearing than very severe pruning at one time and neglect at another. It goes without saying that the bushes should be kept well cultivated and the ground rich enough to enable the plants to not only make good growth, but to produce a crop of fruit. Wood ashes is one of the best fertilizers to apply around fruits of this kind, as it tends to promote fruitfulness rather than excessive growth of wood.
O. A. C. H. L. HUTT.

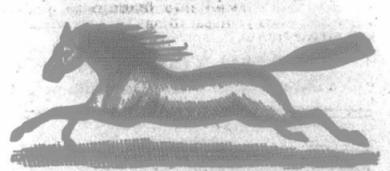


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FAIR GROUND, Ont., May 3 '06.
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Special Sales of Thoroughbred Stock conducted

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.

Clydesdale Stallions and Mares.

For sale: Lyon Stewart (1903), too well known in Canadian show rings to need any comment. The Nobleman (Imp.), 4 years old, sired by Hiawatha. MacKinley 2nd (Imp.), by MacKinley, dam by Princes of Wales (1878). The mares are big, flashy animals, 3 years old, and were imported by myself. All are registered in Clydesdale book. Prices reasonable. Long-distance phone.

H. G. Boag, Barrie, Ont.

SHETLAND PONIES!

P. McCullough & Son, Breeders and importers of Shetland ponies, Markdale, Ont. We showed 8 ponies at Toronto Exhibition in 1906, and got 8 prizes: 5 firsts, 4 seconds and 1 third. All our ponies are imported. Our stallion, Foxglove, took first prize at Toronto. Our mare, Bessie, took first prize, and their foal, Bruce, took first prize also. Good accommodation for mares sent from a distance to breed. Ponies for sale. Our address: Markdale P. O., Ont.

Imp. Clydesdale Fillies!

Have now on hand about a dozen, nearly all imported. A high-class lot and very richly bred. Combine size and quality, and all in foal. Also one-year-old stallion. Write me, or come and see them.
Nelson Wags, Clarendon P. O., Ont.

Imported Clydesdales

Two 4-year-old and two 3-year-old stallions; one 2-year-old and two 1-year-old fillies; positively the best bunch I ever imported; richly bred, full of quality, abundance of size, and nice, true actors. Will sell them right. Terms to suit.
Telephone con. Geo. G. Stewart, Newick, Que.

For Sale: A Registered Clydesdale Stallion First-class, coming 3 years. Color, rich brown; small stripe and little white on two feet. Sired by Imp. Pioneer (11181) (1874), of Darnley breeding. Dam out of the imp. prizewinner, Culmain Lass (1913), and granddaughter of old Princes of Wales (1878), sired by imp. Queen's Own (7176) (1708), winner of several gold medals in Canada. A promising colt, of the very choicest combination of breeding, with near ancestors leading winners in keenest competitions. Price very moderate for quick sale. JOHN CAMPBELL, Fairview Farm, Woodville, Ont.

CLYDESDALES AND SHORTHORNS—Canadian-bred, registered. One stallion, rising 3, by Imp. Maqueson. Two stallions, rising two, by Imp. Primrose. One filly, rising 2, by Imp. Maqueson. These are a choice lot. Show stuff among them. Also my stock bull, Gilbert Logan 36424; roan; weighs 2,500; seven years old. Safe and sure. W. D. PUGH, Clarendon P. O. and Station.

CLYDESDALES and SHORTHORNS—Four Imp. Clyde mares, 2 and 3 years old, bred in the purple—two of them in foal. One filly, rising 1 year, sired by the great Maqueson—registered. Three Shorthorn bulls from 8 to 19 months—Scotch. A few heifers. All sired by Scotland's Fame—47897—, by Nonpareil Archer (Imp.), John Fergie, Clarendon P. O. and Station.



30 PERCHERONS

Also Shires, Hackneys and Clydes, have just arrived with our new importation from Scotland, England and France, of high-class stallions and mares. Many of them prizewinners in their native lands. Bred by the best breeders. Percherons, blacks and grays, weighing 1,600 to 2,000 pounds. Shires at two years old weighing 1,700 pounds. Clydes, bays and blacks, 4 and 5 years old, weighing 1,600 to 2,000 pounds, bred by the best in Scotland. Our Hackneys are bays and chestnuts, combining size, quality and breeding that cannot be beaten. We have a few first-class young stallions that we will sell at cost, to make room for our next importation; and all for sale at reasonable prices.

HAMILTON & HAWTHORNE, Simcoe, Ont.

88 miles south-west of Toronto on the G. T. R.



The La Fayette Stock Farm

J. Crouch & Sons, Props., La Fayette, Ind.

Largest importers in America of German Coach, Percheron and Belgian stallions. Over 200 head on hand at all times. All have the best of bone, style and action, and on which we will put a gilt-edged guarantee they must be satisfactory, sure breeders. Won more prizes in the American show-ring in 1906 than all other importers combined. Our guarantee is the best. Terms to suit buyers. Importations arriving every few weeks insure prospective buyers a large selection from which to make a purchase.

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La Fayette is but six hours' ride from Detroit via Wabash Railroad.

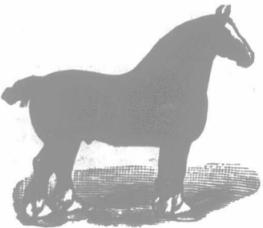
Just got in 100 head of Percheron and Belgian stallions and Percheron and Belgian mares.



Clydesdales, Percherons and Hackneys

I have still on hand 19 Clydesdale stallions, 4 Clydesdale fillies, all imported; Scotland and Canadian prizewinners; 8 years old, that will make 3100-lb. horses of choicest quality and richest breeding; 4 bl. c. Percheron stallions, 3 years old, big, flashy, quality horses, and 6 Hackney stallions, 1st-prize and championship horses among them. Will sell reasonable and on terms to suit.

DR. T. H. NASSARD, Millbrook P.O. and Stn.



GRAHAM BROS.

"Cairnbrogie," CLAREMONT,

IMPORTERS OF

HACKNEYS and CLYDESDALES

Established 90 years, and winners at all large shows in Canada and United States. Best of stock always on hand for sale. New importation of Royal winners just arrived.

W. C. KIDD, LISTOWEL, ONT.

Importer of Clydesdales, Shires, Percherons, Belgians, Hackneys, Standard-breds and Thoroughbreds

of highest possible quality and richest breeding. Have sold as many stallions the last year as any man in the business, with complete satisfaction in every case. I have always a large number of high-class horses on hand. My motto: "None but the best, and a straight deal." Will be pleased to hear from any one wanting a rare good one. Terms to suit. Long-distance 'phone. LISTOWEL P.O. AND STATION.

SMITH & RICHARDSON, COLUMBUS, ONT.,



have now on hand a choice selection of Clydesdale Stallions, combining size and quality with straight, true action. Breeding unsurpassed. Individually unexcelled. Scotland prizewinners. Also a few Canadian-bred stallions, and imp. and Canadian-bred fillies.

Long-distance 'Phone Myrtle Station, C. P. R.
Brooklin or Oshawa, G. T. R.

Imported Clydesdale Stallions and Fillies.

Having sold most of my last importation of CLYDESDALES, I am leaving for Scotland for another importation of stallions and mares, the arrival of which will be announced in this space in the columns of "The Farmer's Advocate." Come and see me on my return.

Andrew Aitchison, - Guelph, Ontario.

When Writing Please Mention Advocate

INSTALLING AN INDEPENDENT TELEPHONE LINE.

The farmers of this section have organized a Rural Telephone Co., and purpose building 20 miles, with about as many 'phones to start with. We expect to extend our line from time to time, and put more 'phones on the present proposed line. It is to extend 9 miles direct from Alexandria to McCrimmon; a three-mile branch from Laggan to Kirk Hill, and an eight-mile branch from Fassfern to Glen Sanfield. Alexandria is our town, and we are getting connection there with the Bell long-distance and the different 'phones in town.

1. Will you kindly advise us what system to instal?

2. Do we need a central?

3. What would be reasonable rates to charge stockholders, non-stockholders, and those taking 'phones in their private houses and place of business?

4. Any other information you may be pleased to give, will be thankfully received.

P. C.
Glengarry Co., Ont.

Ans.—1. By referring to "The Farmer's Advocate," pages 169, 203 and 253, 254, of the January and February issues of this year, you will find answer to your first question. By all means build a metallic line if your finance will allow.

2. With twenty miles of line (metallic) and twenty instruments properly installed, you ought to experience no difficulty in being able to call any of your 20 subscribers. Of course, you can give better service by having only about 10 subscribers to the line. But if 20 is your present limit, I would not instal a central, but have all on the one line. The greatest disadvantage of so many on one line is the almost constant use of the line, and resultant annoyance to some subscriber who is, or thinks he is, in a hurry to use the line. With but 20 subscribers, the expense of operating a central would be too great. I know of a number of lines having 20 or more subscribers per line, and able to call any or all of the subscribers on any one line. With this number of 'phones on a line, it behooves you to get the best telephones made, having 5- or 6-bar generators, and built for this kind of work. Don't get a 4- or 5-bar generator (with a light weight—about three-bar-size gearing), the armatures of which are cast instead of laminated, as all good high-power generators have laminated armatures. These poor telephones will soon "fall down" on you, due partly to the heavy loads on your line, and partly to the hard usage incidental to repeated futile efforts on the part of your subscribers to get the parties on the ends of the line. The average individual, more particularly if in a hurry, starts the crank with a jerk, then instead of allowing it to come to rest at the end of a revolution, stops it with a similar jerk when ringing a series of short rings. On your line, this would mean a code-call system which would necessitate several jerks on the generator mechanism in calling a subscriber.

