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Vol. XLIV.

LONDON, ONTARIO, MAY 6, 1909.

No. 867

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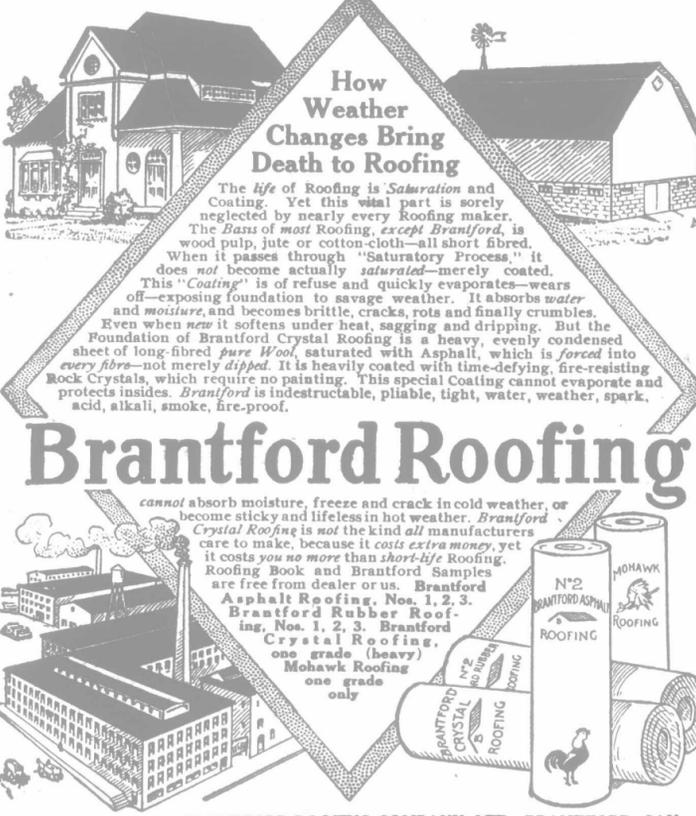
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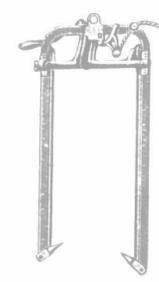
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Note what the "Philosopher of Metal Town" says on page 783 of this issue.

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The simple, light Sharples Dairy Tubular bowl is easily washed clean in 3 minutes. A few thrusts of the brush does it. Better than spending 15 to 30 minutes washing a "bucket bowl."

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"Bucket bowl" manufacturers are wrong, in the first place, in using wide mouth, squatty, "bucket bowls" fed through the top. That kind of bowl is not modern. They are wrong, again, in filling their bowls with disks or other contraptions, for such parts do not make a steady, simple, light, easy to clean, durable bowl. These two wrongs don't make "bucket bowl" separators desirable or right.

The only modern bowl is the light, slender, simple

when he throws it away and replaces it with a Sharples Dairy Tubular.

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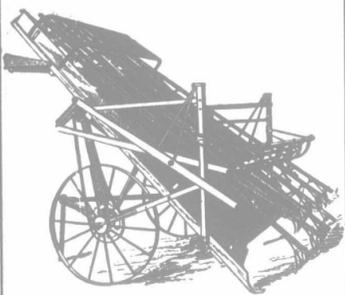


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Kingsmill, Feb. 27, '08

Dain Manfg. Co.:

Gentlemen,—I enclose clipping from "Aylmer Express," of July 25th, 1907:

"The haying outfit of L. M. Brown, of Kingsmill, put in 31 loads of hay one day last week, the product of 14 acres, two of which is orchard. Twenty-eight loads were loaded with a Dain Hay Loader on roller rack with only one man on the wagon, and for twenty-four loads the man drove his own team. Mostly unloaded in a shed with ordinary horse fork, although a gasoline engine is used for unloading in the barn. This looks like very fast work, and shows what can be done by an up-to-date farmer with modern machinery, even if men are scarce."

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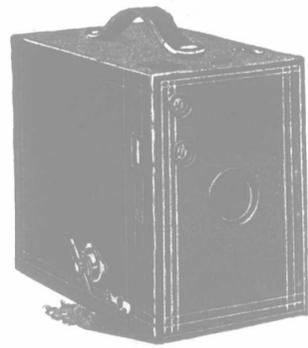
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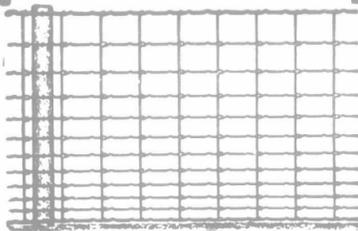


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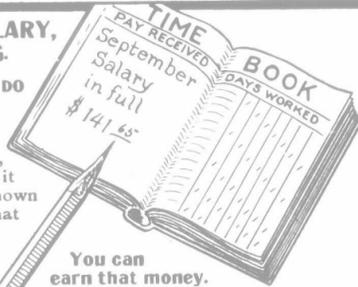
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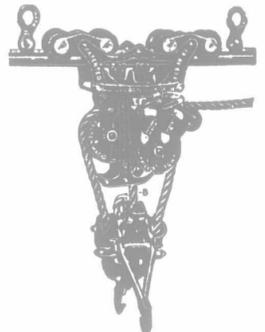
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Manufacturers of Hay Tools, Feed and Litter Carriers, Cow Stanchions, Pumps, Barn-door Hangers and Hardware Specialties.

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Vol. XLIV.

LONDON, ONTARIO, MAY 6, 1909

No. 867

EDITORIAL.

Spraying Before Rains.

Orchardists of many years' experience who for a number of seasons have practiced spraying as soon after a rain as possible, for the control of rot in grapes, were surprised, at the convention held some time ago in the Niagara District, to hear that it was better practice to apply the spray immediately before a rain. It was pointed out that the vines made the greater part of their growth during and immediately after wet weather, and that when dry spells came the tissues became so hardened that the spores of the dread fungus could not gain entrance.

Everyone who makes a study of spraying for fungous diseases will agree that, under certain conditions the new gospel is right. It is admitted by all that the most serious damage is done in spreading the disease when the shoots are growing rapidly. If, then, spraying mixtures that destroy the spores of the fungus can be applied to these young shoots before the part is infected, in such way that it will stay there, the damage is avoided.

What orchardists want, however, is something that can be worked out on large plantations. The new doctrine is open to criticism on many points. How can any man arrange to spray from ten to forty acres between the time he is convinced that wet weather is about to set in, and the time the rain begins to fall? How many times in a season would different growers decide that a wet spell was imminent, and prove to be false prophets? Would the application of spraying materials be effective, provided a drenching rain continued for several days after the work was done?

No doubt, the use of Bordeaux mixture on grapevines immediately before a rain is of great value in combating rot. On small vineyards, and in cases where the spray can be applied quickly, and allowed to dry on the leaves and vines before rain falls, the result doubtless would be satisfactory. In the case of continued rain, and consequent continued growth, is it possible that there would be sufficient spraying material to prevent the entrance of spores, or would it have effect only on the growth made during the early part of the wet spell? This is a point on which growers want to be clear, and it can be settled only by practical work. The main object is effectiveness, at a minimum cost. If one application immediately before a rain is more effective than an application at any other time, then, by all means, every fruit man should know it. If, however, such application is liable to be washed off, thus necessitating another spraying as soon as the rain ceases, it is equally important to have those interested made aware of the fact.

For those who have the means and the equipment, it might be advisable to give a thorough spraying both before and after a rain. Everyone, however, cannot fall in line with this practice. For localities where heavy rains are frequent, it would seem best that a thorough application be made as soon after rain ceases as possible. The practice of spraying before the shower might prove to be effective and economical on small plantations, and in cases where the rainfall is not heavy, but it never can become popular in general practice on extensive fruit farms. There is, of course, little danger of damage from too much spraying, but the cost of material, hire for men and horses, and wear and tear on machinery must be considered. Cannot the growers experi-

It is Up to the Breeders.

A well-known and highly-esteemed Shorthorn breeder draws pointed attention, in another column, to the fact that farmers who want creditable Shorthorn bulls of dual-purpose breeding should be willing to pay a fair price. He complains, as other breeders have done, with reason, that prospective purchasers of dairy Shorthorn herd-headers commonly limit themselves to forty or fifty dollars for a bull, whereas a beef-making farmer counts eighty to a hundred and fifty dollars well invested if he can get the type and quality of sire he wants.

The point raised is worth a little inquiry. We fear that a great many dairy farmers cannot escape the imputation of being oversaving in the class of bulls they buy. When it is remembered that the sire is approximately half the future herd, and often more, thanks to his prepotency, the wisdom of liberal outlay for a high-class stock-getter is beyond debate. The dairyman's parsimony in this regard is probably due to several causes. First of all, bulls of the recognized dairy breeds can be more economically bred, and have commonly been more cheaply sold than those of the special-purpose beef breeds, because the dam of the dairy bull pays for her keep in milk checks, whereas the year's keep of the beef bull's dam is a first charge against the calf. Also, it must be remembered that, in Canada, values of dairy stock have not been enhanced to the same extent as Shorthorn values by rich men who breed cattle as an avocation or hobby, and can afford to put more money into the business than they take out. It may be replied that the operations of such breeders do not affect the values of the lower class of stock, but undoubtedly they do, for when liberal prices are paid for top-notchers the tendency is, through sympathy and speculation, to increase somewhat the prices for all grades except manifest culls, and sometimes also of these. To go outside the realm of breeding for an illustration, there can be no doubt that the multifarious commercial demands and high prices offered for American corn of one class and another increase the price that cattle-feeders pay for it, to a figure much beyond what they would otherwise think they could afford. Two factors which operate to regulate prices are what the purchaser is willing or accustomed to pay, and what the seller demands or can otherwise obtain.

We see, therefore, several factors which in the past have operated to maintain the price of Shorthorn bulls above those of the dairy breeds; hence, in part, the more circumscribed idea of values held by the dairy husbandman. This may be further attributed, in some cases, to previous disappointing experience with expensive dairy sires, purchased on the strength of type and showing excellence, rather than hereditary capacity for dairy performance, which unfortunate experience may have led him to pessimistic conclusions concerning the feasibility of increasing milking quality through sire's influence. This mistake is being gradually corrected to-day by the increasing stress placed by dairy breeders upon authenticated records of production, and the most enterprising dairy farmers are now looking for bulls with Record of Merit or Record of Performance ancestry, and paying fair prices for sires of deep-milking strains. But very few of these more enterprising and liberal dairy farmers are inquiring for Shorthorn bulls, because experience and observation have convinced them that there are not many high-class dual-purpose Shorthorn bulls being bred in Canada, and in seeking to buy one a purchaser runs a long chance. His difficulty is much greater, because there are no officially-authenticated year's dairy records of Canadian

Shorthorn cows; consequently, in seeking to procure a bull of such strain, one almost has to go it blind. The net result of this has been to turn the best-paying dairy-bull customers away from the Shorthorn breed, and they will not likely go back to it until they have been "shown"—in other words, until the Dominion Shorthorn Breeders' Association provides for a system of official testing and Records of Dairy Performance of Shorthorn cows, and a number of breeders take advantage of the system to develop the milking propensity generally in their herds, proving in indisputable black and white that it exists, in what strains, and to what extent. It is all very well to talk about educating buyers, but the stockman who wants to do business must produce what the enterprising purchaser wants, and then demonstrate conclusively that he has it in quantity and assortment. Otherwise, the purchaser will simply take his cash to other counters, as the wide awake dairy farmer has been doing.

The encroachment of the dairy breeds upon the field of the Shorthorn in Canada is undeniable, and it is chiefly due to the fact that the milking quality of Shorthorn cows has been allowed to languish, mainly owing to a wrong system of management. There is still a demand for fancy Shorthorn bulls of certain circumscribed lines of breeding for the American market, and some request from the West, and from Eastern farmers who want dual-purpose cattle, and continue to take the Shorthorn because it is nearer their requirements than any other. The fact that there is as much demand left as there is, indicates the immense scope there would be in Canada for a deep-milking, dual-purpose breed. If Shorthorn men wish to provide against future inroads, and win back a demand that properly belongs to them: if they wish to breed a class of cattle adapted to the economical breeding of high-class beef on high-priced farms, they must right-about-face, not tentatively, and with diffidence, but decisively and for good. The future of the breed in Canada rests with the breeders. Collectively and individually, it is up to them. Breed the cattle, and they will command the price. But the cattle must be genuine double-deckers, prepotent in the transmission both of beef type and dairy capacity. The day has gone by when we can call Shorthorns dairy stock simply because they are not anything else. The two tendencies can be and must be combined.

Meantime, let buyers remember that really good dual-purpose bulls are scarce, and when one is found, it is worth a neat pocketful of bank notes.

Pioneers in Good Farming Competitions.

Press notices in Western papers, ostensibly from those in charge of Manitoba's agricultural education propaganda, persist in referring to the "Good Farming" competition conducted in the "postage stamp" Province in 1908 as being the only competition of such nature carried on in the Dominion. One despatch states: "This competition is not similar to that carried on in Quebec, as that was a competition in good farms." It might be interesting to our Eastern farmers to know how good farms could be established without good farming. The fact is, Manitoba is not the pioneer in this line of agricultural education. A new name may have been devised, but the details of the competition are similar.

In Ontario, the Agriculture and Arts Association inaugurated prize farm competitions in 1880, and they were continued for several years, the Province being divided into groups, and one group taken up each year. The instructions to

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED)

JOHN WELD, MANAGER

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE
is published every Thursday.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.

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LONDON, CANADA.

judges show that every feature of farming that goes to make operations thorough, up-to-date, and practical, were taken into consideration.

As far back as 1867, Quebec held good-farms competitions under the auspices of the Provincial agricultural societies. Similar features have characterized the work of the Provincial Department of Agriculture every year since 1890, under the agricultural-merit competitions, in which the provisions stipulate that awards go to the best-kept farms. In fact, Quebec has perhaps the most thoroughgoing competition on the continent. It does not end with an examination of the farms and a placing of awards. No expense is spared in preparing an attractive and educational report outlining every detail.

Manitoba is doing a laudable work in her "good-farming" competitions, but it is not necessary to represent that agriculture has developed all these years in Canada without such means being adopted in other Provinces to show farmers that it pays to be systematic and thorough in general farm work.

Rats in the West.

Rumor says that Southern Manitoba has an invasion of rats—common gray rats. Thus, another argument of Western land-dealers is blasted. No longer can freedom from this pest be urged as a reason why farmers in Eastern Canada should leave their comfortable homes and go to the wind-swept prairies of the West.

However, the Deputy Minister of Agriculture for the Western Province has been aroused to a promise of immediate action, with a view to extermination of the rodents. A careful survey of the situation reveals the fact that farmers are using traps, and also placing "rough on rats," strychnine, and other poisons. But the Deputy Minister has concluded that the former will not avail, because in a short time the rats will be come cunning, and refuse to be trapped. Poisons, he says, for promiscuous use, are dangerous. But the Deputy's knowledge of agriculture furnishes information that in Germany and France a virus

has been inoculated into rats, thus generating a disease similar to typhoid fever, and playing havoc among the pests. Reports say he has written to Germany for particulars.

Why not try Ontario's old reliable common cats? Perhaps the Manitoban official could profit by importing a few, and establishing a breeding station.

Mystifying Rules.

That only such matters as are designed for the deliberation of the officers of the Clydesdale Horse Association of Canada should be addressed to the secretary of that body, but that all correspondence requesting information, application forms, transfer blanks, etc., should be addressed to the Accountant, National Live-stock Records, Ottawa, is the important point of Mr. Sangster's letter, published elsewhere in this issue. We are of opinion that a good many readers will be relieved to have the matter thus distinctly stated. So far, so good.

Proceeding, Mr. Sangster replies, in passing, to our remark to the effect that the directorate of the Clydesdale Horse Association of Canada has been "making an unenviable record in the incubation of new and mystifying rules and regulations," arguing that all these were badly needed and beneficial. Without debating this point, we beg to submit that the comparatively brief notice that has been given in bringing them severally into effect, and more especially the obscure and ambiguous phrasing of some of them, amply justify the characterization applied. Not to expand the point, let us cite, for the purpose of illustration, this one, quoted from the back of the secretary's official letterhead:

"The following are admitted to registry:

"IMPORTED ANIMALS.—Stallions and mares recorded and bearing registration numbers in the Clydesdale Studbook of Great Britain and Ireland, whose sires and dams, together with their sires and dams, are also recorded and bear registration numbers in said Studbook, provided that the breeding of such sires and dams, if already recorded in the Clydesdale Studbook of Canada as ancestors, comply with this rule."

How many times will the average man have to re-read that rule to be sure he understands it?

Buy in Stores for Cash.

Editor "The Farmer's Advocate":

Last summer you published a couple of pointed editorials advising readers not to encourage or permit the expensive and time-consuming attentions of peripatetic agents and salesmen, but to buy what they wanted in the stores for cash, where different makes can be compared, and an impartial decision arrived at.

A recent experience of ours in buying a sewing machine is so thoroughly in line with your suggestions that I thought it might be acceptable. For a year or more we have been favored by frequent calls from the agents of one sewing-machine store. Four different men came, at four different times. Persistence might have served its purpose, only that my wife had once had an experience with a book agent, which inoculated her for all time with an anti-agent vaccine. So to each man she said a polite but impregnable "No thank you, we're not ready yet."

When we did get ready, we took an afternoon, and visited the local stores of several leading firms, had them explain the good points of their machines, and, after deciding which one of their particular make we would prefer, if we took any, I said to each salesman: "Now, what is your rock-bottom cash price for that machine, on a week's trial. There will be no installment payments, and need be no time wasted running after us. Name your best figure." The result was a heavy discount from the nominal credit price. One man offered a \$45 machine for \$35, and afterwards for \$33. Another offered us a machine commonly sold for \$40 or \$45, at \$28, but would not come down from this. He volunteered the information, however, that an agent had brought in an order the other day for exactly the same kind of machine at \$48, on credit, and he said they had sold it as high as \$50.

Well, two machines were brought into the house, and tried, side by side. We were in advance rather partial to the \$33 machine. The salesman who sent it made a strong point of the reputation behind it. However, we were not buying a reputation; we were buying a sewing machine, and if the reputation was not borne out by its working and general satisfaction, it was of small concern to us. In the end we took the \$38 article, because it suited us best. The other fellow was very insinuating, and when he saw he was worsted, made all kinds of pleas and special offers, but I told him if he were to, at his price

in two, we wouldn't take his machine. The man who made the sale had the good sense to leave us alone. He saw we were determined to make our own decision, and left us to do it, never coming back a second time until we notified him to come and settle. The chances are they made more money on this machine, at \$28, than on the one sold for \$48 on long time and precarious credit, after driving over the country half a dozen times, as they probably had to do.

If you enjoy the sensation of being chased and badgered by salesmen, you can have it for a hint. But bear in mind that you are liable to pay for the attention." "SPOT-CASH."

HORSES.

Is a Stallion-license Law Advisable?

At the recent session of the Legislature a deputation waited upon the Agricultural Committee, and presented the claims of the horse-breeders of Ontario for legislation, in the interests of horse-breeding. What they asked for was that the recommendation of the Ontario Horse-breeders' Association, which had been fully discussed and approved of at the Winter Fairs at Guelph and Ottawa, be crystallized into legislation. Among other things, those recommendations include the licensing of stallions. The members of the Agricultural Committee decided—no doubt, wisely—to postpone action in the matter for another year. In the meantime, the question is before the people, and it seems incumbent upon those in favor of legislation regulating the breeding of horses and the licensing of stallions, to do some moulding of public opinion, if they wish to influence the Legislature in their behalf.

The enactment of a stallion-license law is a rather knotty problem for legislators to handle. Unless there is a strong public sentiment in its favor, they are not likely to enter upon the task with any degree of enthusiasm, no matter how necessary such legislation may be in the interests of horse-breeding. This was clearly pointed out by many members of the Agricultural Committee when the request for legislation was presented to them, a few weeks ago. This attitude will not be lessened any, if nothing is done between now and the next session of the Legislature to influence public opinion in favor of a stallion-license law. The approach of the breeding season affords an opportunity to horsemen to do some very effective educational work in the interest of such legislation. Might it not be possible for stallion-owners and others who are in favor of a license law to circulate a petition asking for the signature of farmers in favor of it. Such petitions might be placed in the hands of parties who travel through the country in charge of stallions, and who could secure signatures, without very much cost to anyone.

As to the advisability of enacting a stallion-license law, there is, no doubt, some difference of opinion, even among horsemen. Such a law, however, drafted in the best interests of the business, and properly and intelligently enforced, would do much to improve horse-breeding methods in Ontario. While breeding methods have improved somewhat of late years, due to a better knowledge of what is required on the part of farmers generally, there is still enough promiscuous mating and breeding to unsound and inferior stallions to make some legislation in the way of regulating the business necessary.

A stallion-license law should not be any more difficult of enforcement than the legislation passed at the last session of the Legislature controlling the erection of cheese factories and creameries, and providing for the licensing of cheese and butter makers. Nor should it be any more knotty a problem for legislators to tackle. There are stallion-license laws in force in other countries: Wisconsin has such a law in force; Manitoba has a modified form of such a law. There is an agitation on in New York State for such legislation, and the time seems ripe for Ontario to take action. Anyone who has carefully studied the report of the Horse Commission cannot but be convinced that something must be done if Ontario is to take the place she should in the breeding of high-class horses.

An energetic educational campaign in the interests of better breeding methods is claimed by some to be the only way of effecting an improvement. Educational methods will, no doubt, do much, but there comes a time in the history of every industry when something more than education is required. For years, educational methods had been tried in effecting an improvement in factory conditions in connection with cheese and butter making, but finally the legislation recently enacted had to be resorted to. Every farmer in Ontario is more or less interested in horse-breeding. For this reason, the horse industry is of equal, if not more, importance than dairying, and should receive as much consideration at the hands of legislators, both in a legislative and educational way. "CHRONICLE."

Clydesdale Registration Information.

Editor "The Farmer's Advocate":

In your issue of April 15th, last, under the caption, "Our Clydesdale Authority," is reiterated the plaint of your Scottish correspondent, as to who is our recognized official authority in matters pertaining to Clydesdale registration.

Theoretically, it might be presumed that the Secretary-treasurer of the Clydesdale Horse Association of Canada would be the official interpreter and exponent of registration conditions, but the facile words in which the assumption is announced.

Permit me to say that, wherever this theory originated, it was not the theory upon which the Canadian National Live-stock Records were founded. A careful perusal of the report of the second annual convention of the Canadian National Live-stock Association, a copy of which is doubtless to be found in the archives of "The Farmer's Advocate," will afford some edification upon this matter.

It is not the fault of the Secretary of the Clydesdale Horse Association of Canada, if home editors and Scottish correspondent of "The Farmer's Advocate" have until now failed to grasp the fact that the whole business of carrying out rules governing live-stock registration for all affiliated breeders' associations is the work of the National Live-stock Records Office alone, under the supervision of the Live-stock Record Board. In order to facilitate this, and for their own protection, that office must have its own rules of business.

The enactment calling for a service certificate from owners of stallions, as well as of dams, was the work of the Clydesdale Horse Association of Canada, and as such was reported, upon ratification by the Minister of Agriculture; while the requisition that this certificate be made out only upon a form provided for the purpose, is an office regulation of the Live-stock Records.

For many months, during the past three years, have advertisements appeared in the columns of "The Farmer's Advocate," and other agricultural journals, in which the outstanding feature has always been, "Write to the Accountant, National Live-stock Records, Ottawa, for information, application form, transfer blanks, etc." In fact, the concluding words of the article in question were: "Address all correspondence, and make all fees payable to Accountant, National Live-stock Records, Ottawa."

The arrangement regarding registration, as it now stands, is very simple, and easy of comprehension. All rules and regulations governing registration of Clydesdales are formulated and enacted by the Clydesdale Horse Association of Canada only at annual or specially-called meetings of that body, and the work of carrying them out is the work of the Canadian National Live-stock Records alone. Under this constitution, the secretary is given no authority in matters regarding registration whatever. Only such matters as are designed for the deliberation of the officers of the Association should be addressed to him. Information is only offered by the authority or consent of the officials of the Association, but will be cheerfully given to anyone on request.

Your editorials, however, reach farther than the work of the Secretary-treasurer and his responsibilities, and indict the executive officials of the Association with "earning an unenviable reputation for the incubation of new and mystifying rules." Permit me to state that these rules, while calling for greater care and accuracy in the work of registration, should not prove perplexing to anyone except the man who is trying to evade them. The officers of the Clydesdale Horse Association of Canada will, doubtless, joyfully plead guilty in this case.

It is a fact well known to all who are familiar with the work of registration, that every rule and regulation passed was badly needed, and applies to situations and conditions which have long called for redress. The National Live-stock Records, established for the purpose of maintaining the prestige of Canadian records and Canadian pedigrees throughout the world, would fail of this object were discrepancies in old rules and conditions not remedied as quickly as possible.

To the experience, ability, sound judgment and courage of the officials of the Clydesdale Horse Association of Canada, as well as the determination of the great majority of its members to accomplish accuracy, honesty and reliability in the Canadian Clydesdale pedigree, the Canadian National Live-stock Records, as well as all honest Canadian horsemen everywhere, have reason to feel deeply grateful. Not only is this the case, but the work of the Clydesdale Horse Association of Canada, in the remodelling of their constitution, together with the enactment of such rules and regulations governing registration, as will, with little increased trouble, work for greater accuracy, has already received such a public recognition in the words of praise could exceed, nor can any derogatory criticisms rain down in the fact that the constitutions of the other leading Horse Breeders' Associations have since been modelled so

carefully after it. Thanking "The Farmer's Advocate" for the space required for this explanatory article, and leaving the matter of a reply to your Scottish correspondent to the proper official, I remain,
J. W. SANGSTER,
Sec.-Treas. The Clydesdale Horse Association of Canada.

Horses Versus Automobiles.

During a recent discussion in the United States Senate over a proposed amendment to the appropriation bill, which provided \$12,000 for automobiles for President Taft, says a Washington despatch, Mr. Bailey, of Texas, made a speech in which he showed the fallacy of the idea that electric and steam motors are driving horses out of business. The Horse World, also, in commenting on this unwarranted assumption, says:

"During the bicycle craze we were frequently warned that horses would soon become useless, except for plowing or heavy hauling. When electricity was applied to street-car service, we heard the same prediction, and a great deal of regret was expressed that the noblest and most intelligent of animals should be condemned to pass into oblivion.

"But the contrary has been the case. There are more horses in the United States to-day than there ever were before; they are worth more money than they ever were before; they are increasing in numbers and in value, notwithstanding the electric street cars, the motor wagons and omnibuses, the bicycles, the automobiles, and the adoption of steam and electricity as a motor-power in farming, and in every business and trade that requires locomotion.

"The number of horses in the United States, January 1st, 1908, was 19,992,000, and they were worth a total of \$1,867,530,000, or an average of \$93.41 each. During the succeeding year, ended January 1st, 1909, the number of horses had increased to 20,640,000; their value had advanced more than \$100,000,000 to the sum of \$1,974,052,000, and the average price was \$95.64, or \$2.23 more than the previous year.

"The average price of horses throughout the United States for the ten years previous to 1908 was \$60.25 per head, which shows that they are worth an average of \$35.39 more, notwithstanding the circumstances which senators and others have so mournfully deplored.

Farmer Would Still be Free Agent.

Editor "The Farmer's Advocate":

I read a letter on licensing stallions in your issue of April 22nd, by a man signing himself "Old Country Joe," and would like to see an answer regarding legislation. I think it would be a good thing for this country, not only for the farmers, but it would help the man that has a good stallion. The man who buys a horse is not asleep nowadays. He knows a good horse when he sees him. There are some farmers that can be persuaded to breed to a scrub. As for importers having it all in their hands, I am not an importer, but I keep two imported stallions. I think "Old Country Joe" doesn't know what he is talking about when he says he could buy a stallion in the Old Country for \$100 to \$150. Any old plug you have to pay \$100 for here, and the idea of a man talking about buying a stallion for that money is absurd. There are grade stallions which have fees from \$2 to \$5, and the owners will try to make the farmer believe that they get just as good colts as the \$15 stallion. It does not sound to me like the Standard Oil Company business. There is one good Canadian-bred horse to five imported ones.

I say legislation would be just the thing. License would be the thing. The farmer would be a free agent, just the same. You may say that, if he had any sense, he would breed to the best horse he could get. He could not help breeding to a good stallion if they were licensed. About breeding cats, I think "Old Country Joe" has a scrub stallion, and he is afraid he will not get a chance to get out. A man that has a good stallion can make enough for his boss, without working the horse to make muscle.
C. O.
Lambton Co., Ont.

LIVE STOCK.

Retention of the Afterbirth.

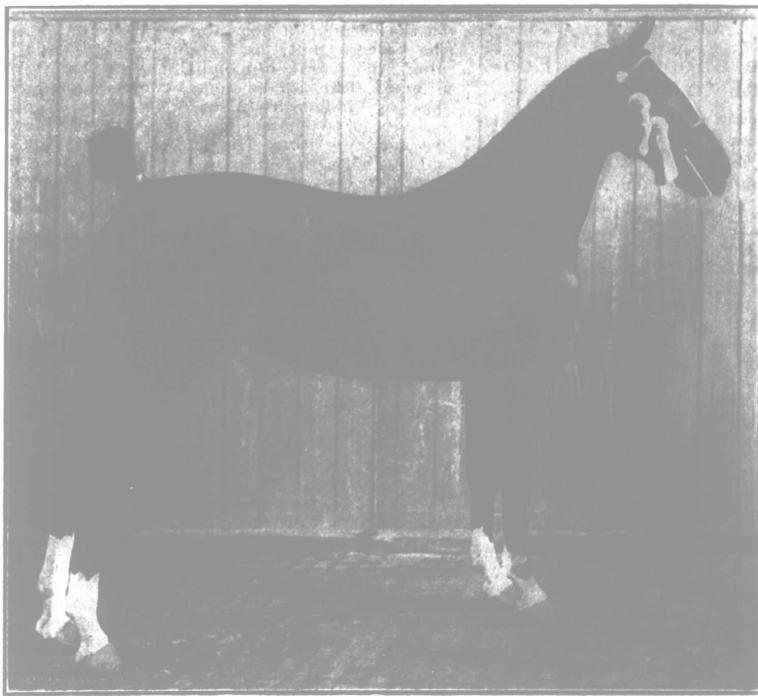
Editor "The Farmer's Advocate":

Having seen a couple of articles in recent issues of this valuable paper on retention of the afterbirth in cows, I thought I would send a treatment which I have used for some years, and believe it to be satisfactory in ninety-nine cases out of one hundred.

Whole oats or flaxseed meal may be a very good preventive of the trouble, but I believe, as your veterinary editor stated, it is sometimes met with in cows under all conditions. I believe the real cause is either from the cow being exposed to the cold, or from taking a chill at calving time, as the retention is simply caused by a congested or swollen state of the little flesh-like buttons that fasten the placenta to the inside of the womb; and a cow in good or an ordinary condition, kept in a warm stable, is very seldom troubled in this way.

Treatment
—Take the chill off all the drinking water until the

cow has cleaned. As soon as the cow is noticed not to clean, give her the following drench: Epsom salts, one pound; sweet spirits of nitre, four tablespoonfuls; ginger, one tablespoonful; belladonna, two teaspoonfuls, dissolved in a pint of lukewarm water. Put a couple of horse-blankets on cow, and keep her warm; also keep half a pail of hot salt on her back in a grain bag. Don't touch the cleaning for thirty hours after giving the medicine. In ordinary cases, it can then be easily removed by rolling up the sleeves, and oiling the right hand with sweet oil, so as not to irritate the passage; then catch the cleaning in the left hand, and slip the right along the cleaning into the vagina, in order to get a good hold on the thick part of it, so it will not break off. Pull gradually, and it



Adbolton St. Mary.

Hackney mare; chestnut; three years old. First in class and champion mare, London Hackney Show, 1909. Sire St. Thomas.

"Automobiles came into general use more rapidly during the year 1908 than at any previous period, but, notwithstanding that fact, the number, and value of our horses increased more rapidly during that period than ever before. During the calendar year 1907 the horses increased 245,000 in number, and \$20,952,000 in value. During the calendar year 1908 they increased 648,000 in number, and \$106,522,000 in value.

"The same can be said of mules, which should also be taken into consideration, because thousands of mules have lost their jobs because of the introduction of electricity as a motive power. There are now in this country 4,053,000 mules, which are valued at \$437,082,000, or an average of \$107.84 per head; that is, about \$12.20 more per mule than horses are worth."

will generally come away all right; but if it is still tight on the little flesh-like buttons, let it remain another day, and repeat the drench mentioned above. If the cow has not cleaned herself by the third day, it can then be easily removed by the hands in the manner mentioned above.

Bruce Co., Ont. C. WESLEY POLLOCK.

[Note.—While we fully approve of the measures advocated for keeping the cow warm, we do not approve of the dosing, as purging necessarily lowers the vitality of the animal, and there is always some risk in drenching a cow, in case she refuses to swallow, of the medicine entering the bronchial tubes and the lungs, with serious, if not fatal, results. If the membranes do not come away within 24 to 30 hours, we advise removing them by the hand, anointed with carbolized oil, carefully unbuttoning them, until the last one is stripped from its fastening. The writer has performed this operation in dozens of cases, with never any bad after-effects, and it is a relief to all concerned to have the unpleasant appearance removed in a reasonably short time.—Editor.]

Retention of Afterbirth.

Editor "The Farmer's Advocate":

I notice in last week's issue of your valuable paper a subscriber recommends, to prevent cows retaining the afterbirth, to feed each cow a pint of whole oats for two weeks before calving. I notice, Mr. Editor, you are disposed to make light of it. I also notice your veterinary does not believe in the recommendation. Now, I wish to inform you, I think it is about forty-five years ago, when I was a boy on the farm, I overheard a neighbor give my father the very same advice; and what is more, I have practiced it, and thoroughly believe it is a good remedy. Why whole oats are better than ground oats, I do not know, but experience has taught me such is the case. However, I think I have discovered a better remedy. For the last fifteen years we have been feeding silage, and, while silage has many things to recommend it, this is one of the best. It seems to prepare the afterbirth to come away quickly, and without trouble. Of course, you are liable to have exceptions to any rule. If from any cause the afterbirth is retained twelve hours after calving, it is better to have it taken away carefully by hand.

FARMER.
Perth Co., Ont.

Dual-purpose Shorthorns Economical to Breed.

Let Shorthorn breeders go in for development of milking quality, and they will be able to sell yearling bulls for a hundred dollars, at a neat profit, while in periods of slack demand, they will be able, if necessary, to make ends meet without selling any stock at all, because the cows will pay their own way in the dairy, even though the calves had to be vealed or beefed. Shorthorn breeders must milk their cows, and especially their heifers. This is the policy that will pay best for the majority of breeders, if followed systematically, with persistence and judgment. The cows will be good breeders and the young stock thrifty doers, as Prof. Arkell reports of the dairy Shorthorns at Macdonald College. The idea that milking capacity and beef quality are antithetical, and cannot be advantageously combined in one breed or one individual, is an absurd notion, advanced by professional theorists, supported on the one hand by champions of the special dairy breeds, who made capital of it against the popularly-entrenched Shorthorn grade, and conceded passively on the other hand by many leading Shorthorn breeders who were unwilling to earn and maintain dual-purpose reputation by milking their cows. So long as farmers continued to buy bulls on the strength of the past reputation of the breed for milking quality, this policy suited the breeders to perfection, but nowadays purchasers are beginning to demand proof of dual-purpose capacity.

We do not for a moment pretend to say that perfection of beef type can be quite as closely approached on the average by a dual-purpose as by a special-purpose beef strain; neither would we claim that quite as high an average of milk production will be attained as by the special-purpose dairy breeds. Nor yet do we forget that, as in the extra lies the profit, so, therefore, an additional unity of milking quality is an important consideration to a business dairyman.

What we do claim—and it is supported by abundance of evidence in England, as well as Canada—is that a serviceable and profitable combination of these attributes can be attained, which will suit to perfection the requirements of thousands of farmers, and that a genuine dual-purpose breed is necessary for the economical breeding of good beef on high-priced land. A steer which has first of all to pay his mother's board-bill, has great difficulty in showing a profit, if raised on valuable land, as compared with a less perfect but still serviceable specimen whose dam pays her own way at the pail.

Pay More for Dual-purpose Bulls.

Editor "The Farmer's Advocate":

Farmers should breed a better class of beef cattle, and raise the quality of beef which would cause a larger consumption of beef in our cities and towns. This could easily be done by banishing the scrub bull and stopping the practice of cross-breeding and mixing up with the dairy breeds. The Shorthorn or Shorthorn grade is the dual-purpose cow, but farmers can improve her dairying quality a good deal more by paying attention to the breeding. In the first place, secure a good bull, as he represents half the herd. We Shorthorn breeders find the difficulty with most of the dairy farmers is they will not pay a living price for a dairy bull; their limit is about forty or fifty dollars for a bull. No Shorthorn breeder will sell one for that price. Consequently, the farmer will pick a bull up on some side line, which is a red, white or roan, perhaps with a pedigree. Now, what can a man expect from such breeding? And yet the Shorthorns get the credit of that breeding. Our agricultural papers and agricultural professors, and even Institute lecturers, are blaming the Shorthorn breeders for the lack of the dairying qualities in the Shorthorn. I say you are wrong in blaming the breeders. The Shorthorn breeder is going to cater to what will make the most money, as there is too little money in the business at any time for the trouble, expense, and money invested. Now, the man that is raising beef cattle is prepared to pay from eighty to one hundred and fifty dollars for his stock bull, and claims he is the only kind that will make him money. He wants the low-down, fleshy, early-maturing kind, as it costs the breeder just as much to raise the one as the other. Now, if you want to increase the dairying qualities in the Shorthorn, you must educate the dairyman to pay about equal to the beefman for his stock bulls, and then the Shorthorn breeders will do their duty.

J. B. PEARSON.
Peel Co., Ont.

Keeping Hogs for Profit.