3. You do not say what you will have to pay the Bell per telephone for connection with their central at Alexandria. If you do not have a central, only one-party line of the 20 subscribers, it ought not to cost you more than three or four dollars per telephone to keep your line in good state of repair. You must take into account the actual cost of your line and the expense incidental to management, depreciation, and a reasonable rate of dividend on the stock. In rural telephone lines, the 'phones in the business places have more in messages than out messages. In fact, the average farmer uses his 'phone oftener than the business man for an out message. Then, why should the latter be asked to pay more than his neighbor farmer? A yearly rental of \$10 or \$12 should be ample to meet all legitimate expenses, and pay a dividend of at least 5 per cent.

4. If it had not been for the Independent movement, there would be mighty few farmers in Canada to-day enjoying the convenience of the telephone. It is to be hoped that farmers will study the economical problems of the telephone situation before entering into contracts with the Bell.

W. DOAN, M. D.,
Manager Harrietsville Telephone Association, Limited,
Middlesex Co., Ont.

THREE TRYING TIMES IN A WOMAN'S LIFE

There are three periods of a woman's life when she is in need of the heart strengthening, nerve toning, blood enriching action of

MILBURN'S HEART AND NERVE PILLS

The first of these is when the young girl is entering the portals of womanhood. At this time she is very often pale, weak and nervous, and unless her health is built up and her system strengthened she may fall a prey to consumption or be a weak woman for life.

The second period is motherhood. The strain on the system is great and the exhausted nerve force and depleted blood require replenishing. Milburn's Heart and Nerve Pills supply the elements needed to do this.

The third period is "change of life" and this is the period when she is most liable to heart and nerve troubles.

A tremendous change is taking place in the system, and it is at this time many chronic diseases manifest themselves. Fortify the heart and nerve system by the use of Milburn's Heart and Nerve Pills and thus tide over this dangerous period. Mrs. James King, Cornwall, Ont., writes: "I have been troubled very much with heart trouble—the cause being to a great extent due to 'change of life.' I have been taking Milburn's Heart and Nerve Pills for some time, and mean to continue doing so, for I can truthfully say they are the best remedy I have ever used for building up the system. You are at liberty to use this statement for the benefit of other sufferers."

Price 50 cents per box, three boxes for \$1.25, all dealers, or The T. Milburn Co., Limited, Toronto, Ont.



ABSORBINE

Cures Strained Puffy Ankles, Lymphangitis, Bruises and Swellings, Lameness and Allays Pain Quickly without blistering, removing the hair, or laying the horse up. Pleasant to use. \$2.00 per bottle, delivered with full directions. Book 5-C, free.

ABSORBINE, JR., for man-kind, \$1.00 Bottle. Cures Strains, Gout, Varicose Veins, Varicocela, Hydrocele, Prostatitis, kills pain.

W. F. Young, P. D. F., 73 Monmouth St., Springfield, Mass.
Canadian Agents, Lyman, Sons & Co., Montreal.

Put Good Grazers on Your Grass!



The HEREFORDS are the range cattle par excellence. They grow near the ground. They make flesh rapidly and easily, and they will make money for you. Over 100 head of breeding stock of the most approved strains on hand at low prices.

A. S. HUNTER, DURHAM, ONTARIO.

Sunnyside Herefords



Present offering: 10 bulls, serviceable ages; 4 of them over 2 years; big, strong, sappy fellows; ready for heavy service or rough usage on the ranch; also breeding cows at prices that will move them. Must make room for this year's crop of calves. Come and see them, or write and tell me what you want. ARTHUR F. O'NEIL, Maple Grove, Ont., Middlesex Co.

Broxwood Herefords

Cows, heifers and calves

For Sale.

R. J. PENHALL, Nover, Ont.

FOREST VIEW FARM HEREFORDS

Four bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individuals for sale. JOHN A. GOVENLOCK, Forest Sta. and P.O.

HEREFORDS—We are now offering a few thick, smooth young bulls and a number of females—a low-down, even, beefy lot. If in want of something extra good, correspond with us. We can please you. J. A. LOVERING, Coldwater P.O. and Sta.

READ THIS! We are offering a dark red Durham bull 14 months old, weighing 1,000 lbs., for \$75. A two-year-old bull, light roan, heavy boned, extra good getter, \$85. Females equally cheap. W. R. BOWMAN, Mt. Forest, Ontario.



A Sky Line of Carey Roofs

ENOUGH MILES of Carey's Roofing have been put on buildings since 1873 to make a pathway across country from the Atlantic to the Pacific and back again! The house, barns and outbuildings of MICHAEL LINK, at Mitchell, Ills., shown above—are all covered with

CAREY'S FLEXIBLE ROOFING

CAREY'S is the "Time-Proof Roof." It withstands the assaults of the elements; is fire-resisting, wind and moisture-proof, and will not ROT, RUST, MELT OR BREAK. It loses neither its life nor elasticity. Is equally adapted to flat or steep surfaces and may be laid over leaky shingles or metal roofs, without the expense of removal. Knife and hammer are the only tools needed in its application.

The Carey Patent Lap, an exclusive Carey virtue, covers and protects nail-heads, insuring a neat, everlasting, moisture-proof union of sheet to sheet and Roofing to roof-board.

In the composition of Carey's Roofing, only the highest grade of woolen felt of our own manufacture is used. This all wool felt, with a highly tempered asphalt cement, (also of our own manufacture) and strong burias, are run through heavy steam rollers and compressed into compact, flexible sheets—the weather side of which is treated with our fire-proof cement.

Sold and shipped from our conveniently located warehouses, at lowest freight rates. Write for FREE sample and illustrated booklet.

The Philip Carey Mfg. Co., Toronto (Ont.), London (Ont.), Montreal (Que.)



The Sensible Gate

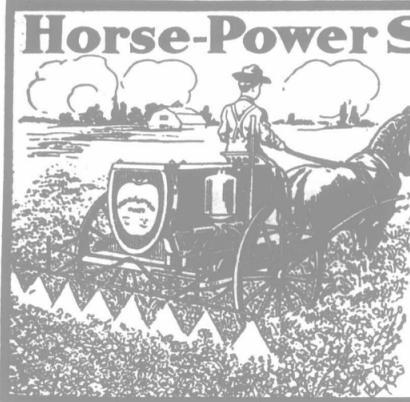
for farm and garden. Neat, strong and lasting.

Especially durable are Anchor wire gates. Put together with the dependable, non-slipping Anchor clamps. Complete with hinges and fasteners—all ready to put up.

They open either way. Never get out of order. Made only of good wire. Plain styles. Also ornamental—pretty scroll and leaf designs. The best, most practical gates to get. And very low-priced. Send for free catalogue, showing gates and fencing.

GOOD AGENTS WANTED.

ANCHOR FENCE CO., Stratford, Ont.



Horse-Power Spramotor

Will pay for itself the first season in removing wild mustard from your fields.

Automatic in action throughout; everything under control of driver without stopping.

Machine automatically stops at 125 lbs. pressure, starting again at 100 lbs.

Tell us your needs. You will get expert advice.

Our 86-page Treatise D free. Agents wanted.

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International Carriage Co.,
BRIGHTON, ONTARIO.

QUESTIONS AND ANSWERS. Miscellaneous.

TIME FOR PRUNING.

At what time is it best to prune apple trees? Also, at what time is it best to prune maples? A. P. B.

Ans.—The best time to prune trees of most any kind, either apples or maples, is in the spring, before the growth starts. Much of this work has already been done this year, and it will probably continue for the next two or three weeks. Some kinds of trees bleed much more than others when pruned in the spring. This bleeding is simply a loss of sap, due to strong root pressure, and is not nearly so serious a drain upon the vitality of the trees as some suppose, although, of course, it is not best that trees should be tapped too severely. To prevent excessive loss of sap, it is usually well to paint over the wounds with heavy lead paint. This, also, protects the wound from entrance of spores, which cause decay, and enables the wound to heal without serious injury.

O. A. C. H. L. HUTT.

CRANBERRY CULTURE.

Where can I get a book on cranberry culture, as I would like to grow them, if grown from canes, like currants, or seeds? J. W.

Ans.—The most recent publication on cranberry culture is given in a "Report on Cranberry Investigations in Wisconsin," published in 1905 as Bulletin No. 119 of the Wisconsin Agricultural Experiment Station. This could no doubt be obtained upon application to the Director of the Experiment Station, at Madison, Wisconsin.

I have just received a communication from Mr. S. C. Parker, Berwick, N. S., secretary of the Nova Scotia Fruit-growers' Association, saying that there are a number of growers in Nova Scotia who could supply cranberry plants for setting out. He himself has several acres of cranberries in bearing, and could furnish good plants. Along with his communication, he sends a report of the Fruit-growers' Association of Nova Scotia for 1896, in which there appears a very good article on cranberry culture in Nova Scotia. H. L. HUTT.

Ontario Agricultural College.

STAVE - SILO BUILDING.

Was thinking of building a stave silo this summer.

1. Would hemlock lumber be as good as pine?

2. Would it be much better to build it with 20-foot lumber, instead of lumber 14 feet and 16 feet long?

3. Is it necessary for the lumber to be thoroughly dry before being used, and the hoops tightened as it dried?

Would like to see some articles about stave silos when you are discussing the corn question.

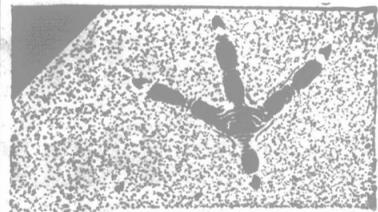
4. Can you give me the name of a good book on silo building, and where can it be procured? J. S.

Ans.—1. Hemlock is not equal to pine for silo-building, though it may be used for the purpose. It is not so durable, and is more liable to check.

2. Thirty-foot staves are better than shorter ones jointed, but not enough better to be worth the extra cost. By beveling the jointed ends, and by alternating the short and long staves, putting first a 14-foot stave on a 16-foot one, then a 16-foot on a 14-foot one, an excellent silo may be built of 14- and 16-foot stuff. There may be a little waste at the joints, but not much.

3. The lumber need not be thoroughly seasoned. Some use it green, and tighten hoops afterwards, as you suggest. It is better, though, to have it partially seasoned before erecting.

4. Soiling, Soiling Crops and Ensilage, by F. S. Peer, price \$1, through this office. The Central Experimental Farm, Ottawa, published a good bulletin on the subject some years ago, which could probably be obtained yet for the asking.



BREED UP!

Get more eggs when eggs sell high—raise chickens that grow faster, mature younger—make your poultry PAY BETTER. You can do these things with birds (single fowls, trios or pens—fair-priced) from our STANDARD BRED, clean strain, scientifically mated, thoroughbred breeds of:—

- Barred Plymouth Rocks
- White Plymouth Rocks
- Buff Plymouth Rocks
- Silver Laced Wyandottes
- Golden Wyandottes
- White Wyandottes
- Buff Wyandottes
- Single Comb Brown Leghorns
- Rose Comb White Leghorns
- Rhode Island Reds
- Buff Orpingtons

Write for our FREE BOOKLET that tells why each breed is best of its kind and why our birds are best-bred in Canada. We can also supply HATCHING EGGS

by the settings and hundred, at prices you won't growl at. Ask about our CO-OPERATIVE plan that makes poultry-raising safer and more profitable.

Ask editor of this paper about our standing.

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A CORN AND OAT FEED,
SPLENDID VALUE.

\$17.00 per ton, in sacks on cars at Woodstock. Write for samples and freight rates.

WOODSTOCK CEREAL CO., LTD.
Woodstock, Ont.

SHORTHORN STAYS

Roan bull, just 2 years old, purchased from Messrs. E. A. & J. A. Watt; also one white bull calf 9 months old, two roan cows, 4 and 5 years, purchased from Messrs. J. Watt & Son; also 3 red heifers, 2 mos., 1 year and 2 years old. Will sell cheap, as I am going out of business. Am also offering two well-bred Ayrshire bulls, 14 mos. and 2 years, the younger is sired by Levensock King of Beauty (imp.); also two Ayrshire cows. For particulars and prices write D. ALLAN BLACK, Kingston, Ontario.

THE only medium which conveys weekly to the farmers of Canada the advertiser's place of business is the Farmer's Advocate and Home Magazine.

THE SCRATCH OF A NAIL

if neglected may cause the loss of a valuable horse. Wire cuts, snag wounds, saddle and harness galls, sore shoulders, all demand prompt attention. One application of HORSE COMFORT to the horse. Cures sore teats in cows. Most dealers sell it or we will send it direct. Write for FREE "Horse Comfort" book. If you have a cow ask for book, "The Cost of a Lost Cow." Dairy Association Co., Mrs., Lyndonville, Vt.

HORSE COMFORT

Belmar Parc Shorthorns

WE think we have as great a lot of young show animals as has ever been on one farm in Canada. Our herd is large, the individuals are choice and of the richest Scotch breeding, and our prices are moderate. 15 young bulls, 25 heifers under three years. A splendid group of breeding and show matrons. Mostly in calf to the champion Marigold Sailor = 53258 = and the prizewinning Nonpareil Archer (imp.) = 45202 =. Pembroke is on the main line of the C. P. R. and the Canada Atlantic Division of the G. T. R. You can leave Toronto 11 a. m., arrive Pembroke 12.05 p. m., see the herd, and arrive Toronto next morning at 7.20. We prefer you to see the cattle, but if you can't spare the time we take special pride in filling mail orders satisfactorily.

John Douglas, Manager.

PETER WHITE, Pembroke, Ont.

R. A. & J. A. WATT

Offer at reduced prices two highly-bred red SHORTHORN BULL CALVES. They are the last pair they have to offer, and are not the poorest of the great dozen they sold this winter. If you want them, come and see them at once. Elora Station, G.T.R. & C.P.R. Phone 42K. SALEM, ONTARIO.

AT "MAPLE SHADE"

Our young bulls are the best that our herd has ever produced. We can furnish Cruickshank bulls of high quality to head the best herds, and some that should produce the best prime steers. We have a bull catalogue. Send for one. JOHN DRYDEN & SON, Brooklin, Ont. Stations: Brooklin, G.T.R. Myrtle, C.P.R. Long-distance telephone.

Valley Home Shorthorns and Berkshires

Special offering at very low prices for immediate sale: Eight young bulls 10 to 15 months old, five cows from 3 to 5 years old, with calves at foot; four 3-year-old heifers in calf to Royal Diamond 2nd = 58459 =; also eight heifers one year old. The above are straight Scotch and a choice lot; and 10 young Berkshire sows, just bred to Myrtle's Prince (imp.) - 14133 -, and 30 young pigs of both sexes, from one to two months old. Visitors welcomed for personal inspection. S. J. PEARSON, SON & COMPANY, Meadowvale, Ontario. Stations: Meadowvale and Streetsville Jct., C.P.R.



Special Offering of Scotch SHORTHORN BULLS

2 just past two years old; 15 just over one year old; 7 just under one year old. The best lot we ever had to offer in individuality and breeding, and prices are right. Catalogue.

John Giancy, Manager. H. CARGILL & SON, Cargill, Ont.

SIX IMPORTED SHORTHORN BULLS

One bred by Duthie, one by Marr, and one by Durno. Show bulls and sires every one. Imported cows and heifers, home bred bulls and heifers, all of high-class. THREE IMPORTED CLYDESDALE MARES, all in foal. Shropst sires and Cotswolds in large numbers. Will price anything I have at a living profit. Write me. ROBERT MILLER, STOUFFVILLE, ONTARIO.

Pure Scotch Shorthorns

19 Bulls. PRESENT OFFERING. 75 Cows and Heifers. 1 imported bull, 3 two-year-olds, and 15 yearlings and calves from 10 to 18 months old—all from imp. sires and choice dams. Cows and heifers all ages, including some show animals. 1 imp. Clydesdale mare four years old, due to foal May 1st. We will book orders for young Yorkshires for May delivery. W. G. Pettit & Sons, Freeman, Ont. Burlington Jct. Station. Long-distance Telephone.

Clover Lea Stock Farm SCOTCH SHORTHORNS

Superior breeding and individual excellence. For sale: Bulls and heifers—reds and roans some from imp. sire and dam. Visitors met at Ripley station, G. T. R. R. H. REID, PINE RIVER, ONTARIO.

STRUAN SHORTHORNS

For sale: Choice young bulls from four to ten months old, sired by Scottish Bean (imp.) (36099); also cows and heifers of different ages. Write for prices, or come and see my herd. M. S. ROBERTSON, Ontario. Arnprior.

JOHN LEE & SONS, Highgate, Ont.

SHORTHORNS & LINCOLNS. The champion herd of Elgin, Kent and Essex counties. For Sale: 6 choice young bulls 8 reds and 3 roans, of grand type and quality; also good selection of young cows and heifers. Visitors welcome.

Shorthorns Stamford's, Marthas, Nonpareils. 3 choice bulls 15 months old. 3 heifers, 2 cows. Breeding stock passed, Canadian and American registered. F. W. EWING, Salem P. O., Elora Station.

The "STAY THERE" Aluminum Ear Markers are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. Fit any part of the ear. Nothing to catch on feed trough or other obstacle. Your name, address and any series of numbers on each tag. Sample tag, catalogue and prices mailed free. Ask for them. Address WILCOX & HARVEY MFG. CO., 104 Lake St., Chicago, Ill.

SHORTHORNS

Six superior yearling bulls, some of them out of great milk cows; heifers of all ages. A lot of very big yearlings and a few heifer calves cheap.

CLYDESDALES

Two mares 5 years old, one an extra good one, and a pair of geldings 4 years old.

JAS. McARTHUR, Gobles, Ont.

Shorthorns for Sale—Five choice bulls, all from imp. sire, and three of them from imp. dams; also females of all ages. Scotland's Fame (imp.) at head of herd. ALEX. BURNS, Rockwood P.O. and G.T.R. Sta.

Maple Hill Stock Farm Scotch Shorthorns—

A special offering of a red bull calf of Missie family, sired by Rustic Chief (imp.) = 40419 =; also some choice females by Wanderer's Star = 48585 =, and Lucerne (imp.) = 59028 =. WM. R. ELLIOTT & SONS, Guelph, Ont.