Editor "The Farmer's Advocate":

For the last ten years I have been to some extent interested in the production of pork, and, after considerable thought, experiments and useful object-lessons, I finally agree that there is a profit in hogs. Some farms are especially adapted to the keeping of hogs for profit, while others are the reverse, but, by careful thinking and planning, the worst of conditions can be overcome. A great deal can be done by breeding any color, type or kind desired, but one thing that no man can do is to change the nature of the hog, nor yet his appetite. His wild state must be considered when in captivity and domesticated. Freedom is necessary. Confine him to a pen as little as possible in winter, and rarely (if ever) in summer, except the last thirty days of his life, in finishing quarters. I find that a hog in captivity requires more feed than when he is allowed his liberty.

To be able to keep hogs for profit, there must be some cheap way of feeding, or, at least, there must be some cheap feed—cheaper than the popular prices of grain and millfeed the last few years. No wonder the question is often asked, "Do autumn litters pay?" I never remember a question being asked, "Do spring litters pay?" for undoubtedly they do. In the warm summer, with dairy offal, with plenty of green feed (alfalfa being my favorite), hogs can be produced with profit. But with the conditions that surround us during our Canadian winters, even at the good price of pork, the question is often asked, "Can it be done with profit?" My experience is that it can. I will describe to you how I bring this about. Finding it necessary to instal power for grinding of grain, and all work for which power is now needed on the farm, I chose steam power as the most desirable, on account of it affording the option of steaming, cooking and boiling for feeding purposes, and scalding hogs at slaughtering time. For fuel, I use old stump fence, which has to be replaced by woven fence, as the old stump fence would not stop the hogs in summer; therefore, fuel is cheap, not counting labor.

I have a suitable building covering engine and boiler, and drive belt, some distance from barn, with roof of corrugated iron, which avoids all danger of fire. With this power I drive chopper and cutting-box. Alfalfa hay is cut fine and tramped into a large wooden tank, with a tight top or cover. Water is turned in from another tank, until perhaps up to within twelve inches of the top, when it is shut off, and hot steam from the boiler turned on, until the contents are thoroughly boiled. The next morning this lid is raised, and, with the use of a tap at the bottom of the tank, dark-brown, hot water is drawn off for hog-feeding, which, of course, must be suitably diluted before fed. The hay which is then above water is fed to old cows which have been discarded from the dairy herd on account of age. I have found this feed preferable to corn silage. I have found the same satisfactory results from feeding milch cows; also horses run down in

flesh, and colts. This hay tea, with a ration of roots and skim milk, needs to be supplemented with a very small amount of grain, and will give a suitable reward for the labor in raising hogs for a profit, providing conditions are suitable and the hogs kept comfortable.

As this is the third winter's experience in this class of feed for hogs, I cannot but note the result on the production of the breeding sows. This spring I have five sows that have already farrowed, and there is yet to be the loss of one young pig, all having good litters. All farmers know that when a sow is allowed to go at large, or perhaps steals away for the purpose of having her pigs in a fence-corner, in some quiet spot in a field of grass, without the attention of anyone, she will have greatest success. Why is this? For this reason only: "Naturé has taken its course," for it is "The Good Old Summer Time." Therefore, in winter, you must imitate summer as closely as possible, as to conditions of feed and feeding. The class of feed which I have outlined I consider the most profitable for hog-feeding, to be fed between the period of weaning and the weight of 140 pounds, alive; after that, a harder grain ration. One hundred pounds of each hog should be produced cheap, in order that we can keep hogs for profit.

My spring litters always come in the months of February and March, and are rushed along as fast as possible, so as to have them take hold of grass as soon as weather will permit, and also that I can strike August market, which you will notice is the best price of the year, as a rule. My sows farrow but twice in one year. With the second crop, or fall litters, my object is to have them farrow as early as possible in the summer, for I always want a good strong pig for winter feeding. The class of feed outlined is good to grow a hog on, but not to force him; therefore, it takes a longer period than spring litters, there being no special reason for rushing them, only for the making of room in the pens for the spring litters. The older crop always should be gone when the young pigs need room. On the average, at the end of five months, my winter hogs weigh 140 pounds.

I cannot say just how much hay, milk, roots and other feed I require to produce 100 pounds of gain. My object in feeding is for a profit, and until I fed grain in some form I never considered it expensive feeding, for grain represents so much money. This winter, my hogs have consumed, per 100 pounds, up to 140 pounds, alive, less than 300 pounds of grain (barley and oats).

Frequently, a cow that is and always has been a good milker, is kept in the herd too long, and in the fall (Toronto stock market refers to them as canners) their teeth are so bad they cannot live on silage alone; she cannot eat hay, and is kept until spring, to be fattened on grass. Beef is very cheap when she will be ready. Under my class of feeding, a cow can be milked up until late in the fall, providing she is not in calf, and be deliberately fattened, and considered finished beef in spring, when the price of beef is nearly double what it is in fall; therefore, the price obtained for a good large cow will buy a fresh milch, and the stable need never be empty.

Possibly the boiled alfalfa is no better than steamed alfalfa, but it serves a double purpose—hog-feeding and cattle-feeding.

E. I. TWISS.
Wentworth Co., Ont.

THE FARM.

Should be a Drag in Every Division

Editor "The Farmer's Advocate":

I did not get using the split-log drag last year, on account of illness, but think very highly of it for keeping an earth road in repair. The piece I undertook to repair ran through a swamp, and it is at present in a very bad condition. Dragging is insufficient; it requires gravel or broken stone. What dragging I did the previous year was gratis. There has been no action taken that I know of, but think there should be a drag in every division, as it would greatly improve the road and lessen the cost of maintenance.

Lanark Co., Ont. ROBT. R. AFFLECK.

Drag on Gravelled Road.

Editor "The Farmer's Advocate":

I used the split-log drag once last year on a half mile of freshly-gravelled road, with the round side ahead. The drag was heavy, and did a splendid job. Was allowed no compensation by the township for dragging. There has been no action taken in this township to provide for the systematic dragging of the roads, as we have two road-graders, which they consider take the place of the split-log drag.

Renfrew Co., Ont. JAS. HY. BROMLEY.

I received the razor all O. K., and am well pleased with it. I think it is worth more than you ask for it. Wishing you every success.

Wentworth Co., Ont. A. HYSLOP.

Good Work with the Drag.

Editor "The Farmer's Advocate":

There has been so much printed in the columns of your valuable paper in favor of the split-log drag, that it is hardly necessary to say much more about it, except to keep it fresh before the public. After two years' experience with the drag, I have no hesitation in saying it is the most effective known means of keeping earth roads in proper repair. I dragged the same portion of clay road last year that I did the year before—about a mile—as early in the spring as the roads began to dry on the top, and continued it on through the summer, as often as it got a big wetting, but that wasn't very often last year. I got one of my neighbors at one time, after a big rain, to go along the edges of the ditch with the disk harrow, to cut the grassy shoulder off in places, and followed with the drag, bringing the loose earth to the center, making a pretty good job. This was part of our statute labor, but the council has commuted statute labor this year and appointed two road commissioners for the township. I don't know that any action has been taken by the council for the systematic dragging of the roads, but I think it could be used to very good advantage on all clay or earth sections of the roads, if there were drags placed with farmers along those roads, to be used after each big rain, just when the clay is beginning to dry a little. It fills the ruts, and leaves a smooth surface, allowing the water to go freely into the ditches, and the cost of the drag is only trifling. When a man is handy to the road, the work is quickly done, at a less expense than it can be done in any other way, for it is a well-known fact that one fixing in a year isn't going to keep earth roads in proper repair. Thanking you for the interest you have taken in this important work.

JOHN SOMERVILLE.

Russell Co., Ont.

Details of Post Driver.

Editor "The Farmer's Advocate":

I saw a fine plan for driving posts in "The Farmer's Advocate" of April 1st, and would like further particulars. The fences have to be fixed up every year, and in the hot spring days, when the sun is pouring down, it is hard to stand with a sledge-hammer and pound stakes into the ground. Also, we have quite a lot of intervale land, on which, after haying, we pasture cattle. We have to build a fence, and thought your correspondent would not mind telling something of the making of his machine. I should like to know the measurements of axle, pounder, derrick, and the frame, and other particulars.

D. J.

Ans.—The axle is 11 feet from end to end, 3 sills 4 x 6 in., and 10 feet long; sill under derrick same size, and 12 feet long. It projects two feet behind axle, so to put a brace from the end of it well up to side of derrick. Two cross sills, 4x6 in., and 11 ft. 6 in. long; derrick, 2 pieces 3x6 in., and 14 feet 6 in. long; two studding, 4 x 8 in., and 4 feet long, for rear end of log. They can be halved 6 inches from the end, 1 inch deep, to form a shoulder to sit on top of sills, and bolt firmly to inside of cross sills. The derrick is done the same way, and both well braced. The sills are laid on edge on top of hind axle and front rocker, and bolted there. The two inside sills should be placed on angle, as shown in cut, to form a brace, as well as to support the weight on top. The center piece, as shown in cut, is a reach, attached to king-bolt underneath the axle, also bolted underneath the hind axle. There is a piece bolted across the end of the two sills, top and bottom, next post, and the lever rest goes in between, so it can be shoved in when moving the wagon. There is a long brace on each side of the derrick which projects two inches past the derrick, to form a step to oil pulley. The hooks on the derrick are 5 feet from top of sill, and should be sunk into the wood a little, and two good bolts in each. The top of derrick leans in about 12 inches over wagon. Any good hardwood will do for pounder, which is 15 feet long, flat on two sides and underneath where it strikes post. Put 1½-inch bolt through rear of log. The frame is a little narrower in front, to allow for cramping. If low wheels are used in front, so as to swing under frame, so much better. Get two irons to go through axle, with a nut on one end, and a hole in other end to put rod of sleigh-pole through. There are three pulleys. The one shown on log is hitched to trip, which is not shown. Get an eye made, with a thread about 4 inches long, to screw into top of log to hook the trip into. It is impossible to give sketch of trip. Our blacksmith charges \$1.25 for making.

E. J. NIXON.

Russell Co., Ont.

Notes from Ireland.

THE TRANSITION OF IRISH AGRICULTURE.

The division of the big grass estates into small holdings, and the creation of peasant proprietors, augur hopefully for the eventual building up of a contented and happy rural population in Ireland, a country which for generations has been oppressed and kept in a state of continual unrest by unpopular and unfair land laws, among other disabilities. The responsibility for our industrial welfare is to a certain extent being shifted, and the country is looking to the newly-established proprietors to demonstrate the wisdom of the altered system of land tenure. What a calamitous matter it would be if fond expectations were to be disappointed!

No legislation, per se, is capable of guaranteeing prosperity to any country, much though it may help; the people, rather than the parliament, must always be the vitalizing force in every national regeneration, be it industrial or otherwise. It is, therefore, a matter of the most vital concern that our future land-holders should realize the obligations which they owe to the nation, and work their farms as the source of the country's wealth, with intelligence, skill and industry. Will they do so? The question is one which will agitate many minds, not only in Ireland, but in every part of the earth in which Irish affairs are taken an interest in. Time will alone supply an authoritative answer, but if indications count for anything, it may be fairly said that there are many bright stars of hope already shining clearly, with others beginning to glimmer in the still somewhat cloud-haunted firmament of our agricultural world.

Foremost among these omens of better things I would place the growing popularity of the educational agencies in operation throughout the country. Information, up-to-date, comprehensive and widespread, will be one of the most potent

ing, and averted many threatening incursions upon the rights and privileges of those engaged in it. The consistent and extending activity of these organizations demonstrates in the most forcible way the existence of a living spirit of independence and progress among those who constitute them.

Passing on to yet a third satisfactory sign, an observer who happens to be "in the know" cannot but detect the keenness with which the more advanced class of Irish farmers are looking out for improved market openings and better methods in getting their produce to the consumers. No doubt, in this respect (if I may say it without giving offence) many of them are "out-Yanked" in cuteness, and "out-Scotched" in canniness, and may have, in some other characteristics, to acknowledge themselves less accomplished (?) or, let us say, adept, than their compeers in other lands; but, withal, every student of the commercial aspect of Irish agriculture will concede to the credit of our farmers a well-developed, and straightforward business instinct. Space does not allow me to cite examples, but I could do so, if necessary.

LABOR-SAVING IMPLEMENTS.

A rather interesting thought now arises, as to whether the effects of enlightenment, co-operation, enterprise and other beneficial factors will be sufficient to counteract other tendencies which have of late years been reducing the tillage area of Ireland. This, from a purely agricultural standpoint, is the crucial feature, and assurance that the plow shall enjoy a reign of greater popularity in the future than it has done in the past would go a long way to enhance our expectations. As I have, on more than one occasion, intimated in "The Farmer's Advocate," the labor difficulty is one of the chief obstacles—but not the only one—to the extension of tillage. Realizing this fact, a notable effort, recently put forth in the County

Waterford by some public-spirited men, materialized in an event which ranks as absolutely unique so far as the United Kingdom is concerned, at any rate. This was a big working demonstration of almost every conceivable kind of up-to-date tillage implements, about 300 separate machines being exhibited by over 40 different firms. The appliances included motor plows, four and double furrow plows, one-way plows; harrows, both spring-tooth and disk patterns; various kinds of cultivators; artificial and farmyard manure distributors; corn drills, etc. The demonstration was a huge success, and was attended by something like twenty thousand farmers from different parts of Ireland, as well as large parties from England and Wales, and all observant spectators availed of the exceptional opportunity of studying in actual working the wonderful modern machines that alone may be expected to solve the labor problem, as well as rendering routine duties more interesting and attractive to the workers. It is intended, during the summer, to organize a corresponding demonstration of harvesting machinery, so that the labor involved in tillage should not continue to prove an insurmountable hindrance to its spread. However, we must wait patiently for the verdict of experience, as to whether the remarkable developments in machinery, in facilitating agricultural advancement, will be fully availed of by our farmers. Prospects are, at any rate, hopeful that they will.

"EMERALD ISLE."

Hardwood Burned to Destroy It.

Editor "The Farmer's Advocate":

I enclose you a few lines on the forestry question. I homesteaded 200 acres, and my son another 100, which I bought. Purchased another 100 from the Department of Crown Lands, at 50 cents per acre. The land is fit for agriculture only as it is compared with places that are less so. Of course, I live, and grow good crops; but I'm living just as the lumberman is doing—out of the stored fertility of centuries. That's the secret.

This is how the forestry question works out in practice with me. I have 400 acres of what 12 years ago was covered with standing timber



Roadside Scavengers: Weed Consumers.

factors in moulding the future of Irish farming. At no stage of our history was practical education in agriculture more urgently needed, and the great thing to rejoice at is the encouraging popularity enjoyed by the facilities afforded by our still imperfect system. During the past season a scheme of winter classes has been carried out in most of the Irish counties for young men and boys, who have received thereat a useful class-room teaching in the science of agriculture, without having to neglect their routine practical work on the farm day by day. Almost one thousand pupils attended these classes during the winter just passed, and received, while engaged in the actualities of farm practice, a systematic course in the more scientific subjects bearing on their calling. Widespread has been the enlightenment thus produced, and nearly one thousand young farmers have had their interest genuinely aroused in the acquisition of fuller knowledge. Next year these winter classes will be considerably increased in number. Towards that other great agent of instruction, the sound agricultural journal, Irish farmers are showing a more marked appreciative attitude than ever, and the farmer who reads generally succeeds.

I also detect a significant sign in the fast-growing recognition by Irish agriculturists, that, single-handed—i. e., as individual units—they are comparatively impotent to hold their own in the struggle for supremacy. United action is what the modern, strenuous life demands, and never were farmers' societies, clubs, and show-promoting bodies more numerous, or more enthusiastically supported than at present in Ireland. On more than one occasion within the past few years, combined action has secured many a boon for farm-

other than pine. I have cut and burned over 65 acres, principally heavy hardwood. Another 25 acres around the edges of the clearing have been destroyed or damaged by the fires used in clearing. I am continuing this course at the rate of six acres a year, letting the oldest parts of the clearing go to pasture from year to year, as the land is too stony, in my opinion, to pay for the labor of breaking at the present market price for help. Three hundred acres of this block are still in a state of nature, except that the few pine trees on it were cut off 12 years ago. There are others situated pretty much as I am. Notwithstanding all the beautiful language used in theorizing on the forestry question, we are not able to sell the timber on these lands at a price which any more than pays for the labor. So, for my part, I pile it up and burn it. Birch, balsam, maple, beech, etc.—log piles that would turn off 30 to 50 stove-wood cords of hardwood to the acre—burned to get them out of the way. Shows a lack of sense, does it? Perhaps. But we cannot live on what somebody else is likely to get for this timber 100 years from now. And, as to the borrowing, at 20% interest, as was stated by an old lumberman to be what he thought to be a good investment for carrying standing timber, well, we are not doing any of it. As things are now, with the fire each year reducing the green area, doubtless the argument that what remains increases in value, has much to support it. But, on the other hand, as more is burned, so the risk of the remainder becomes greater, the latter certainly offsetting the former—locally, I mean. I am four miles from one station, and a few hundred yards from the located line of another railroad, still I fail to see just wherein, judging from what I see have been about similar propositions elsewhere, I am likely to benefit, through any alleged increased value of the timber during the past 12 years. Imagine the situation:

Some hae wood that cannot burn it;
Some hae no wood that want it;
But we hae wood, and we can burn it,
So let the Lord be thank'it.

Will some revolving-arm-chair theorist rise to the occasion?
"NIPISSING."

Growing Mangels.

In those districts of the country where corn for ensilage can be successfully grown, the tendency in recent years has been to abandon the cultivation of roots as winter feed for stock. This, we believe, is a mistake, for, while corn silage is a cheaper feed, because of the greater bulk per acre it furnishes, and while to a large extent it supplies the succulence desirable in connection with dry fodder for winter feeding, roots appear to supply a tonic appetizer and quality of nutriment necessary to the highest degree of health and thrift in young stock, especially, and indeed to a large extent in all classes of cattle and sheep, while mangels or sugar beets are very helpful in the economical wintering of hogs.

Turnip culture has been discouraging in the last few years, owing to the occasional occurrence of the aphid or plant louse, which has affected the crop, but mangels have happily escaped insect enemies, and, being more suitable for feeding to dairy cows than turnips, on account of the latter injuring the flavor of milk and butter, are at present in great favor. Mangels are a tolerably sure crop, in Ontario, at any rate, and, if well managed, yield a large amount of food. The idea that mangels must be sown early in spring, in order to a successful crop, is not so generally entertained now as in the past, and some growers contend that better results may be had from sowing in May than earlier. In warm weather, with a fair amount of moisture, germination takes place sooner than in cold weather, and, as a rule, the more quickly the plants come up, the more rapid growth they make during the season of growth.

In any case, of course, the richer the soil, and the more thorough the preparatory tillage, the better will be the prospect for a profitable crop.

The usual, and probably the best, method is to sow on raised ridges 26 to 30 inches apart, with a root-seed drill, which sows two ridges at a time, and the quantity of seed per acre advisable to sow is four pounds. The seeding should be done as early in May as the land can be got in proper condition, as the seed is generally somewhat slow in germinating, owing to the hardness of the shell or outer covering. Experiments at the Ontario Agricultural College have indicated that, by soaking the seed in tepid water for twelve to twenty-four hours, the germination has been hastened, and the yield largely increased. The objection to this is that it may not run freely from the drill, and may be sown irregularly. A plan recommended by some is pounding the seed in a sack, to crack the shells, and thus hasten germination. It is sometimes advised to set the drill to sow half the quantity intended, and to go over the ground twice, lest any misses may have occurred in the first sowing. The Mammoth Long Red variety, as a rule, is the

heaviest cropper, but the Giant Yellow Globe, or the Yellow Leviathan, are perhaps more nutritious and keep somewhat better, the last named being first in the list at Guelph, in four out of five years, in yield per acre.

As soon as the drills become dry after sowing, roll them with a heavy land roller to compact the soil; but, to prevent evaporation of moisture, the surface should be loosened in a few days by means of a weeder or horse hoe. Thinning the plants should be commenced when they are one and a half to two inches high, leaving the plants about twelve inches apart in the row. It is rarely necessary to stoop to use the fingers, as, with care, the work can be well done with the hoe. A man who knows how to do this work properly will hoe and clean from half an acre to one acre per day, the horse hoe, of course, being first used to cut away weeds as nearly to the plants as is safe, without covering or otherwise injuring them.

Beef-ring Shares.

Details regarding a twenty-share beef-ring are requested by Wm. Beecroft, of Victoria Co., Ont. As farmers in many localities are planning at this season for a supply of fresh beef by means of a beef-ring, we give particulars regarding shares for different numbers of members.

The customary arrangement is for members to agree to provide an animal each for slaughter on successive weeks, said animal to be a steer or heifer, not more than two or perhaps three years old, and to dress not less than 300, or in some cases 400, and not more than 500 pounds, exclusive of head, heart, liver, feet, tail, fat of internal organs, etc., which parts, along with the hide, go to the owner of the animal. The services of a competent butcher are secured to kill the animal and apportion the carcass according to a fixed chart, cuts being supplied in turn, so that by the close of the season each member has received an entire carcass. At the end of the season, settlement is made among the members, according to the weights of the animals slaughtered, on the basis of a fixed, stated price for beef, from or to those who go below or above the average.

Butchers have different charts for cutting into shares. A chart for a sixteen-share beef-ring, commonly used, is as follows:

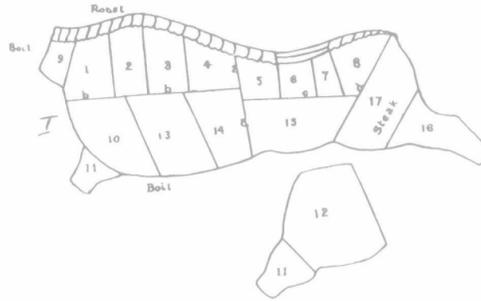


Fig. 1—Represents one-half of beef lying on table ready for saw. Before letting this half down divide it in the middle, by running a saw across at "a," between roasts 3 and 5, leaving two ribs on hind quarter. After laying both quarters on the table, divide fore quarter at line "b."

No. 9—Represents neck. Saw neck off, leaving three joints on it.

No. 1—Represents roast No. 1. Saw roast No. 1 off, leaving three joints on it.

No. 2—Represents roast No. 2. Saw roast No. 2 off, leaving three joints on it.

No. 3—Represents roast No. 3. Saw roast No. 3 off, leaving three joints on it.

No. 4—Represents roast No. 4. Saw roast No. 4 off, leaving four joints on it.

No. 11—Represents front shank. Saw front shank off above upper joint.

No. 11—Represents second rib cut. Saw it off, leaving five ribs on it.

No. 13—Represents first rib cut. Saw it off, leaving four ribs on it.

No. 10—Represents brisket.

No. 12—Represents shoulder, which lies directly under brisket, as represented in Fig. 1.

Then take the hind quarter, and divide at the line "d."

No. 15—Represents flank. Cut flank off at line "c."

No. 5—Represents roast No. 5. Saw roast No. 5 off, with three joints on it.

Nos. 6, 7 and 8—Represents sirloin, rump No. 2 and rump No. 1, respectively. Divide these three to as near the same weight as possible.

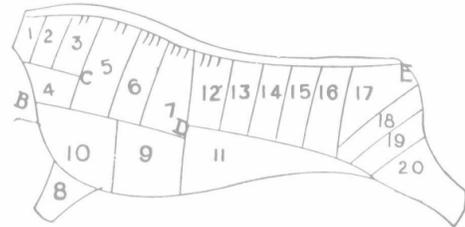
No. 17—Represents steak. Cut steak into slices, giving a slice to each person.

No. 16—Represents hind shank after steak is taken off.

After this half of the beef has been cut up it is divided between the first eight persons, as shown by time-table, giving each person a roast, a boil piece, and a slice of steak. Then the

other half of the beef is taken down and cut up in the same manner.

A successful chart for a beef-ring of twenty members is as follows:



The numbers that go together are: 1 and 18; 2 and 16; 3 and 12; 4 and 13; 5 and 17; 6 and 20; 7 and 11; 8 and 15; 9 and 14; 10 and 19.

In some localities, twenty-four share rings are in operation. Many individuals, too, decide that they cannot handle a whole share, and so arrange with a neighbor to go halves. With a 16-share ring, and animals up to three years, and an average dressed weight of about 400 pounds, one share gives a fair supply for two small families. It can be seen, therefore, that the number of shares will have to be governed by conditions, and that the chart will have to be made out accordingly. A competent butcher will find little difficulty in dividing the carcass in such way that each member will receive justice.

Another Lightning Theory.

Editor "The Farmer's Advocate":

I have noted with interest the articles in your paper on lightning, and its attraction by the earth. I quite agree with "Observer" in his remarks on lightning having no special affinity for underground water, but think his point on the connection between the earth and cloud is rather obscure.

The fact is, as scientists teach us, that in the air and in the earth there exist two forces of electricity, similar in character, but opposite in relations. For the sake of simplicity, we will call the electricity of the air positive, and of the earth negative. Each force has an attraction for the opposite force, but repels a similar one. When evaporation is taking place, the particles of water and dust rising through the atmosphere gather with them a small force of electricity. When they have risen to a high altitude, they meet the cool air, and are transformed into small drops of water. As the particles of water collect, the volume is reduced, while the charge of electricity is increased, as it always resides on the surface of objects. This continues until they have gathered force enough to be attracted by the negative charge in the earth, which is always stronger than the positive of the atmosphere. We then have a flash of lightning. This relieves the drops of much of the electricity they have collected, and they immediately rush together, gaining volume enough to fall as rain, which can be noticed as large drops directly after a flash. In case the drops fall before a flash, it is on account of a lack of electricity in the air, and the drops have gained volume enough to fall before a sufficient charge has gathered to equalize with the earth.

The connection between the earth and cloud takes place by the nearest connecting point, which is usually a tree, barn or some object projecting high into the air, and forming a conductor by which the electricity may travel. If no object is near, it may strike in clear space, just when the forces have power enough to equalize.

The return stroke which "Observer" speaks of is quite possible, and is no optical illusion. It is on account of a heavy charge in the air drawing from the earth a similar stroke to the one which entered it, and one usually occurs directly after the other. In the case of many trees being planted around the buildings, the lightning is hindered from striking on account of one of the peculiarities of electricity to gather stronger at the points of an object than at any other place on its surface. The trees aid by the large number of points which they have, and on none of which is a sufficient charge to attract the lightning. A tree standing in the opening has a large amount of electricity, on account of no other trees being near, and in this way it is more liable to be struck.

While we are discussing this subject, a word in connection with lightning-rods will be in place. The object of such a rod on a building is to protect it from the lightning stroke, and prevent fire or damage, which might otherwise occur. If properly constructed when attached to a building, there is little danger of damage being done. One of the first requisites of a rod is that it should be a good conductor, or should allow the electricity to pass freely over it. Any of the metals are fit for this purpose, the cheaper ones being the most commonly used; even barbed wire has been used in some instances, on account of the large number of points it possesses to distribute the ground current, which is one of the essential

features of a rod, as it decreases the attraction for the lightning. In the case of a rod, the points are not distributed along it as on barbed wire, but are attached as uprights on the roof. The uprights should not be more than twice their own length apart, as over this distance they have no effect on the space between. The main rod can be attached directly to the building, and should be continuous, making the curves in gentle curves, and ending in moist earth, the object being that moist earth can distribute the shock more readily than if it is dry. Statistics gathered by the Department of Physics, at Guelph, show that, in eight years, out of 511 buildings struck with lightning only eleven bore rods, and of these eleven more than fifty per cent. were in need of repair. By this it can be seen that it is an advantage to use rods on the buildings, and by many of the farmers who do use them, they are held as a second insurance policy.

Dundas Co., Ont.

A READER.

THE DAIRY

Experiments with Pasteurized Whey.

Interesting conclusions were reached by W. M. Waddell, who carried on a series of experiments at Ontario Agricultural College last winter, with the object of finding out what temperatures would be the most suitable for the pasteurization of whey. Mr. Waddell points out that the experiments were not extensive enough to warrant definite conclusions being drawn in regard to whey pasteurization for the entire season. The work was done during February and March, the whey used being from small amounts of milk, and the amount of whey pasteurized for each experiment was therefore limited. He does, however, express satisfaction with the experiments for winter whey, under laboratory conditions.

In order to make a definite statement re the pasteurization of whey for the whole season, it would be essential to conduct experiments during the whole cheesemaking season, so that deductions could be made from the various conditions which are only known to manufacturers in handling large quantities of milk. The following deductions are, however, worth studying:

1. That pasteurization of whey is beneficial, (a) The fat is held in suspension; (b) a gentle agitation makes the mass uniform; (c) when raw, unpasteurized whey is plated, there is a marked germ life shown even in 1 C. C. of a 1-100 dilution; (d) in 100 pounds of whey there are possibilities for untold development of germ-life, if pasteurization is not employed.

2. (a) In heating to 120 degrees, and allowing to cool, there are quite a few organisms uninjured; (b) in heating to 140 degrees, and allowing to cool, there are some organisms uninjured; (c) in heating to 149 degrees, and allowing to cool, there are some organisms uninjured; (d) in heating to 155 degrees, and allowing to cool, there are a few organisms uninjured; (e) in heating to 156 degrees, and allowing to cool, only a few organisms uninjured; (f) in heating to 159 degrees, and allowing to cool, only a very few organisms are uninjured; (g) in heating to 162 degrees, and allowing to cool, it is very rarely any germ life is left in ordinary whey; (h) in heating to 169 degrees, and allowing to cool, life of organisms is extinct, but slime occasions trouble at this high temperature, owing to the coagulation of the albumen.

3. (a) In heating to 140 degrees, and holding the whey at such a temperature that the whey will be 110 degrees in 24 hours, there is no growth of germ life in 120 hours, either on whey peptone carbonate gelatin or agar media; (b) in heating to 150 degrees, and holding at such a temperature that the whey is 110 degrees in 24 hours, there is no growth in 120 hours on media plates; (c) the same holds good with whey heated to 155 degrees, and held at such temperature that the whey will be at 110 degrees in 24 hours.

4. These experiments were performed with whey taken from milk delivered to the cheese department of the O. A. C. If milk is normal, good results can be obtained by pasteurizing the whey to 159 to 155 degrees, and having the temperature register 110 degrees in 24 hours.

5. If some resistant spores existed in the whey with which these experiments were conducted, they must have been killed. If they had been present, and survived the heating, they would have developed inside of 120 hours. FACT: No very resistant spores were present.

6. Cheese factories are being erected in West Ontario, at Shedden, West Lorne, Arkona, Komoka and Millbank. All have excellent appliances, and fine buildings will be equipped with modern appliances, and along strictly sanitary

Follow up Process in Cow-testing.

Editor "The Farmer's Advocate":

It is, we understand, the intention of the Dairy Commissioner's Branch to supplement cow-testing work this season by obtaining information as to the cost of feeding cows so tested. This will be carried on in a small way at first, in connection with one or two cow-testing associations.

Valuable as has been the work of the cow-testing associations in showing the difference in production in individual cows, it has lacked completeness in not supplying definite information as to the cost of feeding cows. Even if carried on in a small way, the information to be obtained by the Department in this connection should prove of very great value to dairymen.

It is not always the cow that gives the largest amount of milk or fat that is the most profitable. We have some examples of this in the record of the dairy herd at the Ontario Agricultural College, in 1908. The second cow in point of yield gave a larger profit over cost of feed than the cow which gave the largest amount of milk and fat during the year. The six-year-old Holstein cow, Molly De Kol, headed the herd in point of yield. In 298 days she gave 12,963 pounds of milk, and 129.06 pounds of fat, which, valued at 25 cents per pound, gave a gross return of \$107.26. She cost to feed \$54.48, thus showing a net profit of \$52.78. The second cow, a four-year-old Holstein, gave 11,458 pounds of milk, and 394.92 pounds of fat in 337 days, valued at \$98.72; but she only cost \$45.41 to feed, thus showing a net profit of \$53.31. The same thing is found in the records made by the Ayrshires. The third cow in point of yield showed a profit of \$41.18, while the one giving the largest quantity of milk and fat showed a profit over cost of feed of only \$39.13, or over \$2 less than the cow giving the smallest yield.

This does not prove that the cow giving the largest yield of milk and fat is never the most profitable cow. It merely shows that, in accurately estimating the value of a cow, her cost of feeding, as well as her yield, must be taken into account. However, until such times as they are able to estimate accurately the cost of feeding each individual cow in their herds, dairymen had better cling to the one giving the largest yield of milk or fat. They will not go very far astray in selecting on this basis, though a cow's real value can only be accurately gauged by finding out what it cost to produce her product. It will, therefore, pay dairymen who are testing their cows, to keep track of the cost of feeding, as well as the amount of product each one gives.

Just on this question of feeding, the cow-testing work carried on in Michigan, for example, is ahead of the work here. Not so many associations have been formed, nor has the movement spread as rapidly as in Canada, but it has been more thorough, and covers the cost of feeding, as well as the amount of product. And what is more, the whole cost of the work is borne by the cow-owner. An association is formed, and a competent man engaged to do the work of testing, and compiling the records as to yield and cost of feeding. This individual looks after more than one association, thus spreading out the cost. Last year, the cost to members of associations for this work averaged \$1.05 to \$1.07 per cow per year per member. Where a dairyman pays for the cost of testing his cows, he enters into the work with more enthusiasm, and profits more by it, than is the case where the Government foots the bill. In this, as well as in other things, Canadians are rather given to looking to the Government to do for them what they should be willing to do for themselves.

There are some other features of the cow-testing work in Michigan that might be copied with advantage here. The State Board of Agriculture sends a competent man to organize associations. He visits a locality, and talks up the value of testing cows. When he has secured forty dairymen who are willing to join an association, and abide by its rules for not less than six years, the organization is completed. In addition to testing their cows and keeping track of the cost of feed, the members agree to purchase three pure-bred dairy bulls for use in their herds, the breed of the animals being left largely for the members to select. The members are divided into three groups: the members in each group have the use of one bull for two years. After that a change is made, and the bulls redistributed. At the end of the second two-year period another change is made, so that at the end of six years every member has had the use of three good dairy bulls on his herd, and not one of them for a longer period than two years.

The advantages of this plan are many. Each member has the use of a good bull at a lower cost than if he bought one himself or patronized some breeder in the district. As soon as a member has tested his cows, and found out which are the more profitable ones, he can begin at once to build up his herd from this foundation. If a suitable dairy sire were not at hand, this building-up process might be postponed, or carried on in such a way as to make it largely valueless.

By combining the two—that is, testing and selecting cows, and selecting a dairy sire—and continuing the work for six years, the improvement in the dairy herds should be so apparent at the end of the period that members would continue the work of their own accord afterwards.

The finding out which are the profitable and which are the unprofitable cows is valuable, but if this is not followed up by systematic and intelligent effort in the building up of a dairy herd, the dairyman comes far short of getting all the good out of cow-testing there is in it. The experience in cow-testing work in Canada, so far, shows that many dairymen discontinue the work at the end of one season. It should be a continuous process, selecting and building up, until maximum production in a dairy herd is reached.

W. J. W.

Collect Cream by Motor Car.

Editor "The Farmer's Advocate":

The effect on the price of creamery butter by the introduction of hand or power cream separators on the farm, can be summed up as follows:

I doubt if farm separators have influenced the price of creamery butter to any extent directly. Indirectly, they have doubtless caused a lower price to be accepted for the output of creameries, chiefly for two reasons: First, because the creamerymen have accepted, and continue to accept "ream" (raw material) which no amount of skill can manufacture into a first-class finished product (butter). In the second place, the farmers have supplied, as a rule, just as poor a quality of cream as the creamerymen will accept. (I am somewhat in doubt which of these should be placed first. It is not easy to say which is cause and which is effect, but I have placed the onus on the creameryman, as he has the power to cause the necessary improvement.)

It is difficult to say which has had the greater influence on prices received for creamery butter—the manufacture of butter in the farm dairy, or the sending of the cream to the creameries. As "dairy" butter is usually in a class by itself, and scarcely comes into competition with finest "creamery," except in special cases, if there is any difference in effect, I should judge that the sending of cream to the creameries has been the more potent factor in influencing prices of creamery butter.

As to the relative merits of manufacturing butter in creameries from whole milk, as compared with making butter from cream collected in the ordinary way, there is no doubt about which is the better in its effect on the quality of butter made. As proof of this, we may cite the case of Denmark, where the butter is made in creameries almost exclusively from whole milk, and where they found that the gathering of cream had such a detrimental effect on the quality of their butter that, in the few cases where they tried it, they dropped it "quick." And we may further cite the experience of every country which has changed from whole-milk to cream-gathering—e. g., Australia, the United States, and Canada. In every case it has meant a marked deterioration in the quality of the butter. We may also call attention to the fact that, at the National Exhibition of Canada, the best prizes for butter have been, for the most part, awarded to Quebec creameries, where, I understand, the whole-milk system is followed.

Where the population is small, and roads are not good, creamerymen have been obliged to adopt the cream-gathering system, in order to reduce expenses, but we have yet to learn how to make a fine quality of butter under this system. "Finest" butter is possible, but not probable—at least, not in the near future.

From the foregoing, it will be observed that our judgment is that hand separators have been indirectly a cause of depreciating prices for creamery butter, and, in the "language of the street," it is "up to us" to suggest a remedy, or remedies. We offer the following:

1. The cream ought to be collected from the farm at least three times per week—daily, if possible. To do this, we need better roads and cheaper motive power than the horse. The introduction of gasoline or electric power for hauling cream is a step in the direction of reducing the cost of collecting cream. Why should these cheap methods of moving loads be monopolized by the idle rich? There is need of some exact experiments along this line to find out the best way to utilize this cheap power for collecting the raw material in the making of fine butter. If one of these machines could cover 50 to 100 miles in a day, at a low cost, it would mean cutting the cost of hauling in two, and the getting of a fine quality of raw material for making good butter, which is practically impossible under present conditions. The value of aeroplanes (airships) in creamery work is another factor to be reckoned with in the future. These would eliminate the road problem, and cut distances in two. It is possible that "Darius Green" and his flying machine" may be valuable aids in solving the problem of making fine butter.