Shorthorn Bull—Prince of Stars = 49804 =, sired by Blue Ribbon (imp.) R. de M Estelle = 40419 =, and sire, a good bander. Will sell to any one who will look up this pedigree, and see the Alexander, Calnsville, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

WHAT IS THE ENCLOSED SAMPLE OF SEEDS?

What is the enclosed sample of seeds? G. C.

Ans.—The material has been examined at Ottawa, and found to consist of small plates of brownish-yellow mica of no economic value.

WRITING SONGS FOR MONEY.

Would you please give me your opinion of a company, or association, that conducts business such as the enclosed sheet describes? An aged friend of mine has the knack of making rhymes, and was induced to send some of her productions to them. Then they wrote her, if she would send them so much money, they would give her half of the profits of the song, etc. I advised her to have nothing to do with them. (MRS.) M. J. T. Elgin Co., Ont.

Ans.—Your advice was sound. It is doubtful if your friend would ever see her deposit again, or get any return from it. We are advised by reliable music houses that the demand is very small, not "big," for contributed songs. The leading music houses of America have their own paid composers, who receive a royalty on productions that "take," and these, we expect, are comparatively few compared with the volume written. The circular letter you enclose bears all the ear-marks of being run off on a printing press, and distributed indiscriminately wherever persons can be induced to drop a penny in the slot.

SELLING GRASS SEED TO DEALERS.

Is it legal for a farmer to sell grass seed, which has not been tested, to a dealer? Which party is liable to be fined? OLD SUBSCRIBER.

Ans.—It is as legal for any person to sell grass seed, or any other kind of seed, which has not been tested, so long as such seed will conform to the provisions of the Seed Control Act. In the sale of seed to a seed vendor or dealer, farmers are held to the observance of the Act, except when such seeds are to be cleaned or graded before being offered for sale for the purpose of seeding. If the seed dealer prove before a court that he had made clear to the farmer from whom seeds were purchased that he desired such seeds for sale for the purpose of seeding in the condition as delivered to him, it would seem clear, from the wording of the Act, that the said farmer would be held by the court to the observance of the Act.

The farmer would be liable until after the expiration of seven days from the date on which the seed had been delivered to and entered into the possession of the seed vendor. If the seed vendor exposed such seed for sale, for the purpose of seeding, he would also be liable, and, after the expiration of seven days, he alone would be liable, under the Seed Control Act.

Action might be taken against the farmer by the seed vendor, or by an official seed inspector, at his request. Action might be taken against the seed vendor by an official seed inspector acting directly, by any person who purchased such seed for seeding, or by an official seed inspector acting on his request after the purchase had been made by him. GEO. H. CLARK, Seed Commissioner.

Maple Lodge Stock Farm 1854-1907.

Am now offering a grand lot of young Shorthorn Bulls, several from choice milking strains. Also a few extra good heifers.

A. W. SMITH, MAPLE LODGE, ONT.

Six Red Shorthorn Bulls

12 to 15 months old, got by Proud Gift = 50077 = (imp.); also cows and heifers, imported and home-bred. Inspection solicited. We think we have as good Shorthorn cattle as we have Lincoln sheep. 14 firsts out of a possible 19, our record at Chicago, 1906.

J. T. GIBSON, Denfield, Ont.

GREENGILL HERD of high-class

SHORTHORNS

We offer for sale 8 young bulls, a number of them from imp. sire and dam; also females with calf at foot or bred to our noted herd bull, Imp. Lord Roseberry.

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

T. DOUGLAS & SONS STRATHROY, ONT.

Breeders of Shorthorns and Clydesdales. 15 bulls, 10 cows and heifers, 1 imp. stallion, and home-bred flies. Write us what you want or come and see our stock. Farm 1 mile north of town.

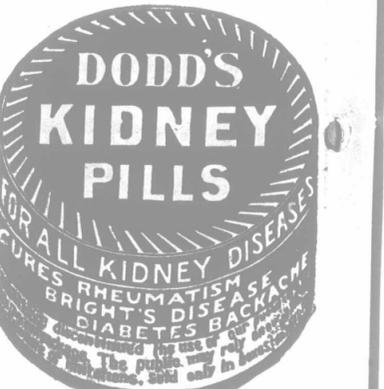
John Gardhouse & Sons, Importers and breeders of Scotch Shorthorn cattle, Shire and Clydesdale horses and Lincoln sheep. Just now we are offering a few extra choice heifers—show stuff among them; also three rare good young bulls, bred from imp. young bulls, bred from imp. sire and dam. Highfield P. O., Weston station 3 1/2 miles. Telephone.

KENWOOD STOCK FARM, SHORTHORNS.

Bred by (imp.) Jilt Victor = 45187 =. Offerings are two bull calves, an 11-months Miss Ramden, from imp. sire and dam; a 13-months Missie, by Blythesome Ruler, and other bulls; also heifers of choice breeding. A few choice Berkshires pigs just off the sow. HUNING BROS., Highgate, Ont. Kent Co.

A seed we say is a simple thing. The germ of a flower or weed— But all earth's workmen, laboring With all the help that wealth could bring, Never could make a seed. —Julian S. Cutler.

Look for the best, and the best shall rise up always to reward you.

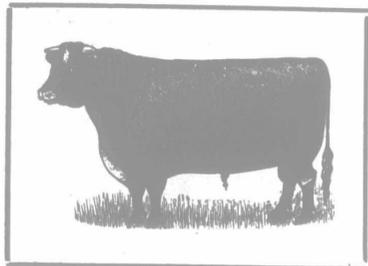


35 Head Imp. Scotch Shorthorns

BY AUCTION

At his farm, "Hollymount,"
3 1/2 miles north of Mitchell,
Ontario, on

Thursday, May 9th '07



Mr. W. J. Thompson will sell his entire herd of 35 head of Scotch Shorthorn cattle, including the stock bull, Imp. Rustic Chief, a roan 6-year-old son of Clan Alpine. Sixteen of the cows are imported, the balance sons and daughters of theirs, all got by Rustic Chief. Nearly all the cows have calves at foot, the balance heavy in calf. All are in splendid condition, of modern type and richest breeding. See Gossip.

TERMS—Six months' credit on bankable paper, 5 per cent. per annum off for cash.

Conveyances will meet all morning trains at Mitchell.

CAPT. T. E. ROBSON } Auctioneers. Catalogues on application.
JAMES JONES

W. J. THOMPSON, Prop., Mitchell, Ont.

Tudhope Carriages



It's a positive luxury to ride in a Tudhope. The perfect ease and solid comfort, make Tudhope the Carriages for business as well as pleasure.

Guaranteed by a firm that has been building Carriages in Canada, since 1855.

TUDHOPE NO. 4

The most popular carriage sold for general use. Green wool cloth or hand buff leather seat—selected hickory gear, wheels and shafts—Dayton 5th wheel—rubber tire wheels if desired—silver dash rail—green or wine painting. You'll see dozens of them on every road. Let us send you our free illustrated catalogue—which gives details you want to know.

THE TUDHOPE CARRIAGE CO., LTD. ORILLIA, ONT.

SHORTHORN FEMALES.

I have sold all my young bulls advertised in 'Advocate, but have some good females, representing the families of Village Maids, Claret, Crutchank Village Blossoms and Ramsdens. Box 556.

HUGH THOMSON, St. Mary's, Ont.

SUNNYSIDE STOCK FARM

For sale: A number of young SHORTHORN BULLS, red and roan, from imported sire and dams; good enough to head pure-bred herds. Apply: **JAMES GIBB, Brookdale, Ont.**

ATHELSTANE SHORTHORNS!

Pure Scotch Rosewood, Rosalind and Countess strains. Ten one and two year old heifers of the above strains, the get of the Village-bred son of Imp. Knuckle Duster, Vicar 3335, and the Bruce Mayflower bull, Star Prince; also young bulls from 6 to 12 months old. Prices reasonable. **WM. WALDIE, Box 324, Stratford, Ont.**

Sunny Southern Alberta

Investors, homeseekers and others, who intend settling in the West, be sure and see the Macleod district before settling elsewhere. Grand climate. No irrigation. No fuel famine. Cheap land, and the best wheat belt of Canada. **20TH CENTURY EXCHANGE, 600 A. Adams, Macleod, Alta.**

Shorthorns—Scotch and milking strains.

I have as good Shorthorn milking strains as there are in Canada, also others pure Scotch, and can supply a few bulls of either strain; also a number of heifers from 1 to 3 years of age. They are a good-doin' lot of modern type, and will be sold light. **Dr. T. S. Spruce, M.P., Markdale P.O. and Sta.**

Wm. Grainger & Son

Hawthorn herd of deep-milking Shorthorns. Aberdeen Hero (Imp.) at head of herd. Eight grand young bulls, also females, all ages. Prices reasonable. **Londesboro Station and P. O.**

DOMINION SHORTHORN HERDBOOK WANTED.

The Dominion Shorthorn Breeders' Association will pay \$1 each for the following volumes of their herdbooks: Volumes 8, 9, 12, 13, 14, 15, 16, 17 and 19. Parties having these volumes to part with, write for wrappers and mailing instructions to **W. G. Pettit, Sec.-Treas., Freeman, Ont.**

8 SHORTHORN BULLS FOR SALE from 10 months to two years old. Several of their dams or grandams winners in Toronto. Prices very moderate. **J. & W. RUSSELL, Richmond Hill, Ont.**

QUESTIONS AND ANSWERS. Miscellaneous.

SALSIFY.

What is the reason I can't grow salsify? For the past three years, the root has been a hairy thing, with a thousand small rootlets, instead of the straight taproot it should be. Other crops grow on adjacent plots—most excellent turnips and good potatoes, but I am disgusted with the salsify. **J. W. B.**

Ans.—The difficulty lies in the character of the soil, I think. Salsify is like parsnips in requiring a deep and well-prepared soil. If the land is shallow; that is, if the plowing is shallow, or even if it is not well prepared to a good depth, the main taproot is very likely to break up into a large number of small ones, as your correspondent describes. Even a lump of earth, if it happens to be directly under the crown of the salsify plant, and if it is fairly hard, may have the same effect. If it is possible to select a good, friable, loamy soil, and have this deeply and thoroughly prepared, I believe it would remedy the trouble. The soil should be rich also, and kept well cultivated, especially during the hot, dry weather of midsummer, as salsify needs a cool soil, and should make a steady growth to give the best results. I can see no other reason than some soil difficulty to account for this lack of success, as I have myself grown excellent salsify at Wolfville, only 18 miles from Windsor, year after year. The only other possible explanation would be seed not grown with sufficient care given to selecting well-formed roots from which to grow the seed the second year, salsify being a biennial. Of course, this is a matter for the seedsman, and could only be obviated on the part of the grower by care in selecting his seed dealer. **F. C. SEARS.**

ARRANGING BASEMENT STABLE.

Am raising a barn, 36 x 60 (outside measurement; wall, 18 inches thick). Want to stable as near 45 cattle as possible, and wish stables arranged with manure passages wide enough to drive through in cleaning out. Would like a few box stalls. Please indicate the best way of laying out the stable, giving, also, width of doors necessary. There is to be a root-house under approach at one side of the barn. **J. J.**

Ans.—To have two rows of stalls lengthwise, and a row of box stalls besides, would be the ideal arrangement, but in this case it would make too close quarters. Perhaps the very best way, therefore, to secure maximum stabling space will be to have a five-foot alleyway along the side on which the root cellar is, and have three rows of stalls extend across from this passage to the opposite wall. This will leave room for three rows of stalls, and a row of boxes across one end. As to dimensions, we would suggest a 4 1/2-foot feed alley at the far end; then a row of stalls, with platform 5 1/2 feet from stanchion to drop; then a six-foot manure passage, with sloping gutter, say a foot wide, on each side (8 feet in all); then another row of stalls, with 5 1/2-foot platform; then a 5-foot feed passage; then a row of stalls for smaller cattle, with a 5-foot platform; then another 8-foot manure passage; then a row of box stalls, 15 feet deep. The capacity of this stable would be 38 to 40 head. The two rows of stalls for large cattle would each allow for four double stalls, 7 feet wide. The row for smaller cattle would accommodate four double stalls, 6 feet wide, and a single one besides, or, perhaps, 5 double stalls might be squeezed in. This would allow for 25 or 26 head in stalls. The box stalls would hold 12 or 15 young cattle and calves. Doors for driving through should be not less than 7 feet wide. Ordinary stable doors should be 3 1/2 feet. Sixteen inches makes a good manger bottom.

A much more convenient layout would be to have one full row of stalls lengthwise (except for across feed alley, opposite root cellar), and have part of a row of stalls opposite, filling out the remaining space with a row of box stalls. This would accommodate, say, 24 head in stalls, and about 10 or 12 head of calves and young cattle in the box stalls. The total capacity of 34 head would thus be a little less than with the layout first described, but not very much.

Zam-Buk is compounded from pure herbal extracts, is highly antiseptic and applied to a wound or sore kills all bacilli and disease germs which otherwise set up festering, blood poison, etc. It heals cuts, burns, scalds, bruises; and cures eczema, prairie itch, salt rheum, poisoned wounds, ulcers, etc. All stores and druggists sell at 50c. per box, or post free from Zam-Buk Co., Toronto, for price. 6 boxes for \$2.50. Send 1c. stamp for trial box.

SHORTHORNS.

Just closed out the season's crop of bulls of breeding age, but have a few very nice youngsters coming up. Anyone wishing a stock bull from the noted Derby Imp., send orders ahead, as they are all picked up as soon as ready. **W. J. SHEAN & SON, Box 222, Owen Sound, Ontario.**

A. EDWARD MEYER

Box 372, Guelph, Ont.
Offers for sale, at prices you can stand, young SHORTHORN BULLS
Four of them from imported sire and dams. Several cows with heifer calves at foot by Imp. Scottish Hero, and a few yearling heifers. All are of the choicest Scotch breeding. Write, or better come and look them over.
Long-distance phone in house.

MAPLE GROVE SHORTHORNS

My present offering consists of imported and home-bred cows and heifers, also four young bulls bred by Lord Bant's Conqueror. He is one of the best stock bulls of his breed. Terms and prices to suit the times. **C. D. WAGAR, Enterprise Stn. & P. O., Addington Co.**

Queenston Heights Shorthorns

Show animals in yearling and two-year-old bulls, also bull and heifer calves. Young cows and heifers at very reasonable prices. Canadian and American registration.

Hudson Usher, Queenston, Ontario. Shorthorns and Clydesdales

I am now offering 6 young bulls from 8 to 20 months old, all Scotch bred, two of them from extra good milking families, and a few registered fillies of good quality.

JOHN MILLER, Brougham, Ont.
Claremont Sta., C.P.R.; Pickering, G.T.R.

Pleasant Valley Shorthorns

Herd headed by Imp. Ben Lomond—45160—, assisted by Bud's Emblem, 2nd-prize senior bull at Toronto, 1906, son of Old Lancaster 50088. Correspondence solicited. Inspection invited.

GEO. AMOS & SON, Moffat Sta. & P.O., C.P.R.
Farm 11 miles east of City of Guelph.

GEORGE D. FLETCHER,

Breeder of Scotch Shorthorns and Yorkshire Figs Herd, headed by the \$2,000 Dutch-bred bull, Joy of Morning (Imp.)—88970—. Choice young bulls from 4 to 9 months old, also females for sale. In Yorkshires are a choice lot of either sex, 7 months old, from Imp. sire and dam. Sows bred to Imp. hog if desired.

Spring Valley Shorthorns

Bulls in service are: Bapton Chancellor (Imp.)—40859—(78286), Clipper Chief (Imp.)—64220—. Stock for sale at all times.

Brown Lee Shorthorns

Present offering is 8 young bulls from 6 to 15 months old, a nice straight, good-doin' lot, sired by Blenheim Stamp; also females of all ages, daughters of Imp. Sir Christopher and Imp. Beestump. Prices very reasonable. **DOUGLAS BROWN, Arr. P.O. and Station.**

SHORTHORNS & OXFORD DOWNS

Herds headed by Protector, Imp., Vol. 22 E. For sale: Bulls from six to twenty months—three from imported dams and imported sires. Also females in calf. Also eleven registered Oxford Down ewe lambs. All at reasonable prices. **John McFarlane & W. H. Ford, Sutton, Ont., Elgin Co. M.C.R. and P.M. Railways. Long-distance phone.**

SHORTHORNS for sale.

One choice yearling bull—red. Also young calves with pedigree. **MATTHEW GILBERT P. O. Box 601, St. Thomas.**



TO FARMERS AND DAIRYMEN

It will pay every farmer or every farmer's wife to sit right down and write for Sharples "Business Dairying." This valuable book contains information that can be found in no other book, and will help any dairyman to make his business more profitable. It tells How to Feed, What to Feed, How to Care for Feed, What Foods Produce Greatest Amount of Milk, How to Care for the Dairy Cow in the way to get best results, and the whole book is practical. To get all the good out of your milk you should of course use

THE SHARPLES TUBULAR CREAM SEPARATOR

It is not only guaranteed to more than pay for itself annually, but the ease with which you can skim, the low can, the self-oiling bearings, the simple Tubular bowl with only one little part inside to wash, the moderate price, are all points you should know about. Send today for the free "Business Dairying" and full information about the Sharples Tubular, giving number of cows you keep. Ask for booklet G. 193

Mrs. J. Benken, Trenton, Ia., says "We cleared \$100.00 in six months off seven cows."

THE SHARPLES SEPARATOR CO.,
Toronto, Can. WEST CHESTER, PA. Chicago, Ill.

BRAMPTON JERSEYS

Canada's Premier Herd

Strengthened regularly by importations from United States, England and the Island of Jersey.

We have animals of all ages and both sexes for sale, and the largest herd in Canada to choose from.

Write for prices and particulars.

Long-distance phone at farm.

B. H. BULL & SON, Brampton, Ont.

HOLSTEINS FOR SALE



Four imported and one home bred bulls from 8 to 18 months old; also our entire crop of spring bull calves from week old up.

Stred by the grandly-bred imp. bull, Sir Howie B. Pieterje, whose dam record is over 82 lbs milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 15c. Don't delay if you want one from this herd.

H. E. GEORGE, Brampton, Ont.

LOOK HERE!