2. The patrons supplying cream ought to

make an honest effort to deliver sweet cream to the drivers. This can be done by keeping the separator and everything that comes in contact with milk and cream clean. The separator should be regulated to produce a cream testing 30 to 35 per cent. fat, and the cream should be cooled at once to 50 degrees F., or below, which means a large supply of cold water, or water and ice.

There are other suggestions which might be made to remedy matters, such as pasteurization of the cream, more skillful makers, etc., but, in our judgment, these two—more frequent collecting of the cream, and having the cream delivered in a sweet condition—are the two main points.

The average farmer does not produce cream of as high quality as he should, and might, do. The trouble seems, to us, to lie in two directions: indifference, and because it does not pay. When creamerymen devise some practicable plan to reward labor and skill in caring for cream, we may look for a marked improvement, but not before that time. Creamery patrons (men and women) "are but children of a larger growth." We all remember how reward was an important factor for good work in our childhood days, and most of us have not gone very far from those happy days. We have not yet learned to do things because of duty. Will mankind ever reach that golden age? H. H. DEAN.

O. A. C., Guelph.

How to Improve Gathered-cream Butter.

Editor "The Farmer's Advocate":

Butter made from gathered cream should equal in quality that made from whole milk. That it does not, under average creameries, is not a sufficient reason for assuming that it could not. Where patrons and buttermakers co-operate in caring for the cream, each doing his work properly, the product from gathered cream will equal that from whole milk.

Poor conditions have their effect, more or less as to contact, on the good. The price of the best cream-gathered butter suffers because of the inferior quality of the product of the average cream-gathering creamery. Of course, in the local markets, a class of butter called "separator dairy" comes in competition with creamery, due to the introduction of cream separators and the advertising of a number of commission merchants, with their offers of a premium over ordinary dairy, thus affecting the price to some extent. The main cause, however, for lower prices for cream-gathered is its reputation, a reputation sustained by the quality of the average output.

Indirectly, farm separators may be responsible for the inferior product and the consequent lower price. But most directly, the onus should rest upon a number of separator agents, a number of careless buttermakers, and a large number of negligent patrons; the separator agent by instructing the purchaser that the separator required cleaning but once a day, or two or three times a week, also in advocating skimming a thin cream, not over 20 per cent. fat; the buttermaker is to blame in accepting inferior cream, and in not availing himself of the best methods of handling the cream at the creamery; the patrons' share in the responsibility is in sending a thin, sour cream, and in a lack of scrupulous cleanliness. The average per cent. of fat in gathered cream of Western Ontario last year was 22 per cent. (Chief Instructor Hern's report in "The Farmer's Advocate" of January 28th.)

The question right now is how to make cream-gathered butter equal to the best! How? The buttermaker must reject all inferior cream, and pasteurize all cream accepted. The patron must separate a rich cream, testing 30 per cent. fat and upwards. The separator, utensils and surroundings must be kept clean all the time, remembering that in the dairy business, "where there's dirt, there's danger."

It is not altogether price the dairy business needs to-day—prices are good—but a better selection of cows, a more careful study of production and manufacture, that the best quality of butter may be made.

Let us have clean, sweet, rich, untainted cream for our creameries. And, to make more money out of the business, let us make more butter.

Huron Co., Ont.

W. G. MEDD.

Support Well-managed Creameries.

Editor "The Farmer's Advocate":

Creameries were obliged to accept lower prices for their butter during the first few years after hand separators came into general use. The operator of the hand separator has caused the value of the cream to lessen, on account of lack of knowledge of the effect of varied speed, different temperature, and hot cream poured into the cold cream, to say nothing of separators half washed and sometimes that only once a day.

As to remedy, it is evident that separators must be kept clean, and in a clean and airy

place. Speed must be retained even and high. Milk must be let into the machine slow enough to throw a rich cream, if the cream screw lacks that effect. Standard separators only should be bought; a farmer cannot afford to experiment. Cream separated with ice always was cool and nice. Therefore, after separating cream, it should be treated in the same way, chilled down with ice or water before being put in the cream pail, and then kept in a cool place until called for by the cream wagon.

Sending the cream to the creamery has had the influence of raising the price of home dairy butter, as creamery butter is mostly exported. Therefore, every farmer should help to support any creamery that is under good management. Gathered-creameries can manufacture and make profits, where the separator factory would fail. Peel Co., Ont. J. B. SMITH.

Length of Cow Stalls.

Editor "The Farmer's Advocate":

Your length of platform, as given in answer to R. J. M.'s inquiry—4 ft. 6 to 4 ft. 9 inches—would not answer for our cows. The back part of our platform is five feet, and the end by the door is 4 ft. 10 inches, from stanchion to gutter, and our cows are just good-sized Holstein grades. You could put all the manure that accumulates on them all winter in a pint measure, if they were not cleaned until spring. Would say to R. J. M. to make front side of his gutter 8 inches, and the back part 6 inches deep, the floor back of the gutter being two inches lower than the platform. Also make the gutter 14 inches wide. The bottom of manger should be 3 inches higher than where the cows stand, then there will not be any stretching or getting on their knees to clean out the manger. A. W. DeFONG.

Oxford Co., Ont.

The Pure Milk Co. have removed their plant from Welland to Silverdale, Ont.

GARDEN & ORCHARD

Radishes in Succession.

Editor "The Farmer's Advocate":

It costs very little to buy enough seeds for a good-sized garden. Radishes and early onions may be made to grow in such a way as to keep the table well supplied the whole season, and, when taken fresh and crisp from the garden, they have proved to be a real help to digestion.

Radishes soon grow too strong and pithy, and are not fit to use on the table. To be good, they must be planted in rich and well-prepared soil. My way of having a continued supply is to get two packages of seed, one of the small, turnip-shaped kind, the other of the long kind, that are not quite so early, both being of the red variety. I then plant one-third of each package. This is for a small family, but those having large families will find it necessary to plant more. When the early, little, round radishes are about gone, plant again about a third from each package. By the time the third planting has been nearly used, other vegetables will be ready, and will take their place. The ground, however, should be cleared by removing all the waste ones. I have found that hogs relish these very much.

Give the boys five or more square rods for a garden. Let them plant anything they like, but insist on them keeping down the weeds.

Bruce Co., Ont.

LESLIE TAYLOR.

Fighting Root Maggots.

Every season finds great damage to garden crops in some localities, due to depredations by root maggots. Onions, cabbage, cauliflower and other crops frequently are destroyed. The eggs from which this maggot develops are laid by flies less than half the size of the common house fly, on the stem of the plant close to the ground, or near the roots of the plants they attack. In two or three days the eggs hatch, and the resulting maggots bore into the stem.

No practical remedy that always gives immunity has been found. Best results, however, particularly with cabbage and cauliflower, have been obtained by the use of tar-paper disks. It is necessary to place a disk on each plant. Take ordinary tarred building paper, and cut in pieces about three inches square. Split them from the center to one side, so that they can be put around the stem of the plant. It is best to do this when the plants are being set out. The disks are pressed close to the ground, and the grease of the tar prevents the insect from laying the egg on the stem. With a punch for making the hole in the center of the disk, it does not take long to furnish protection for a great number of plants.

Tomatoes for Shipping.

Editor "The Farmer's Advocate":

We grow tomatoes for shipping only, and use the Chalk's Jewel, as they ripen early and evenly, are firm and smooth, and will bear until the frost comes. For our tomato crop, we like a soil that is easily worked and well drained, which has been in a good state of cultivation the previous year. The fall before planting we manure and plow under; then, in spring, we work ground to a nice, mellow condition, and plant out about May 24th to June 1st, according to the season.

We do not plant on the same ground more than twice in succession, as they are liable to rot and disease. The plants are grown by a florist in pots, until they are 8 to 10 inches high, with bloom on, and usually a small tomato. These plants are furnished at three cents each.

In planting, we run furrows about six feet apart, and place the plants four feet apart in the rows, so they can be cultivated both ways. Then they are cultivated every week, and hoed every ten days or two weeks.

This year we are growing part of our plants at home. The florist starts the seed for 50 cents a box, which contains about 500 plants. We got them the last of March, and planted in regular hotbeds, 2 inches apart each way. We will transplant May 1st to 4 inches apart each way, and by May 24th they should be ready to plant in the field. J. W. SMITH & SONS.

Cucumbers, Melons and Squash.

Among the garden crops that cannot safely be sown until danger of frost is past are, cucumbers, melons, pumpkins, and squash. As a rule, the seeds are not put in the ground before the middle of May, and fair crops have resulted from June plantings. In order to catch the early market, some gardeners start plants in pots, or on sods in greenhouse or hotbed, and have stout, strong plants ready for setting in the open as early as possible. A very slight frost injures the plants.

Cultural methods with all of these crops are much the same. A rich, mellow, sandy loam is desirable. If the soil has not been well manured, it is good practice to incorporate some thoroughly-rotted manure in the place where the plants are to become established. Some dig a hole, put in two or three forkfuls of manure, cover this with three or four inches of mellow garden soil, and place the seeds, covering them about one inch.

The distance apart will be regulated by the habit of growth of the variety used. Cucumbers usually are satisfactory at a distance of six feet apart. Musk melons can be sown four to six feet apart, and watermelon or citrons six to eight feet. Bush squash do not need to be more than four feet apart, while the sorts with running vines require at least eight feet. Six or eight seeds are placed in a hill, but no more than three vigorous plants should be allowed to develop.

Thorough cultivation is demanded throughout the early summer. When the vines begin to run freely, perhaps when they are four to six feet long, the ends should be nipped off the main runners, so as to induce the development of laterals, on which most of the crop is produced.

Arsenite of Lime for Spraying.

From the number of letters we have received during the past few weeks from orchardists, more especially in New Brunswick and Nova Scotia, it is very evident that there is much confusion respecting the preparation of arsenite of lime. As a misunderstanding in this matter might lead to a very considerable loss, through injury to the foliage, it is well that one or two of the essential points in the process should be explained and emphasized.

The first step in the process is the preparation of arsenite of soda, by the boiling together of white arsenic and washing soda (carbonate of soda, in crystals). The proportions generally recommended are: White arsenic, 1 pound; washing soda, 4 pounds; water, 1 gallon. A few minutes' boiling usually suffices to dissolve the arsenic and soda, and the result is a solution of arsenite of soda. This cannot be used as a spray, as it is strongly corrosive, and would very quickly strip the trees of their foliage. It must be converted into arsenite of lime.

The conversion of the arsenite of soda into arsenite of lime constitutes the second and very essential part of the process. It may be accomplished in one of two ways, as follows:

1. Thoroughly slake two pounds of good, fresh quicklime, and stir into 40 gallons of water; then pour in, with constant stirring of the lime-water, one pint of the arsenite of soda solution. The spray is ready for use immediately, as the formation of arsenite of lime takes place at once. This spray contains as much arsenic as one made by adding 4 ounces of Paris green to 40 gallons. The above proportions allow for a fair excess of lime, which serves the double purpose of preventing injury to foliage, and of mak-

ing visible the degree of thoroughness with which the spray has been applied.

2. With Bordeaux Mixture.—This is the more common method, as it allows the employment of a fungicide and insecticide in the one spray. Bordeaux mixture, made according to the formula used so successfully for so many years, viz., 4:4:40 (four pounds lime, four pounds bluestone, and forty gallons water), contains a sufficient excess of lime to allow the addition of one pint of arsenite-of-soda solution to a barrel of 40 gallons. All that is necessary is to pour the requisite quantity of arsenite of soda (one pint) into the barrel of Bordeaux, stirring meanwhile. We have now Bordeaux mixture containing as much arsenic as the "poisoned Bordeaux mixture," in which 4 ounces of Paris green per barrel has been used.

In conclusion, may I further emphasize the necessity of clearly distinguishing between arsenite of soda and arsenate of soda. It is the former that is used in the preparation of arsenite of lime (just described), and the latter which is necessary for making the arsenate-of-lead spray. Failure to recognize that there are these two classes of compounds—arsenites and arsenates—each with its own characteristics, has frequently resulted in loss and disappointment.

FRANK T. SHUTT,
Chemist, Dominion Exp. Farms.

Fruit Experimentation.

It has been represented to us that the heading, "Is Ontario too Poor to Experiment in Fruits?" (in "The Farmer's Advocate" of April 22nd, page 673), is liable to give a wrong impression, in view of the fact that, as set forth on page 675, the Provincial Government is further extending the work of fruit experimentation at the Experimental Fruit Farm, \$13,050 being provided for maintenance of the fruit farm and fruit experiment stations, and 13,030 for completing the equipment, from which it will be seen that, during 1908 and 1909, a much larger sum than ever before will have been spent in experimenting in fruits. For over ten years the Department of Agriculture has carried on experimental fruit work through the experiment stations, and, as the result of that work, issued a report entitled, "Fruits of Ontario," as a reliable guide to fruit-growers. Now, with a view to more carefully testing new varieties, and of developing improved varieties, it is getting in shape to carry on extensive work at the Horticultural Experiment Station, in Lincoln County.

The article referred to dealt with the work of the Experimental Union, to which the Government makes a grant of \$2,750. The officers of the Union decided that the money at their disposal for horticultural work can be used to better advantage through school-garden encouragement than through the free distribution of plants and seedlings. The offer made a few years ago to distribute samples of fruits to anyone applying who would undertake to make a report, brought in an immense list of applicants to the Union, and the question was at once brought home to the Department as to whether it was advisable to ask for funds to extend the work along that line, or whether the funds might more profitably be expended along the line of fruit stations and fruit farm. The question is, therefore, whether the money available should be used for extending the distribution through the Experimental Union, or developing the work along the other lines that the Department is following. With unlimited funds to draw upon, it could develop both lines.

To all of which, "The Farmer's Advocate" has simply to reply that it has no fault whatever to find with the lines of work decided upon, and we are pleased to take advantage of the opportunity to set forth thus concisely just what the Department of Agriculture is doing in this line. At the same time, we are of opinion that the distribution of fruits for co-operative experiment is of such great and decided importance that no considerations of economy should have induced the Government of a rich Province like this to so limit the agricultural appropriation as to cause its discontinuance. The heading referred to was deliberately chosen to arrest attention, and we hope the point may not be lost upon the Provincial Treasurer.

For dissolving and handling copper sulphate, use a wooden bucket or half-barrel. One of our editors had a galvanized pail ruined in a few hours the other day, having forgotten to caution the men who were doing the spraying. Two pounds of bluestone were suspended in the pail to dissolve, and by the time the men returned, after dinner, to fill up their barrel a second time, the chemical had eaten a hole through the pail, and the solution had run out on the floor.

In garden work, I am a believer in deep plowing, as it deepens the soil, and the reservoir that holds the moisture. Where the soil is shallow, I like to plow a little deeper each year, thus gradually increasing the depth of the soil.—[Leslie Taylor, Bruce Co., Ont.]

Thorough Spraying.

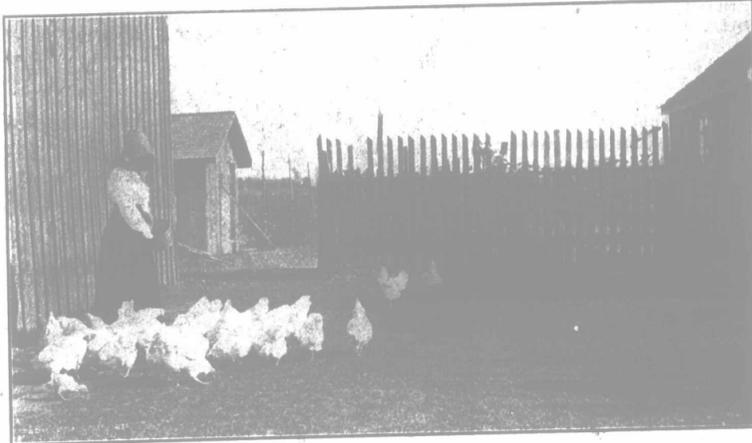
Progressive apple-growers in most localities will now have given the first application of spraying mixtures, unless a close examination and past experience revealed the fact that it was not necessary. None can afford to neglect a thorough use of poisoned Bordeaux mixture just before the blossoms open, and another application as soon as the blossoms fall. Follow the spray calendar given in our issue of April 1st, if you would be sure of clean fruit of high quality. In a few instances, experience may have developed treatment for some of the applications that is just as effective as those recommended, but the mixtures mentioned are safe standards.

POULTRY.

Elevated Hatching Coops.

Editor "The Farmer's Advocate":

A short time ago I reported to "The Farmer's Advocate" (March 25th issue), commencing a trial of individual hatching coops, which, for lack of room elsewhere, I suspended to the stable ceiling, or at top of wall near windows, so Biddy would have plenty of light and air, without drafts or disturbance. These coops were just light, rough packing-boxes, about 36 x 24 x 16 inches, cheaply made, with slatted sides, and nest boxes in corner, about 12 x 10 x 6 inches. I gave the hens fresh water, grit and food daily in the coops, but put no sods under the nests, as different writers have suggested—just fresh, dry, chaffy straw. On March 30th the chicks began coming out, and up to this time (April 26th) I have had six hatches of smart, healthy birds, averaging nine to each setting of a dozen eggs. About a day after hatching they are moved to outside coops on the ground. Fresh straw is put in the hatching-coop nest, and another clucker started.



A Pleasant Evening's Chore.

I do not know if this high-toned plan of hatching be orthodox or not, according to the poultry experts, but it is bringing lots of early, strong chicks, and that's what we are after. In order to insure fertile eggs, my flock is composed of about one rooster to each 12 or 13 hens, and the eggs were carefully collected each afternoon from the layers.

PLYMOUTH ROCK.

A Good Egg Record.

Editor "The Farmer's Advocate":

As I am a reader of "The Farmer's Advocate," and a breeder of pure-bred poultry, I thought I would give a few suggestions, hoping they will be helpful to someone. I think all poultry men, and also women, should work up the pure-bred poultry business in their neighborhood, and try to get farmers to start into some good breed, and get rid of the mongrels. Here are a few good reasons why:

First, that it does not cost one cent more to keep them, after you get started in them, than mongrels; second, if you get a good strain, they will lay twice as many eggs as common fowl (I have proved this in my own experience); third, when you come to kill them, they have the finest meat—in fact, anyone, after eating pure-bred fowl, with their plump, juicy breasts, will not use any other; and, fifth, when you go to your hen-

yard, you have something worth looking at, and also something worth showing to your friends. Who ever saw a finer sight than a large flock of Barred Rocks or White Wyandottes?

Although one may not have pure-bred fowl, he ought to take good care of what he has, and when he gets pure-breds, he will know how to care for them. Now is the time to clean out the hen-house. Take all movable things out, thoroughly clean, then whitewash, getting the lime well into the cracks; use coal oil on the roosts freely, this being the best and cheapest louse-killer. Look over the flock, and see if any have scaly legs; if so, use coal oil again—better put a little on all their legs, as the infection soon spreads.

Always try to make it a point to hatch early chickens; they should be all off in April and May. Keep them growing, and do not let them get any setbacks, so they will lay when eggs are a good price next fall and winter, then they will want to sit early another spring. This is what the farmer wants, for his hens are too late wanting to sit.

FEED FOR CHICKENS.

Never feed chickens until they are thirty-six hours old. More chickens die from feeding too soon than by starving. Their first feed should be grit or sand; then feed them hard-boiled egg, with breadcrumbs crumbled together, or bread soaked in milk and squeezed dry. Never feed sloppy food. Baked corn meal, rolled oats and cracked wheat are the best feed. Feed often, and they will grow right along.

FOOD FOR LAYING HENS.

Discontinue the whole-corn ration almost entirely now; feed cut clover regularly, and be sure the hens have plenty of ground bone and shells. I feed a pint of wheat to eight hens in the morning, a pint of barley at night, using oats for a change; this is scattered in straw or litter, to make them scratch. I also use hoppers in each pen, made to hold about half a bushel. Any handy farmer or farmer's son can easily make one from a small square box, obtained at any grocery store. Make lid for top, fasten on with hinges; split a piece out of side of box about two inches wide, on the bottom board; take a piece of board, nail lath on one side and two ends, and fasten under hole on side of box. Now you have your hopper, made; nail to the wall of your hen-house, about ten inches from floor. In this keep bran, chop or shorts, with a few meat scraps mixed in, and I also mix Herbageum in my hopper feed.

Keep the birds free from lice, or they will not do well; dust them often with insect powder.

For a drinking fountain, take a one-gallon syrup pail, and cut bottom off about 1½ inches up. Take a tomato can, cut a three-cornered notch at the open end, fill with water, put the bottom of syrup pail over top, and turn upside down. Now you have a self-regulated drinking-can that the chicks cannot get their feet into. It is also easily cleaned, and cleanliness is one of the most important things about poultry-raising.

Just to show what can be done with a few hens, when properly cared for, I will give the following record of seven pure-bred Barred Rock pullets, hatched the first of August, 1908. Every poultryman knows how late this is for chickens. They started to lay on the 29th of January, but laid only three eggs that month, but in February they laid 62; March, 120, and, if they continue to do as well for the rest of the month as they have so far (up to April 26th), they will lay 160 in April. One was set March 25th, so that only left six to lay. That is an average of 26 eggs each—pretty good for such late-hatched pullets. The hen I set brought out 11 chicks, and I have set eight dozen in incubator, and sold \$5.60 worth. Bruce Co., Ont. BURTON E. POST.

[Note.—This is a good letter, and a good egg record. The reasons advanced for keeping pure-bred fowl are also good, except that, in his zeal, our friend has greatly exaggerated the claim as to egg production. The fact is that, taking them by and all, birds of mixed breeding lay them by and all, better, than pure-breds. Of course, some flocks of mongrels lay a great deal better than others, and the same is true as regards pure-breds. The advice to take care of whatever one has, is sound.—Editor.]

THE FARM BULLETIN.

Would Bonuses Have Paid?

Editor "The Farmer's Advocate":

Again we are at the end of another mild winter, of which we get too few. Situated as we are in the zone between continuous snow and frost on the one side, and no snow and little frost on the other, we are liable to have almost any kind of weather in the winter season. This makes it very difficult to plan work or speculate on what the crops and live stock may be like in the spring. Usually, a mild winter, while good for the stock, is hard on the wheat and meadows, but this one seems to have been a fortunate exception. Winter wheat, so far, is looking exceptionally promising, and grass and clover is seldom better. A feature of the live-stock trade is the increasing scarcity of cattle. Really good stockers are almost a curiosity, and, judging from the way the trade in calves for veal and hides is developing, native cattle of any kind will be almost as scarce as horses. The poultry industry is developing rapidly; so much so that some enterprising farmers, with incubators, in order to supply the demand, have undertaken to supply newly-hatched chicks at 5 cents each; but, from the writer's observation, it is more difficult to rear incubator-hatched chicks than to hatch them. They seem to lack the vitality of those cared for by the old Biddy.

We expect seeding to be in full swing in a few days. Sugarmaking seems to be over, and the cheese season has again commenced. Dairying is the stand-by around here, and cheese takes the lead in summer, though about one-quarter the amount is made into butter in winter, and shipped (mostly) to Toronto commission men, along with the "hen fruit." The distance is about one hundred miles, and local merchants are beginning to complain at the loss of this trade. In summer, the country storekeepers gather the eggs direct themselves, exchanging for groceries, so that, between the city and the country, the town merchants are losing ground. But this is only another example of the modern tendency to divide into city and country, mostly the former, leaving the smaller places to struggle along as best they can. And in this connection, might it not be wise for the Legislature to relieve the town of some of the burden of road-building? If public money is to be used for this purpose, let the permanent roads be extended from the town outwards, or else compel the town to maintain as good roads within the limits of the corporation as there are in the surrounding townships. St. Mary's made a supreme effort to construct good roads with broken stone and a steam roller, and succeeded admirably while the money lasted, but taxes, getting too high, some of the leading roads to the town are left in a deplorable condition, much worse than the township's; while the town, in desperation, has taken to loaning money to corporations like the C. P. R., and various manufacturing industries, which, though it injures the town's credit temporarily, may, we hope, benefit it ultimately. But are the farmers to wade through mud to get into the town till those good times come? On this problem, the ratepayers of the writer's native township have again shown their good sense, by rejecting a raid on their treasury by what is commonly supposed to be the C. P. R., acting through a "straw" company of local men, that wanted a straight gift of \$20,000, as a slight acknowledgment of the honor and benefit of having a branch of the great C. P. R. through part of the township. On a former occasion the township refused aid to a cement company, and subsequent events have proved it wise in doing so, for if it produced the cement from marl, it would probably have failed, and anyway, another strong company is likely to locate in St. Mary's, which will benefit the township just as much. If the locality is worth it, these industries will come in good time, without aid; and so will the railway. And if it is not worth it, it is better without them, for you can't take blood out of a stone. St. Mary's has had bitter experience with the big creamery and the big quarries. Would it have paid the town to have bonused them? J. H. BURNS.
Perth Co., Ont.

Ancient History.

Commenting upon the customarily belated appearance and distribution of the Experimental Farms report, "The Farmer's Advocate," of Winnipeg, remarks: "The printer to the King's Most Excellent Majesty, as the job-printer of the Government matter styles himself, may be working under a speed limit that will not permit any faster work, but it certainly does not add to the value of the report of experimental farms to have that one dealing with experiments carried on in 1907 ready for distribution by April 1st, 1909."

To Our Club-raisers.

There are thousands of farmers who do not know what they are losing every year through not being subscribers to "The Farmer's Advocate and Home Magazine." Therefore, we want all readers of "The Farmer's Advocate" to act as club-raisers this year, and send us large lists of NEW SUBSCRIBERS.

If you send us two new names and \$3.00 to cover same (each new subscriber paying \$1.50), we will mark date on your paper forward one year as remuneration to you; or, for each single NEW NAME, accompanied by \$1.50, we will advance the date of your address label six months. Cash commissions or premiums, as preferred, for larger lists of new names.

In clubs of FOUR RENEWALS OR OVER, we will accept \$1.25 each.

Premiums not included in club offers.

Start raising your club immediately. Get "The Farmer's Advocate and Home Magazine" into every household in your locality.

Protection is Expensive.

Editor "The Farmer's Advocate":

I have read with much interest the articles which have appeared in your valued journal, relating to protection, and believe that, so far, the anti-protectionists have had much the best of the argument. The agriculturist does not ask for a bonus, a subsidy or exemption from



On Friendly Terms.

taxation, but simply to be placed on equal footing with other industries. Just give Canadian farmers free trade for five years, and agriculture would receive an impetus such as it has not known since the history of this country. Higher prices for farm products would attract thousands from the congested cities to the soil; farm values would advance by leaps and bounds; more hands would be employed on the farms; better methods would be employed; production would be wonderfully increased, and a market would be had for our surplus right at home, at greatly advanced prices. It seems absurd and unbusinesslike to send all our surplus across the Atlantic, with all the necessary loss from shrinkage, overstocked market, insurance, etc., when we have a better market right at our very door. That word "protection" spells all the difficulty, and debars us Canadian farmers from a market that should be ours and a market that would be worth millions to us annually. The writer recently had occasion to penetrate Uncle Sam's domain a few hundred miles, and the following are some of the prevailing prices of farm products in the particular section which he visited:

Lambs, each, \$9.00; veal calves, live weight, per pound, 10 cents; Beef, live weight, per pound, 6 to 8 cents; hens, live weight, per pound, 20 cents; chickens, live weight, per pound, 25 to 30 cents; milk, retail, per quart, 10 cents; milk, wholesale, per gallon, 30 cents; eggs, wholesale, per gallon, \$1.50; potatoes, per bushel, \$1.00 to \$1.00; turnips, per bushel,

50 cents; maple sugar, per pound, 25 cents; maple syrup, per gallon, \$2.00; hay, per ton, \$18 to \$24.

We have a little port-of-entry here, and formerly two men were employed to do this work, but now, I am told, there are nine, and one per-annum. This force must cost the country at least \$15,000 annually. Protection is expensive, and WE have to foot the bill.

AN OLD SUBSCRIBER.

Stanstead Co., Que.

Mine Royalty Right and Expedient

Editor "The Farmer's Advocate":

"Why should a royalty be imposed on the miner?" asks John Seabrook, in your issue of April 8th, and he goes on to argue that no royalty should be imposed. Let me take the same illustration as Mr. Seabrook uses, and try to show why a progressive royalty should be imposed, not on the miner, but on the product of the mines.

Each of the seven sons, investing his \$10,000 in farming property, has a fairly definite chance of earning a livelihood, with a reasonable expenditure of industry and common sense. Why? Because the agricultural possibilities of a given piece of land are more or less apparent to any man who knows something of practical farming. Risks there are, but they are reasonably well estimated, and more or less common to all engaged in the same business.

But consider the case of the other three brothers, who invest in mining property. Mr. Seabrook admits that the business of prospecting and mining is a game of chance, and he assumes that the first of the three brothers loses all his \$10,000; the second begins fairly well, but finally has to suspend operations; while the third strikes a rich vein, and makes a nice "profit." I have no quarrel with Mr. Seabrook's illustration, or his characterization of the miner's business, but

both seem to me to point undeniably to the wisdom of a progressive royalty. The fact is that there is no fairly constant proportion between the labor a miner expends and his return therefor. The business is a game of chance. One man may work hard and get nothing, while another does little, and reaps an enormous return. A progressive royalty does nothing more than even up matters a little, and makes the successful miner help his less-successful fellow workmen. It is a system of insurance, whereby those who lose are partly recouped by those who gain. Under private ownership of the mines, it is the only way compatible with justice. A progressive royalty is

not levied until the earnings attain a certain magnitude, and it increases in proportion to the "luckiness" of the miner. The miner who does not "strike luck" is none the worse, as the royalty does not touch him, while the man who does make a rich find is still amply rewarded for his labor, after all royalties are paid.

Moreover, it can scarcely be maintained that a man is entitled to all the treasure that may be beneath the surface of any piece of land he may have legal claim to. The right of ownership of all that lies beneath the surface of land has not yet been conceded to the individual, and I much doubt if the popular sense of justice will ever concede it. Private property in air, water, etc., has never yet been conceded, and is not likely to be. Similarly, one cannot concede unlimited private ownership of mineral resources. And it is certainly not in the public interest that a few should grow immensely wealthy by striking rich veins of ore, while the majority of miners lose money, and the general public gets no share of the "luck" which awaits the few.

Mr. Seabrook says: "If the farmer has a good crop, he does not care to give a royalty from it to the Crown. Neither should the miner care to pay it." If Mr. Seabrook will look into the question a little more closely, he will see that there is but the remotest analogy between farming and mining, and that his argument, therefore, fails. And even supposing that the alleged analogy did exist, the just policy would be to levy a royalty on the lucky farmer, as

well as on the lucky miner, rather than to abandon it in both cases. But, as a matter of fact, the analogy does not exist. The farmer ordinarily gets a good crop by good management, not by good luck, whereas the reverse is ordinarily the case in mining. Therefore, it is, that a progressive royalty on mineral output is both right and expedient. W. C. GOOD.
Brant Co., Ont.

Next Eastern Live-stock and Poultry Show, Ottawa, January 17th to 21st, 1910.

A largely-attended meeting of the directors of the Eastern Ontario Live-stock and Poultry Show was held in Ottawa on Wednesday, April 28th. Reports presented showed that the last exhibition was the most successful that has yet been held. At the last show, each department was well filled with exhibits of high quality, and the new department for horses attracted much attention, and received a great deal of favorable comment from visitors at the show. The attendance showed an increase of nearly one hundred per cent.

Peter White, of Pembroke, was re-elected president by acclamation, and John Bright, of Myrtle, vice-president. The next show will be held at Ottawa on January 17th to 21st, 1910.

It was decided to have three sections in each class of the dairy department, instead of two, as formerly. The sections to be for cow, 48 months and over; cow, 36 months, and under 48; and heifer, under 36 months. The ages of the dairy cattle will be computed from the first of August. The scale of points by which awards are made in the dairy department was changed to, 25 points for each pound of butter-fat, 3 points for each pound of solids not fat, and 1 point for each ten days in milk after the first thirty days; limit, 10 points. The dairy test will start at 9 p. m. on Friday, January 14th, and will be completed on Monday, January 17th, at 9 p. m.

Classes were added to the poultry prize list as follows: Black Wyandottes, Silver Unbearded Polands, and Golden Unbearded Polands. Sections for A. O. V. Fowls, and for Ducks were added to the Sale Class. When the entries in any sub-section of poultry number thirty or more, there will be ten money prizes, as follows: 1st, \$4; 2nd, \$3; 3rd, \$2; 4th, \$1.50; 5th, \$1; 6th, 50 cents; 7th, 50 cents; 8th, 50 cents; 9th, 50 cents; 10th, 50 cents.

The following will be poultry judges for the next show: L. G. Jarvis, Grimsby; R. Oke, London; Sharpe Butterfield, Windsor; Wm. McNeil, London; Geo. Robertson, Ottawa; C. F. Wagner, Toronto.

The revision of the live-stock prize list and the appointment of live-stock judges will be attended to at a later date by the Executive Committee.

Government Construction of Georgian Bay Canal.

To a large deputation which waited on him last week, urging immediate construction of the Georgian Bay Canal by the Dominion Government, or, failing that, by a private company, with Government guarantee of bonds, Sir Wilfred Laurier very wisely replied that he was in favor of the construction of this canal by the Government. At present, it had heavy undertakings on its hands, and demands upon the exchequer were large, but he assured the deputation that the Government would undertake this work when it was satisfied that the financial situation of the country warranted. With this assurance, the country has every reason to feel gratified. Private construction of this canal, even under Government regulation as to rates, is unthinkable. It must be accomplished as a public enterprise, and at the earliest practicable date. If the country is not now in a position to commence it, we can wait a few years. One consolation of such delay is that, with the annual progress in engineering achievements, the waterway will be liable to be constructed on all the ampler scale, and with all the more complete facilities, when it is done.

Enlarged Building for Winter Fair.

At a joint meeting of the Ontario Winter Fair Board and Guelph City Council, last week, arrangements were made for the erection of new buildings in accordance with suggestions from the Provincial Public Works Department. It is understood that the Ontario Horse-breeders' Exhibition in future will be held at Guelph, in conjunction with the Winter Fair. A large show arena and stabling accommodation will be provided.

It is being suggested to the Government from many quarters in the West that Dr. J. G. Rutherford, Veterinary Director-General and Live-stock Commissioner of Canada, should be appointed to the Board of Railway Commissioners, to fill the vacancy caused by the death of Hon. Thos. Greenway.

Huntingdon, Que., Notes.

It does not do to become poetical in farm practice when the weather has to be considered. My poetical spring of last writing has become decidedly wintry, as to-day (April 30th) it is snowing with a vengeance. A week ago, the prospects of grass for our young stock by May 1st was most favorable, but the cold, backward weather of the past week, and this tail of wintry weather betokens another week of stable feeding. This will be a hardship to many, and shorten up the scant supply of feed for the cows in milk and the work horses. A considerable supply of hay has been brought in lately, and selling at \$14 to \$15 per ton, mostly in small lots, to tide the stock over until pasturage is ready.

The large acreage of land plowed last fall leaves little to be done now, and farmers are ready to get on the land, other spring work being well advanced. On the higher lands, some seeding has been done, and in a few days, with favorable weather, seeding would have been general. The onfall of snow, sleet and rain of to-day will retard seeding operations almost another week.

New seeding is a partial failure, no doubt owing to the intense drouth of last fall. The early drilling in of about four or five pecks of oats per acre, and the usual amount of grass and clover seed, is being practiced here, with favorable results, when done early in the season. In fact, these fields should be the first attended to, so that the oats would be ready to cut, being in the milk stage, at the same time as the hay. This usually gives a lot of splendid feed for stock.

Cheeseries and creameries are now in operation, and taking in a larger amount of milk than was anticipated. The condensary has arranged for a full supply: in fact, so much milk was offered, they had to refuse new patrons. The Montreal milk market has been somewhat unsettled. While 15 cents is the general price, and is being paid by the largest and best dealers, yet a considerable amount of milk is going in from new shippers at 14 cents per gallon. Cream is being sold at about 25 cents per pounds of butter-fat. Through the Eastern Townships, some creameries are putting in pasteurized cream in large amounts, which is having the effect of cutting into the individual farmer's cream trade.

Cows are selling high, considering that prices of dairy products are lower than last year at this time. W. F. S.

No Trees Free for Wind-break Planting.

The Forestry Department at the O. A. C., Guelph, is sending out trees for reforestation. Many do not fully understand the nature of the work of this Department, and send in applications for various kinds of materials. During the first two years of the distribution work, Norway spruce were sent out for wind-breaks along fence lines. The distribution of Norway spruce for this kind of work had to be discontinued.

Attention is called to the fact that the Forestry Department furnish trees only for plantation work on waste land, or land which is undesirable to till for annual crops. No fruit trees, ornamental trees or shrubs, trees for town or village lots, Norway spruce for hedges or wind-breaks, will be supplied by this Department. As may be inferred from Bulletin 155, the planting material sent out under this system is unfit for roadside or ornamental planting, but is intended to make forest plantations.

Applications cannot be received for this spring's distribution since April 30th, as the supply is exhausted, and the shipping season was over the first week of May. Those having waste hill-sides, sandy or gravelly waste spots on the farm, or land which is undesirable to till for annual crops, should apply early for the 1910 distribution. Circular and bulletin will be sent to any who are interested in this question.

To Curtail Charter Trafficking.

To prevent wholesale trafficking in railway charters, which are obtained almost by scores from Parliament each session, but of which only a very small percentage eventuate in actual construction of the lines authorized, Senator T. O. David proposes to do away altogether with the Railway Committees of the Commons and Senate, and place the incorporation of railway companies on the same basis as now obtains in the case of industrial companies seeking Federal charters. His bill provides that any company seeking a railway charter may obtain one through the Secretary of State's Department, but the company applying must first satisfy the Railway Commission as to the bona fides and need of undertaking. The bill also contains a provision that a deposit shall be made with the Government sufficient to cover the cost of the right of way and all expropriation proceedings, and if the road is not gone on within a specified time, five per cent. of this deposit is to revert to the State.