Now is the time to place your order for young stock from choice dams, and sired by a son of the greatest cow in Canada, Boultje 3rd Pieterje De Kol (645 lbs. milk in 7 days 86 lbs. in one day). His sire's dam, Calamity Jane, 25 1/2 lbs butter a week; gr. dam, Alta Posch, 27.07 lbs. butter a week. World's record under 3 years. Write for prices. **FRED ABBOTT Fairview Stock Farm, Harrietsville, Ont.**

Pine Ridge Jerseys For sale very cheap some choice young bulls, bred in the purple, of ideal type; also a few heifers and heifer calves and some Cotswold shearing rams and ram lambs. **Wm. Willis & Son, Newmarket P. O. & Sta.**

High Grove Jerseys—Choice young bull for sale, 18 months; fit for service; a prizewinner at Toronto last fall, "Bim of High Grove" 73688. **ROBT. TUFTS & SON, Tweed, Ont.**

When Writing Please Mention this Paper

ANNANDALE FINE STOCK FARM

TILLSONBURG, ONT.

Premier sire, Prince Posch Calamity, whose dam and sire's dam average in official test 86 lbs. milk in 1 day and 26 lbs. butter in 7 days.

No stock for sale at present.

GEO RICE, Tillsonburg, Ont.

RECORD OF MERIT HOLSTEINS



Herd 110 strong. Over 40 head now in the Record of Merit Two of the richest bred bulls in Canada at head of the herd For sale: 18 bulls, from 2 months to 1 year of age, all out of Record of Merit cows and sired by the stock bulls.

P. D. EDE, Oxford Centre P.O., Woodstock Station.

MAPLE HILL HOLSTEIN-FRIESIANS

Korndyke Teake, calved Aug. 16, 1905. Thir y nine sires in his pedigree have sired 503 daughters with official seven-day butter records. Twenty dams in his pedigree have official butter records averaging 23 lbs. 1 oz. of 85.7 per cent butter in seven days. For extended pedigree price, etc., write

G. W. CLEMONS, St. George, Ont.
Evergreen Farm Holsteins is headed by DeKol, which we are offering for sale; sire of 10 daughters in Record of Merit; also a choice lot of young bulls fit for service, from Record of Merit cows with large records. **F. C. PETTIT & SON, Burgessville Ont.**

QUESTIONS AND ANSWERS. Veterinary.

HORSE PANTS.

Four-year-old horse pants in hot weather. He is nearly all right until he starts to travel, and then pants freely on slight exertion. R. C.

Ans.—This is a congenital weakness for which nothing can be done. It is probable he may improve with age and regular work. V.

PRESSURE UPON BRAIN.

Two weeks ago my cow commenced to carry her head to one side, and became all stiffened up. She seems sore and lame, especially in hind quarters. R. T.

Ans.—There is pressure upon the brain, either from congestion of the blood vessels or from a growth or thickening of the tissues. Give a purgative of 2 lbs. Epsom salts and 1 ounce ginger. Follow up with 1 dram iodide of potassium, twice daily. V.

ENTERITIS.

Pig died. A post-mortem revealed the intestines covered with a thick, yellowish matter, and they appeared to be grown together. C. C.

Ans.—This was inflammation of the bowels. It is caused by exposure, violent exertion, irritating matters in the intestines, diarrhoea, etc. It is usually fatal. Treatment consists in applying heat to the abdomen, as hot poultices or cloths wrung out of hot water, and giving 2 to 6 drams laudanum every four or five hours. Preventive treatment is the best. This consists in keeping comfortable, feeding food of good quality, and seeing that they get regular exercise. In fact, taking general good care of them. V.

BLIND STAGGERS.

Mare, eighteen years old, has had a few attacks of blind staggers. Just when being led out of the stable in the morning, she goes sideways and backwards, falls down, but gets up almost immediately, and is all right. G. T.

Ans.—This is apparently what is commonly known as "stomach staggers or blind staggers," due to a congestion of the blood vessels of the brain, which is supposed to occur through nervous sympathy from stomach trouble. Draw 6 to 8 quarts of blood from the jugular vein, and give a brisk purgative of 8 drams aloes and 2 drams ginger. Feed bran only until purgation commences. See that the food given is of first-class quality, and in only medium quantities. Avoid overloading the stomach, and give regular exercise after purgation ceases. V.

ACUTE SPINITIS, ETC.

1. Four-year-old mare was found down and unable to rise on Sunday morning. She had no use of her hind parts, and her hind limbs were cold. She was working in slushy snow the day before she went wrong. She died in three days.

2. Would it be wise to shear sheep this early in April? H. E. B.
Ans.—1. The symptoms indicate acute inflammation of the spine, which may be caused by an injury, but often appears without appreciable cause. The disease is usually, if not always, fatal. Treatment consists in keeping as comfortable as possible, purging with 6 to 8 drams aloes and 2 drams ginger, and following up with 2-dram doses nux vomica, three times daily. Heat or camphorated liniment, applied to the spine, may have a beneficial action.

2. If sheep can be kept in comfortable quarters, they may be shorn now. Early shearing is often practiced with sheep for show purposes, but, except for show sheep, it is usually considered best to not shear until the weather becomes fine. V.

INAPPETENCE.

Two sows are not feeding well. They stand at the trough, eat a little, grunt, eat a little more, grunt again, etc., etc. Am feeding mangels twice daily, and plenty of house slops. W. B.

Ans.—Purge each with 4 to 8 ounces Epsom salts, according to size. After the bowels have regained their normal condition, feed milk, bran and a little chopped oats and peas. Continue giving roots, and see that they get plenty of exercise. V.

Lump Jaw

The first remedy to cure Lump Jaw was

Fleming's Lump Jaw Cure

and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser.

Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy. **FLEMING BROS., Chemists, Toronto, Ontario, 75 Church Street.**

MAPLE GLEN HOLSTEIN HERD

Quality Tops for Sale

In A. R. O. test a Sylvia female has just made 606 1/2 lbs. milk and 26.04 lbs. butter for 7 days. Who wants her son by Sir Alta Posch Bessie? Four other of his sons for sale. A sister to his dam has just made over 32 lbs. butter in 7 days. Prices right.

G. A. GILROY, Glen Buell, Ont., Brookville Stn., G.T.R. or C.P.R.

Ridgedale Farm Holsteins—Present offering: One yearling bull, also six bull calves, from one to four months old, sired by Prince Pauline De Kol 6th, and from rich, heavy milking dam. Come and see them or write for prices. Shipping stations: Port Perry, G.T.R., or Myrtle, C.P.R., Ontario Co. **R. W. WALKER, Utica P.O., Ont.**

HILTON STOCK FARM—Holsteins, Cotswolds and Tamworths—Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton P.O., Brighton Tel. and Stn.**

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshire sows, about 3 months old, for sale cheap. True to type and first-class. Bred from imported stock. **THOS. E. CARLAW & SON, Warkworth P.O., Campbellford Stn.**

"THE MAPLES" HOLSTEIN HERD

Is made up of Record of Merit cows and heifers with large records, and headed by Lord Wayne Mechthilde Calamity. Bull calves from one to five months old for sale.

Walburn Rivers, Folders, Ont.

LYNDALE HERD

Offers a number of young bulls fit for service, out of Record of Merit cows, and sired by Beryl Wayne Paul Concordia, four of whose nearest dams have official records averaging 29 lbs. 11 oss. each. Eight heifers coming two, and due to calve in spring. Younger stock, either sex.

BROWN BROS., Lym, Ont.

Imperial Holsteins—An Advanced Registry herd for sale. One-year-old bull, a Toronto champion, four bulls from 5 to 8 months of age. A. B. on both sides. Imported dam from the U.S.

W. H. SIMMONS, New Durham P.O. & Sta.

"GLENARCHY" HOLSTEINS

43 head of big, deep-flanked, heavy-producing Holsteins, many of them milking from 50 to 80 lbs. a day on grass. Young stock of both sexes for sale. A straight, smooth lot.

G. MACINTYRE, Renfrew P.O. and Sta.

Holsteins and Yorkshires

R. HONEY, Brickley, Ont., offers a very choice lot of young bulls, also boars and sows fit to mate.

Greenwood Holsteins and Yorkshires

For sale: A few richly-bred bulls from one to eighteen months old. Also a few choice females of all ages. Yorkshires of either sex.

D. JONES, Jr., Saledonia P. O. and Sta.

Grove Hill Holstein Herd

Offers high-class stock at reasonable prices. Only a few youngsters left. Pairs not akin.

F. R. MALLORY, Frankfort, Ontario, G.T.R. and C.O. Railway connections.

Springhill Ayrshires.

Over 25 heifers from 6 months to 3 years of age. Nearly all of them imported, the balance bred from imported stock. A high-class lot of show stuff. A few older ones imported and Canadian-bred. Three bull calves, 1 of them imported in dam, the others bred from imported Cross of Knockdon. Anything in the herd is for sale.

Robt. Hunter & Sons, Maxville, Ont.

Ayrshire Bulls

Two very choice, nearly 12 months old, and from dam that gave last year more than enough to qualify for "Record of Performance." **W. W. BALLANTYNE, Long-distance phone, Stratford, Ont.**

SPRINGBROOK AYRSHIRES

gave an average of 7,000 lbs. of milk, testing 3.9 per cent. butter-fat in 1905. A few bull calves for sale. Prices quoted for females. **W. F. STEPHEN, Box 163, Huntingdon, Que.**

Ingleside Ayrshires won more prizes in 1908 than all other competitors combined. Young stock of either sex for sale. **H. C. HAMILL, Islay P. O., Ont., Fenelon Falls or Lorneville Stn.**

QUESTIONS AND ANSWERS. Miscellaneous.

SON DYING INTESTATE.

My son, aged 45, unmarried, and living with me, was drowned in February. He had worked on my farm all his life. He was to have \$120 a year and board, after maturity. He had also an interest in certain breeding stock on the farm. We advertised and did business in the firm name of — & Son; never had our partnership registered. I always intended to retire, leaving him the farm and stock, and endorsing the amount due him (about \$7,000) as part payment on the farm, the balance to be paid over to me. Deceased son never made a will, and never expressed a desire as to what should be done with his property in case of his death. Besides deceased son, myself and wife (mother of deceased son) have two sons and three daughters, all of mature age, and all married but the youngest daughter.

- 1. Can I lay claim to the property and money that was coming to my dead son?
2. If so, can I sell the property and claim the proceeds of the property as well as the money?
3. I intend to do this, and to add the proceeds to my own means, and then to make a will, dividing the whole into six parts—one each for my wife and the five children—specifying that each be paid his or her share after my death. Can I legally do this?
4. If not, can I amalgamate my dead son's property and money with my own, and give each heir a percentage of the whole now, and will the remainder to them afterwards?
Ans.—1. No, only a share thereof.
2, 3 and 4. No. Your wife and children are legally entitled to participate in your deceased son's estate equally with you, and, unless you can arrange an agreement with them to dispose of the matter otherwise, the estate must be administered and wound up in the regular way.

ROOTS VS. ENSILAGE.

- 1. Which do you think is the most beneficial to stock, roots or ensilage?
2. Do you think roots are better than ensilage for feeding stock? If so, what kind of roots would you recommend?
3. If you had a silo, and were raising corn, or ensilage, and did not like it, would you exchange for roots, or not? If not, why?
4. Is there not more iron and strength in roots than corn?
Have taken your valuable paper for about fifteen years, and would not part with it for any price. I enjoy reading the questions and answers answered through your valuable paper, and also the different watering systems. W. F. S. Waterloo Co., Ont.

Ans.—1 and 2. If unable to provide both roots and silage, we would rather prefer to have the roots, from the standpoint of the animals' welfare alone, leaving economy out of consideration. But corn silage is a very much more profitable feed to raise than roots; that is, of course, in suitable corn districts. The best plan is to depend on corn silage for the bulk of the ration, and raise a few roots besides. As to kinds of roots, it makes no great difference, except that mangels or sugar beets should be preferred to turnips for dairy cows, except in districts, like most parts of the Maritime Provinces, where turnips yield much better than the beets.

3. If we had a silo and did not like it, we would set to work to find out why. There is always a good reason somewhere, if it can be got at. Among the more frequent causes of dissatisfaction with silage are: the building of silos of too great diameter for the stock kept, so that not a deep-enough layer can be taken off per day; use of too late-maturing varieties of corn; planting too thickly; use of poor seed; mistakes in the filling of the silo; feeding each animal too much silage per day, and so on. Find out the reason. There is one, be sure of that.

4. Iron is a negligible factor in the economy of feeds.
Havin' sint mos' iv us good digistions, but th' docthors won't let them wurruk. Th' strongest race iv rough-an'-tumble Americans that iver robbed a neighbor was raised on pie.—Mr. Dooley.

Dr. McLaughlin's PLAIN TALK TO WEAK MEN

Now that it is generally conceded that "Electricity is the Basis of Life," you should give some credit to the theory of my teachings.

I have spent twenty years to perfect my appliance; there is no guesswork about curing when used as I advise.

The current supplied by my Belt enters the body in a glowing stream of vitalizing heat, so gentle that the nerves and vital organs absorb it as freely as a hungry babe drinks milk. This force is added to the natural power generated by the stomach; it saturates every vital part, and soon transforms the debilitated body into a natural storage battery which generates its own health and closes the doors forever to disease and debility.

I am an enthusiast, you say. Why should I not be? I have the gratitude of thousands of people who have been cured by my Electric Belt after the failure of the best physicians. I am enthusiastic, because I know that I relieve suffering humanity with the surest cure for the least expenditure of money that is known to-day.

Every man or woman who comes into my office gets a practical illustration of my method of treatment, and goes away convinced that the claims that I have made for it are true. After seeing original letters from the cured (letters which I am permitted to exhibit), their doubts are dispelled, and they know that my Electric Belt makes strong men out of weak men, gives new life and ambition to men who formerly were weaklings.

They read grateful letters from men and women who were cured by my Belt of rheumatism, headache, lumbago, sciatica, stomach, liver, bowel, kidney and bladder troubles. They also see evidence of wonderful cures of locomotor ataxia and some forms of paralysis. Every day brings fresh evidence of the wonderful cures.

My Cures Prove the Truth of My Arguments

Dear Sir,—I have worn your Belt for several months, and it has cured me of rheumatism and piles. I would not take \$100 for the benefits I have received from it so far and be without it. I can recommend it to any one suffering from any troubles for which it is recommended. J. H. MIKEL, Mapleview, Ont.
I will say that I am perfectly satisfied with your treatment. I used your Belt as directed, and found it just as you represented it, and I can thank you alone for the cure it has given me. I have it yet in just as good condition as ever. If I know any one who needs a Belt like yours, I will send them to you. Once again thanking you for kind treatment and good advice, and wishing you and your Belt every success, I remain, with best wishes.—JOSEPH GOBLE, Gillies Depot, Que.
I write to let you know that your Belt has cured me, and I am entirely satisfied with your treatment. I then gave it to my sister to wear, and she, too, was entirely cured after being treated by many different doctors, and also being told that she would have to undergo an operation to which she would not consent. She used your Belt and was entirely cured.—JOHN W. THIBAUT, Bruce Mines, Ont.

DR. McLAUGHLIN'S OFFER

Any man who is suffering from any weakness, let him come to me and I will cure him, and if he will give me evidence of his honesty and good faith by offering me reasonable security, he may use the Belt at my risk and

PAY WHEN CURED

FREE BOOK

I have a book which every man should read. It contains hundreds of letters from men all over Canada, telling of how they have been cured when hope was lost and all other treatments failed to give the desired relief. If you cannot call, write to me for a copy of this valuable book, setting forth the key to strength and manhood. Call or write to-day.

Put your name on this coupon and send it in. DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Ont. Dear Sir,—Please forward me one of your books as advertised. NAME ADDRESS Office Hours: 9 a.m. to 6 p.m. Wednesday and Saturday until 9 p.m.



Burnside Ayrshires

Imported and Canadian-bred. Prizewinners at all the leading shows. I hold the award of merit given by the Bd. of Dir. of World's Fair, St. Louis, to the breeder of largest number of prizewinning Ayrshires at said Exposition. Females of all ages for sale, imported and Canadian-bred.

R. R. NESS, JR., HOWICK, QUE., P.O. AND STATION.

Wardend Ayrshires We are offering young bulls from 1 to 2 years old; also a choice lot of spring calves from deep-milking dams. Sired by White Prince of Menie No 1895; bred by A. Hume, Menie. F. W. TAYLOR, Wellman's Corners, Hoard's Stn., G. T. R.

Ayrshires 3 prizewinning bulls fit for service at reasonable prices also younger ones for quick buyers. N. DYMENT, Hickory Hill Stock Farm, Dundas Stn. and Tel. C appison, Ont.

Glenhurst Ayrshires Olde established herd; Ontario, Imp. and Canadian-bred. Average B. F. test for the whole herd 42; milk yield, 40 to 60 lbs. a day For sale: females of all ages, and several young bulls; all by Imp. sire and some out of Imp. dams. James Benning, Williamstown P. O., Lancaster Sta.

SHIP US YOUR CALFSKINS Write for our prices.

When Writing Please Mention this Paper E. T. CARTER & CO., Toronto, Ont.

SOUTHDOWN

AND Scotch Collies. Robt. McEwen, Byron, Ont. Long-distance Phone.

Canadian Agents for the Original McDeugall's Sheep Dip & Cattle Dressing Imported direct. Price: Imperial pint, 50c. Imperial half gallon, \$1.25; imperial gallon, \$2.50. Sold by druggists, or charges prepaid on one-gallon tins. THE WORTHINGTON DRUG CO., Toronto, Ontario.

Sheep and Cattle Labels. You will need them soon. See about them now. Write to-day for circular and sample. F. S. JAMES, Sarnia, Ont.

When Writing Please Mention this Paper

YORKSHIRES of Choicest Type and Breeding.



I have on hand 75 brood sows of Princess Fame, Cinderella, Clara, Minnie, Lady Frost and Queen Bess strains. My stock boars are true to type and richest breeding. For sale are a large number of sows bred and ready to breed, boars fit for service, and younger ones of both sexes. Pairs and trios not akin.

J. W. BOYLE, Woodstock, Ont.

Woodstock Hurd of Large English Berkshires

I have for sale pigs of all ages, both sexes, from prizewinning stock. I am booking orders for spring delivery from my Imp. and home-bred sows. Come and see or write for prices. My herd was in the front rank of prizewinners at the leading exhibitions this fall.

G. F. R. and G. T. R. Woodstock.

DOUGLAS THOMSON, Box 1, Woodstock, Ont.

Rosebank Berkshires. — Present offering:

Sows ready to breed. Choice young stock ready to wean, sired by Maple Lodge Doctor and Sallie's Sambo (Imp.), a Toronto winner.