One Last Word on Seeds.

Owing to the very backward season, great importance attaches to the kind of seed we sow. The large, plump seed will produce the strong, vigorous plants that will catch up when the weather conditions become favorable for growth. While we are waiting for the land to dry, would it not abundantly pay us to put our seed grain through the fanning mill once more? Put on plenty of wind and suitable screens to take out all the light, chaffy seeds, and even the small plump ones. They will make good meal, but they are not so good to produce healthy, strong plants. Then, would it not pay to hand pick a few bushels of oats, barley, wheat and peas, in order to get our seed supply purer? In this way, all the wild oats, wild mustard, wild tares, purple cockle, cow cockle, etc., could be removed, along with the other kinds of grain which have in some way got mixed with the seed. I am the more convinced that this would pay as I go through the Province and see the demand at satisfactory prices for seed grain of any kind which can be guaranteed pure. T. G. RAYNOR.

Export Trade Via Vancouver.

An influential deputation, representing the grain interests of Alberta, waited on Sir Richard Cartwright last week, to present recommendations looking to the development of the Pacific export trade, and improved transportation facilities via the Vancouver route. It was claimed that the lower rates now being given by the C. P. R. on west-bound grain from Alberta make it possible to export wheat for the British market via Vancouver and Cape Horn more cheaply than via Montreal. The deputation asked for the establishment of Government terminal elevators at Vancouver, and for amendments to the Grain Act, or, in lieu of that, orders-in-council to further facilitate the shipment of grain via the Pacific route. L. P. Strong, general manager of the Alberta-Pacific Elevator Co., said that, during the season when navigation on the Great Lakes was closed, Alberta farmers, on the present rates, had an advantage of six cents per bushel on shipments of wheat to Liverpool via Vancouver, an advantage that would be increased when the Panama Canal was completed. Sir Richard promised favorable consideration.

Good Dairy Outlook.

Indications point to a good dairying season in 1909. While short pasturage and scarcity of water seriously affected the supply of milk during the latter part of the season of 1908, and resulted in a considerable decrease in the production of cheese and butter in the main dairying districts, there was a good stock of fodder laid in, and, with the mild winter, experienced, cows are reported to have come through in good condition, and will, for the most part, freshen rather earlier than usual, according to advices received by the Dairy Commissioner's Branch. Cows are in good demand, and bringing good prices. Silos have become almost general in the principal dairying districts.

Late Snowfalls.

Belated winter storms have put a stop to operations on Canadian fields in a few districts, and delayed them in others, and in some parts were severe enough to cause alarm for crop prospects in 1909. Last week, extremely low temperatures prevailed throughout Western Canada, while in the Eastern Provinces mother earth was covered with a mantle of snow ranging in depth from an inch to a foot. The central part of south-western Ontario, from midnight, Wednesday, until 9 a. m., Thursday, had a twelve-inch fall of heavy, soft snow.

Winnipeggers are putting forth every effort to make the Winnipeg and Selkirk Centennial Exhibition, to be held in 1912, one of the best ever held on the continent. Representatives are touring the West. Last week a number of Western members of the Dominion House had an informal interview with Hon. Sydney Fisher, and asked for Federal assistance.

The Winnipeg Industrial Exhibition prize list shows a total of \$40,000 in prizes, with competition open to the world in most departments. In addition to the regular live-stock display, grain exhibit and general attractions, there will be an agricultural-motor competition and a buttermaking competition. Na Vassar Ladies' Band is the chief musical attraction. The dates are July 10th to 17th.

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MARKETS.

Toronto.

LIVE STOCK.

At West Toronto, on Monday, May 3rd, the receipts were 65 cars, consisting of 1,436 cattle, 79 hogs, 11 sheep, 35 calves. Quality was good. Export steers, \$5.50 to \$6.05; bulls, \$4.25 to \$5; prime picked butchers', \$5.25 to \$5.50; loads of good, \$5 to \$5.25; medium, \$4.60 to \$4.90; common, \$4 to \$4.50; cows, \$3.60 to \$4.60; short-keep feeders, \$5 to \$5.35; milkers, \$4 to \$6; calves, \$3 to \$6 per cwt.; sheep, \$4 to \$5.27; yearling lambs, grain fed, \$7.25 to \$8 per cwt.; common, \$5 to \$6 per cwt.; spring lambs, \$4 to \$8 each; hogs, fed and watered, \$7.50, and \$7.25, f. o. b. cars, country points.

REVIEW OF LAST WEEK'S MARKET. Receipts at the City and Union Stockyards last week were again light, which is accounted for largely by there being little or no demand for export cattle, there being no space available on ocean vessels. There was a total of 221 cars, consisting of 3,422 cattle, 4,837 hogs, 629 sheep, 824 calves, 127 horses.

Trade was slow at the commencement of the week, but at the latter part it was brisk, at a little higher prices, especially for the medium butchers'.

Exporters.—Not many were offered, only two or three loads, and the highest price quoted was \$5.75, but real first-class exporters would bring around \$6. Export bulls sold at \$4.25 to \$4.65, but nearly all of them were bought for butchers' purposes.

Butchers.—Prime picked lots sold at \$5.30 to \$5.55; loads of good, \$5 to \$5.25; medium, \$4.60 to \$4.90; common, \$4 to \$4.50; cows, \$3.50 to \$4.50.

Stockers and Feeders.—Few of good-quality feeders were on sale, and all such, with a little flesh on them, were taken for butchers' purposes. Harry Murby, the largest wholesale dealer in stockers and feeders, stated that he had many orders to fill, but could not get them at prices that farmers were willing to pay. Prices were as follows: Best feeders, 900 to 1,000 lbs. each, \$4 to \$4.75; steers, 800 to 900 lbs., \$3.75 to \$4; stockers, 500 to 700 lbs., \$3 to \$3.50.

Milkers and Springers.—Receipts light. Demand good; greater than supply, with prices firm, at \$30 to \$60, with a few at \$65 each.

Veal Calves.—Receipts large. Quality generally poor; few good calves being marketed. The bulk of those offered were of common quality and reflect little credit on the farmers that raised them. Prices ranged from \$3 to \$5.50 per cwt.

Sheep and Lambs.—Receipts light; market steady, at about the same prices. Ewes sold at \$4.50 to \$5 per cwt.; rams, \$3.50 to \$4.25; yearling lambs, grain-fed, \$7 to \$8 per cwt.; common, yearlings, \$5 to \$6 per cwt.; spring lambs, \$3 to \$6 each.

Hogs.—Receipts moderate. Prices firm, but unchanged. Selects, fed and watered, \$7.50 per cwt., and \$7.25, f. o. b. cars at country points.

Horses.—J. Herbert Smith, manager at the Union Horse Exchange, reports a fair to good week's sales, having sold 125 horses, and could have disposed of more. Mr. Smith sold a pair of top-notch drafters, 1,700 lbs. each, at \$525; also one pair carriage horses that took prizes at many points in Ontario last season, for \$150. Buyers were present from many parts of Ontario and Montreal. The Exchange shipped one carload to Montreal and one to Haileybury. Prices ranged as follows: Drafters, \$160 to \$200; general-purpose, \$130 to \$165; expressers, \$150 to \$185; drivers, \$100 to \$160; serviceably sound, \$35 to \$80.

BREADSTUFFS.

Wheat.—No. 2 red, white, or mixed, \$1.17 to \$1.18, at outside points. Manitoba—No. 1 northern, \$1.23½; No. 2 northern, \$1.20½; No. 3 northern, \$1.18½, on track at lake ports. Rye—No. 2, 72c. to 73c., outside. Peas—No. 2, 96c. to 96½c. Oats—No. 2 white, 45c. to 46c.; No. 2 mixed, 45c. to 45½c., at outside points. Barley—No. 2, 61c. to 62c.; No. 3 extra, 58c. to 59c.; No. 3, 56c. to 57c. Buckwheat—No. 2, 63c. to 64c. Corn—American yellow No. 3, 79c. to 80c.; Canadian, 74c. to 75c., Toronto freights. Flour—Ontario, 90 per cent. patent, \$5 to \$5.10; exporters bidding \$4.60 to \$4.70; Manitoba first patents, \$6 to \$6.40, at Toronto; seconds, \$5.50 to \$5.90; strong bakers', \$5.30 to \$5.40.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$10.50 to \$10.75. Straw—Baled, car lots, track, Toronto, \$7 to \$7.50. Bran—Car lots, in sacks, Toronto, \$24 to \$25. Shorts—in sacks, car lots, Toronto, \$25 to \$26. Manitoba meal, \$28.50 per ton. Flax-seed meal, pure, \$3.75 per cwt.

FRUIT AND VEGETABLES.

Apples.—Prices easier, on account of Southern fruits being plentiful. Northern Spies, \$4.50 to \$5 per bbl.; Greenings, \$3.50 to \$4.50; Russets, \$3 to \$4. Potatoes—Market easy; car lots, on track, Toronto, in buyers' bags, 85c. to 90c.; onions, \$1.30 to \$1.45 per bag; turnips, 35c. per bag; parsnips, 50c. to 60c. per bag; red carrots, 3c. to 40c. per bag; beets, 40c. to 50c.; cabbage, new, \$2 to \$2.50 per crate.

COUNTRY PRODUCE.

Butter.—Receipts fair. Prices about steady. Creamery pound rolls, 26c. to 27c.; creamery solids, 21c. to 22c.; separator dairy, 24c. to 25c.; store lots, 19c. to 21c.

Eggs.—Market stronger, at 19c. to 20c.

Cheese.—New, 13c. for large; 13½c. for twins. Old cheese, firm, at 14c. for large, and 14½c. for twins.

Honey.—Market unchanged. Extracted, 10½c. to 11c.; combs, dozen sections, \$2.75 to \$3.25.

Poultry.—Turkeys, 20c. to 26c. per lb.; last year's chickens, 18c. to 22c.; spring chickens, 60c. per lb.

HIDES AND WOOL.

E. T. Carter & Co., 85 Front street East, Toronto, have been paying for No. 1 inspected steers, 60 lbs. and up, 10½c.; No. 2 inspected steers, 60 lbs. and up, 9½c.; No. 1 inspected cows, 9½c.; No. 2 inspected cows, 8½c.; country hides, 8c. to 8½c.; calf skins, 12c. to 14c.; horse hides, No. 1, \$2.50 to \$2.75; horse hair, per lb., 30c. to 31c.; tallow, 5c. to 6½c.; sheep skins, each, \$1.25 to \$1.40; raw furs, prices on application.

British Cattle Markets.

London. Canadian cattle 13c. to 13½c. per lb.; refrigerator beef, 9c. to 9½c. per lb.

Montreal.

Exports of cattle from the ports of St. John, N. B., and Portland, Me., for the two weeks ending April 17th, amounted to 2,281 head. Demand for ocean freight space from the port of Montreal shows a considerable improvement of late, and as a result freight rates have strengthened considerably, being now 27s. 6d. to 30s. for Liverpool, for June, May having all been taken. Most of the May space for London has been taken at 2s. 6d. less than the above figures, and some Glasgow space at 30s. Demand for Manchester space is very light.

Owing to the improved demand from exporters for choice animals, as well as to the better out-of-town inquiry and the increased requirements of local butchers, coupled with the light supplies, the market for cattle showed much strength here, and prices registered fractional advances. Some splendid Ontario stall-fed steers—large, and fat—sold at 6c. per lb., but the run of finest sold at 5½c. to 6c. Fine stock sold at around 5½c., and good at 5c. to 5½c. per lb., while medium ranged from 4½c. to 4¾c., and common from 3c. to 3½c. Fat Manitoba cows brought 4½c. to a fraction more, in loads, bulls being about the same figures, though showing a wider range. Supplies of sheep and lambs were light, and demand was good, prices ruling firm, at 6½c. to 7c. per lb. for yearling lambs, and 5c. to 5½c. per lb. for old sheep. Spring lambs were scarce, and firm in price, selling at \$3 to \$6 each. The supply of calves was large, and the quality none too good. Prices were \$2 to \$6 for fair to good. Supplies of hogs on the local market were none too liberal, and as a result prices were firm, being 8½c. to 8¾c. per lb.

Horses.—Dealers reported a continued good demand from both out-of-town sources and local sources, the latter being the more active. Prices continued unchanged, as follows: Heavy draft, weighing 1,500 to 1,700 lbs. each, \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$185 to \$240 each; small or inferior horses, 1,000 to 1,100 lbs., \$100 to \$150 each; and fine saddle or carriage animals, \$300 to \$500.

Dressed Hogs and Provisions.—The tone of the market for dressed hogs continued very firm, in sympathy with that for live, abattoir-dressed, fresh-killed being 11½c. to 11¾c. per lb. Barrelled pork was only in moderate demand, and prices held steady, at \$21 to \$25.50 per bbl., according to quality. Everything considered, there was a good demand for most lines of provisions, and the tone of the market was generally firm.

Potatoes.—The market for potatoes continued very strong, and the tendency of prices was higher. It is said that the States are taking considerable away from New Brunswick. Shippers in New Brunswick asked \$1.10 per 90 lbs. for Delawares, and \$1.15 for Green Mountains, carloads, track, here, other quality of potatoes costing \$1 to \$1.10. These were resold, on track, at an advance of about 5c., to which 10c. is added for bagging and delivering into store.

Maple Products.—Receipts have been light of late, and the quality poor, the second make being very inferior. This could be had at 1c. to 5c. per lb., for syrup, although the best syrup would cost 5½c. to 6½c. per lb. Sugar ranged from 8c. to 10c. per lb.

Eggs.—The market held very firm and buyers were not able to secure any more in the country at less than 17½c. west, and 18c. east. There was a good demand for everything offering, dealers requiring them for putting away in cold store. Straight receipts were quoted at 20c., wholesale, selects being 21c. to 22c., and No. 1 about 19c. to 20c. per dozen.

Butter.—The trade was slightly exercised over the advance in the market for new creamery. In the Townships, end of week before last, prices ran to 24½c. to 24¾c., making the goods about 25c. to 25½c. here. This was for pasteurized creamery, being about 1c. more than the ordinary makes of equal quality. From the above figures, prices ranged down a cent or more, according to quality. Fresh rolls were about 19c. to 20c., and held creamery 18c. to 20c. per lb. The strength of the market for new creamery was due to the fact that supplies were too light for demand, although the make is rapidly increasing and will soon be

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equal to the demand, when, it is thought, there will be a break in prices.

Cheese.—The market opened up at 11c. to 11½c. for Ontarios, at country points, and at about 11½c. for Townships. Holders in this market demanded 12c. for their best goods—new makes—but they could not get that figure for export. The tone seemed a little on the easy side.

Grain.—The market for oats was steady, as was also that for peas, buckwheat and barley, demand being light. Quotations were unchanged.

Flour.—Owing partly to the refusal of other millers to follow, and partly to the decline in wheat, millers who were asking the extreme prices recently quoted came down to a level with competitors. Hence, Manitoba first patents were quoted at \$6.10 per bbl., in bags, seconds being \$5.60, and strong bakers' \$5.40. Ontarios, however, were rather firmer than before, patents being fully \$5.75 per bbl., and straight rollers \$5.50 to \$5.60.

Millfeed.—The market was steady, demand for bran and shorts being exceedingly active, at \$22 to \$23 per ton for Manitoba bran, in bags, and \$1 more for Ontarios. Shorts, either Manitobas or Ontarios, \$24 to \$25. Cottonseed and oil cake were, nominally, quoted at \$32.50 to \$35 per ton.

Seeds.—Dealers reported a very active demand for seeds of all kinds. Quebec farmers were unusually late this year in sending in their last season's crop of seed, but dealers think it has now all been received. Meantime, they have experienced a good demand, at \$13 to \$14 per 100 lbs., for red clover, \$16 to \$18 for alsike, and \$5.25 to \$6.50 for timothy, bag lots, Montreal.

Hides.—The market showed no change. Hay.—The market was unchanged at the previous week's prices.

Cheese Board Prices.

Cheese boards in some districts are once more in operation. Prices last week ranged from 11½c. to 11¾c. At Belleville, 310 colored and 222 white were offered. The prices at different points were: Kingston, Ont., 11½c.; Belleville, Ont., 11½c.; Winchester, Ont., 11½c.; Picton, Ont., 11½c.; Napanee, Ont., 11 5-16c.; London, Ont., 11½c.; Cornwall, Ont., 11½c.; St. Hyacinthe, P. Q., 11 1-16c. bid for cheese, and 23c. for butter, but no sales; Watertown, N. Y., 13c.

Chicago.

Cattle.—Steers, \$5 to \$7; cows, \$4 to \$5.75; heifers, \$3.25 to \$6; bulls, \$4 to \$5.25; calves, \$3 to \$7.35; stockers and feeders, \$3.30 to \$4.95.

Hogs.—Choice heavy shipping, \$7.35 to \$7.40; light mixed, \$7.10 to \$7.20; choice light, \$7.20 to \$7.25; packing, \$7.20 to \$7.30; pigs, \$5.25 to \$6.75; bulk of sales, \$7.15 to \$7.25.

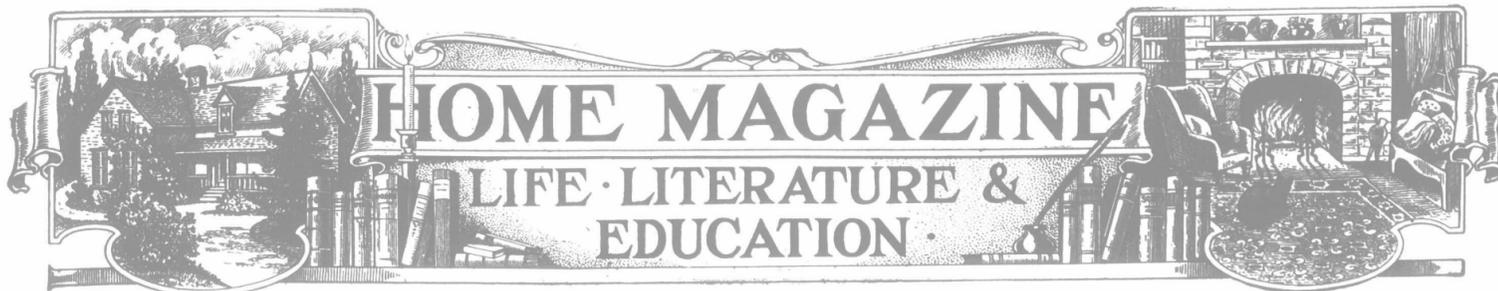
Sheep and Lambs.—Sheep, \$4.25 to \$6.75; lambs, \$5.50 to \$7.55; yearlings, \$5.50 to \$7.25.

Buffalo.

Cattle.—Prime steers, \$6.30 to \$6.65. Aves, \$6 to \$8.

Hogs. Heavy, \$7.65 to \$7.70; mixed, \$7.60 to \$7.70; Yorkers, \$7.30 to \$7.60; pigs, \$7.15 to \$7.25; roughs, \$6.40 to \$6.65; stumps, \$7.25 to \$7.55.

Sheep and Lambs.—Lambs, \$4.50 to \$7.75.



The budget introduced into the British House of Commons by the Chancellor of Exchequer, Mr. David Lloyd-George, on April 29th, includes some of the most daring innovations ever brought forward in the history of the British Parliament. It proposes to make up the deficit of nearly £16,000,000, induced by the amount necessary for old-age pensions and building of Dreadnoughts, chiefly by increased taxes on liquor and accumulated wealth. The tax on unearned incomes will be increased from 2 pence to 1 shilling 2 pence on the pound, and that on earned incomes of over £2,000 will be raised by 1 shilling. Upon incomes of over £5,000 a supertax will also be imposed; also taxes on urban, undeveloped land, undeveloped mines, etc. "We ought to avoid taxes on the necessities of life," said the Chancellor, "and tea and sugar are necessities of life." Hence, the expected rates on these commodities will not be realized. Upon whiskey, however, the duty will be increased by one-third, and that on tobacco by 8 pence per pound. There is also an increased tax on motor cars, while that on all the transactions of the Stock Exchange will be doubled. . . . In addition, many new measures for the benefit of the working classes are foreshadowed, among them a State insurance against loss of employment by deserving workmen, and a grant to persons earning under £500 a year of a special new abatement of £10 for every child under 16 years of age.

Naturally, the wealthy classes of all kinds, the brewers, distillers, motor manufacturers and stock-exchange speculators are practically all in arms against the budget, which, Sir Frederick Banbury declared, includes "every fad on the face of the earth." The Labor Party alone gives praise. But the Chancellor, with his keen vision, has not taken the step without counting the cost. He has foreseen the opposition, tremendous as it is, but he has dared to be a man, and to free himself forever from the ranks of the mere parasite. "He has kept faith with the nation."

The Governors-General sent to Ottawa may not at all times meet the unqualified approbation of this democratic Dominion, with its youthful ambitions and leanings towards common sense, even to the undoing of conservatism, but none but golden opinions are likely to be held in regard to the present Governor, and the way in which he has filled the office.

The secret, perhaps, of Earl Grey's popularity is his genuine interest in humanity. He is no snob; he possesses a goodly share of sound, practical sense; he is not selfish; and he is not lazy. Even in England, that land of aristocracy, he took an interest in the common folk, and exerted himself to bring about measures for their good. In Canada he has broader opportunities, and nothing escapes him. He considers it more beneath him to investigate or regard to securing better home for workmen, or to advise a more general care as regards ventilation (he sees too many windows shut, he says, as he travels from place to place), than to form plans for a national policy for this land, in which for a little time he stands as king. "Earl Grey has told the Canadian people," writes a Canadian

correspondent to London Times, "that the highest wisdom consists not in the frenzied or restless pursuit of wealth, but in the foundation of character. He has declared that the chief immediate requisites for Canada are: (1) Such measures as will lay firmly and securely the foundations of a trade with the Orient; (2) as will perfect our system of transportation east and west, and secure to Canada the full benefits of her geographical position; and (3) as will increase the supply of labor."

The wisdom of Earl Grey's conclusion that, for the immediate prosperity of Canada, it is necessary to build up a trade with the Orient, would seem to be borne out by a recent article in the Review of Reviews, written by a gentleman who, through long residence in the Empire of China, knows it thoroughly. China, he states, is becoming so fully alive to the importance of her resources, and to the necessity of developing them, that it will not be long until she has entered into keen trade competition with other countries. Whereas, thirty years ago, the single railway in the country, and that built by foreigners, was torn up out of superstition, there are now over 1,000 miles laid and operated by Chinese, while as many as 37,000 tons of iron have been exported by a Chinese company in a single year. China is bent on Occidentalization, and the greatest

children, thousands of whom were burned to death in their homes, or killed on attempting to escape.

The Moslem believes that the killing of a Christian is a virtuous act, insuring for him who kills additional joys in the future life. He also is a fatalist, believing that the time of death is irrevocably set for every man, and that it can neither be incurred by rank exposure to it, nor avoided by ever so much care. His religion, therefore, makes him a most formidable agent of destruction of the most devilish order, and religion only could exert such a power over men as far removed from the natural savage as is the Moslem—men who wear woven clothes, and live in houses and cities, who cultivate land and carry on manufactures, who possess an organized system of Government and commerce, and worship.

No people under the sun need the beneficent influence of Christian religion more than the vast horde forming the ranks of Mohammedanism, and no people is harder to reach with such influence. For the Mohammedan has already heard of the Christ, but he believes there is one yet greater, whose words and commands are to be taken, rather than His. "There is but one God, and Mohammed is His prophet."

Local optionists appear to be taking up in earnest the matter of providing first-class accommodation for the travelling public. The latest news in regard to this comes from



"A perfect day whereon it is enough for me Not to be doing, but to be."

statesmen are behind the movement. As a result, she is introducing with amazing rapidity Western telegraph, telephone, postal and military systems; mines are being promoted, the sale and cultivation of opium suppressed, and education, on Western methods, encouraged in every Province.

The marvellous power which religion, even if of a kind bordering on that of the heathen, exerts over human kind, is again exemplified by the recent massacres in Adana and the surrounding towns and villages of Asia Minor, where the death-roll for the past few weeks records an estimate of 30,000 men, women and

the Village of Wellington, where the Citizens' League have applied for a Government charter for the "Wellington Hotel Co., Limited," and have purchased the Hotel Wellman property, valued at about \$15,000. The hotel, which will be known as the "Hotel Alexandra," will be renovated and re-furnished, and will be run on strictly temperance lines.

Reply to "Nemo."

Editor "The Farmer's Advocate": In your issue of April 22nd I see that "Nemo" takes exception to my article of April 1st. Now, in the first place, I would advise Nemo to hunt up that issue of "The

Farmer's Advocate," put on his spectacles, and read the article again, then possibly he may be able to see where he has misrepresented me. It certainly would have been presumption on my part to have accused "Nemo," or any of his family, of being drunkards, not having any personal knowledge of them whatever. What I did say was this: "If 'Nemo' were a drunkard, or one of a drunkard's family," etc. It makes all the difference in the world whether that little word IF is put in or left out. I have no doubt but that "Nemo" and his family are quite respectable, temperate people, but I have not seen anything yet in either of his articles in condemnation of the liquor traffic. A man must be either on one side or the other, and if he is not willing to do something, and make sacrifices, if necessary, in the cause of temperance, he has no right to consider himself a temperance man. We do not claim that local option will stop all drinking, but it will stop some of it; it practically does away with the open bar and the treating system. Of course, old toppers will sneak in at the back door, but respectable people will not descend to anything like that, and it takes the temptation out of the way of boys and young men.

If "Nemo" thinks we are justified in carrying on an abominable liquor traffic in this country, simply to provide accommodation for travellers, he is very much mistaken. What I objected to in "Nemo's" first article was the slur which he cast upon temperance workers and preachers.

Now, I am not one who goes around the country blowing my own horn, but I have no doubt but those who know me will be able to judge whether my temperance principles are worthy of confidence or not.

GEO. H. LAMB.

South Perth, Ont.

Another Opinion.

Editor "The Farmer's Advocate":

Your correspondent, "Nemo," is, evidently, like a good many others, not very well informed on the great temperance reform. He says "Local option may be all right, but around here it is the means of producing many proficient liars and sneaks." We will suppose "Nemo" has a hog fenced into a lot of rather barren pasture, while just over the fence is another lot of most luxurious hog-feed. That hog will quite readily consent to being a liar, sneak, or any other mean thing, if it can only get beyond that fence. Place the liquor party in the place of that hog, and the analogy is complete. In many districts in Ontario the people have found it to their advantage to fence the liquor "hog" out of the rich license "pastures," and not allow him to tear and wallow around among the rich heritage of boys and girls that is ours. The liquor "hog" has got very mad about this. He will readily degenerate into a "liar" or a "sneak," if only he could get into such rich pastures again; but the people of those districts are usually content to allow him to fume and fret, so long as their heritage is protected. It is the liquor "hog" that produces the liars and sneaks, and not local option. Anyway, it is much better that a few liars and sneaks should be produced, than a few old toppers should be compelled to sneak around back alleyways, and down dark cel-

lars, in fear of detection, than that the gilded saloon should be allowed to flaunt its temptation before every young man who may pass.

"Nemo" insinuates that more liquor is drunk under local option than under license; that brewers and distillers are doing a more flourishing business than ever. Without burdening your space with facts and figures to disprove that oft-exploded contention, I will content myself by pointing to the mortal dread with which the liquor party regard any form of prohibition; and, while sneeringly contending that prohibition does not prohibit, that more liquor will be drunk under local option than under license, they proceed to subscribe a good fat campaign fund to fight local option, to reduce the amount of liquor drunk, presumably. Wonderful temperance reformers!

"Nemo" objects to "G. H. L." accusing him of being a drunkard. I wouldn't have thought of accusing him of being a drunkard. In all probability, if himself or family had been stung by the traffic, he would be only too glad to welcome any help to overcome the depraved appetite of himself or friends. The drunkard is not the most formidable opposition that temperance reformers have to contend with. It is rather the arm-chair moralist, like "Nemo," who has never been affected in person by the traffic, who sneers and scoffs at the heroic efforts of temperance "fanatics," but who will not lift a finger to lessen the blight of strong drink.

I wonder if it ever occurred to "Nemo" to think of the advancement and progress of human history that is due directly to the enthusiasm of "fanatics." Practically every pioneer who has blazed the trail in religion, science, art or commerce for others to follow in, has been dubbed a "fanatic," and has had to contend with all sorts of sneering opposition from arm-chair moralists like "Nemo," who were only too ready to reap the benefits of their self-sacrificing toils when their "fanaticism" had finally been crowned with success.

Temperance reformers may rest assured they are on the right track, when they can invoke the opposition of men like "Nemo." I remain, sir, yours, for the overthrow of the liquor traffic. J. D. TAYLOR.

Pleasure in Labor.

A writer in New York Independent remarks: "If you will examine the better sort of life, you will find that pleasure constitutes the better half of it, including reading, news-gathering, the arts, and now, more and more, direct labor."

It is to the last phrase of this statement that we desire to draw especial attention, viz., that "direct labor" constitutes one of the chief pleasures of life. This is true. There never was a time when direct labor, manual, as well as mental, was so widely recognized as good for both body and soul, as at present.

The time was when a life of do-nothingness—at least, of easy pleasure—was the general idea of a desirable existence. To-day the viewpoint has shifted. At the present time, some of the richest men, men who could afford to do nothing, are among the hardest workers, while even the idly rich feel that they must do something strenuous. They must motor, or take trips to Europe, or go mountain-climbing, or have some especial charity or estate or manufactory in which to be interested, even though hiredlings do the work. By and by, they also will learn to find "pleasure" in vigorous labor of hand or brain, and will scorn to spend lives of idleness.

In the past, too, there was a general impression that brain-workers should be brain workers only, and nothing else. To-day, the tendency of these men themselves is to find relief and change, in some form of manual labor; hence, we find the clergyman or the physician making arts and crafts furniture in his spare

time; the bookkeeper glorifying in his vegetable garden; the retiring merchant looking to a "place" in the suburbs.

How much of this new attitude towards labor is due to the initiative of a few minds, which have churned the matter into the organization of societies, and the introduction of technical-training institutes, it would be impossible to estimate. For several years, Arts and Crafts societies, inspired by the teachings of William Morris and John Ruskin, have been in existence in Europe and the United States. More recently they have penetrated Canada, and though as yet comparatively little heard of, their influence may be detected in the gradual spread of arts-and-crafts houses, hand-made furniture and homespun.

For several years, too, technical institutes have been in existence—the Pratt Institute, of New York, and Armour Institute, of Chicago, are familiar examples—and gradually the idea of technical education has spread, until it has taken form in the introduction of manual training and domestic science into every school of recognized position in the educational world. Closely following has come the movement for school-gardening and the teaching of agricultural principles—a venture which promises to be the most popular of all, because, perhaps, the most pleasant and most interesting.

All this cannot but have a tremendous influence in setting forth the dignity of labor. While, to some degree, an expression of the innate desire of healthy man for useful activity, such movements also lead. Little by little they will demonstrate the "pleasure" of actual work. Then will the line between white hands and work-hardened hands, merely because of that distinction, fade gradually away. The mental worker will be a manual worker, also, and the manual worker will realize that he must be a mental worker as well.

This is the idea which Tolstoi has so long, and with such infinite pleading, advocated. "If the question had been put thus after I had repented," he cries, "What have I, so ruined a man, to do?" the answer would have been easy: First of all, I must try to get my living honestly—that is, learn not to live upon the shoulders of others; and, while learning this, and after I have learned it, to try on every occasion to be of use to men with my hands and with my feet, as well as with my brain and my heart, and with all of me that is wanted by men."

Tolstoi has not been heeded so much, perhaps, in his own day, as he may be, upon some points, at least, in the future.

Current Events.

The New Brunswick Legislature has defeated the bill to extend the franchise to widows and spinsters.

The Archbishop of Rupert's Land, the Most Rev. Samuel Pritchard Matheson, has been chosen as Primate of all Anglican Canada.

Ontario now has armorial bearings, approved by Herald's College, and authorized by the King. The design of the Coat of Arms is the well-known shield, with a moose-deer and a red deer as supporters, and a black bear as crest. The motto is: "Ut Incepit Fidelis Sic Permanet"—"As loyal she began, so loyal she remains."

Abdul Hamid was deposed last week, and his brother, Mehmed Reshad Effendi, who asserts himself to have been ever a "convinced and ardent supporter of the cause of enlightenment, liberty and progress," has been made Sultan of Turkey in his place. Abdul Hamid's life will be spared, but the Young Turks consider him too dangerous to be left

at liberty, and he has been sent to a small country-house in Salonika, where he will be kept practically a prisoner. On April 29th, his second eunuch, Nadir Pasha, a member of his private Cabinet, was hanged, and already the death of 250 fellow-conspirators has been decreed.

Hope's Quiet Hour.

Your Father Knoweth.

Your Father knoweth what things ye have need of.—S. Matt., vi. 8.

"I the Lord, am with thee,
Be thou not afraid!
I will help and strengthen.
Be thou not dismayed!
Yea, I will uphold thee
With My own right hand;
Thou art called and chosen
In My sight to stand.

Onward then, and fear not,
Children of the day!
For His word shall never,
Never pass away!"

Here is part of a letter I received from "An Anxious Mother" a short time ago: "I used to enjoy Christ's Presence every moment in my youthful days, but cares distract and doubt enters, and things do not seem to be what they used to. Heaven used to be to me a place of rest and a real place. Now one says it is a state, another something else. . . . Would you tell me, through 'The Farmer's Advocate,' some time in the future—as it is too much to ask you to write private letters—what you think of Heaven, if we will know each other and remember what relation each one was to us in this life? . . . Would you have a place in your prayers for one who needs the way made plainer and doubts removed; and for wisdom and grace to manage children, to train them in such a way as will make them a blessing in after years. I feel unequal to the task, though I used to enjoy training them. It would be the crowning point to see them grow up pure and good. But oh! if contrary, the remorse, for I would blame myself. . . . they want to play on Sunday after church, or stormy Sundays when we cannot all go to church. Do you think it right to allow children with any toys, or to run down on the ice with their sleighs? . . . Would you sometime write on what you think is the 'unpardonable sin'?"

"Anxious Mother" also asks my opinion of a book she has heard of, and wants to know whether it would be helpful to her children.

I will try to answer these questions to the best of my ability, beginning with the last two. The book may be helpful to some readers, but it seems to me to be extravagant and unnatural, and also I disagree entirely with its presentation of the great gift of Prayer. If prayer were intended by God to be a magical charm—a talisman like the famous lamp of Aladdin—it would be a terribly dangerous gift. We should be like spoiled children if everything we asked for were instantly put into our hands. That is not the way a wise parent would train children to be unselfish, brave and patient.

Then, as to the vexed question of the "unpardonable sin." I would simply refer my correspondent to God's own words on that subject: S. Matt., xii. 31, 32; Heb. vi. 4-6; x. 26-31; 1 S. John, v. 16. I don't profess to be able to explain the mystery of evil, but the whole Bible repeats the glorious refrain, "GOD IS LOVE," and no repentant prodigal can fail to find a Father's heart. One who in sinning against the Holy Ghost must be deliberately and wilfully unrepentant; for penitence is a proof that the Voice of the Divine Spirit within the soul is not finally silenced. God is our Father, and we are His loved children. We can be content with mysteries which are no mysteries to Him. We can walk safely over the most dangerous road if His hand is holding us up.

Then there is the question about Sunday amusements for children. The old law of the Sabbath was one of strict rules—though even that prohibited work, not play—but the Christian's holy day is not guarded with an iron wall, bustling

with "Thou Shalt Not"! No, it is guarded far more securely by an invisible law of love. Children are naturally religious; and, if Sunday is the day when the near presence of the invisible King is particularly impressed upon them, they will soon love to hear about Him and speak to Him as a great privilege. The day will gradually have an atmosphere of its own, if it is not artificially forced into a painful mould. One who makes Sunday a day of galling restraint is apt to drive young people into rebellious opposition. God loves to see the children happy, I am very certain of that; but they are never so happy as when they are hearing about Him and trying to serve Him in little ways which are within their reach. Leading is better than driving; principles are far more satisfactory than iron rules. Impress on their susceptible subconscious minds the reality of Christ's presence, and the glad truth that Sunday is the day when His people are especially allowed to meet Him in His Own House, and I don't think a little innocent play will hide Him from their clear eyes. If His Face is not very visible to yourself, ask Him trustfully to reveal Himself more fully to you, and to help you to lead others to Him. The surest way of being certain of Him yourself is to do your best for the spiritual growth of your fellows. No disciple can keep his spiritual vision keen if his religion is selfish. We must "give out" or we shall soon cease to "take in"; and we must "take in" more and more of God's Spirit, or we shall find that our efforts for other people are useless and we cannot give them any spiritual help. Prayer and service go together. Prayers which never blossom out into service will soon grow formal and lifeless. Service, which does not draw its very life and breath from God, is like a perfectly-appointed electric car without any live wire to supply invisible power.

You "feel unequal to the task of bringing up children to be pure and good." Of course you do! If the wisdom of all mankind were concentrated on the effort to make one seed spring up and bear flowers and fruit, it would fail. Man can plant the seed—any child can do that—and then he must stand aside and wait patiently while God does the rest. If we are so helpless in the physical world, it is not strange that we are incapable of making spiritual seeds spring up and bear fruit. But that is just why we can plant the seeds in joyful hope of a harvest. We are fellow-workers with Almighty Wisdom and Power. If we put in the seeds, looking to Him for increase, He is pledged to do His part. Why should we be faint-hearted because the result of our prayerful sowing is not immediately visible? Let us use common sense in soul-gardening, and not show distrust of our Master by constantly trying to see whether the seeds we have tried to plant under His direction have begun to sprout. He can see into the hearts which are hidden from us. The business of training souls is really His—though He has allowed us to have some small share in it—and surely He knows the special training each soul needs.

So I would say, give up being an "anxious" mother; trust your dear children in their Father's hands. He knows what things they and you have need of. Ask Him simply for wisdom to do your part, and never be anxious for fear He may fail to do His—that part which is so far beyond your power. Your Father knows what is needed, is not that assurance enough.

I am always glad to know something of the difficulties of our readers, and will always try to help them to the best of my ability. The other question asked by "Anxious Mother" must be left for another time. I can't dispose of a question about "Heaven" in a word or two, and space is limited.

DORA FARNCOMB ("HOPE").

The following is written by one of our readers, in reply to a question by "Enquirer":

"What Is a Saint?"

A "Saint" is a disciple, a friend or follower of Jesus Christ. This world would indeed be dull without such sanctified human beings. Some would ask what characterizes such and how to attain to such blessedness? Let us then start at the beginning; again some may

ask, what and where is that? The true beginning and foundation is the Rock of Life, which is Christ. He must be our Leader, right through our life in all things. He will lead and we must follow, if we desire true happiness, and that peace which passeth all understanding; what tongue cannot tell nor pen write; and even those who have tasted of that peace find it beyond their power to express. None will know loneliness when they follow their Master and obey His commands, for He says, "If ye love Me keep My commandments," then again, "Seek ye first the Kingdom of Heaven." This, I often think, is one of the first steps to sainthood. Here our Lord tells us plainly and simply what to do, if we (especially when young) seek first the Kingdom of Heaven, then our trade or occupation of life will be better chosen, and the right path in life taken. I sometimes think of the title of this page and wonder how many have a "Quiet Hour," just a few souls gathered together in quietness, with minds and hearts empty of all worldly things, and waiting patiently for communion with Christ, for has He not promised us "that where two or three are gathered in My Name, I will be in their midst." Is not this promise alone enough to encourage the faint and weary, "Ask and ye shall receive, knock and it shall be opened unto you, seek and ye shall find." There are no "ifs" or "mays" or "perhaps," for the apostle said Christ cannot lie. But, before we can become a saint, disciple, or friend, we must give up all and follow and obey our Lord. What must we give up? Everything and everybody that will hinder us from obeying His Holy Will, for when our Lord commanded a man to follow Him, the man replied, "Let me go bury my father," but Christ, knowing all men's hearts, replied: "Let the dead bury their dead." Christ is our pattern, He came on earth and took upon Himself the form of man, showing us by His life what was possible for all men, and further, He said, "Be ye perfect even as your Father which is in Heaven." Christ, and Christ alone, is our only Mediator and Advocate, by Him, and through Him only, can we reach the Father. Christ is not a hard Master, for whatever He asks us to forsake or give up, that will be a stumbling-block to our spiritual growth, you may be sure He will give in return much more than we gave Him. The Christian traveller, whose eye is turned towards Calvary, will have many spiritual and carnal battles to encounter, but if he steps carefully and slowly, with his eye always on his true Leader, he will reach his journey's end rejoicing. And, in conclusion, I should like to draw the reader's attention and solemn consideration to what our Lord and Saviour Jesus Christ, when personally on earth, taught the woman of Samaria. "God is a Spirit, and they that worship Him must worship Him in Spirit and in Truth." In other words, because He is Spirit, we must find Him in our spirit, that is to say, in our deeper consciousness, where "Spirit with spirit may meet." There He must be sought after "in Truth"; which means, in sincerity and reality, in accordance with His real nature, not with images or human intermediaries, but sincerely and directly as children seek their father. I was deeply touched when I read an article in this paper some time ago on "The Things that Jesus Would Not Do." I could truly sympathize with those 1,500 young people, bawling to do as Christ would have them do. I gave up my former trade for conscience sake. It seems hard at first, but oh! the joy after yielding to the command. I am afraid I have taken up too much space, and thought only to write a few lines. How I should like to plead and encourage those young people in their trying situations. It is astonishing how frequently truths are told in all trades; they seem part of the business. "But anything that is not of Truth is sin, and must leave an awful impression, for we read in II. Cor., xiii, 5, "Examine yourselves, whether ye be in the Faith; prove yourselves; know ye not your own selves, how that Jesus Christ is in you, except ye be reprobates." Then again there is much enlightenment in I. John, ii, 27. "But the anointing which ye have received by Him abideth in you; and ye need not that any man teach you, but as the same anointing teacheth you of all things, and

is Truth, and is no lie: and even as it hath taught you, ye shall abide in Him." Sask. LIVLANENG.
I am sure all our readers will be interested and pleased as they read the earnest words of our correspondent. It is always especially inspiring to have a man come out boldly and declare himself a whole-hearted Christian—perhaps because it is in some ways much harder for men than for women. D. F.

Saints.

It is usual for artists to give to their representation of so-called "Saints" a ring of light around the head. My idea of a saint is one whose life and actions diffuse such light that one cannot but "take knowledge of them, that they are constantly with Jesus." There are those who are born, and continue all their lives to be, almost without fault, and are humble-minded and pure-lived beings; but, to my way of thinking, these dear souls are not the help to their fellow-creatures that the men or women who are constantly fighting against sin, and Satan, in their own lives; fighting often against fearful odds; knocked down again, and yet again, and rising by the Helping Hand of the Master, with fresh strength, given by Him at their asking, to renew the fight. Sometimes this is the case in quite a young man or woman—really only boy or girl, and the victory is won before middle age. And again it is fighting and victory, all along the path of life. I do not think such people ever realize that they are at all saintly. A true saint, is a very humble-minded individual. Are there such? Aye—God be thanked! many, many such. Overcoming evil temper, patiently enduring trials and temptations, which would be no trials, or temptations, to another. Fighting daily, hourly; bearing bodily pain, rubs against sensitive feelings, contradiction, misunderstanding, perhaps all their lives. I could tell you of saints I have known, and know now. Of those who, putting aside the things that would make life pleasant and lovely to them, cheerfully take up the ugly, distasteful duties which lie to their hand, and do them perfectly—so perfectly that those around them never know or dream that there is any sacrifice made by them. A LOVER OF MANY.

The above is a very beautiful description of saintliness, though perhaps the writer might find—if hearts could be seen—that the "dear souls" described in the first part of the article are fighting as hard as the brave, self-sacrificing souls described in the end. Browning makes no mistake when he declares it is very hard to be a Christian. God knows it is not easy. D. F.

The Ingle Nook.

Coming down to the office this morning I noticed a new advertisement on the bill-board by the bridge, a new old advertisement, rather, for it represented the familiar figure of the old lady with the wooden shoes, who has proved such a good friend to the "Dutch Cleanser" people. Right well she has done her duty, even better than the pleasant darkey who has smiled so long over his bowl of Cream of Wheat. She is certainly "after" the dirt, and no doubt her little Dutch kitchen shines with a cleanness that would be almost painful if it weren't so sweet and wholesome.

Now, do you know what that old lady made me think of? Why, of the perennial struggle that all the housewives of the land will soon be waging against—(don't groan)—bacteria. I groaned inwardly at the very word. "How on earth," thought I, "am I ever going to bring that old subject up again? Year after year, we have preached about bacteria. Perhaps some of the readers, at very sight of the word, will skip the whole thing. But what are we going to do? The subject is seasonable. It is one of the very most important that every housekeeper should understand, and yet, in spite of all our preaching and explaining, how are we to know that our readers do understand all about it?"

Then a bright idea struck me. Why not let our readers do the explaining this time? And so here we are. We will

give a prize of \$2 cash for the best answer to the following questions, written, not in the form of a mere catalogue of answers, but in a connected letter or article. Books and pictures will be sent as prizes for 2nd, 3rd and 4th best answers. Contributors must, of course, be either subscribers, or belong to a subscriber's family.

What are bacteria? How could you see them if you wanted to, and what would they look like? Where are they found? Are any of them useful? If so, in what way? Are any of them harmful? If so, in what way? How do they reproduce? Under what conditions do they thrive best? If you wished to check their thriving (multiplication), name different ways by which you could do so, (1) to prevent putrefaction in foods; (2) to prevent dissemination of illness by bacteria.

Describe in detail how you would keep bacteria, "wild yeasts," etc., out of fruit that you are canning.

Also answer the following questions by number:

1. Why are dried beef, dried fruits, etc., so easy to "keep"?
2. Why will milk and foods of various kinds keep sweet and eatable so much longer when in the ice chest than when merely sitting in the cupboard?
3. If you had no ice, yet wished to keep milk sweet longer than it is likely to in hot weather, what would you do?
4. Why is it that the following "keep" with so little care, comparatively? Very rich fruit, jelly, marmalade; salt pork, corned beef, and salt fish; pickles; mince-meat and sausage?
5. Why is very frequent scalding necessary to keep a dish-cloth pure and harmless?
6. Why is it advisable, as the best bread-makers will tell you, to leave the salt out of bread-sponge as long as possible in cold weather, but to put it in as early as possible in hot weather?
7. Describe briefly the process of caring for milk from the time the cow is driven into the stable until the milk is separated, in order that as few pernicious bacteria as possible may be in the milk.

Now, Chatterers, this is something new for you, but I think you will really enjoy writing about it, if you start. You will think I am very wise to know the answers to so many questions, but you must remember that I have dozens of books bearing on every subject at hand, and the dairy editor right in the next room. He's an obliging mortal, and always ready to answer questions or help over a hard place.

This time I am not going to count literary skill, or good writing, or fine sentences, I want just good, plain, practical papers, no matter if half the words are spelled wrong; but I do want you to send me your papers so that they may reach me not later than the 24th of May. If you all turn in and make this experiment a success, even half as much of a success as the Roundabouts have made of their "studies," perhaps we shall give you a chance of winning some more prizes. Yours cordially, D. D.

Cleaning Velvet and Zinc.

Dear Dame Durden,—I wonder if any of the Chatterers, or yourself, can suggest a way to clean velvet couches, as we have an old couch which has become soiled and we do not want to have it re-upholstered. Would be very glad to receive any suggestions along that line. In regard to the kitchen-cabinet question, I may say we have used a Chatham kitchen cabinet nearly a year and have had no trouble in keeping the zinc clean, as we have used the Old Dutch Cleanser in scouring it, and it retains a perfectly-clean, bright appearance. Wishing you every success. MAYFLOWER. Oxford Co., Ont.

We presume you wish to clean the couch without taking the covering off, and would say that about the only thing you can do is to take the couch out of doors some fine day and rub it well with gasoline, applied with a rag. Rub over and over again, until the soiled places have disappeared. This ought to act all right, unless there is some colored material underneath upon which the gasoline may act as a solvent. Of course, you understand the necessity of keeping gasoline away from fire and lights while using.

It is very inflammable, and must be used with care. A woman in this city was severely burned last week through an explosion caused by carelessness in handling it.

Message from Lankshire Lass.

Dear Dame Durden,—Lankshire Lass has requested me to send you a card to tell you that she has been very ill for two weeks, and has not been able to give the recipe asked for, for maple syrup, in last week's "Advocate," but she shall as soon as possible.

She does get so ill, and suffers so much, and always so patiently. I love her very much, and feel so very sorry she cannot be well like the rest of us. Trusting last week's Inquirer will not mind the delay, I remain, yours truly. B. H.

I am sure I may speak for all of the Chatterers in sending a message of sympathy to Lankshire Lass. She has been a lesson in patience, indeed, to many of us.

Our Scrap Bag.

A writer in Harper's Bazaar says that a most convenient clothes-horse can be made and suspended by pulleys so that it can be drawn up flat against the ceiling when not in use.

Have you seen any of the new "printed scrim" for window curtains? Some of them are very pretty, and the price is not at all prohibitive, running at about 85 or 40 cents a yard.

While reading some bulletins on bread-making recently, I found repeatedly the statement that, since bread mixed with water is rather poor in protein, it is advisable to mix it with skim milk instead of water. One writer says: "Its use (that of milk) is by all means to be advocated, especially on farms where skim milk is abundant." The loaf is said to rise more slowly, but to be quite as light, and much more nutritious. . . . If any reader has been in the habit of using skim milk thus, I should be pleased to hear from her. D. D.

Try some very young dandelion leaves for "greens." They are both palatable and medicinal.

Are you going to make a bonfire at housecleaning time this year, by which to dispose of the really useless and no longer beautiful things that are only cluttering your house and making extra work at dusting and cleaning time? It is really a good idea. Some people seem to think it is an unpardonable extravagance to discard anything, but is it? Here are some old silvered or gaudy glass vases, good enough in their time, twenty or thirty years ago, perhaps, when the taste of the neighborhood demanded nothing better, but now nothing but a mark of tawdriness. Is it an extravagance to get rid of them? And here is an old "Rocky-mountain" cushion-cover, faded, soiled, unwashable—what about it? And what about those old chromos, garish and inartistic—that antiquated shelf-drape, besplashed with impossible roses, and more impossible other flowers, unnamable, because unlike anything on the earth or under it?—that dirty and discarded milkweed-down bag hanging on the corner of a picture?—those Berlin-wool toilet mats, faded and unsuitable for the purpose to which they are applied?

Of course, you need not burn these things—you may make the heart of some child glad with them at play-house time—but you will do well to discard them from your house. Having done so, you are likely to add a new one to your household axioms. "Wise is the housewife who has learned when and how to eliminate."

"I tell you I won't have this room," protested the old lady to the bell-boy who was conducting her. "I ain't a-goin' to pay my good money for a pigsty with a measly little foldin' bed in it. If you think that jest because I'm from the country—"

Profoundly disgusted, the boy cut her short.

"Get in, mum. Get in," he ordered. "This ain't yer room. This is the elevator."

Made in Ireland.

The following, from T. P.'s Weekly, is interesting and suggestive. Why not also a "Made in Canada" trade-mark, to be affixed only to manufactures of certain quality, thus passing as a guarantee of excellence at home and abroad?

"It is now nearly three years since an experiment was made, quite unlike anything that had previously been done, save, perhaps, the hall-mark on silver and gold. No country has ever possessed a trade-mark applicable to all its products, until Ireland took prompt advantage of the Trade Marks Act of 1905 to register a national impress. An energetic group of gentlemen, interested in the welfare of the 'Green Isle,' headed by Mr. John Boland, M. P., banded themselves together as the Irish Industrial Development Association, and registered a trade-mark which is now becoming more and more familiar among us.

"Hundred of firms have applied for certificates to use the mark, for



it benefits them in several ways. To begin with, no firm is allowed to use it unless its goods are really Irish, and also of a really high standard; therefore, the mark is a guarantee of quality to the buyer. By inference, it suggests the foreign nature of the goods not bearing it, and it provides a means of discovering fraudulent pretensions. The Association has prosecuted firms in several instances for using the mark without authority, for falsely representing goods to be Irish, and for applying to English or foreign goods Irish names likely to mislead buyers. The yearly charge for the use of the mark is quite small, and its administration is quite simple, although completely effectual. By an ingenious use of numbers, matters are so arranged that any firm wrongfully using the mark is detected at once.

"The mark, as may be seen from the illustration above, consists of a conventionalized Irish E (for Erin), enclosing the circular 'Collar of Justice,' which, according to the old stories, automatically throttled any judge who administered the law unrighteously. A Runic design is combined with this, and the words 'DEANCA I ERIN' meaning 'Made in Ireland.' This mark can be applied to every kind of Irish product, and a way has recently been found of attaching it even to lace in such a way that it cannot be removed till bought. At the new Irish Stores in Victoria Street, where one may buy eggs or poetry, pictures, lace or bacon, impartially, together with many other products, the Irish trade-mark can be seen in full use, even branded on bacon and woven into carpets, while a very successful design for men's ties is the mark in little on a silk ground. Many people are making a specialty of using note-paper bearing this device in one corner, thus supplying an easy and effective way of helping Ireland in her plucky struggle for commercial prosperity. One wonders why England has not followed suit with a similar mark, seeing that its advantages are so apparent."

TRADE TOPIC.

Special bargains in ladies' shirt-waist suits are offered in this issue by W. H. Scroggie, Ltd., of Montreal. These suits are said to be very dressy. Write to the manufacturers for spring and summer catalogue, giving full descriptions of the lines handled.

"The Farmer's Advocate" Fashions.



629: Tucked Blouse, 32 to 40 bust.



6300 Tucked Blouse, 32 to 42 bust.

Please give bust measure when ordering. Price 10 cents per pattern. Address: "Fashion Department," The Farmer's Advocate, London, Ont.

The Roundabout Club

An Interesting Poem.

(Sent by "Fritz," Toronto.)

Editor "The Farmer's Advocate":

We read a great deal in your valuable paper of the high and noble calling of the farmer. This is a very good thing to teach, and it should be kept before the minds of the young men. But this idea has been in men's minds for a great number of years. While reading my favorite poet, Whittier, I ran across the following poem, which was written for the Agricultural and Horticultural Exhibition at Amesbury and Salisbury, September 28th, 1858:

This day, two hundred years ago,
The wild grape by the river's side,
And tasteless groundnut trailing low,
The table of the woods supplied.

Unknown the apples red and gold,
The blushing tint of peach and pear,
The mirror of the Powwow told
No tale of orchards ripe and rare.

Wild as the fruits he scorned to till,
These vales the idle Indian trod,
Nor knew the glad, creative skill,
The joy of him who toils with God.

O, Painter of the fruits and flowers!
We thank Thee for Thy wise design
Whereby these human hands of ours,
In nature's garden work with Thine.

And thanks that from our daily need
The joy of simple faith is born,
That he who sows the summer seed,
May trust Thee for the autumn corn.

Give fools their gold, and knives their power;
Let fortune's bubbles rise and fall,
Who sows a field, or trains a flower,
Or plants a tree, is more than all.

For he who blesses most is blest,
And God and man shall own his worth
Who toils to leave as his bequest
An added beauty to the earth.

And soon or late, to all that sow,
The time of harvest shall be given,
The flowers shall bloom, the fruit shall grow,
If not on earth, at least in Heaven!

The "One Book" Query.

Editor "Roundabout Club":

If I were alone on an island, I imagine I should be quite content with Shakespeare. As a matter of fact, I should not be alone, for I should have a whole world-full of people with me. First of all, I should go around the island with Prospero, looking for shipwrecked sailors; and perhaps, (who knows?), Miranda might be my guide sometimes. Then, if that was disappointing, Rosalind would appear, and we would look among the trees for her name on the bark. By this time, I should be ready for more serious things, and might take philosophy with Hamlet, law with Portia, statecraft with Brutus; in fact, no matter what my mood, someone would come at my will to while away the time. Kings, lawyers, parsons, doctors, statesmen, "all sorts and conditions of men" are to be met with in the "land of Shakespeare." And as for women, why, I could fall in love with a different beauty every day in the year; then I'd be ready to start over again, an expert in the gentle art of making love. But that's enough; I could write columns about Shakespeare, but I haven't time—I'd rather read him! And your readers would be better so employed than by reading the opinion of

"FENROIS."

Waterloo Co., Ont.

Literature and Art in Rural Districts.

Why is it advisable that the people of rural districts should be interested in literature and art?

The hope of our country lies in the advancing intelligence of the tillers of the soil. It is time the farmers as a whole learned that a home of simple furnishings, but with good books, music, flowers, and pictures, is an influence on character. It is quite possible to work hard on a farm, and yet devote certain portions of the day and night to poetry and dreams of existence.

It is astonishing what a broad education may be obtained by spending spare moments in reading and study in literature of good quality. If we would develop mentally, we must read, learn and think. Reading is to the mind what exercise is to the body.

The art of being a good conversationalist begins with cultivation of the mind. A child's mental growth should be encouraged by directing him to an understanding of the things he sees around him, and by familiarizing him with the best thoughts of the best men and women of the past and present. It is not how much one reads, but how one reads, that counts. Whatever we read, the main consideration is to read thoughtfully.

We should be very careful about the pictures we have in our homes, as pictures have a great influence over the emotions, especially of the children. I have been in homes in which the walls were decorated with pictures, some quite expensively framed, but such pictures—the walls, if bare, would have been preferable. If the money could not be spared for real water-colors or oils, a few good prints of famous artists' paintings, of landscapes, simple rural scenes, pet animals, or any subject which would draw the attention to the beauties of everyday life, might be substituted. It is glorious to see the beautiful things about us, and to love them. There is a keenness of joy in such a love which the sordid soul can never know. We have many artists in Canada, who paint, and paint well, and many splendid studies may be procured from them at moderate prices.

Huron Co., Ont. MINERVA.

Vegetarian Diet.

Eminent physicians and dietetic reformers of the present day are deeply absorbed in solving the great problems of wholesome food for human beings. In India, this problem was solved by the Hindu philosopher long before Pythagoras, (400 B. C.) was born.

The medical science says that constant use of meat increases the action of the heart and brings premature loss of vital forces. Lord Byron evidently believed that flesh-eating cripples men to war and blushed no testis that in his "Don Juan" (Canto II., l. 100) Luther V., Bell of the Entail Stages, writes: "The use of a good food is all that is necessary to the health of a man, and a good man should be a good man."

bodily health, and even prejudicial to intellectual and moral sanity." Finally, the Bible itself has been drawn upon to furnish lasting proof: "Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree in which is the fruit of a tree yielding seed; to you it shall be for meat." Most of us will readily admit the validity of these statements.

The natural food of man is not animal flesh, but vegetable fruits, nuts, cereals, etc., which grow spontaneously on this earth. Can we not live on them? Can you point out or mention who has been weak and useless for work without taking meat? Look at the Sikh soldiers in India, who are the bravest and strongest fighters in the British army; they are strict vegetarians. We have reports of the Scotchmen who have been healthy and hardy while living on oatmeal.

Now, the question is: Is it for health that we eat meat? No; because vegetarians as a class are healthier than the majority of meat-eaters. Why, then, is meat eaten? Because of the habit transmitted from generation to generation, and because of superstition, prejudice and ignorance, and these must be checked gradually by establishing vegetarian societies, like the Physical Culture Hall, New York.

Many animals are killed for Thanksgiving and Christmas Days, in Christian countries, and also for idol-worshipping (which is done by the orthodox Hindus). The killing of so many animals on those days is a great sin. Many men say that the Merciful Lord would not accept prayer unless some of his creation are killed. As it is impossible for them to think that the slaughter of animals for food is sinful, so it is impossible for a vegetarian to believe that the lower animals are created for their use by a Merciful Lord.

It is written in Sanskrit literature: "Be kind to lower animals. Do not kill them for your food, because the natural food of man is not an animal." Some of us hold that the Divine Spirit which dwells in us, dwells also in lower animals. Whether you agree with us in that or not, you must acknowledge that Christ said that not even a sparrow fall to earth without the notice of the Divine Being, and that the Heavenly Father provided for their needs. Do you think for a moment that He will look on in approval while the creatures He has cared for and nourished are slaughtered?

Compare also the eater with the animal that is eaten. The one has pleasure which lasts for a few seconds, and the other is deprived of all pleasures of life.

Life is a sacred thing. Man cannot give life to even a single cell of animal, much less produce highly-organized living creatures. What he cannot produce or reproduce, he should not lightly destroy. How much more thought should be given before the destruction of much more highly-organized beings, whose development has reached such a state that they possess like feelings to man himself. They feel pain just as keenly; they suffer from hunger as he does; they are capable of affection, and are easily angered. How then dares man take upon himself to destroy those precious lives at his own whim and to gratify a merely acquired appetite?

God has not created any man naming "butcher." Men love to take meat, so some of them have been in the profession of a butcher. If there would be no meat-eater, there would be no butcher.

The time has come when vegetarians should be defended by arguments derived from purely ethical and religious, as well as from economic or hygienic considerations. S. SINHA (Hindu Student).

O. A. C.

Tastes and Temperaments.

Editor "Roundabout Club":

"Should people of opposite tastes and temperaments marry?" Sometimes they should, and sometimes they should not. By this I mean that it depends greatly, almost entirely, on the people themselves.

First of all, let us consider different tastes. People who have like tastes should marry, rather than those of unlike. A man who is fond of the society side of life should marry a society girl. A person of strong ideas and opinions on such subjects as religion, i. e., holding to one church, and one only—high sense of honor and morality, etc.—should marry a lady of like ideas. Educated

people should rarely mate with uneducated ones. The reason in this case is the fact that the effect of education on the true man or woman, lifts them up above the ordinary level of life. It ennobles them, gives them an insight into poetry, music, art, nature-study, geology, astronomy, and, in fact, gives them a truer, deeper outlook on this beautiful world, than an uneducated person could even dream of. However, there are men and women who are high-minded and deep-souled enough to overlook all those little deficiencies, and make their husbands or wives happy, whatever be their tastes, simply on account of the love they bear them.

In considering the temperaments, I think people of opposite kinds should marry. Two hot-tempered people, two nagging people, two ambitious people, two slow people, or two people who persist in looking on the dark side of things, never agree. A high-tempered person needs somebody calm and cool when things go wrong. The ambitious couple would become too anxious to succeed, and then, on the other hand, the slow need someone to urge them on. Persons who are always down-hearted and blue need a bright, sunny temperament to shame them out of it.

"HIAWATHA."

Snowbirds.

Some time ago, someone wrote us asking where snowbirds nest. In reply to this, Mr. W. E. Saunders, an ornithologist of note, very kindly writes as follows:

"The breeding grounds of the birds about which you inquired are as follows. Snowflake, also called snowbird, or snow-bunting, does not nest as far South as James Bay, and its center of abundance in the breeding season is the higher latitudes only, the islands in the Arctic Ocean, Greenland, and the most northerly districts of the continent. Junco, on the contrary, which is called snowbird, nests in small numbers as far south as London, Ont., and is common from one hundred miles north of us up to at least as far as New Ontario, and in the west to much higher latitudes.

"The Redpoll nests as far north as the limit of shrubs, which, of course, is the Arctic Ocean, but it does not, as a rule, nest as far south as James Bay in Central North America, although it is found in Labrador quite common in summer."

We sincerely regret that publication of the above and other correspondence has been delayed so long, but trust that our readers will pardon the unavoidable omission.

Our Literary Department.

Rabbi Ben Ezra, Study V.

STANZA XXVI.

Ay, note that Potter's wheel,
That metaphor! and feel
Why time spins fast, why passive lies
our clay—
Thou, to whom foals propound,
When the wine makes its round,
"Since life floats, all is change; the Past
gone, seize to-day!"

XXVII.

Food! All that is, at all,
Lasts ever, 'past recall;
Earth changes, but thy soul and God
stand sure:
What entered into thee,
THAT was, is, and shall be
Time's wheel runs back or stops—Potter
and Clay endure.

XXVIII.

He fixed thee 'mid this dance
Of plastic circumstance,
"This Present," thou, forsooth, wouldst
fain arrest:
Machinery just meant
To give thy soul its vent,
Try thee, and turn thee forth, sufficiently
impressed.

XXIX.

Wear though the earlier grooves
Which ran the laughing loves
Around thy base, no longer pause and
press?
Wear though, about thy rim,
The things in order grim
Laid out, in graver mood, obey the
sterner stress?

XXX.

Look not thou down, but up!
To uses of a cup,
The festal board, lamp's flash and trumpet's peal,
The new wine's foaming flow,
The master's lips a-glow!
Thou, heaven's consummate cup, what
needst thou with earth's wheel?

XXXI.

But I need, now as then,
Thee, God, who mouldest men,
And since, not even while the world was
worst,
Did I—to the wheel of life
With shapes and colors rife,
Bound dizzy—mistake my end, to slake
Thy thirst:

XXXII.

So, take and use Thy work,
Amend what flaws may lurk,
What strain o' the stuff, what warpings
past the aim!
My times be in Thy hand!
Perfect the cup as planned!
Let age approve of youth, and death
complete the same!

1. Can you name any poem which appeared in England about this time, of which Stanzas XXVI.-XXX. seem to be a reproval?

2. What does the poet mean by lines 4, 5, St. XXVII.? By "this dance of plastic circumstance"? To whom does "He," line 1, St. XXVIII., refer? What does "impressed" mean here?

3. Explain the metaphor in Stanzas XXIX.-XXX.

4. Can you explain the meaning of St. XXX.? Also the significance of the phrase, "to slake Thy thirst, St. XXXI.?"

5. Write, as briefly as possible the idea which the poet wishes to convey in these stanzas (XXVI.-XXXII.).

6. Write your impressions of the poem, Rabbi Ben Ezra," as a whole.

This is the last study of the series. Kindly send answers to reach us not later than May 24. Answers to last study will appear as soon as possible.

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For sale—ten thousand hansoms
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We've simply got
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That pace may suit the tortoise
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But only old back-numbers
Go nowadays by rail!

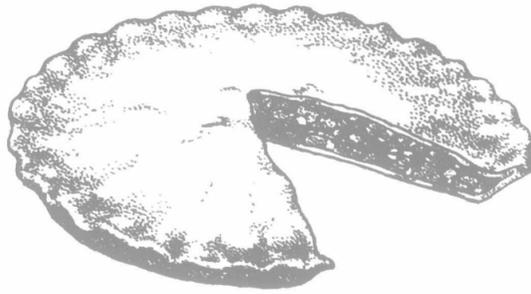
Who'll buy a thousand liners,
To sail across the sea?
There may be lots
Whom thirty knots
Will suit. It won't suit me!
I mean to have an airship,
And then I'll start—Hooray!
To race the lurid lightning
Across the Milky Way!

The horse—his days are numbered,
The motor soon must pass
To silent sleep
Upon the heap
Where iron's scrapped, and brass,
All kinds of locomotion
Are simply dead and gone,
All save the arrowy airship
That zopples swiftly on.

For sale—some Channel steamers,
The cheapest ever known,
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No more will float
"Twixt Folkestone and Boulogne
Embarking at the Flip-Flap,
You'll find, in half-an-hour,
Across the sea, in gay Papee,
You'll reach the Eiffel Tower!

—Modern Society (London).

The young man who is content to go through the world sawing on a second fiddle will never lead the band.



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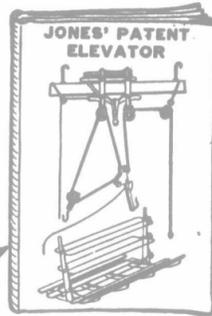
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See the "S" shaped swing links beneath the tub.

These links do nearly all the hard work when once you start them going. And this washing machine works as easy as a bicycle wheel does.

There are slats on the inside bottom of the tub.

These slats act as paddles, to swing the water in the same direction you revolve the tub.

You throw the soiled clothes into the tub first. Then you throw enough hot, soapy water over the clothes to float them.

Next you put the heavy wooden cover on top of the clothes to anchor them.

This cover has slats on its lower side to grip the clothes and hold them from turning around when the tub turns.

Now we are all ready for quick and easy washing.

You grasp the upright handle on the side of the tub, and with it you revolve the tub one-third way round.

The machine must have a little help from you at every swing, but the motor links do practically all the hard work.

You can sit in a rocking-chair and do all that the washer requires of you. A child can run it easily full of clothes.

When you revolve the tub the links cause it to move up and down as it swings—the clothes don't move.

But the water moves like a mill race through the clothes.

The paddles on the tub bottom drive the soapy water through and through the clothes at every swing of the tub. Back and forth, in and out of every fold, and through every mesh in the cloth, the hot, soapy water runs like a torrent. This is how it carries away all the dirt from the clothes, in from six to ten minutes by the clock.

It drives the dirt out through the meshes of the fabrics without any rubbing—without any wear and tear from the washboard.

It will wash the finest lace fabric without breaking a thread or a button, and it will wash a heavy, dirty carpet with equal ease and rapidity. Fifteen to twenty garments, or five large bed sheets, can be washed at one time with this "1900" Gravity Washer.

A child can do this in six to ten minutes better than any able washer-woman could do the same clothes in twice the time, with three times the wear and tear from the washboard.

This is what we say; now, how do we prove it?

We send any reliable person our "1900 Gravity" Washer, free of charge, on a full month's trial, and we even pay the freight out of our own pockets.

No cash deposit is asked, no notes, no security.

You may use the washer four weeks at our expense. If you find it won't wash as many clothes in four hours as you will wash by hand in eight hours you send it back to the railway station—that's all.

But if, from a month's actual use, you are convinced it saves half the time in washing, does the work better, and does it twice as easily as it could be done by hand, you keep the machine.

Then you mail us 50 cents a week till it is paid for.

Remember that 50 cents is part of what the machine saves you every week on your own or on a washer-woman's labor. We intend that the "1900 Gravity" Washer will pay for itself, and thus cost you nothing.

You don't risk a cent from first to last, and you don't buy it until you have had a full month's trial.

Could we afford to pay freight on thousands of these machines every month if we did not positively know they would do all we claim for them? Can you afford to be without a machine that will do your washing in half the time, with half the wear and tear of the washboard, when you can have that machine for a month's free trial, and let it pay for itself? This offer may be withdrawn at any time it overflows our factory.

Write today, while the offer is still open, and while you think of it. The postage stamp is all you risk. Address me personally on this offer, viz.: F. A. W. Bach, Manufacturer "1900" Washer Company, 357 Yonge Street, Toronto, Ont. 1531

The Golden Dog

(Le Chien D'Or.)

A Canadian Historical Romance.

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CHAPTER XVI.

Angelique Des Meloises.

"Come and see me to-night, Le Gardeur." Angelique des Meloises drew the bridle sharply as she halted her spirited horse in front of the officer of the guard at the St. Louis Gate. "Come and see me to-night; I shall be at home to no one but you. Will you come?"

Had Le Gardeur de Repentigny been ever so laggard and indifferent a lover, the touch of that pretty hand, and the glance from the dark eye, that shot fire down into his very heart, would have decided him to obey this seductive invitation.

He held her hand as he looked up with a face radiant with joy. "I will surely come, Angelique; but tell me—"



Old St. Louis Gate, Quebec.

She interrupted him laughingly: "No; I will tell you nothing till you come! So good-bye till then."

He would fain have prolonged the interview, but she capriciously shook the reins, and with a silvery laugh rode through the gateway and into the city. In a few minutes she dismounted at her own home, and giving her horse in charge of a groom, ran lightly up the broad steps into the house.

The family mansion of the Des Meloises was a tall and rather pretentious edifice, overlooking the fashionable Rue St. Louis.

The house was, by a little artifice on the part of Angelique, empty of visitors this evening. Even her brother, the Chevalier des Meloises, with whom she lived, a man of high life and extreme fashion, was to-night enjoying the more congenial society of the officers of the Regiment de Bearn. At this moment, amid the clash of glasses and the bubbling of wine, the excited and voluble Gascons were discussing in one breath the war, the council, the court, the ladies, and whatever gay topic was tossed from end to end of the crowded mess-table.

"Mademoiselle's hair has got loose and looks like a Huron's," said her maid, Lizette, as her nimble fingers rearranged the rich, dark-golden locks of Angelique, which reached to the floor as she sat upon her fauteuil.

"No matter, Lizette; do it up a la Pompadour, and make haste. My brain is in as great confusion as my hair. I need repose for an hour. Remember, Lizette, I am at home to no one to-night except the Chevalier de Repentigny."

The Chevalier called this afternoon, Mademoiselle, and was sorry he did not find you at home," replied Lizette, who saw the eyelashes of her mistress quiver and droop, while a flush deepened for an instant the roseate hue of her cheek.

"I was in the country, that accounts for it! There, my hair will do!" said Angelique, giving a glance in the great Venetian mirror before her. Her freshly donned robe of blue silk, edged with a foam of snowy laces and birdswings, set off her tall figure. Her arms, bare to the elbows, would have excited Juno's jealousy. Her eyes, as she

greater efforts in praise of them. Her dainty feet, shapely, aspiring, and full of character as her face, were carelessly thrust forward, and upon one of them lay a flossy spaniel, a privileged pet of his fair mistress.

The boudoir of Angelique was a nest of luxury and elegance. Its furnishings and adornments were of the newest Parisian style. A carpet woven in the pattern of a bed of flowers covered the floor. Vases of Sevres and Porcelain, filled with roses and jonquils, stood on marble tables. Grand Venetian mirrors reflected the fair form of their mistress from every point of view—who contemplated herself before and behind with a feeling of perfect satisfaction and sense of triumph over every rival.

A harpsichord occupied one corner of the room, and an elaborate bookcase, well-filled with splendidly-bound volumes, another.

Angelique had small taste for reading, yet had made some acquaintance with the literature of the day. Her natural quick parts and good taste enabled her to shine, even in literary conversation. Her bright eyes looked volumes. Her silvery laugh was wiser than the wisdom of a precieuse. Her witty repartees covered acres of deficiencies with so much grace and tact that men were tempted to praise her knowledge no less than her beauty.

She had a keen eye for artistic effects. She loved painting, although her taste was sensuous and voluptuous—character is shown in the choice of pictures, as much as in that of books or of companions.

There was a painting of Vanloo—a lot of full-blooded horses in a field of clover; they had broken fence, and were luxuriating in the rich, forbidden pasture. The triumph of Cleopatra over Antony, by Le Brun, was a great favorite with Angelique, because of a fancied, if not a real, resemblance between her own features and those of the famous Queen of Egypt. Portraits of favorite friends, one of them Le Gardeur de Repentigny, and a still more recent acquisition, that of the Intendant Bigot, adorned the walls, and among them was one distinguished for its contrast to all the rest—the likeness, in the garb of an Ursuline, of her beautiful Aunt Marie des Meloises, who, in a fit of caprice some years before, had suddenly forsaken the world of fashion, and retired to a convent.

The proud beauty threw back her golden tresses as she scanned her fair face and magnificent figure in the tall Venetian mirror. She drank the intoxicating cup of self-flattery to the bottom as she compared herself, feature by feature, with every beautiful woman she knew in New France. The longer she looked, the more she felt the superiority of her own charms over them all. Even the portrait of her aunt, so like her in feature, so different in expression, was glanced at with something like triumph speed with content.

"She was handsome as I!" cried Angelique. "She was fit to be a queen, and made herself a nun—and all for the sake of a man! I am fit to be a queen, too, and the man who raises me highest to a queen's estate gets my hand! My heart?" she paused a few moments. "Pshaw!" a slight quiver passed over her lips. "My heart must do penance for the fault of my hand."

Petrified by vanity and saturated with ambition, Angelique retained under the hard crust of selfishness a solitary spark of womanly feeling. The handsome face and figure of Le Gardeur de Repentigny was her ideal of manly perfection. His admiration flattered her pride. His love, for she knew infallibly, with a woman's instinct, that he loved her, touched her into a tenderness such as she felt for no man besides. It was the nearest approach to love her nature was capable of, and she used to listen to him with more than complacency, while she let her hand linger in his warm clasp while the electric fire passed from one to another and she looked into his eyes.

and spoke to him in those sweet undertones that win men's hearts to women's purposes.