Letroy, G.T.R. JOHN BOYES, JR., Churchill, Ont. Long-distance 'Phone

HILLCREST BERKSHIRES

Stand unrivalled for individual merit in the herd. Our business for 1906 surpasses former years. The inquiry for choice things increases from year to year. I have choice sows for sale due to farrow in the spring. Also a few boars on hand. Vine Sta. G.T.R. near Barrie. John Lahmer Vine P.O.

DAKDALE BERKSHIRES

Largest Berkshire herd in Ontario. Stock boars and several brood sows imported. For sale: Sows bred and ready to breed, boars ready for service, and younger ones, all ages, richly bred on prizewinning lines and true to type. Everything guaranteed as represented. Long distance 'phone. L. E. MORGAN, Miligan P.O., Co. of York.

Willowdale Berkshires

Young boars and sows 3 and 6 months of age out of imp. sows, and sired by Imp. Folgate Doctor, Royal Master piece, a son of the \$5,500 boar, Masterpiece, and some of them imp. is dam. Satisfaction guaranteed.

J. S. WILSON, Milton P.O. and Sta.

Berkshires—Chief herd boars: Compton Duke (Imp.), and Elmhurst Swell (Imp.). For sale: 5 boars, 5 gilts, 1 nine-month-old sow, due in May. Pigs ready to wean. Motto: "Goods as represented." Careful selections for mail orders. H. M. VANDERLIP, Cainsville, Ont.

Dunrobin Stock Farm

Clydesdales, YORKSHIRES, Shorthorns

We are booking orders for breeding stock from our grandly-bred Yorkshire sows. Twenty-five sows to farrow in the next few weeks. Unrelated pairs a speciality. Write for prices and particulars.

DONALD GUNN & SON, Beaverton, Ontario. INSPECTION INVITED.

G. T. R., C. N. O. R. stations 1 1/2 miles from farm. Customers met on notification.

Maplehurst Herd of Tamworth Swine, Bronze Turkeys, Toulouse Geese, Pekin Ducks, S.-C. W. Leghorns.

For sale: A large herd of Tamworths, of excellent breeding and ideal bacon type. This herd won sweepstakes at Toronto and London, 1905-6. Among our winnings at World's Fair, St. Louis 1904, both premier championships, sweepstakes aged and junior herd, and two grand championships. Inspection and correspondence solicited. For further particulars apply to

D. DOUGLAS & SONS, Mitchell, Ont.

ORCHARD HOME TAMWORTHS

Herd headed by Newcastle Warrior. This hog won first prize and silver medal at Toronto 1905 and defeated his sire, Colwill's Choice (1949) who has won these honors three years in succession. Our brood sows are large and of the same high quality. If you want choice stock, we can satisfy you at a reasonable price. Young boars fit for service; also young pigs now on hand. One good Yorkshire boar one year old. Express prepaid and satisfaction guaranteed.

GRANDALL BROS., Cherry Valley, Ont.

Newcastle Herd of Tamworths and Shorthorns. We have for quick sale a choice lot of boars and sows from 2 to 6 months old, the produce of sows sired by Colwill's Choice and Newcastle Warrior, both our own breeding, and winners of sweepstakes and silver medal at Toronto, 1901-02-05. Several very choice sows due to farrow in March and April. Pedigree furnished with every pig. Several choice heifer calves and heifers in calf to our present stock bull. All of high show quality. Prices right. Daily mail at our door. COLWILL BROS., Newcastle, Ont.

MOUNT PLEASANT TAMWORTHS and HOLSTEINS.—An extra choice lot of pigs, from one to six months old. Two sows to farrow in March. Nearly all sired by Colwill's Choice No. 1949; won sweepstakes and silver medal, Toronto, 1901-9-3. Also four bulls and one heifer from one to ten months old. 'Phone in residence. BERTRAM HOSKIN, The Gully P. O.

ELMFIELD YORKSHIRES Have 40 young pigs from 2 to 5 mos. Some young boars ready for service; also young sows bred and ready to breed. Pairs supplied not akin. Prices right. G. B. WUMA, Ayr, 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; pedigrees and safe delivery guaranteed. Address: E. D. GEORGE, Putnam, Ont.

MAPLE LEAF BERKSHIRES!

Now offering King of the Castle sows bred to British Duke (Imp.) also young sows and boars, 9 and 10 weeks old, from British Duke (Imp.).

Joshua Lawrence, Oxford Centre P.O. Woodstock Station.

IMPROVED YORKSHIRES. LARGE

Choice young stock from imported prizewinning stock for sale.

GEO. M. SMITH, HAYSVILLE, ONT.

Cherry Lane Berkshires

Are strictly high-class Toronto winners. Of all ages. Young stock of both sexes for sale. Pairs supplied not akin.

Sam Dolson, Allea P. O., Norval Str. COUNTY PEEL.

CHESTER WHITE HOGS

The largest herd of bacon-type Chester White hogs in Canada. Strictly high-class have won highest awards. Young stock of both sexes always on hand. Satisfaction guaranteed.

ROBERT CLARKE, 41 Cooper Street, Ottawa, Ont.

Cedar Lodge Yorkshires

100 head brood sows (Imp.) and the product of imp. stock, weighing from 500 to 800 lbs. each. Stock hogs by imp. sires and dams, very large and full of quality. Young stock of both sexes constantly on hand for sale. Pairs not akin. Satisfaction guaranteed.

P. O. COLLINS, Bowesville P.O., Ont. Manotick Sta., C.P.R.

LARGE ENGLISH YORKSHIRES

We have a limited number of choice young pigs for sale, bred from our choicest sows, and got by the imported boars, Dalmeny Joe 18677 and Broomhouse Beau 14614. Pigs from the latter won all the first prizes at the Ottawa Fair Stock Show last March for the best dressed carcasses and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders. Joseph Featherston & Son, Streetsville, Ont.

Maple Lodge Berkshires—A number of nice thrifty Berkshire sows, bred and ready to breed. Young stock on hand of both sexes. Stock registered and crated f.o.b. Prices reasonable. JOSEPH NAUMAN, Fisherville, Ont. Nelles' Corners Sta., G.T.R.

Duroc Jerseys—Imported and home-bred sows and boars ready for service. Pigs fit to wean; also Buff Orpingtons and Buff Leghorn cockerels.

MAC CAMPBELL, Harwich, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

NOTICE TO QUIT.

A rented his farm to B on April 17th, 1906, for a number of years. The lease states that A was liable to sell, and doing so, B was to get six months' notice at any time. He got his notice on October 26th; so it would be up on the 26th April. Can B hold the farm, or has he to go? OLD SUBSCRIBER.

Ans.—B is obliged to give up possession, provided A did really sell the farm, and gave the notice accordingly in good faith.

DOG SUCKS EGGS.

A reader asks what to do with a dog that sucks eggs. If the habit is not confirmed, crunching a strongly-flavored, cayenne-peppered egg in his mouth may remove his inclination for raw eggs. Some have recommended boiling, instead of filling with pepper, but we have known dogs to finish hot eggs quite willingly, apparently relishing them boiled as well as raw.

SQUARE OR OCTAGON CEMENT SILOS.

I propose building two cement silos, each 16 feet by 35 feet or 40 feet deep, inside my barn. As the square or octagon silo will fit into the space I have for them better than the round silo, I have almost decided upon the octagon silo. Please inform me, through the columns of "The Farmer's Advocate," if the square or octagon, cement silo, reinforced with iron, will withstand the pressure from inside as well as the round silo, or, at least, be strong enough to stand that immense pressure from inside caused by that weight of ensilage.

AN OLD SUBSCRIBER.

Ans.—While not equal in strength to the round silo, usage has proved that the square or octagon form, properly constructed, is quite equal to the pressure of ensilage, and, when the corners are rounded off, and the interior smoothly plastered, so as to permit free settling, this form of silo has given very good satisfaction.

NITRATE OF SODA FOR TOMATOES.

I am just starting farming on my own account, and am going to try a little nitrate of soda as top-dressing for tomatoes, sweet corn, sugar beets, cabbage, etc.

Could you tell how best to top-dress tomatoes? I am thinking about mixing the nitrate of soda with the water used for transplanting the tomatoes. If I put, say, 2,000 plants to the acre, I can put 4 pounds of nitrate in about 10 or 12 gallons of water, and use that water at rate of about one pint to every plant, that would take about 100 lbs. nitrate of soda to the acre.

1. Do you think this would be a good plan?
2. Would that mixture be strong enough to injure the plants?
3. Could I use that mixture for any kind of vegetable that I have to transplant, as cabbage, celery, etc.?
4. Do you advise top-dressing sugar beets?

Ans.—One of the difficulties in the use of nitrate of soda is that it is so soluble that it is easily leached out of the soil, or, at least, beyond the reach of the plant. If you apply one pint of the solution, as you suggest, to each plant, I should be afraid that part of the nitrate of soda would at once be carried beyond the reach of the plant. It would, I think, be better to apply the nitrate of soda in two applications. One-half might be put on the surface of the ground near the plant, but not touching, about the time of planting. The balance can be put on two or three weeks later. I think this would give very much better results than if it were applied in solution in the manner indicated. The same would apply with reference to the use of this fertilizer with different kinds of vegetables. I think that a dressing of a small amount of nitrate of soda, say, 50 to 75 pounds to the acre, might be quite effective in the growing of sugar beets.

R. HARCOURT.

Ontario Agricultural College.



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