She believed she loved Le Gardeur, but there was no depth in the soil where a devoted passion could take firm root. Still, she was a woman keenly alive to admiration—jealous and exacting of her suitors, never willingly letting one loose from her bonds, and with warm passions and a cold heart was eager for the semblance of love, although never feeling its divine reality.

The idea of a union with Le Gardeur some day, when she should tire of the whirl of fashion, had been a pleasant fancy of Angelique. She had no fear of losing her power over him; she held him by the very heart-strings, and she knew it. She might procrastinate, play false and loose, drive him to the very verge of madness by her coquetries, but she knew she could draw him back, like a bird held by a silken string. She could excite, if she could not feel, the fire of a passionate love. In her heart she regarded men as beings created for her service, amusement, and sport—to worship her beauty, and adorn it with gifts. She took everything as her due, giving nothing in return. Her love was an empty shell that never held a kernel of real womanly care for any man.

Amid the sunshine of her fancied love for Le Gardeur had come a day of eclipse for him, of fresh glory for her. The arrival of the new Intendant, Bigot, changed the current of Angelique's ambition. His high rank, his fabulous wealth, his connections with the court, and his unmarried state, fanned into a flame the secret aspirations of the proud, ambitious girl. His wit and gallantry captivated her fancy, and her vanity was full-fed by being singled out as the special object of the Intendant's admiration.

She already indulged in dreams which regarded the Intendant himself as but a stepping-stone to further greatness. Her vivid fancy, conjured up scenes of royal splendor, where, introduced by the courtly Bigot, princes and nobles would follow in her train, and the smiles of majesty itself would distinguish her in the royal halls of Versailles.

Angelique felt she had power to accomplish all this could she but open the way. The name of Bigot she regarded as the open sesame to all greatness. "If women rule France by a right more divine than that of kings, no woman has a better right than I!" said she, gazing into the mirror before her. "The kingdom should be mine, and death to all other pretenders! And what is needed after all?" thought she, as she brushed her golden hair from her temples with a hand firm as it was beautiful. "It is but to pull down the heart of a man! I have done that many a time for my pleasure; I will now do it for my profit, and for supremacy over my jealous and envious sex!"

Angelique was not one to quail when she entered the battle in pursuit of any object of ambition or fancy. "I never saw the man yet," said she, "whom I could not bring to my feet if I willed it!" The Chevalier Bigot would be no exception—that is, he would be no exception—the voice of Angelique fell into a low, hard monotone as she finished the sentence—"were he free from the influence of that mysterious woman at Beaumanoir, who, they say, claims the title of wife by a token which even Bigot may not disregard! Her pleading eyes may draw his compassion where they ought to excite his scorn. But men are fools to woman's faults, and are often held by the very thing women never forgive. While she crouches there like a lioness in my path, the chances are I shall never be chate-laine of Beaumanoir—never, until she is gone!"

Angelique fell into a deep fit of musing, and murmured to herself, "I shall never reach Bigot unless she be removed—but how to remove her?"

At that was the riddle of the mystery! Angelique's life, as she had

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projected it, depended upon the answer to that question.

She trembled with a new feeling; a shiver ran through her veins as if the cold breath of a spirit of evil had passed over her. A miner, boring down into the earth, strikes a hidden stone that brings him to a dead stand. So Angelique struck a hard, dark thought far down in the depths of her secret soul. She drew it to the light, and gazed on it shocked and frightened.

"I did not mean that!" cried the startled girl, crossing herself. "Mere de Dieu! I did not conceive a wicked thought like that! I will not! I cannot contemplate that!" She shut her eyes, pressing both hands over them, as if resolved not to look at the evil thought that, like a spirit of darkness, came when evoked, and would not depart when hidden. She sprang up, trembling in every limb, and supporting herself against a table, seized a gilded carafe and poured out a full goblet of wine, which she drank. It revived her fainting spirit. She drank another, and stood up herself gain, laughing at her own weakness.

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—CLARA L. DEARIN, Windsor, Ont.



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"The friends of Diamond Dyes have much to tell of renewing children's clothing—of dyeing and making over their own as well, but nothing seems to be said about how they may renew men's clothing.

"My son plays golf, and his old sweater was too gray and faded looking to use another season until I gave it a bath in Diamond Dyes, and now it's just as good as new. He told his young lady friend about it, and she dyed her tan skirt a beautiful brown, and also colored some hose to match. He said she was delighted to learn about Diamond Dyes."

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She ran to the window and looked out into the night. The bright stars shone overhead; the lights in the street reassured her. The people passing by, and the sound of voices, brought back her familiar mood. She thought no more of the temptation from which she had not prayed to be delivered, just as the daring skater forgets the depths that underlie the thin ice over which he skims, careless as a bird in the sunshine.

An hour more was struck by the loud clock of the Recollets. The drums and bugles of the garrison sounded the signal for the closing of the gates of the city, and the setting of the watch for the night. Presently the heavy tramp of the patrol was heard in the street. Sober bourgeois walked briskly home, while belated soldiers ran hastily to get into their quarters ere the drums ceased beating the tattoo.

The sharp gallop of a horse clattered on the stony pavement, and stopped suddenly at the door. A light step and the clink of a scabbard rang on the steps. The familiar rap followed. Angelique, with the infallible intuition of a woman who recognizes the knock and footstep of her lover from ten thousand others, sprang up and met Le Gardeur de Repentigny as he entered the boudoir. She received him with warmth, even with fondness, for she was proud of Le Gardeur, and loved him in her secret heart beyond all the rest of her admirers.

"Welcome, Le Gardeur!" exclaimed she, giving both hands in his: "I knew you would come; you are welcome as the returned prodigal!"

"Dear Angelique!" repeated he, after kissing her hands with fervor, "the prodigal was sure to return, he could not live longer on the dry husks of mere recollections."

"So he rose, and came to the house that is full and overflowing with welcome for him! It is good of you to come, Le Gardeur! why have you stayed so long away?" Angelique, in the joy of his presence, forgot for the moment her meditated infidelity.

A swift stroke of her hand swept aside her flowing skirts to clear a place for him upon the sofa, where he sat down beside her.

"This is kind of you, Angelique," said he. "I did not expect so much condescension after my petulance at the Governor's ball; I was wicked that night—forgive me."

"The fault was more mine, I doubt, Le Gardeur," Angelique recollected how she had tormented him on that occasion by capricious slights, while bounteous of her smiles to others. "I was angry with you because of your too great devotion to Ceile Tourangeau."

"This was not true, but Angelique had no scruple to lie to a lover. She knew well that it was only from his vexation at her conduct that Le Gardeur had pretended to renew some long intermitted coquetries with the fair Ceile."

"But why were you wicked at all that night?" inquired she, with a look of sudden interest, as she caught a red cast in his eye, that spoke of much dissipation. "You have been ill, Le Gardeur!" But she knew he had been drinking deep and long, to drown vexation, perhaps, over her conduct. "I have not been ill," replied he; "shall I tell you the truth, Angelique?"

"Always, and all of it!" The whole truth, and nothing but the truth! Her hand rested fondly on his; no word of equivocation was possible under that mode of putting her lover to the question. "Tell me why you were wicked that night?"

"Because I loved you to madness, Angelique, and I saw myself thrust from the first place in your heart, and a new idol set up in my stead. That is the truth!"

"That is not the truth!" exclaimed she vehemently, "and never will be the truth if I know myself and you. But you don't know women, Le Gardeur," added she, with a smile; "you don't know me, the one woman you ought to love better than that!"

It is easy to recover affection that is not lost. Angelique knew her power, and was not indisposed to excess in the exercise of it. "Will you do something for me, Le Gardeur?" asked she, tapping his fingers coquettishly with her fan.

"Will I not? Is there anything in earth, heaven, or hell, Angelique, I would not do for you if I only could win what I covet more than life?"

"What is that?" Angelique knew full well what he coveted more than life; her own heart began to beat responsively to the passion she had kindled in his. She nestled up closer to his side. "What is that, Le Gardeur?"

"Your love, Angelique! I have no other hope in life if I miss that! Give me your love, and I will serve you with such loyalty as never man served woman with since Adam and Eve were created."

It was a rash saying, but Le Gardeur believed it, and Angelique, too. Still she kept her aim before her. "If I give you my love," said she, pressing her hand through his thick locks, sending from her fingers a thousand electric fires, "will you really be my knight, my preux chevalier, to wear my colors and fight my battles with all the world?"

"I will, by all that is sacred in man or woman! Your will shall be my law, Angelique; your pleasure, my conscience; you shall be to me all reason and motive for my acts, if you will but love me!"

"I do love you, Le Gardeur!" replied she, impetuously. She felt the vital soul of this man breathing on her cheek. She knew he spoke true, but she was incapable of measuring the height and immensity of such a passion. She accepted his love, but she could no more contain the fullness of his overflowing affection than the pitcher that is held to the fountain can contain the stream that gushes forth perpetually.

Angelique was almost carried away from her purpose, however. Had her heart asserted its rightful supremacy—that is, had nature fashioned it larger and warmer—she had there and then thrown herself into his arms and blessed him by the consent he sought. She felt assured that here was the one man God had made for her, and she was cruelly sacrificing him to a false idol of ambition and vanity. The word he pleaded for hovered on her tongue, ready like a bird to leap down into his bosom; but she resolutely beat it back into its iron cage.

The struggle was the old one—old as the race of man. In the losing battle between the false and true, love rarely comes out of that conflict unshorn of life or limb. Untrue to him, she was true to her selfish self. The thought of the Intendant and the glories of life opening to her closed her heart, not to the pleadings of Le Gardeur—them she loved—but to the granting of his prayer.

The die was cast, but she still clasped hard his hand in hers, as if she could not let him go. "And will you do all you say, Le Gardeur—make my will your law, my pleasure your conscience, and let me be to you all reason and motive? Such devotion terrifies me, Le Gardeur?"

"Try me! Ask of me the hardest thing, nay, the wickedest, that imagination can conceive of hands do—and I would perform it for your sake."

Le Gardeur was getting beside himself. The magic power of those dark, flashing eyes of hers was melting all the fine gold of his nature to folly.

"Die!" replied she, "I do not ask you to drink the sea; a small thing would content me. My love is not so exacting as that, Le Gardeur."

"Does your brother need my aid?" asked he. "If he does, he shall have it to half of my fortune for your sake!" Le Gardeur was well aware that the prodigal brother of Angelique was in a strait for money, as was usual with him. He had lately importuned Le Gardeur, and obtained a large sum from him.

She looked up with well-affected in-

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dignation. "How can you think such a thing, Le Gardeur? my brother was not in my thought. It was the Intendant I wished to ask you about—you know him better than I."

This was not true. Angelique had studied the Intendant in mind, person and estate, weighing him scruple by scruple, to the last attainable atom of information. Not that she had sounded the depth of Bigot's soul—there were regions of darkness in his character which no eye but God's ever penetrated. Angelique felt that, with all her acuteness, she did not comprehend the Intendant.

"You ask what I think of the Intendant?" asked he, surprised somewhat at the question.

"Yes—an odd question, is it not, Le Gardeur?" and she smiled away any surprise he experienced.

"Truly, I think him the most jovial gentleman that ever was in New France," was the reply; "frank and open-handed to his friends, laughing and dangerous to his foes. His wit is like his wine, Angelique; one never tires of either, and no lavishness exhausts it. In a word, I like the Intendant, I like his wit, his wine, his friends—some of them, that is!—but above all, I like you, Angelique, and will be more his friend than ever for your sake, since I have learned his generosity towards the Chevalier des Meloises."

The Intendant had recently bestowed a number of valuable shares in the Grand Company upon the brother of Angelique, making the fortune of that extravagant young nobleman.

"I am glad you will be his friend, if only for my sake," added she, coquettishly. "But some great friends of yours like him not. Your sweet sister Amelie shrank like a sensitive plant at the mention of his name, and the Lady de Tilly put on her gravest look to-day when I spoke of the Chevalier Bigot."

Le Gardeur gave Angelique an equivocal look at mention of his sister. "My sister Amelie is an angel in the flesh," said he. "A man need be little less than divine to meet her full approval; and my good aunt has heard something of the genial life of the Intendant. One may excuse a reproving shake of her noble head."

"Colonel Philibert, too! he shares in the sentiments of your aunt and sister, to say nothing of the standing hostility of his father, the Bourgeois," continued Angelique, provoked at Le Gardeur's want of adhesion.

"Pierre Philibert! He may not like the Intendant; he has reason for not doing so; but I stake my life upon his honor—he will never be unjust towards the Intendant or any man." Le Gardeur could not be drawn into a censure of his friend.

Angelique shielded adroitly the stiletto of innuendo she had drawn. "You say right," said she, craftily; "Pierre Philibert is a gentleman worthy of your regard. I confess I have seen no handsomer man in New France. I have been dreaming of one like him all my life! What a pity I saw you first, Le Gardeur!" added she, pulling him by the hair.

"I doubt you would throw me to the fishes were Pierre my rival, Angelique," replied he, merrily; "but I am in no danger. Pierre's affections are, I fancy, forestalled in a quarter where I need not be jealous of his success."

"I shall at any rate not be jealous of your sister, Le Gardeur," said Angelique, raising her face to his, suffused with a blush; "if I do not give you the love you ask for, it is because you have it already; but ask no more at present from me—this, at least, is yours," said she, kissing him twice, without prudery or hesitation.

That kiss from those adored lips sealed his fate. It was the first—better it had been the last; better he had never been born than have drunk the poison of her lips.

"Now answer me my questions, Le Gardeur," added she, after a pause of soft blandishments.

Le Gardeur felt her fingers playing with his hair, as, like Delilah, she cut off the seven locks of his strength.

"There is a lady at Beaumanoir; tell me who and what she is, Le Gardeur," said she.

He would not have hesitated to betray the gate of Heaven at her prayer; but, as it happened, Le Gardeur could not give her the special information she wanted as to the particular relation in which that lady stood to the Intendant. Angelique, with wonderful coolness, talked away, and laughed at the idea of the Intendant's gallantry. But she could get no confirmation of her suspicions from Le Gardeur. Her inquiry was for the present a failure, but she made Le Gardeur promise to learn what he could, and tell her the result of his inquiries.

They sat long conversing together, until the bell of the Recollets sounded the hour of midnight. Angelique looked in the face of Le Gardeur with a meaning smile, as she counted each stroke with her dainty finger on his cheek. When finished, she sprang up and looked out of the lattice at the summer night.

The stars were twinkling like living things. Charles Wain lay inverted in the northern horizon; Bootes had driven his sparkling herd down the slope of the western sky. A few thick tresses of her golden hair hung negligently over her bosom and shoulders. She placed her arm in Le Gardeur's, hanging heavily upon him as she directed his eyes to the starry heavens. The selfish schemes she carried in her bosom dropped for a moment to the ground. Her feet seemed to trample them into the dust, while she half resolved to be to this man all that he believed her to be—a true and devoted woman.

"Read my destiny, Le Gardeur," said she, earnestly. "You are a Seminarist. They say the wise fathers of the Seminary study deeply the science of the stars, and the students all become adepts in it."

"Would that my starry heaven were more propitious, Angelique," replied he, gaily kissing her eyes. "I care not for other skies than these! My fate and fortune are here."

Her bosom heaved with mingled passions. The word of hope and the word of denial struggled on her lips for mastery. Her blood throbbed quicker than the beat of the golden pendule on the marble table; but, like a bird, the good impulse again escaped her grasp.

"Look, Le Gardeur," said she. Her delicate finger pointed at Perseus, who was ascending the eastern heavens; "there is my star. Mere Malheur—you know her—she once said to me that that was my natal star, which would rule my life."

Like all whose passions pilot them, Angelique believed in destiny.

Le Gardeur had sipped a few drops of the cup of astrology from the venerable Professor Vallier. Angelique's finger pointed to the star Algol—that strange, mutable star that changes from bright to dark with the hours, and which some believe changes men's hearts to stone.

"Mere Malheur lied!" exclaimed he, placing his arm round her, as if to protect her from the baleful influence. "That cursed star never presided over your birth, Angelique! That is the demon star, Algol."

Angelique shuddered, and pressed still closer to him, as if in fear.

"Mere Malheur would not tell me the meaning of that star, but bade me, if a saint, to watch and wait; if a sinner, to watch and pray. What means Algol, Le Gardeur?" she half faltered.

"Nothing for you, love. A fig for all the stars in the sky! Your bright eyes outshine them all in radiance, and overpower them in influence. All the music of the spheres is to me discord, compared with the voice of Angelique des Meloises, whom alone I love!"

As he spoke, a strain of heavenly harmony arose from the chapel of the Convent of the Ursulines, where they were celebrating midnight service for the safety of New France. Amid the

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Her night-dream of love was over. Her fears vanished, her hopes were all alive, and she began to prepare for a possible morning call from the Chevalier Bigot.

CHAPTER XVII. Splendide Mendax.

Amid the ruins of the once magnificent palace of the Intendant, massive fragments of which still remain to attest its former greatness, there may still be traced the outline of the room where Bigot walked restlessly up and down the morning after the Council of War. The disturbing letters he had received from France on both public and private affairs irritated him, while it set his fertile brain at work to devise means at once to satisfy the Marquise de Pompadour, and to have his own way still.

The walls of his cabinet—now bare, shattered and roofless with the blasts of six score winters—were hung with portraits of ladies and statesmen of the day, conspicuous among which was a fine picture from the pencil of Vanloo, of the handsome, voluptuous Marquise de Pompadour.

With a world of faults, that celebrated dame, who ruled France in the name of Louis XV., made some amends by her persistent good nature and her love for art. The painter, the architect, the sculptor, and, above all, the men of literature in France, were objects of her sincere admiration, and her patronage of them was generous to profusion. The picture of her in the cabinet of the Intendant had been a work of gratitude by the great artist who painted it, and was presented by her to Bigot as a mark of her friendship and demi-royal favor. The cabinet itself was furnished in a style of regal magnificence, which the Intendant carried into all details of his living.

The Chevalier de Pean, the secretary and confidential friend of the Intendant, was writing at a table. He looked up now and then with a curious glance as the figure of his chief moved to and fro with quick turns across the room. But neither of them spoke.

(To be continued.)

With the Flowers.

Perennials for the Flower Garden.

The advisability of perennials for the farm flower garden has been so often set forth in these columns, that no further word on that subject is at present necessary. To those who have proved their merits, however, the following list of varieties, selected from a list given by Mr. Roderick Cameron in a paper read before the Horticultural Society at Toronto, may prove suggestive. The species are all such as will succeed about Toronto:

Phlox paniculata Decussata; Phlox Etna, fiery red, 2 to 3 feet high; Phlox Snowdon, pure white, 2 feet; Phlox, Nettie Stewart, white, with light pink eye, flowers in June and July, and is the earliest of its class; Phlox Subulata (moss pink), 4 to 6 inches, can be got in any color, from pure white up, and is grand for border, etc.

Pink Family.—Lychnis Haagiana Grandiflora, 1 to 2 feet, from white to fiery red, blooms from midsummer to fall; Lychnis Viscaria Splendens, double rose red, (June); Lychnis Plenissima Semperi, double pink.

Loosestrife Family.—Lythrum Salicarium, or purple loosestrife, a grand subject for a damp spot in the garden, 4 to 5 feet, (July and August).

Lily Family.—Tritoma, 4 to 5 feet, orange-red, (July and August); Kniphofia Aloidis Obelisque, 2 to 3 feet, (July, Aug. and Sept.); Liliun Martagon Alba, or White Meadow Lily, 2 feet; Liliun Testacium Nankeen, buff color, 5 feet, grand variety; Allium Azurium, 2 to 3 feet, in bloom June and July, deep sky blue, a good clump of them makes a fine display. Yucca, 2 varieties, both first class, hardy-border evergreen plants, valued for foliage. Funkia, Lance-

sweet voices that floated up on the notes of the pealing organ was clearly distinguished that of Mere St. Borgia, the aunt of Angelique, who led the choir of nuns. In trills and cadences of divine melody, the voice of Mere St. Borgia rose higher and higher, like a spirit mounting the skies. The words were indistinct, but Angelique knew them by heart. She had visited her aunt in the Convent, and had learned the new hymn composed by her for the solemn occasion.

As they listened with quiet awe to the supplicating strain, Angelique repeated to Le Gardeur the words of the hymn, as it was sung by the choir of nuns:

"Soutenez, grande Reine,
Notre pauvre pays!
Il est votre domaine,
Faites fleurir nos lis!
L'Anglais sur nos frontieres
Porte ses etendards:
Exaucez nos prieres,
Protegez nos remparts!"

The hymn ceased. Both stood mute until the watchman cried the hour in the silent street.

"God bless their holy prayers, and good-night and God bless you, Angelique!" said Le Gardeur, kissing her. He departed suddenly, leaving a gift in the hand of Lizette, who courtesied low to him with a smile of pleasure as he passed out, while Angelique leaned out of the window listening to his horse's hoofs, until the last tap of them died away on the stony pavement.

She threw herself upon her couch and wept silently. The soft music had touched her feelings. Le Gardeur's love was like a load of gold, crushing her with its weight. She could neither carry it onward nor throw it off. She fell at length into a slumber filled with troubled dreams. She was in a sandy wilderness, carrying a pitcher of clear, cold water, and, though dying of thirst, she would not drink, but perversely poured it upon the ground. She was falling down into unfathomable abysses, and pushed aside the only hand stretched out to save her. She was drowning in deep water, and she saw Le Gardeur buffeting the waves to rescue her, but she wrenched herself out of his grasp. She would not be saved, and was lost! Her couch was surrounded with indefinite shapes of embryo evil.

She fell asleep at last. When she awoke, the sun was pouring in her windows. A fresh breeze shook the trees. The birds sang gaily in the garden. The street was alive and stirring with people.

It was broad day. Angelique des Meloises was herself again. Her day-dream of ambition resumed its power



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FOR SALE BY AUCTION The Imported Clydesdale Stallion

On May 18th, our entire stock of Registered Holsteins, Hackneys, Leicesters and Berkshires, Rigs, Implements, other horses and pigs, in fact, everything we have on this well-equipped farm of 150 acres, as we have sold the farm and are moving to the city. Send for catalogue.

G. H. CAUGHELL & SON, Middlemarch,
Five miles west of St. Thomas, Ont.

Lord Scott, imp (14249). Bay. Foaled June, 1904. (See illustration June 11th, 08, Farmer's Advocate). Sire Marcellus (11110), by Hiawatha, dam Primrose, by Benedict, by Baron's Pride, will stand for service this season at his stable in Brampton, Ont. Terms, \$25. One dollar down at time of service, balance payable January 1st, 1910.

W. J. McCALLUM, Brampton, Ont.

olata Undulata, Argenta Variegata, Funckia Lancefolia Undulata Aurea, and F. Thos. Hogg—all good.

Mustard Family.—Arabis Albida, or Rock Cress, 6 inches, white, 2 varieties, single and double, bloom very early.

Rose Family.—Spiraea, or Meadow Sweet: Spiraea Aruncus, or Goat's Beard, cream-white, 4 to 6 feet, (June and July); Spiraea Chinensis, pink, 3 to 4 feet, (July and Aug.); Spiraea Filipendula, 1 to 2 feet, white, beautiful, (June and July).

Campanula Family.—Campanula Lactiflora, cream-white, fine to mix with phlox in a bed. Japanese Bell Flower, blue, and white.

Scrophularis Family.—Veronica Spicata Rosea, pink, persistent bloomer; Veronica Rupestris, creeping, covered with sky-blue flowers.

Mint Family.—False Dragon's Head, 4 to 5 feet, pink; also a white variety; good for deep, damp soil.

Amaryllis Family.—Gladiolus communis, hardy, 3 feet, purple. Along with it, plant for succession Tritoma or Blazing Star.

Leadwort Family.—Statice Latifolia, or Sea Lavender, 2 feet, lavender blue, good for cutting and for drying for winter bouquets; very hardy.

Parsley Family.—Fryngium Yuccafolium, or Sea Holly, beautiful; protect slightly in winter by inverted peach-basket, with coarse manure above. Aстранtia Major, silvery-gray flowers, good for cutting.

Buttercup Family.—Ranunculus Aconitifolius Flora Plena, double white buttercups, (June and July). Raw Speciosus Flora Plena, yellow, May and June.

Compositae Family.—Three-lobed Leaved Rudbeckia, 4 feet, orange-yellow, single; Stokesia, 1 to 1½ feet, blue; Achillea Ptermica, the Pearl (Yarrow); Chrysanthemum, Maximum Superbum, 2 to 3 feet, white, with yellow disks, July to frost.

Funica Saxifraga fl. pl., perhaps one of the most perpetual-blooming plants we have, as they bloom all season, light pink, pretty, grass-like foliage.

The majority of hardy perennials have a dislike to dry soils, which cause red spiders to thrive and destroy the foliage. Nearly all of these plants are gross feeders, therefore deep trenching of the soil, with all the decayed manure that can be dug into it, is advised. If the soil is heavy, use horse manure and leaf mould. If light and sandy, use cow manure and hardwood ashes to bind it. A coating of leaf-mould put on in the spring over the surface as a mulch, keeps the plants cool and damp, and helps to keep the weeds down.

HAD IT IN FOR HAM.

Edgar Smith, who is one of the big lawyers of Muskogee now, but who used to practice in Arkansas, had a case once where there was great difficulty in getting a jury, says the Saturday Evening Post. Nearly all the talesman had excuses.

Finally, one man was called. "What is your excuse?" asked the judge.

"Hain't got none."

"What?" asked the judge, much astonished; "you have no excuse? Are you sure your father isn't sick?"

"Bin dead twenty years."

"Doesn't your cotton need tending?"

"Don't raise none."

"Isn't the barn in need of repairs?"

"Ain't got no barn."

"And you can spare the time to sit on this jury for a month or so?"

"You bet! Glad of the chance."

"Well, well!" exclaimed the judge; "you are the only man on the panel who has time to serve the State. How does that come?"

"Wal," said the juryman, "I heern tell you was goin' to try that ornery Ham Mitchell this yere term. He poisoned a cow of mine onct."

He—Now, would you women take the trouble to vote if you had a right to?

She—No, we wouldn't.

He—Then why are you making such a fuss about voting?

She—Because you men won't let us.

I see by the city papers the latest song is entitled "No Matter How Hungry a Horse May Be, You Cannot Make Him Eat a Bit." That reminds me, I heard a fellow say the other day he had knocked a farm wagon speechless. It seems he had broken the tongue out of it.

Sir Melville Beachcroft, who is a practical philanthropist and a social reformer of the useful type, while waiting in a tenement house for the occupant of the first floor to admit him, chanced to overhear two women conversing on the stairs.

One chanced to remark that her husband always wore a clean shirt every Sunday morning. The other replied, "Well, now, I never cares about Sundays, but I allays do see that 'e 'as a clean shirt every Saturday afternoon, 'cos that's the time he is generally drinking, and when 'e does take his coat off to fight I do like to see him look nice and clean."

To illustrate the different view-points of manufacturers upon the question of tariff revision, Charles Heber Clark, a writer upon economic subjects, but better known as a humorist under the pen name of "Max Adeler," recently told this story to a gathering of Philadelphia manufacturers:

"There is a farmer neighbor of mine in Montgomery county who was the owner of a very good Alderney cow. One day a stranger, having admired the cow, met the farmer and asked, 'What will you take for that cow?'"

"My farmer friend scratched his head a minute and then said, 'Look ahere, be you the tax assessor or has she been killed on the railroad?'"

A little while ago the newly-elected Provost of a Scotch provincial town was about to make his first journey in that capacity through the place. The townspeople had arranged that from an arch of flowers under which he was to pass a floral crown should hang, surrounded by the words, "He well deserves it." But the wind blew away the crown, and when the Provost passed under the arch, to the great joy of those who had voted against him, only a rope, with a noose at the end of it, dangled there, with "He well deserves it" standing outside in bold relief.

GOSSIP.

A GOOD SALE OF "DODDIES."

At Maryville, Mo., on April 14th, W. W. Andrews and Davis Bros., sold at auction 39 head of Aberdeen-Angus cattle at an average of \$216.70. The highest price, \$740, was realized for Blackbird of Woodlawn 14th, a four-year-old cow, Omer Catterson, Missouri, being the buyer. Seven other females brought prices ranging from \$400 to \$525, and the two-year-old bull, Black Lad 2nd, sold for \$500, to C. D. & E. F. Caldwell, of Missouri.

CASTRATE THE LAMBS.

Thousands of dollars are annually lost to sheep-raisers by neglect of castrating the male lambs in grade or common flocks intended for the butcher's market. The ram lambs become restless in the fall months and fail to put on flesh, while they disturb the ewe flock also, and prevent them from thriving, the consequence being that much lower prices have to be accepted than would be the case were the operation of castration attended to at the proper time, which is when the lambs are from two to three weeks old. There is no more art in performing the operation on a lamb than on a calf or a pig; just cut off about one-third of the sack, and pull the testicles out, one at a time, with the thumb and forefinger of one hand, while pressing down with the other hand on the base of the scrotum, and the job is done.

TRADE TOPIC.

The fact that roofs put on 20 to 35 years ago remain in serviceable condition to-day, is the best evidence of the durability of coal-tar pitch-tarred felt and gravel, laid according to the Barrett specification. The average cost is said to be less than one-quarter of a cent per square foot per year of service. The Paterson Manufacturing Co., of Toronto, Ont.; Montreal, Que., and Winnipeg, Man., and the Carrille-Paterson Manufacturing Co., of St. John, N. B., and Halifax, N. S., are Canadian agents. Write for their book containing particulars, and mention "The Farmer's Advocate."

MAY BARGAINS IN USED ORGANS

Every Organ described in this list is in perfect order, and is fully guaranteed. Some have only been used a few months. We know that every one will give entire satisfaction, and, therefore, ship subject to approval of customer, agreeing to pay the return freight if not satisfactory. Remember this when reading the descriptions and prices, and if you need an instrument at all, an early order should be the result, for certainly better bargains never have been offered.

Send your second and third choices when ordering, in case your first choice should be sold before your order is received.

TERMS OF PAYMENT.

Organs under \$50—\$5 cash and \$3 per month without int. Organs over \$50—\$10 cash and \$4 per month without int. A discount of 10% for cash. A handsome stool accompanies each instrument.

BELL—A small 5-octave parlor Organ, in walnut case, with low top. Has 8 stops, 2 sets of reeds throughout, knee swell and octave coupler. Special Sale Price \$29 00

WILLIAMS—A 5-octave parlor Organ, in walnut case, with extended top. Has 9 stops, 2 sets of reeds throughout, 2 knee swells, octave coupler. Special Sale Price \$32 00

DOMINION—A 5-octave parlor Organ, by the Dominion Organ Co., in handsome dark solid walnut case, with high top. Has 6 stops, 2 sets of reeds in the treble, 1 set in the base, knee swells, etc. An attractive Organ. Special Sale Price \$34 00

DOMINION—A 5-octave walnut Organ, by the Dominion Organ Co., Bowmanville, with resonant ends and high back. Has burl walnut panels, 8 stops, 2 sets of reeds throughout, couplers and 2 knee swells. Special Sale Price \$39 00

BELL—A 5-octave parlor Organ, by W. Bell & Co., Guelph, in handsome solid walnut case, with extended top. Has 10 stops, 2 sets of reeds in the treble, 1 set in the bass, 2 knee swells, mouseproof pedals, etc. A fine instrument. Special Sale Price \$42 00

KARN—A 5-octave parlor Organ, by D. W. Karn & Co., Woodstock, in attractive walnut case, with extended top, containing music rack. Has cylinder fall, 10 stops, 2 sets of reeds throughout, couplers and 2 knee swells. Special Sale Price \$43 00

SHERLOCK-MANNING—An almost new 5-octave Chapel Organ by the Sherlock-Manning Co., London, in handsome oak case, with rail top and finished back. Has 13 stops, 2 sets of reeds throughout, 2 couplers, 2 knee swells, mouseproof pedals, etc. Used only six months. Special Sale Price \$56 00

DOMINION—A 6-octave piano-case Organ, by the Dominion Co., Bowmanville, in mahogany-finished case, without rail top. Has 13 stops, 3 sets of reeds in the treble, 2 in the bass, mouseproof pedals, etc. Special Sale Price \$59 00

BERLIN—A 6-octave piano-case Organ, by the Berlin Organ Co., in handsome solid walnut case, without mirror top. Has 11 stops, 2 complete sets of reeds, 2 knee swells, mouseproof pedals, etc. A fine modern instrument in perfect order. Special Sale Price \$73 00

DOMINION—A 6-octave piano-case Organ, by the Dominion Co., Bowmanville, in walnut case. Has 11 stops, 2 sets of reeds throughout, 2 couplers, 2 knee swells. Special Sale Price \$76 00

BELL—A 5-octave Chapel Organ, by W. Bell & Co., Guelph. Has 16 stops, 6 sets of reeds in the treble, 4 sets in addition to sub-bass in the bass, octave couplers, 2 knee swells, etc. Is in very attractive style of case, with finished back. Has lever for pumping, as well as pedals. Special Sale Price \$79 00

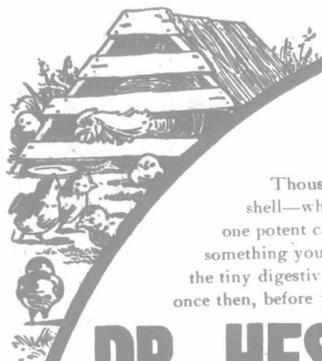
DOHERTY—A 6-octave piano-case Organ, by W. Doherty & Co., Clinton, in case of very attractive design, with mirror top. Has 13 stops, 2 full sets of reeds, 2 couplers, 2 knee swells. Cannot be told from new. Special Sale Price \$81 00

KARN—A very attractive 6-octave piano-case Organ, by D. W. Karn & Co., Woodstock, in solid walnut case, with mirror rail top. Has 11 stops, 2 sets of reeds throughout, 2 couplers, 2 knee swells, mouseproof pedals, etc. Just like new. Special Sale Price \$84 00

DOMINION—A 6-octave piano-case Organ, by the Dominion Organ Co., Bowmanville, in beautiful walnut case, carved panels, mirror top and automatic folding mouseproof pedals. Has 11 stops, 2 full sets of reeds, 2 couplers and 2 knee swells. Special Sale Price \$87 00

SHERLOCK-MANNING—A 6-octave piano-case Organ, by the Sherlock-Manning Co., London, in walnut case, with full length plain polished panels, slightly carved in relief. Has 13 stops, 2 sets of reeds throughout, 2 couplers and knee swells, mouseproof pedals. Has been used less than 6 months. Special Sale Price \$88 00

GOURLAY, WINTER & LEEMING
188 Yonge Street, Toronto, Ont.



Are You Losing Chicks

Thousands of promising little chicks die, only a few days from the shell—why? Outside of accidents, depredations of rats, etc., there is but one potent cause of chicken mortality—neglect. If you are losing chicks, there is something you are not doing that you should do. Very likely you have failed to keep the tiny digestive organs of these little creatures in a healthy, active condition. Begin at once then, before you lose another, to give a very little of

DR. HESS Poultry PAN-A-CE-A

once a day.

Dr. Hess Poultry Pan-a-ce-a is the prescription of Dr. Hess (M. D., D. V. S.) and in it are just the elements your chickens need to bring about healthy growth. It is "The Dr. Hess Idea," and you can, by aiding digestion, provide every needed element. Dr. Hess Poultry Pan-a-ce-a contains bitter tonics for digestion, iron for the blood and cleansing nitrates. It will make vigorous breeding stock, and it will save the little chicks after hatching and hurry them on to the point where they're profitable.

Nothing fills the egg basket like Poultry Pan-a-ce-a. It also cures gapes, cholera, roup, etc.

"The Dr. Hess Idea," put in practice, means unflinching success with hens. One penny's worth of Dr. Hess Poultry Pan-a-ce-a is sufficient for 30 hens one day. **Sold on a written guarantee.**

1½ lbs. 35c; 5 lbs. 85c; 12 lbs. \$1.75; 25 lb. pall \$3.50. Duty paid. **Dr. HESS & CLARK, Ashland, Ohio, U. S. A.**

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

DR. HESS STOCK FOOD

is a tonic, formulated expressly to correct a weakened animal digestion. That it does this is the testimony of successful feeders everywhere. It is "The Dr. Hess Idea," and contains elements which act upon animal organs, causing the maximum amount of food to be assimilated. It makes a dairy cow give more milk, a fattening steer round out trim and plump in the least time; makes hogs fat better and puts horses in prime condition. The ingredients in Dr. Hess Stock Food are recommended by prominent medical men to act upon digestion, build good blood and eliminate all dead, poisonous matter. **Sold on a written guarantee.**

100 lbs. \$7.00; 25 lb. pall \$2.00. Smaller quantities at a slight advance. Duty paid.

Send 2 cents for Dr. Hess Stock Book, Free.

INSTANT LOUSE KILLER KILLS LICE



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.

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

POULTRY AGENTS, write us; reliable men we start in business of their own and give credit. Merchants Portrait Co., Limited, Toronto.

TRACTION Engine for Sale—One, New Ross 18-horse-power, cheap. Has not been in use yet; also 30-horse-power firebox boiler, tested 200 lbs. C. W. F. repairs, R. J. Black, Apply H. E. Jolliffe, St. Catharines, Ont.

WANTED—Girls to work in large Hosiery Knitting Mill in attractive Ontario town. Highest wages paid. No experience necessary to start. Apply Box P, "Farmer's Advocate," London, Ontario.

WANTED—A married man, for general farm work. Also single man. "Must be able to milk." Long-distance phone. W. W. Ballantyne, Stratford, Ontario.



Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

A WINTER LAYING strain White Leghorns. Thirteen, 75c; forty, \$2. Geo. Easton, Jr., Whitney.

A BARGAIN to introduce eggs from Barred Rock winners, seventy-five cents per fifteen. Satisfaction guaranteed. Geo. S. Hammond, Poole, Ontario.

BARRED ROCKS—39 hens laid from January 1st till April—188 dozen eggs. Price \$1 per 15. T. Edward Musgrove, Wroxeter, Ont.

BUFF ORPINGTON EGGS—\$1 per 15; 9 chicks guaranteed. Splendid selected stock for eggs and market purposes. Free illustrated catalogue. Hugh A. Scott, Caledonia, Ont.

BARRED ROCKS—One grand pen. Well mated. Heavy laying strain. Eggs for hatching, \$2 for fifteen. Burton E. Post, Colpoys Bay, North Bruce.

BUY 95% FERTILE EGGS—That will produce winter layers. Ancona eggs, \$1.50 per fifteen; Single-comb White Leghorn eggs, \$1 per fifteen; \$4.50 for one hundred. Free circulars for stamp. Edward C. Apps, Box 224, Brantford, Ont.

BEST RHODE ISLAND REDS in Canada—Rose and Single-comb. Won silver cup for best collection at the Provincial Winter Fair. Eggs \$2 per 15. \$5 per 50. Barred Rock eggs \$1 per 15. \$4 per 100. O. A. C. stock. Wm. J. Mihm, No. 1 Richardson St., Guelph.

BARRED ROCK eggs from heavy-laying prize-winning stock. Dollar for fifteen. Two dollars for forty. Chas. Hilliker, Norwich, Ont.

BUFF Orpington pure-bred eggs for hatching; 9 chicks guaranteed. Illustrated catalogue, free, tells all about them. Hugh A. Scott, Caledonia, Ont.

CLARK'S BUFF ORPINGTONS—Oldest and largest breeder in Canada. 12 years specializing. Exhibition and egg production combined. Greatest winter layers in America. 11 breeding pens. Eggs from 1st 4 pens, \$5 per 15, infertile replaced free. Eggs from pens 6, 7, 8, 9, 10, 11, from \$1 to \$3 per 15. 50 eggs, \$3; 100 eggs, \$5.50. Crates free. Illustrated catalogue free. J. W. Clark, Cainsville, Ont.

EGGS FOR HATCHING—Barred, Buff and White Rocks, Rhode Island Reds and Black Minorcas, \$1 per 15. Joseph Foster, Brampton, Ont.

EGGS from choice Indian Runner ducks, 10c. each. Single-comb Brown Leghorns (money-makers), \$1 per 15. Frank Bainard, Glanworth, Ont.

EGGS—Buff Wyandottes, from good winter layers, \$1.50 per setting; \$5 per hundred. Chas. Hardy, Mandamin, Ontario.

EGGS FOR HATCHING—"Edelweiss" White Rocks. Trap-nests used all the year. Only hens used as breeders that have proven "worth while" pullets. \$1.50 the 13. J. A. Butler, M. D., Box "F F," Baden, Ont.

EGGS FOR HATCHING—Now half price: Rhode Island Reds, W. Wyandottes, B. P. Rocks, \$1 per 15. 9 chicks guaranteed. J. Crighton, Box 18, Knowlton, Que.

EGGS FOR HATCHING—Barred and White Rocks, White and Silver Wyandottes, Black and Buff Orpingtons, Brown and White Leghorns, Black and Spangled Hamburgs, Houdans, Black Javas, Dorkings, Single and Rose Combed R. I. Reds. These birds won over 300 1st prizes at nine shows. \$1 per fifteen eggs. F. W. Krouse, Guelph, Ont.

FOR SALE—Four hens and cock, \$8. of the following breeds: Barred and White Rocks, White and Silver-laced Wyandottes, Brown and White Leghorns, Black Javas, Silver-grey Dorkings, Single- and Rose-combed R. I. Reds, Silver and Black Hamburgs, Buff and Black Orpingtons, F. W. Krouse, Guelph, Ont.

HIGH-CLASS White Wyandotte eggs for hatching from prize-winning stock. \$1.50 per 15; \$2.50 per 30. Brown Bros., Colville, Ont.

INDIAN RUNNER DUCKS—The sensational laying and paying kind. Eggs, \$1.25 for 12. Easy to raise. H. E. Moffat, Woodstock, Ontario.

KLAGER'S Rhode Island Reds—both combs. 8 breeding pens. Enclose 5c. for catalogue. Klager's Poultry Yards, Hespeler, Ont.

LOOK—Rose-comb Black Minorcas that win prizes at the good shows. Have an egg record of over 200 eggs per year. Campbell's, Fould's and Lloyd Mishler strains, the best winter layers in Canada. Two dollars per setting. Square deal to all. Walter Bowron, care Sanford Co., Hamilton, Ont.

LOOK—Eggs from S. C. Black Minorcas. Large, grand-laying strain, prizewinners. Eggs \$1.50 per 15. Order now. You will be pleased. Leslie Taylor, Langside, Ont.

RHODE ISLAND REDS—Rose-comb. Bred ten years from carefully selected heavy winter layers of large brown eggs. Eggs, dollar half per fifteen. Satisfaction guaranteed. Jno. Luscombe, Merton, Ont.

ROSE-COMB Brown and Single White Leghorns, bred from some of the best laying strains in America. Eggs, \$1.50 per 15, or \$2.50 per 30; also Rouen ducks at \$1 per 6 or \$2 per 13. J. N. Rutherford, Caledonia East, Ontario.

P. C. RHODE ISLAND REDS—Best farmers' fowl. Eggs from winners reasonable. Circular free. \$1 per 15; Partridge Wyandottes, \$1.50 per 15. Bert Smith, Colville, Ontario.

SINGLE-COMB BROWN LEGHORNS—Prize winners. Eggs reduced, 75c. per fifteen. H. W. Parry, Princeton, Ont.

S. C. W. LEGHORN EGGS—Settings ten cents an egg. Five dollars a hundred. Good laying strain. Martin Robertson, Kent Centre, Ontario.

WHITE Rock eggs for sale, also a few cockerels. Apply to Howard Smith, Winona, Ont.

WHITE Wyandotte eggs from choice matings, \$1.50 per 30, in Morgan crates. W. A. Bryant, Cairnform, Ont.

WANTED, your order for Barred Rock eggs, winners at Toronto, London and Guelph. Prices reasonable. Leslie Kerns, Freeman, Ont.

Single-comb White Leghorns

Bred from best prize-winning and grand-laying strains. Eggs one dollar per fifteen. A hatch guaranteed.

Geo. D. Fletcher, Binkham P. O., Ontario
Erin shipping station, C. P. R.

The Only Simple Engine

THE ST. MARY'S Semi-Automatic Gasoline Engine

Only one-third the parts seen on other engines.

Runs on one-third less fuel. Easiest engine to start. No cranking. This engine is so simple that it can hardly get out of order.

It has so few parts that we can afford to build it better and sell it cheaper than other engines.

Mounted on Skids, Water Reservoir on Cylinder, Gasoline Tank in Bed, it can be taken anywhere on the farm.

It will pump your water, grind your feed, saw your wood, run separator, churn, washing machine and ice-cream freezer by day, and light your home with electricity by night.

Every conceivable advantage and convenience for you is combined in The St. Mary's Semi-Automatic Gasoline Engine. Write now for our free expert opinion on your requirements.

A. W. PARKS & SON,
Petrolea, Canada.

GIVEN AWAY 4 Cows, 2 Horses, 6 Hogs

70 Hens, wagons, tools and machinery all thrown in by aged owner to get quick sale of his beautiful 90-acre farm; cuts 40 tons hay, 100 bearing fruit trees; wood, spring water; 15-room residence; barns and outbuildings. \$3500 takes all. It is your chance to secure an Empire State money-maker. For details and travelling instructions, see page 27 "Strout's April Bulletin" copy FREE. Dept. 2415, E. A. Strout Co., University Block, Syracuse, N. Y.

GOSSIP.

Too late for this issue, Mr. H. J. Davis, Woodstock, Ont., sends a change of his advertisement of Yorkshires, in which he is offering a good lot of young boars, ready for service; young sows of breeding age, and a choice lot of spring pigs, of which he can supply pairs not akin, all bred from large, imported stock.

At the Royal Dublin Society's Spring Show at Ball's Bridge, Dublin, April 20th, the Chaloner Plate (£155), for the best Shorthorn bull in the show, was won by Mr. Miller's two-year-old, Royal Duke, with Mr. A. J. Marshall's Royal Eclipse as reserve, a roan six-year-old, bred at Uppermill, and sired by Bapton Favorite.

The champion Clydesdale stallion at the Kilmarnock, Scotland, Show, on April 17th, was the two-year-old, Fyvie Baron (14681), by Baron's Pride, exhibited by A. & W. Montgomery, and bred by G. & J. Cocker, Fyvie. The champion female was Mr. Stephen Mitchell's brood mare, Minnewawa, and the same owner's Boughan Lady Peggy was reserve. Both are by the famous Hiawatha.

The champion female Ayrshire at the Kilmarnock, Scotland, Show, April 17th, 1909, was the cow, Meikle Kilmory Lady Bute, by Flora's Chief, exhibited by John Murray, The Muir, Old Cumnock. She was first in the aged cow class. The champion bull was Hugh Allan's Peter Pan, first in the aged class, sired by Duke of Wigtown, Mr. Howie's first-prize two-year-old, by Robin Hood, being the reserve.

The Caledon herd of Shorthorns, the property of the Earl of Caledon, County Tyrone, Ireland, dispersed by auction April 16th, made an average price of \$200. The highest price for a bull was 110 guineas, for the red four-year-old, Scottish Champion, bred by Mr. Watson, Brucefield, and purchased by Captain Ogilby, Dungiven. The highest price for a cow was 60 guineas, for Luxury 32nd, taken by the same buyer. The cattle were in only ordinary breeding condition.

Dalgely Bros., in their advertisement in this issue, announce that about the third week in May they will hold an auction sale in London, Ont., of choice, newly-imported Clydesdale mares and fillies, including some of show-ring material. Date of sale and further particulars will be given in a later issue. The class of horses this firm import invariably finds ready purchasers, and this offering will be fully up to the standard.

RECORD PRICES FOR SHIRES.

At the sale of Shires on April 21st, the property of the late Earl Egerton, of Tatton, Cheshire, England, the first six animals realized 6,930 gs. The five-year-old stallion, Tatton Dray King, was purchased by Messrs. Whitley at 3,700 gs. (\$48,907), which included a booked season value for £855; Tatton Herald, a two-year-old colt, by Tatton Friar, at 1,200 gs. (\$6,132), by Mr. Ainscough; and Tatton Friar, nine years old, realized 1,100 gs., which also included the season, looked up for over £500.

G. H. Caughell & Son, of Middlemarch, Elgin Co., Ont., have sold their beautiful home to Mr. A. Watson, of Bedford Park, North Toronto, who has now taken possession, he having sold his 100-acre farm there for \$25,000 cash, to a syndicate. Mr. Watson is a breeder of fancy horses, and no doubt will keep up the reputation of Sprucedale Stock Farm. Messrs. Caughell are retiring and moving into the city of St. Thomas, and are advertising their stock, etc., in this issue.

M. E. Jones, of Illinois, sold 43 head of Shorthorns at auction in Chicago, on April 22nd, at an average of \$191, the top price, \$700, being realized for the ten-year-old cow, Village Belle (imp.) two other cows selling for \$400 and \$445, and the two-year-old bull, Cumberland's Best, for \$500. At Aurora, Ill., on April 23rd, the Brookline Stock-farm Co. sold 25 head, for an average of \$223, the highest price, \$1,000, being paid by Geo. J. Sayer, Illinois, for the three-year-old cow, Stella 5th, while the eight-year-old cow, Webster Star, sold for \$400.

EATON'S CATALOGUE

The Thrifty Workman Saves Money Buying From The Eaton Catalogue



The man who labors with brain or hand for a stated wage deserves all the value he can get out of his money. Our list of customers shows many of this class who are saving by a few dollars every year because they take advantage of the **EATON** Mail Order Service. Do as your neighbor does: share in the saving and satisfaction

THE **T. EATON CO.** LIMITED
TORONTO CANADA

GOSSIP.

Volume 25, of the Dominion Shorthorn Herdbook, has been issued from the Department of Agriculture at Ottawa. The volume contains over 500 pages, and the pedigrees of bulls numbering from 70481 to 74092, and of cows numbering from 82208 to 86119, a total of 3,613 bulls, 3,913 females, and a grand total of 7,526 animals. The volume also includes the 1908 prize-list of Shorthorns at the leading Canadian exhibitions.

Within half a mile of the town of Stayner, in Simcoe County, is the stock farm of H. M. Douglas, breeder and dealer in Clydesdale, Hackney and French Coach horses. Mr. Douglas has lately purchased the farm at Stayner, being previously engaged in the horse-breeding business in the County of Grey, a short distance from the town of Meaford, where for several years he did a somewhat extensive business in handling high-class horses of the above breeds. This being a record year in the demand for horses for breeding and work purposes, Mr. Douglas, at the time of a visit from "The Farmer's Advocate" representative, was sold out pretty closely, having only on hand three head. These are the big black Clydesdale stallion, Creemorne (Imp.) (79034) (12927), the five-year-old son of Boreland's Pride, by Baron's Pride, dam Rival Belle (11295), by Lord of the Isles. He is a massive, big horse, of superior quality, and a prizewinner at the Dominion Exhibition, Sherbrooke, Que., and at Ottawa. Royal Saxon is a Hackney of more than ordinary style, quality and action, a roan, rising four, sired by Imp. Saxon, dam Peerless, by Rosseau Perfection. He has natural, all-round action, of superior quality, and a grand,

IMPORTANT PUBLIC SALE

At Spring Brook Stock Farm, Breslau, Ont., on
THURSDAY, MAY 27, 1909, 1 P. M.

36 head high-class **HOLSTEIN-FRIESIAN CATTLE.**
35 choice **TAMWORTH SWINE** of best British blood.

This is my second public offering, and includes some of the richest blood of the breed. All stock descendants of official record breeding, including a number of tested cows; close in blood to such noted cows as Grace Fayne 2nd's Homestead, the world's champion butter cow; De Kol 2nd, Netherland, Aaggie, Posch, Pieterije, Abbekirk and other noted families. In the lot is Ormsby King Segis, a son of King Segis, sire of the world's champion junior 2-year-old, senior 2-year-old and champion 3-year-old for butter in a week.

TERMS OF SALE.—Cash; 10 months' credit if desired on approved security, with interest at 6 per cent. per annum.

Farm one mile north-east of Breslau station, G. T. R., main line between Sarnia and Toronto; nine miles west of Guelph. Arrangements made for all trains to stop day of sale. Come and buy as cheap as you can.

Catalogue ready May 15th.

A. C. Hallman, Prop., Breslau, Waterloo County, Ontario.

breedy appearance; a show horse all over. Gauthier 3383, is a French Coach stallion, whose breeding on prizewinning lines is most intensive, his sire being one of the most noted show horses in France, and his dam, Gabrielle, having won two first prizes at the Chicago World's Fair, first at Madison Square Gardens, New York, and first at the Trans-Mississippi Exposition, Omaha; he is also a grandson of Perfection, five times champion of America. Gauthier is also a great show horse himself, having won first at Toronto, Ottawa, Sherbrooke, and Detroit, besides several championships. These horses are for sale.

IMPORTANT HOLSTEIN AND TAMWORTH SALE.

On May 27th, as announced in the advertisement in this paper, A. C. Hallman, of Breslau, Ont., will sell at auction from his noted Spring Brook herd, 36 head of high-class Holstein-Friesian cattle, and 35 choice Tamworth swine. The Holsteins in the sale list are rich in the blood lines of some of the most noted producers of the breed, being bred direct from Advanced Registry stock, with large A. R. O. records, as the advertisement indicates. The splendid records of Holstein cows is indisputable evidence of their superior dairy qualities, and dairying is now clearly the most profitable branch of farming. Farmers desiring to improve the production of their herds should write for the catalogue and plan to attend this sale, which offers one of the best opportunities likely to occur this year for securing such high-class stock. The same may be said of the Spring Brook Tamworths, which are acknowledged to be of first-class type and breeding, and the demand and prices of hogs now ruling should make this sale very attractive.

Buy at Wholesale Price

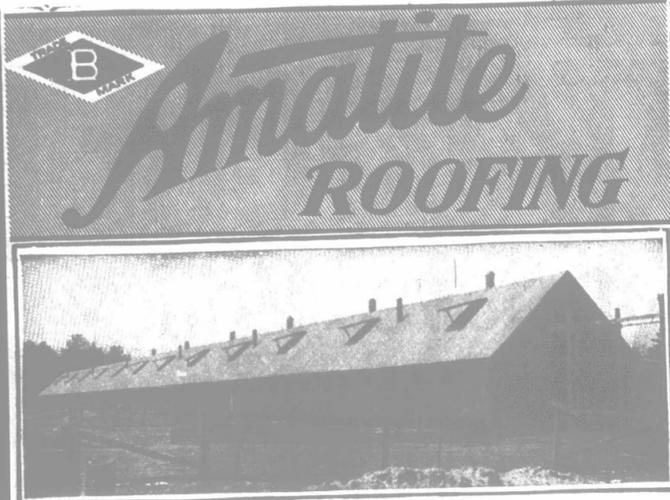


Best quality imported double galvanized **ENGLISH POULTRY NETTING**, 2-inch mesh, put up in 50 running yard rolls. Cut prices as follows:

36-in. high.....	\$1 95
48-in. high.....	2 65
60-in. high.....	3 25
72-in. high.....	3 95

Hardware Russell
126 KING ST. EAST, Toronto, Ont.

Send express money order or postal note with order.



AN EXPERIENCE AT THE BELLE MEADE FARM

THE Belle Meade Farm of Bedford, Mass., is well known for its thoroughgoing and scientific methods, and is a model in many respects. Its big stables are all covered with Amatite Roofing. The owners write us as follows:

"It is now nearly three years since we put your Amatite Roofing on our new 300-ft. buildings. This Roofing is now in its third winter, and has gone through without a leak, and there is every indication that it will be good for many years. The buildings with this light, sparkling Roofing and the red trimmings as painted, are very attractive in appearance, and altogether we are much pleased with your Amatite Roofing. We are contemplating the construction of some further buildings for our Shetland Ponies, and mean to use more of your roofing."

If the Belle Meade Farm people had chosen a "smooth surfaced" roofing it would have cost them more in the beginning, and the difference would have become greater every year. Those roofs were laid in 1905. In 1907 they

would have required a thorough painting, which would have to be repeated in 1909, and every two years thereafter.

The Amatite, however, has had no painting, and needs none. The mineral surface takes care of that. When the roof finally wears out and the owners of the Belle Meade Farm compute the cost of their Amatite Roofing, they will put down "for the Amatite, so many dollars"; "for care of same, nothing." If they had used a painted roofing there would probably be several coats of paint to figure on, besides the original cost of the roofing, and the total would be several times as much as Amatite.

It does not matter whether your roofs be large or small, it is wasteful to use anything but Amatite.

Let us send you a free sample, together with a booklet telling more about Amatite. It will save you money later.

The PATERSON MANUFACTURING CO., Ltd.

TORONTO,
MONTREAL,

WINNIPEG,
VANCOUVER,

ST. JOHN, N. B.
HALIFAX, N. S.

Watch Your FRUIT TREES

Winter spraying can't prevent re-infection. The coming of warmer weather means that insects will be on the wing—passing from tree to tree and orchard to orchard.

Have V 2 Fluid ready and watch the Fruit Trees. At the first sign of insects moving, of Scale, Aphis, Psylla or other destructive insects, spray the trees with V 2 Fluid Spray Mixture (one part V 2 Fluid to 100 parts water).

That means death to every insect on the trees in which it comes into contact—and absolutely no injury to leaf, blossom or fruit. Tell us the size of your orchard and mention this paper and we will send, free, copy of our book "The Eradication of The Plant Pests."

For sale by druggists and dealers generally or direct from

WM. COOPER & NEPHEWS
11 TORONTO.

V 2 FLUID

The Summer Spray

QUESTIONS AND ANSWERS.

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

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

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

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

FLOW OF WATER — TESTING WATER—FOUNDATION FOR HOUSE.

1. How much water would a 1-inch pipe, two thousand feet long, with a fall of not less than 7 feet, deliver per day?

2. Where could I get a sample of water tested, to see whether it would eat iron or not?

3. Which makes the best foundation for a brick house, cost being equal, ordinary stone or cement? M. A. S.

Ans.—1. 1,900 gallons, or 47.5 barrels, approximately, on 7 feet fall in the 2,000 feet.

2. Try the Chemical Department, O. A. C., Guelph.

3. I prefer concrete. WM. H. DAY.

ELECTRIC GENERATOR.

1. What kind of generator would be best adapted for charging four storage cells of 100 ampere hours capacity, to run a ½-h.-p. motor, wound for 7 volts?

2. How should generator be wound?

3. What voltage and amperage should generator give?

4. In installing said generator, would it be necessary to use automatic switches? If so, what is their function, and how are they attached?

5. What horsepower would be required to run said generator?

6. Would a windmill, with 10-ft. wheel, be sufficient?

7. At what speed should said generator be run? W. T.

Ans.—1. Any direct-current generator, giving a somewhat higher voltage and amperage than necessary for the four cells, will be suitable. Each cell will require about 2 volts, and the motor, to give ½ horse-power, will require 26.3 amperes, hence the generator must produce at least 8 volts and 26.3 amperes, if the cells are arranged in series when charging. If the cells were arranged in parallel when charging, then your generator would have to give 2 volts and 26.3 amperes. The latter, however, is a difficult combination to obtain, so the former would be better, and, indeed, a ¼ horse-power motor running on 7 volts, is a very unusual design.

2. Series, shunt, or compound.

3. Answered in 1.

4. Not unless the generator is to be driven by an intermittent power with no one in charge, such as the windmill. If there were not automatic switches, and the windmill were to stop, then the energy already stored in the cells would discharge back through the generator and run it as a motor, or try to, not succeeding if the load was too heavy, but using up the energy all the same, and all the more quickly. These automatic switches are controlled by means of an electric magnet, acting on an iron armature fastened to the knife edge of the switch. As long as the generator is working, the magnet holds the knife-edge of the switch in position, but the moment the generator stops, and the magnetism disappears, the switch is thrown open by means of a spring. It should be possible to so arrange the details of one of these switches that the circuit would be closed again automatically as soon as the generator was started anew. Considerable fine work and design is necessary in their construction, and they are expensive. If the switch was to be automatic in both cases, that is, making the circuit when the windmill starts, as well as breaking it when the mill stops, the magnet controlling the knife edge would have to be in parallel with the cells when being charged, and the resistance of the wire with which the magnet was wound would have to bear a suitable proportion to the resistance of the cells. But, if the switch was to be only an automatic circuit-breaker, then the mag-

net controlling it might be either in series, or in parallel with the cells.

5. The horse-power to run the generator would need to be greater than ½ h.-p. would do it nicely.

6. In case of a strong wind, a 10-ft. windmill would be sufficient, but not in the case of a light wind.

7. This question could only be answered if all the details of the generator were given. Lacking these, the speed would have to be determined by experiment.

Veterinary.

AGALACTIA.

Cow has had three calves, and has always been a good milker. Her udder did not fill before calving five weeks ago, and she has given very little milk, although well fed and looking well. R. H.

Ans.—The absence of milk is called agalactia. It occasionally occurs in all classes of mammals, and the reason is not understood. All that can be done is to milk the cow regularly, feed well, and massage the udder frequently. Her mammary may and may not regain its normal activity. V.

PREGNANT MARE.

Pregnant mare, whose 11 months will be up May 9th, has a swelling in front of her mammary. It is getting larger. What had I better give her? When will she foal? H. A. B.

Ans.—Swellings of this kind are quite common in pregnant mares, especially during the latter months of gestation. In some cases, the whole floor of the abdomen becomes swollen. No treatment other than gentle and regular exercise is advisable. It is not possible to say when she will foal. In round numbers, we say that 11 months is the period of gestation, but it varies greatly in different mares, and in the same mare in different periods. The shortest noted has been 307 days, and the longest 370. Hence, your mare may foal any time now, and may not foal until June. V.

DISTEMPER—NON-APPEARANCE OF TESTICLES.

1. My horses had distemper, from which they have recovered, but are very much run down. What can I give them to tone them up? How could I disinfect the stable? A. C.

2. A male twin calf, six months old, shows no signs of testicles. A. C.

Ans.—1. Take equal parts of powdered sulphate of iron, gentian, ginger and nuxvomica; mix and give each horse a tablespoonful three times daily. The stable can be disinfected by sweeping and dusting thoroughly, and then giving a thorough coat of hot lime-wash, with five per cent. carbolic acid. If you do not want the white-wash in stable, you can use a hot five-per-cent solution of carbolic acid without the lime.

2. The testicles may or may not appear in the scrotum later on. In some instances they do not descend, in which case it is not possible to say whether or not he will be a good breeder, but it is not wise to breed a bull that is not perfect, even though he be potent. V.

TRADE TOPIC.

HUGE BANQUET.—The fortieth anniversary of the founding of the house of N. W. Ayer & Son, one of the leading advertising agencies of America, as well as the successor of the pioneer advertising agency, was celebrated at Philadelphia recently by a banquet tendered by the firm to upward of 500 guests, comprising their 260-odd employees and the most prominent men of the country in advertising circles, journalism and immense enterprises and industries in commercial lines. The esteem in which F. W. Ayer is held was shown by the presentation of loving cups from the publishers with whom he has had business relations, and from the employees of the firm. The history of this advertising agency shows that push and progress go hand in hand, and that "keeping everlastingly at it" brings success. Ayer & Son state that they have greater faith in advertising to-day than ever before.

TRADE TOPICS.

A FACTORY MANUFACTURES ITS OWN FACTORY.

When the Plymouth Cordage Company, of Plymouth, Mass., required enlarged mill capacity to fill the demands for binder twine, they decided to build a new mill themselves. Beginning on paper, their own draughtsmen planned and draughted the new mill to the minutest detail. In a lull between seasons a force of men manufactured cement bricks and then built the mill from the ground up. The completed mill is a model in all respects. It is 430 feet long, 114 feet wide, two stories high, and floored throughout with concrete. A notable feature is the wealth of windows, admitting ample cheerful daylight for the hands, as well as cool breezes from Plymouth Harbor in summer. The new mill is one of several used by a business which was established in 1824.

To read Dan Beard's book, "Guns and Gunning," is next best to actually getting out with a gun and a dog—actually enjoying the fine sport of the woods and the fields. Any man who likes the big outdoors will learn a lot from it that he didn't know. And the boys!—It's a book any boy not a "mollycoddle" will revel in. The book is written and illustrated by Bellmore H. Brown—famed as an explorer, hunter, "shot," and practical outdoor man, and edited by Dan Beard, veteran sportsman and writer, whose pictures and stories have thrilled thousands. The things every man wants to know about hunting and shooting are given, the selection of the gun, its handling, its care. The particular reason why every boy should have this book is that it teaches carefulness in the handling of firearms. Interesting facts about game birds and small game of all kinds, are given about their habits—where to find them—how to get within range of them, etc. Also chapters about woodcraft, camping, camp-outs, cooking—in short, the whole field of hunting and shooting is covered. This book, handsomely illustrated, is published by the J. Stevens Arms & Tool Co., Chicopee Falls, Mass. No one should be without it, for the book costs only 30 cents, bound in cloth and stamped in gilt. Or in paper, with a cover scene in three colors, it costs only 20 cents, postpaid.

The word Kodak is an example of what good, strong advertising can do. No one knows just where it originated, or, at any rate, the origin has never been disclosed, but all the same "Kodak" is a recognized word in the English language of to-day, and a word, the meaning of which is known to all. In our advertising columns will be found an ad. of the Canadian Kodak Co., of Toronto. Kodak ads. have been directed at almost every class of the community, and they say the turn of the farmers has come. Why the Kodak people did not get after "the backbone of the country" first is not quite clear, because the farmer appreciates the uses of a Kodak. Every one living on a farm has unsurpassed opportunities for depicting the many phases of nature. Till the coming of Kodak photography, cumbersome processes made picture-making open to none but a favored few, who had leisure and money—money to buy an expensive outfit, and

Success Manure Spreader Has Light Draft Roller Bearings

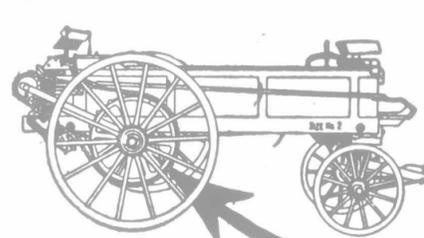
When purchasing a manure spreader you naturally look for the lightest draft machine, but you need look no farther than the "Success" spreader. The "Success" has always been the lightest draft manure spreader, and the recent introduction of Five Sets of Roller Bearings still further decreases the draft—places the "Success" far ahead of its competitors.

The arrows show you where these draft-reducing Roller Bearings are located—one set on either end of the rear axle, one on either end of cylinder shaft, one in the combination gear and sprocket. Thus, you see, the "business end" of the spreader—the mechanism that has the work to do—is made to run with the greatest ease and smoothness.

These "Roller Bearings" prevent the wearing out of boxes and other bearings—and add years to the life of the machine. They decrease the draft at least the equal of a horse.

These "Roller Bearings" are accurately cut out of cold rolled steel and rivetted together in substantial, durable boxes. They can be removed from the machine without coming apart. If you want the easiest running, most durable, greatest improved manure spreader in the world buy the New 1909 "Success."

A Simple instantaneous change of Feed Device. One lever moves a pinion from one row of teeth to another on a Disc Gear, without separating pinion and gear and no ground is skipped.



B Force Feed Worm and Gear Drive guarantees smooth and positive motion of the apron whether going up or down hill, or on level.

C Beater of "Success" is driven by Direct Steel-Pinned Chain Drive. This method makes "Success" lighter draft than any other spreader.

ARROWS ALL POINT TO ROLLER BEARINGS ON BUSINESS END OF "SUCCESS" SPREADER.

THE PARIS PLOW CO., LIMITED, PARIS, ONT.

Western Agents: The John Deere Plow Co., Ltd., Winnipeg, Regina Calgary and Edmonton. Agents for Quebec and Maritime Provinces: Frost & Wood Co., Ltd., Montreal, Quebec, St. John, N.B.

The Tie That Binds

Examine our lock—"The Tie That Binds." Notice how it locks smooth on both sides of the line wire. Being an oval loop, it permits a long bend in the line wire. This does away with short kinks, which cause so many breaks in the fence.

This lock can't slip and adds strength and wear to the whole fence. The "Standard" may cost a little more than small, soft wire fences—but it's worth more to every farmer and stockman who wants the best. Write direct to the factory for catalogue and sample lock.

The Standard Wire Fence Co. of Woodstock Ltd., Woodstock, Ont.

Standard Woven Wire Fence

leisure to devote to the tedious processes then existing. While farmers may be well-to-do, they certainly cannot devote precious hours to lugging a weighty camera with a dozen plates, when they want to take a picture. With Kodak photography, no dark-room is necessary. The cartridges of film are loaded into the Kodak in daylight, and by means of the Kodak Tank Developer the film may be developed by the kitchen sink during the day, instead of in a stuffy dark-room. The experience is in the tank, all you have to do is to read the manual and follow a few instructions so simple that any child can master them. The Kodak people announce a booklet of special interest to farming folk, which may be had free at the dealers, or by mail.

GOSSIP.

This has been one of the best winters for stock that the Canadian ranchers have ever seen. The number of losses is practically nil, and cattle are going out in good heart, although the spring is backward.

Jas. Homon, of Grandview, Man., has organized a company to manufacture and sell an automatic grain shocker he has invented, which is said to do away with the necessity of a man touching the sheaves until they are ready to fork on the wagon. A roughly-constructed model was used last year by the inventor, and the appliance is likely to be offered for sale on the market this season.

Joshua Lawrence, Oxford Centre, makes a change in his advertisement of Berkshires this week, in which he is now offering young sows, bred to farrow in May and June; also boars fit for service, and young pigs farrowed in March and April. The improved prices prevailing for hogs, and the prospect of a continuance of the demand, and the good prices for commercial hogs, is having its effect on the demand for good breeding stock. The Berkshires are steadily growing in favor, and Mr. Lawrence has in his herd the right type to suit the market and the show-ring.

\$40 PER ACRE PROFIT FROM POTATOES.

W. Waugh, a Manitoba potato-grower, who lives near Winnipeg, and claims a clear profit of forty dollars per acre from this crop, estimates the cost of growing an acre of potatoes as follows:

Seed, per acre, 15 bushels.....	\$ 7.50
Two men dropping seed.....	3.00
Man and team plowing.....	4.00
Harrowing until plants grow.....	5.00
Cultivating and hilling.....	5.00
Hoing.....	3.00
Two men and team plowing and hauling in.....	7.00
Five pickers.....	7.50
Total.....	\$42.00

At a selling price of 35 cents per bushel, his crop is worth \$85.50, leaving a profit of \$43.50 per acre, or after deducting marketing expenses, about \$40 clear.

ALFALFA IN SASKATCHEWAN.

Most of our readers are doubtless aware that alfalfa is being successfully grown in Alberta, but it may not be so generally known that it has been grown with decided success by a very few men in Manitoba and Saskatchewan. A farmer in the latter province thus concludes a letter, giving his experience in growing a field of it on well-manured, thoroughly-summer-fallowed stubble-field, inoculated with soil from an alfalfa field.

"It is three years ago since I sowed my alfalfa. The first two years I cut very heavy crops. Last spring I put a pig fence around it and used it as a pig and calf pasture. They did very well on it. Alfalfa, I believe, is the best forage plant we can grow. My reasons are these: Last year was pretty dry here in July, and very hot. The native grasses and cultivated grasses all dried up, but our alfalfa was as green right to freeze-up, and the dry weather did not seem to hurt it, as the roots of it are away down into the ground, and I would hate to have to dig to find the bottom of them."



Bruce's New Century Swede Turnip.

Sales season 1901, when first introduced, 16 lbs.; 1906, 4,351 lbs.; 1908, 9,370 lbs. The best all-round variety. It is one of the few Swedes that resist mildew; the best shipping variety, and for cooking purposes cannot be excelled by any other Swede. It is a purple-topped variety resembling Westbury, of splendid uniform growth, of fine quality, a heavy cropper, and roots are clean and of handsome shape. In sections where large quantities are grown for the American market, the growers and shippers will have no other. 1/4 lb., 12c.; 1/2 lb., 18c.; 1 lb., 30c.; 4 lbs., \$1.15. Postpaid.

Bruce's Mam. Inter. Smooth White Carrot.

Sales season 1891, when first introduced, 14 lbs., now 1,352 lbs. The best of all field carrots, and invaluable for horses. This grand half long carrot is of large size, solid, productive, of finest quality, a splendid keeper, and has the advantage of being much more early harvested than the old long varieties. 1/4 lb., 17c.; 1/2 lb., 33c.; 1 lb., 55c. Postpaid.

Send for our handsomely-illustrated 100-page catalogue of Vegetable, Farm, and Flower Seeds, Plants, Bulbs, Poultry Supplies, Garden Implements, etc., FREE.

John A. Bruce & Co., Hamilton, Ontario. SEED MERCHANTS. ESTABLISHED 1850.



Don't Judge a Roofing By Its Looks

On the surface, most ready roofings look the same.

But the weather finds the hidden weakness.

The weather finds the vegetable fibers in the fabric and rots them.

The weather finds the volatile oils which are concealed below the surface. The sun draws these oils, in globules, to the top of the roofing, where they evaporate in the air.

Where there was a globule of air, there remains a hole. And behind each hole is a tiny channel which lets the weather and water into the very heart of the roofing.

When the sun and the wind and weather have sought out the hidden weaknesses, the roofing is porous, instead of solid; water-soaked, instead of waterproof.

You can't tell by looks, which roofing will last twenty years, and which will go to pieces in a single summer.

Seventeen Years of Service

But you can do this: You can tell the original Ruberoid roofing—the only roofing which has lasted seventeen years—from the 300 substitutes which have proven their unworthiness.

Ruberoid was the first ready roofing. Its basis is the best wool felt impregnated with Ruberoid gum.

It is this wonderful flexible gum which no other maker can duplicate.

It is this gum which gives Ruberoid all the flexibility of rubber without containing an iota of it. It is this gum which withstands wind, weather, sun, fire, acid, gases and fumes, where all other compounds fail.

It is this gum, in the Ruberine cement which accompanies each roll of Ruberoid roofing, which makes ours practically a one-piece roofing—sealed against leaks—sealed against the weather.

Ruberoid comes plain and in colors. The attractive Red, Brown and Green Ruberoid are fine enough for the costliest home. And the color feature is exclusive—protected by patents.

In the past twenty years we have had experience not only with all ready roofings, but with other roofings—shingles, tar, tin, iron and other roofings.

We Test All Roofings

Each roofing we have exposed to the weather test, on our roof garden at our factory.

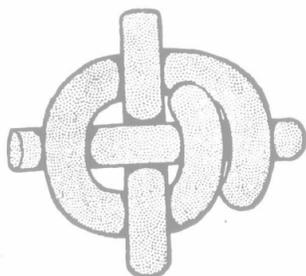
The result of these twenty years of tests we have written into a book which will be gladly sent you free.

This book is a gold mine of roofing information, telling about the advantages and disadvantages of each roofing for each purpose. To secure a copy, address Dept. 98B The Standard Paint Company of Canada, Ltd., Montreal.

RUBEROID

Be sure to look for this registered trademark which is stamped every four feet on the under side of all genuine Ruberoid. This is your protection against substitutes which many dealers brazenly sell as Ruberoid. Ruberoid is usually sold by but one dealer in a town. We will tell you the name of your Ruberoid dealer when you send for our free book.

The Standard Paint Company of Canada, Ltd., Montreal, Canada
New York Hamburg London Paris



The Lock that makes "Page Fences Wear Best."

There Are No Two Ways About It.

Page High Carbon Fences are either the most economical to buy, or they are not.

Page High Carbon Wire is from 33 1/3% to 50% stronger. Which fence can be stretched the tightest? Which will hold its shape and consequently require least number of posts?

Posts for Page High Carbon Steel Fences can, with equal factor of safety, be set one-half greater distance than for hard steel or ordinary wire fence. Suppose posts cost say 16 cents digging and setting 10 cents. How much would you save, figuring the Page Empire all No. 9 fence costing you two or three cents more than the hard steel fences? The figures will prove Page the Economical Fence.

To all making request to our nearest office, we are mailing, free of charge, a Booklet entitled "How to Test and Prove Wire." It's a money-saver, as you can know for a certainty what quality of wire is used in any fence. No more guesswork. This Booklet is a practical text-book on the fence question. Every farmer or property owner ought to have it. The Booklet, formerly had a big sale at 10 cents per copy, but as the Page Wire Fence Co., Limited, have acquired the copyright they mail it free to enquirers. Send for it now while you think about it.

THE PAGE WIRE FENCE COMPANY, Limited
WALKERVILLE TORONTO MONTREAL ST. JOHN

GOSSIP.

A Manitoba drover has an order to supply 2,500 stockers to the Knight Sugar Co., of Raymond, Alta. The prices are \$22.50 for two-year-olds, and \$15 for yearlings.

Nelson Morris & Company are shipping cattle from Alberta this spring via Boston, to fill the space they have contracted for on the boats.

SALE DATES CLAIMED.

May 25th.—G. H. Manhard and G. A. Gilroy, at Brockville, Ont.; Holsteins.
June 2nd.—S. J. Pearson, Son & Co., Meadowvale, Ont.; Shorthorns.
July 1st.—John Davidson, Ashburn, Ont.; Shorthorns.

The King's horse, Minoru, by Cyllene, dam Mother Seigel, won the race for the 2,000 guineas at Newmarket last week, eleven horses running. The Derby will be run May 26th, and there is a strong probability that His Majesty's horse will again add to his laurels.

Alberta is giving a man a farm, if he can demonstrate that it pays to work it his way. Isn't that a backhand compliment to the thousands who have taken up land? Duncan Anderson says he would like the opportunity to demonstrate that it pays to keep milking Shorthorn cows, raise beef steers, and hogs, and will give his time for six years if the Government will furnish the farm and give it to him when he has concluded his demonstration.

CHICKEN HOMILETIC.

A country minister, in the course of his dining out on the circuit, came to a house where a roast chicken was served for dinner. He had previously encountered a series of rib-corned-beef dinners, and chicken looked good to him.

"Well," he facetiously remarked, "here's where that chicken enters the ministry!" "Hope it does better there than in lay work," rejoined the small boy of the family.

AMBITIOUS NAVAL FOLLY.

This is how a correspondent of "The Farmer's Advocate and Home Journal," of Winnipeg, scores the foolishness in the daily press relative to navy building: "Lest it might be inferred that he is a Continental European, with sympathies for the Fatherland, we mention that he signs the good North British name of Scott."

"Hasn't Germany as much moral right to a great navy as has Britain? Hasn't she as much right to possess a navy to 'guard her shores' as Britain has to possess one to 'menace' them. This sentence presents the thing from the German viewpoint. The converse is identically the Briton's viewpoint. Which is right? Obviously: neither!"

"Some fools in high places have even suggested that Britain present an ultimatum to Germany to cease building. How would it be to emulate the meek and lowly Jesus, and set them an example? Britain has no more moral right to curtail Germany's operations than you have to hold a gun to my head and threaten me, upon pain of death, to refrain from selling more than one car of wheat per year."

"Surely the day has come when our modern civilized barbarians shall cease to demand each other's blood in a vicarious propitiation of their own vanities."

"The thing that seems to me most deeply significant is that the church is foremost in this ravenous clamor."

"Money wasted upon war and battleships is the worst economic waste known to man's inventive brain."

"We, as individuals at least, can continue humanitarian and more wholly Christian."

TRADE TOPIC.

Demand for the goods advertised in these columns by The Steel Shoe Co., of Racine, Wis., has been so heavy that difficulty has been found in filling orders promptly. A branch office has been opened in Toronto, and later on steel shoes will be manufactured there, but for the present all correspondence should be addressed to Racine, Wis.

QUESTIONS AND ANSWERS. Miscellaneous.

INACTIVE KIDNEYS.

I have a horse which has great difficulty in passing his urine. Will you kindly advise me the best thing to do?
SUBSCRIBER.

Ans.—This trouble in geldings is sometimes caused by dirt lodging in the sheath and forming lumps around the opening from the passage. This should be well washed out with warm soapsuds, and any matter pressing the passage removed. To stimulate the kidneys, mix 4 pound each of saltpetre, sulphur, and ground gentian, and give a teaspoonful three times a day in feed, or on the tongue, with a spoon. If the horse can be rested a few days, it is well to give him first a purgative ball, and follow up with the above mixture.

FITTING CATTLE FOR SHOW.

Could you advise me, through the pages of your valuable paper, how to fit a herd of Herefords for the leading exhibitions. What is the best feed for them; also the care that should be given them?
M. B. G.

Ans.—Cattle of this class require to be in high condition, carrying much flesh, in order to win at the leading exhibitions. In addition to good pasture during the summer, they should be fed in the stable, morning and evening, a moderate ration, in the early months, of a mixture of bran, ground corn, or peas, oats and nutted oil cake, the ration to be increased in the last two months, if the pastures fail. If flies are troublesome, the cattle should be kept in the stable during the day and on pasture at night, fed a little green clover or good clover hay while in stable, and later, if corn is fairly forward in growth, run it through a cutting-machine and scatter the grain ration over a moderate allowance of this. The stable windows should be darkened with muslin or open sacking in hot weather, when flies are active, but good ventilation and plenty of clean water should be provided. For the last month, in order to have the hair and skin in good condition, the animals should be groomed daily, not with sharp currycombs, but principally with the brush and woolen cloths, and they should be kept covered with light blankets or sheets to keep out dust, and secure a glossy coat. It is well to wash them a week before the fair with soft water and castile soap, and after rinsing with clean water, blanket them and groom daily with soft cloths, and massage with the palms of the hands to secure the necessary glossiness and softness of the hair. While fairly liberal feeding may be necessary, care must be exercised to avoid over-feeding, or cloying the appetite. No more should be given than is cleaned up reasonably soon after each meal. The hoofs should be trimmed, if necessary, with a fine saw, or a chisel and rasp, to keep them in good shape, and exercise should be allowed regularly.

Veterinary.

PURPURA HAEMORRHAGICA.

Horse had distemper and, apparently, recovered. Now, his legs, nostrils, eyes, etc., are swollen, and a bloody water runs from eyes and nostrils. My veterinarian says it is a form of blood-poisoning following distemper, and is giving him turpentine and oil, and what he calls chlorate, and a brown liquid, three times daily, and advises whiskey, milk, eggs and gruel.
J. F. W.

Ans.—Your horse is suffering from a disease called "purpura haemorrhagica," which occurs as a sequel to distemper or other respiratory troubles. Your veterinarian is quite correct, both in diagnosis and treatment. Recoveries seldom take place in well-marked cases. Treatment consists in giving 1 to 2 ozs. oil of turpentine in 3 to 1 pint raw linseed oil, once daily, giving 4 to 1 oz. tincture of iron three times daily (this is, no doubt, the brown liquid you mention), also giving 2 to 4 drams chlorate of potassium three times daily, and, if possible, keeping up the patient's strength with anything he will eat, or with raw eggs, whiskey, gruel, etc. Local treatment is not beneficial any more than keeping nostrils, eyes, etc., washed clean. Hand rubbing and bandaging the legs may be tried when there is no exudation from them.

When You Need a Stove or Range
IT WILL PAY TO INVESTIGATE THE MERITS OF



"TREASURE"

Construction.

Made exclusively of high-grade pig iron. Castings are smooth.

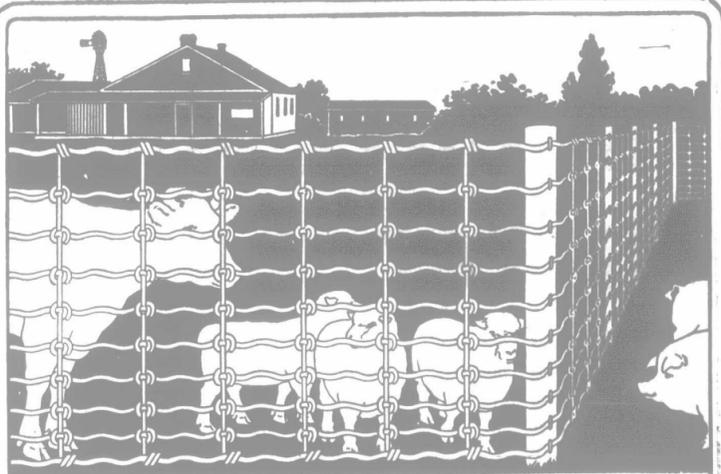
Nickel plating is whitest, brightest and longest lasting.

The "British Treasure," here shown, has many new and original features, which are sure to prove a source of pleasure and satisfaction to the user, and an ornament to the home.

All nickel parts being removable, facilitates cleaning and blacking the range.

The Company's guarantee goes with all Treasure Stoves and Ranges.

The D. Moore Company, Ltd., Hamilton, Ont.



IMPORTANT TO FARMERS

Your fences are your fortress against loss and damage. They must be strong enough to resist invasion from without, and to keep within bounds your flocks and herds. You can't afford to take chances on soft, slack, or brittle wire fences, which may fall just when most needed.

Peerless Woven Wire Fence

has the elastic springiness and resisting qualities that make an A 1 farm fence. Once up it lasts—no breaking—no falling down. There are reasons why. We can't tell them all in this ad, but if you will write to us we will send you some valuable fence facts.

The Banwell Hoxie Wire Fence Co. Ltd.

Dept. 8, Hamilton, Ont.
Winnipeg, Manitoba.

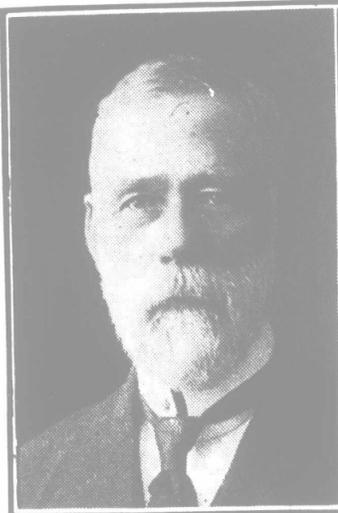
J. S. KEMP, The Inventor of the Manure Spreader and the President of the W. I. Kemp Co., Ltd., Stratford, Ont.

MANUFACTURERS OF

Kemp Manure Spreaders

AND

Imperial Horse-Lift Drills



In calling the attention of the farmers of Canada to my latest improved Spreader in 1909, I would state that I built in the Township of Magog, Province of Quebec, in the year 1875, for use on a farm that I owned there, the first practical Spreader ever built, and that I have been engaged in farming and the manufacturing of the Spreader ever since.

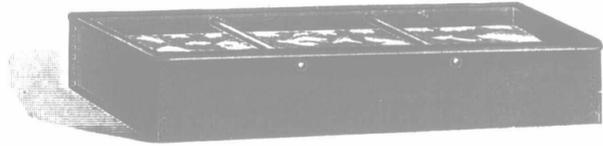
In 1906 I sold out my patents in the United States for \$50,500, this gave me a chance to devote my time to the Spreader business in Canada, where it had been started in Stratford, Ont. I moved there in the fall of 1908, and with the experience of 34 years in the business, and the experience of my sons, we are manufacturing by far the best Manure Spreading Machine ever built. This year we are equipping the Spreader with what we call the reversible self-sharpening, graded flat-toothed beater, which handles every grade of material successfully, and with much less power.

To those wishing to know my experience in the use of a Manure Spreader, I will be very glad to give same upon application. Most respectfully yours, J. S. KEMP, 552 Ontario St., Stratford, Ont.

Write for Manure Spreader and Seed Drill Catalogues, which fully describe these machines. Live agents wanted in unoccupied territory.

W. I. KEMP CO'Y, LTD., STRATFORD, ONT.

PERFECT STEEL TANKS



Our great specialty is Steel Tanks—perfect Steel Tanks. You want good ones—something that will stand the severest test. We make that kind—making tanks is our business. We like it. How perfect we can make them is our aim. We study to see how we can make still better tanks. We take more pride in a good tank than most people do in a fast horse. We begin right down at the bottom. We send to the mills in the Old Land and get the finest quality of material. We buy in large quantities to get it cheap. We select it heavy, so it will stand the test. We employ expert workmen to make it up. We take no chances on it. Our factory is equipped with power machinery, this enables us to build you heavy tanks at the same price other people charge for light ones. It enables us to make them fast. Our tanks are galvanized, so they won't rust. Thoroughly riveted and soldered so they can't leak. Finished around top with heavy steel angle, so they are strong and rigid and self-supporting. We brace them inside to prevent any bulging with weight of water. What more need we say? Look here! If our tanks are not as represented when they reach your station, just fire them back at our expense. We don't want your money if we can't give you big value for it, at least as good as three of the best wooden ones. We would not make you this offer if we had not great confidence in our goods. We supply any kind. Barn tanks, bath-room tanks, gasoline tanks, windmill tanks, milk-cooling tanks, threshers' tanks, any shape, round, square or oblong. Anything in heavy sheet steel. Write us.

THE STEEL TROUGH & MACHINE, CO., LTD., TWEED, ONT.

Your boy will be far better off for the fun and training he'll get with a Stevens



With a Stevens Rifle he will fast develop all those sturdy qualities so essential to success—health, strength, keen-and-quick-thinking, prompt action and self-reliance.

STEVENS

firearms are so accurately adjusted, so straight-shooting, that they are the pride of every owner. They show their quality in their appearance.

Your boy will get a lot of good out of "Guns and Gunning," by Dan Beard. Tells what to shoot—where to find it—how to handle a gun, etc. Bound in cloth, stamped in gilt, 30c., or in paper, 20c., postpaid.

Send for the Stevens Catalog—it will help you immensely in selecting a rifle, shotgun or pistol. Six cents for postage brings it. Ask your dealer and insist on STEVENS. There are no substitutes. If you cannot obtain, we will ship direct, express prepaid, on receipt of catalog price. J. STEVENS ARMS & TOOL CO., 25 Grove St., Chicopee Falls, Mass., U.S.A.

RENNIE'S

SOLD BY

ALL DEALERS

IN SEALED PACKAGES.

WM. RENNIE CO., Limited, Toronto,
Montreal, Winnipeg, Vancouver.

SEEDS

WHEN WRITING ADVERTISERS, PLEASE MENTION "THE ADVOCATE."

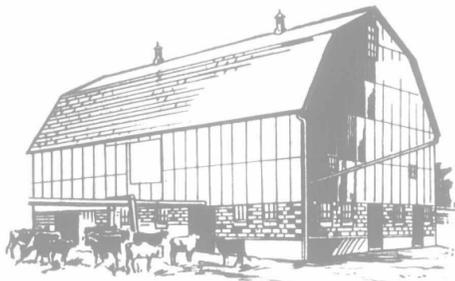
Greatest Building Offer Ever Made!

\$2,000 will build this beautiful \$4,000 home with metal construction.

The outside of this building is covered with our Sheet Metal Exterior Stone Sheeting (see sample design below). The roof is covered with "Safe Lock" Shingles. The entire building exterior is of metal construction, except the porch railings. The test of two winters proves that it keeps out the cold, and the non-conducting walls make it a cool house for summer.



This commodious barn was sided and roofed with "Acorn" Corrugated Sheeting. It is guaranteed lightning proof. The corrugated sheeting will last for years, and furnishes the best fire protection. \$450.00.



METAL SHINGLE & SIDING CO., LTD.
PRESTON, ONTARIO. MONTREAL, QUEBEC.

You can build now cheaper and better than ever before. Don't pay present high prices for lumber, of inferior quality too, when you can build a metal house, barn, chicken house, pig and stock sheds for less money. The saving over brick, stone or concrete construction is fully one-half, when you follow our perfected plans. A sheet metal building can be erected in less time, and building can be done at any time of the year.

Use Metal Construction, and save not only in building cost, but as much more by being free from continued painting expense every year or two. Galvanized sheet metal never needs attention, and lasts for years. Write us and let us give you facts and proof about

SHEET METAL EXTERIORS AND INTERIORS

"SAFE LOCK" SHINGLES

"ACORN" CORRUGATED SHEETING

We can furnish sheet metal exteriors in almost perfect imitation of rough stone or brick. Interiors in a large variety of styles, and suitable for any kind of residence, store, church, large hall or other building.

"Safe Lock" Shingles are the only shingles that LOCK on all four sides, and are galvanized to meet British Government specifications for admiralty and other public work. They are guaranteed lightning proof, and a positive guaranty is given free with every roof.

"Acorn" Corrugated Sheeting is the highest grade of sheeting on the market. It will last for years, and is the ideal material for barns, sheds and other out-buildings. Gives amplest protection against fire, and is guaranteed lightning proof. Where inexpensive construction is wanted, we recommend "Acorn" sheeting as the best in the market. No board sheeting required, as it can be nailed on strips laid across the rafters.

BEAR IN MIND that these figures are not architect's estimates, but the actual cost of these buildings. You can build now just as cheaply. Call on us. We will cheerfully give you estimates and save you money.

QUESTIONS AND ANSWERS Miscellaneous.

AILING HEN—FIRST FEED FOR NEWLY-HATCHED CHICKS.

1. I have a hen that cannot walk but a few steps at a time, and falls over when put down on the ground. I keep her away from the other hens and give her the same feed as others. She has been this way all winter. Will she get well, or what will I do?

2. How long after chickens are hatched should they be fed?

3. I am interested in poultry-raising. Could you give me any valuable information through your paper? M. J. B. W.

Ans.—1. It is impossible for us to diagnose this case satisfactorily. The chances are, your best plan would be to kill the hen.

2. About thirty-six hours.

3. Yes; plenty of it. Read our Poultry Department from week to week.

COW DRIES PREMATURELY.

Have a cow, grade Jersey; is extra-good cow until four months before calving, then she will go dry; she is fed well, and in good condition; had calf last year, and will calve in July this year; has been dry one month now. I did not raise her, so do not know how she was treated as a heifer. Would you advise raising this cow's calves? Would they be like the cow? J. P.

Ans.—It is not improbable that this tendency has been induced by the cow having been allowed to dry off prematurely in her first lactation period. If her heifer calves are properly raised, they will, in all probability, prove satisfactory performers at the pail, as Jersey breeding generally manifests itself in a well-developed inclination towards persistent milking. To overcome the tendency in the cow, breed her to freshen the end of September or 1st of October, and then the flush of pasture will renew her when she inclines to go dry.

STRAWBERRY WEEVIL.

For the past two years I have been troubled with a bug which eats around the stem, under the bud of my strawberry plants. It is a small, green bug, and it eats around the bud just before it opens, and the bud dries up and falls off.

T. H. F.

Ans.—I think the insect referred to must be the strawberry weevil. It has the habits of the pest mentioned, but differs from the description in color, being never green, but always of a blackish or chestnut color. The weevil is a tiny snout-beetle, only about one-tenth of an inch long. The female lays her eggs in the buds, just before they are opened, and immediately after laying them punctures the bud-stem (petiole) in such a way that it soon breaks off. The young grubs hatch out in the dead buds, and feed on the pollen that has already formed there. There is only one brood in a year.

The insect is a very difficult one to combat, and for this reason it is fortunate that it usually disappears of its own accord in a few years. Best results have been got so far by covering the plants with muslin or cheese cloth, putting this on a week before the blossoms appear, and removing it as soon as the first berries are ready for market. It also does much good in some seasons to mow the plants as soon as the crop is harvested, scattering a little straw over the vines, and as soon as the leaves are dry burn the whole plantation over. This does not injure the plants, and gets rid of numerous pests, as well as helps to keep fungous diseases under control.

Staminate varieties are worse attacked than pistillate, therefore it is wise to set out chiefly pistillate plants where this insect is troublesome.

A few fruit-growers report good results from spraying the plants with Bordeaux and arsenate of lead when they are beginning to bloom. L. CAESAR.

J. A. Gerswell, Bond Head, Ont., writes: "Our Oxfords have come through the winter in capital form. We have a grand crop of lambs, that makes one feel good. We had six ewes, which increased their number by eighteen lambs. The results of my advertisement have been very satisfactory indeed, far beyond my expecta-

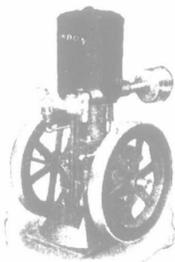
TRADE TOPIC.

Those wishing to dispose of cream should consult the advertisement of the T. Eaton Co., appearing in this issue. Cream is wanted for direct shipment to Toronto, where butter will be made, and the product sold direct to consumers.

GOSSIP.

SALE OF A HIGHLY-BRED CLYDESDALE STALLION.

W. Fredrick Kay, Ravensdale Farm, P. Q., has purchased from the Ormsby Grange Stock Farm, Ormsby, Que., the three-year-old imported Clydesdale, Baron Barlae (13972) [85621], sire Baron's Pride, dam by Macgregor, grandam by Cedric, a well-bred one and a good individual. Mr. Kay has acted wisely in securing such a sire for his stud as a Clydesdale breeder.



A Complete self-contained power plant, easy to operate and understand.

London Gas or Gasoline ENGINES

2½ AND 4½ H.P.

Ask for Catalogue 14G.

SCOTT MACHINE CO., LIMITED,
London, Canada.



For a prize-winning

Clydesdale, Hackney or French Coach Stallion

write me. I have generally something to sell.

HENRY M. DOUGLAS, STAYNER, ONTARIO, LAMB OF MARYLAND.

HAVE YOU EVER REALIZED THE RESULTS OF A GOOD...



Seeing Myself as Others See Me

I laughed at a so-called Metal Roofing Guarantee a few weeks ago, and was just looking at a report of it. I considered it a joke because my lawyer said the Guarantee I showed him wouldn't hold water a minute.

Have you been interested enough to prove that either my lawyer or myself was wrong?

The point I made was that the past showing of the fire-proof, weather-proof "Eastlake" Steel Shingles (made by the oldest and largest Metallic manufacturers in the Dominion) was safer than the future guarantee of any other

manufacturer, even if it were binding. During the Laymen's Missionary Convention in Toronto last month, I was showing a friend around the Exhibition grounds and buildings and pointed out some "Eastlake" shingles that were laid 25 years ago and are in perfect condition yet. As a matter of fact, the Metallic Roofing Company who manufacture the Eastlake Shingles have been awarded **Three Gold Medals** by the Canadian National Exhibition Association.

The Metallic Roofing Company are often asked if they can meet any guarantee or promise made by any manufacturer of sheet metal goods. Of course they can and will—they'll undertake any problem you have—estimate the cost, etc. Write them to-day.

—The Philosopher of Metal Town.

Toronto, Ont.

Dear Sirs,—

I have pleasure in certifying that the roofs covered with your Metallic Shingles have given the utmost satisfaction. A large number of buildings on the Exhibition Grounds have been covered with your Metallic Shingles, and have proved the tightest roofs we have. I also consider your Metallic Shingles and Siding a good fire protector. Yours truly,

Mark Hall, Architect.

The Metallic Roofing Co., Limited
Manufacturers

TORONTO AND WINNIPEG

1547

QUESTIONS AND ANSWERS. Miscellaneous.

FRUIT AND POULTRY FARM.

I am well pleased with your weekly journal, and consider it a good all-round journal for the whole of Canada. It is my intention to return to Ontario and start a horticulture and poultry farm, as I consider the best profits are in Ontario yet. What part of Ontario would you suggest for me to start in this business to have a first-class market for the products? What would you think the average price of land would be? J. C.

Saskatchewan.

Ans.—There are many parts of Ontario admirably suited to fruit-farming and

poultry-raising. Your location would have to be regulated largely by the amount you have to invest. For largest profits from labor given, you should locate as close as possible to a good market, or, at least, close to some point where shipping facilities are satisfactory. A great deal, too, will depend on what class of fruits you wish to grow. If you wish to grow peaches, or grapes, it would probably be advisable to go below Hamilton somewhere in the Niagara peninsula, between "the mountain" and Lake Ontario, or else in favored parts of South-eastern Ontario, say Essex county. In the Niagara district, prices run from \$150 to \$600, or higher, per acre, depending on location and improvements. Recently, we heard of a 35-acre farm, situated on the electric-railway line, and mostly in

bearing to grapes, plums and pears, being offered for \$12,000. This included fairly-good house and stable. Provided you care to grow only bush fruits, and perhaps plums, cherries, pears, or apples, you could locate anywhere along the north shore of Lake Ontario, between Hamilton and Toronto, or perhaps east of Toronto, to advantage. The price demanded would vary with the distance from the lake and from railway stations. The figures, however, would be considerably lower than for fruit-bearing lands in Niagara district, except for truck-gardening areas near Toronto.

SHOULDER QUIVERS.

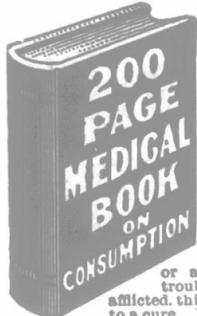
I have a filly, three years old, that has been broken about six months. She gets lots of exercise, but when she stands in

the stable the muscles in her left shoulder quiver. What is the cause? How can it be cured? SUBSCRIBER.

Ans.—We can only attribute this to weakness, and as long as it does not cause lameness, we do not think any treatment is necessary. We would advise avoiding overloading or overworking her. She may gain strength in the parts when out on pasture.

Attention is directed to the advertisement in this issue announcing the annual sales of Lincoln Long-wool rams, to be held in Lincoln, England, on July 9th and September 3rd. For fuller information, address the Secretary, Wm. Fran'ish, St. Benedict's Square, Lincoln, England.

Consumption Book



FREE

This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

Write at once to the Yonkerman Consumption Remedy Co., 1316 Rose Street, Kalamazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.

You cannot possibly have a better Cocoa than

EPSS'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 1-lb Tins.

LAND FOR SETTLEMENT!

Lands are offered for settlement in some cases FREE, in others at 50 CENTS per acre, in various districts in NORTHERN ONTARIO. Write for information as to terms, homestead regulations, special railway rates, etc.

HON. JAMES S. DUFF,
Minister of Agriculture.

Thos. Southworth,
Director of Colonization, Toronto.

A BIG MONEY SAVING BARGAIN

THE BISSELL DISK HARROW

Because the "Bissell" cuts cleaner and turns the soil over better it has become the favorite of the farmer—famous throughout Ontario and the older Provinces as a great money-making farm tool. Perfectly adjusted, simple, compact, stout, rigid, and long lasting. Light draft, no neck weight on team; under absolute control at all times. Several styles for farm and orchard. A harrow bargain it will pay you to know more about. Free descriptive booklet furnishes the facts. Write for it today. Address Dept. W., T. E. BISSELL CO. Ltd., Elora, Ont.

GOSSIP.

Now that the foaling season is near at hand, every small breeder who has even but a single brood mare should provide himself with a rubber-bulb syringe. The foal should be watched carefully, and if there is difficulty in expelling the foeces, an injection per rectum of a half-pint of blood-warm water should be given. A tablespoonful of glycerine, mixed with the water, will prove beneficial. If the bowels are not evacuated in half an hour, repeat the injection, and continue at intervals until there is a movement. Many foals die every year from a lack of attention in this direction. The remedy is simple, inexpensive, and harmless.

QUESTIONS AND ANSWERS. Miscellaneous.

PINE TREES FOR PLANTING.

1. I have about 1½ acres of land suitable for the growth of pine trees. What variety is best suited to grow trees which would, in time, make good lumber? Do the Dominion or Provincial Governments make any provision for the free distribution of pine, or any other trees suitable for planting for forestry purposes? If not, would you give name of firms who grow them for sale? J. C. R. Québec.

Ans.—Perhaps the white pine would suit best. We could not say definitely without knowing the nature of the soil and the topography of the district. The Ontario Government aids forestry by supplying trees, through its Provincial nursery, inaugurated at Ontario Agricultural College, Guelph. The Dominion Government forestry branch also assists those interested under certain conditions. Manitoba maple, ash, willow, cottonwood and elm have been distributed to settlers on the prairies of Western Canada. It is expected that a limited quantity of evergreens will be ready for distribution in 1911. The Quebec Department of Lands and Forests has established a nursery at Bortherville with a view to supplying trees suitable for forestry planting.

CHICKEN CHOLERA—GRUB IN HEAD—YOUNG APPLE TREES DYING.

1. A sheep took staggering fits, would fall back and lie for an hour; would not eat; lingered for about five days, then died. It was thrifty and fat.

3. Could you give me a cure for cholera in hens and turkeys, and cause of the same?

3. What is the cause of young apple trees dying after bearing fruit three or four years. Under the bark there appears to be a small louse.

Lanark Co., Ont. SUBSCRIBER.

Ans.—1. This trouble is probably due to grub in the head, resulting from the eggs of the sheep gaddy being deposited in the nostrils of the sheep in summer time. Treatment is seldom effectual, though some claim to have dislodged the grub by placing a piece of plank on the head and hitting it hard with a mallet; others by syringing spirits of turpentine or tobacco juice into the nostrils, holding the head high meanwhile, and causing violent sneezing. Preventive measures are tarring the nose of sheep occasionally in summer, or giving them access to a dark shed in hot weather.

2. Fowl-cholera is caused by the presence in the blood of a special infective microbe. The disease is very rapid in its progress, and nearly always fatal. The bird affected has its feathers ruffled, its wings low, is dejected, and appears to be very thirsty. The discharges are foamy or glistening. All treatments for this disease have so far failed. As soon as the disease breaks out in a poultry yard, the healthier birds should be at once removed, the poultry house disinfected, the walls, floor, roosts, and all utensils used by the birds washed with milk of lime. The diet during the epidemic should be composed of vegetables, to which bran is added. Some authorities advise giving the suspected cases drinking water containing one-tenth-of-a-grain tablet to the quart of water. All birds which show noticeable symptoms of the disease had better be killed and cremated at once. Kill with a sharp blow by a blunt club. Do not draw blood if you can help it, as the blood is infectious. If any is spilled, scrape it up, burn with the body, and disinfect the place where it was. All droppings of affected birds should be disinfected and burned, or buried deeply.

3. We cannot give the cause of your apple trees dying without knowing more of the details. Perhaps it was due to winter-killing. Trees that bear heavily when young, sometimes do not survive the rigors of winter in northern parts of Ontario. Whether or not the insects mentioned are responsible depends on their kind. If possible, forward us a few specimens. It may be that they simply wintered there under the bark of dead trees.



Frictionless Empire.

Learn Particulars about both cone and disc types before making your choice of a Cream Separator.

No one type of cream separator exactly meets the requirements of every farmer. The disc type is best adapted to one farmer's needs, while the cone type may be better for his neighbor. So we say learn particulars about both types before making your choice.

The EMPIRE Line Quality Cream Separators All sizes of both types

The Empire Line of Quality Cream Separators includes both disc and cone types—therefore the Empire agent is the man to go to for an unbiased opinion. We have heard of agents for disc machines who have claimed for their disc separator the peculiar advantages possessed by the cone type alone. The object of the Empire agent is not to claim all the advantages of both disc and cone types for either a cone or disc machine. His object is to tell you frankly the whole truth about each style—then to let you decide for yourself which type best suits your requirements.

If you decide on the **Frictionless Empire**—the original cone separator—you secure a separator far in advance of all cone separators. Easiest running, easiest to clean, closest skimming, most durable.

If you decide on the **Empire Disc**, you get by far the best disc separator in the world. The Empire Disc is really the leading disc separator of Europe—the home of the disc. More than that it has in addition several exclusive Empire patented features that make it better than the European machine that we secured the rights to make in America.

But remember, before deciding on any separator, see our agent and learn full particulars.

Empire Cream Separator Co. of Canada, Limited,

Head office: TORONTO.
Western office: WINNIPEG.

FREE DAIRY BOOK

A complete guide to certain isolation. Tells the truth about both cone and disc methods of separation. Explains in detail the construction of Empire Disc and Frictionless Empire. Contains dairy pointers of real value to the farmer.



Empire Disc.

Choice Farm Lands

FOR SALE ON EASY PAYMENTS.

In Western Canada there are great opportunities for the willing farmer. He can make money and success of farming. We have for sale the very choicest of Farm Lands in Saskatchewan, and guarantee to please the most particular. Let us tell you about them, and how others are making money here. Write at once for maps and pamphlets and full information. Our years of experience are at your disposal. All we want is to know if you are interested. Write at once.

TRACKSELL, ANDERSON & CO., REGINA, SASK.

British Columbia Office: 1210 Broad St., Victoria.

THE MOST COMPLETE LINE OF

IRON STABLE FITTINGS

IN CANADA. ALSO A COMPLETE LINE OF

Stewart Horse-clipping and Sheep-shearing Machines.



Knives Sharpened and Returned Promptly.

Before fitting up your stable write us for information and prices.

Our knowledge, gained by years of experience, is at your disposal.

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Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with

Fleming's
Fistula and Poll Evil Cure
—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket
Veterinary Adviser.
Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durably bound, indexed and illustrated.

FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

THE "MAPLES" HEREFORDS

Canada's Greatest Show Herd.

For Sale: 25 bulls from 6 to 18 months of age, bred from imported and show stock; also about the same number of heifers, none better. Prices right.

W. H. HUNTER,
Orangeville P.O. and Sta.

Hereford Bulls

One two-year-old. One yearling. Both from prizewinning stock. The best of breeding, and in fine order. Prices low to quick buyer.

H. D. Smith, Hamilton, Ont.
"INGLESIDE FARM."

The Sunny Side Herefords.

The herd that has the best of breeding and individual merit. For sale: Bargains in 2-year-old, yearling and bull calves. Some cows and heifers to spare. Write for prices. Long-distance phone.

M. H. O'Neil, Southgate, Ont.

HOMESTEAD ABERDEEN-ANGUS

A number of young cows with calves at foot, and heifers. Will sell right to make room. Come and see them.

WM. ISCHE, Sebringville, Ont.
Bell telephone.

Aberdeen-Angus Cattle

For Sale: Cows, Heifers, Bulls.

Good strains at reasonable prices. Apply to:
Andrew Dinsmore, Manager, Clarksburg, Ont.
"Grape Grange" Farm.

Aberdeen-Angus

For sale: The right sort, some of them by Klondyke, imp. Drumbo station.
WALTER HALL, Washington, Ontario.

Present offering: Two choice bulls ABERDEEN ready for service, and anything in the female line. A choice lot and sold right. GEO. DAVIS & SONS, ALTON, ONT. Station, C. P. R.

At Dominion Exhibitions, Halifax, Nova Scotia, in 1906; Sherbrooke, Que., 1907; Calgary, Alta., 1908, our herd won all the champion and grand champion prizes. Out of a possible of 42 first-prizes our herd won 40. We have a good graded show herd for sale. Also single animals, bulls and females.
JAMES BOWMAN, Elm Park, Guelph.

SHORTHORNS

Several good yearling heifers for sale at very reasonable prices. Also one red eleven-months-old bull. Barred Plymouth Rock eggs for hatching.
JOHN RACEY, Lennoxville, Que.

1854-Maple Lodge Stock Farm-1909

Shorthorn bulls and heifers of extra quality and breeding, and from best milking strains.

Leicesters of first quality for sale. Can furnish show flocks.
A. W. SMITH, Maple Lodge P.O., Ontario.
Lucan Crossing Sta., G. T. R., one mile.

Twelve choice red bulls, 10 to 18 months, by Imp. Protector; some out of imported dams. Also Hackney fillies. M. C. and P. M. Rys.
McFarlane & Ford, Box 41, Dutton, Ont.

Ready for service. One will make a show bull. Also young things from Matchless, Crimson Flower, Miss Ramsden, Rosemary, Diamond and Lady Fanny dams, the get of Chancellor's Model. Prices to suit times. Come and see. Israel Groff, Elmira, Ont.

Registered SHORTHORN Yearling Bull This is a bull of superior quality. Dark red. Sired by Bapton Chancellor (imp.), that noted sire of prize stock. Will be sold worth the money.
James R. Wood, Preston, Ontario.

PLEASE MENTION THIS PAPER.

GOSSIP.

A. Hume & Co., Menie, Ontario, in ordering a change in their advertisement of Ayrshires, write: The Ayrshire business is unprecedented in volume. We have completed two carloads to Alberta, and one full car to Wash., U. S. A., besides many sales of ones, twos, and threes, and one of four animals each, to many. Also started three new herds, which we think is quite a record for one section; further secured four new members for Ayrshire-breeders' Association. We would be much pleased to receive further orders for imported stock, either bulls, heifers, cows, or calves of both sexes. We are having them selected now, and expect them to sail May 5th, from Glasgow, so the bulls will be out of quarantine in time for service, say July 6th.

S. J. Pearson, Son & Co., Meadowvale, Ont., report the following recent sales of Shorthorns and Berkshires from their Valley Home herds: To Westlake Bros., Beeton, Ont., one Nonpareil bull and one sow; to R. Curtis & Sons, Hereward, Ont., the grand young bull, Nonpareil Diamond, and one sow; to Arch. Campbell, Ospringe, Ont., Nonpareil Banff; to Wm. Gardner & Sons, Meadowvale, Ont., one sow; to W. J. Watson, Galt, Ont., one sow; to F. A. Maas, Streetsville, Ont., one sow; to W. J. Might & Son, Britannia, Ont., one imported boar; to James Pearson, Inglewood, Ont., two sows. Our herd bull, Royal Diamond 2nd =58469=, is the best bull we ever owned, his stock, both male and female, are uniform in type, being smooth, even, and thick-fleshed, of the easy-feeding kind. A noted breeder who has recently visited the best herds in Scotland, stated that if Royal Diamond was in Scotland, it would take a long price to get him out of it. Parties wanting good stock, at living prices, should call at Valley Home, Meadowvale Station, C. P. R., half mile from farm, 24 miles west of Toronto.

T. D. Elliott, the well-known importer of Clydesdale, Percheron, Hackney, and Thoroughbred horses, of Bolton, Ont., reports the demand and sale of stallions and fillies as quite unprecedented in his many years' experience. All of the large importation of last fall are sold but three, surely a testimonial of the superior excellence of the horses handled by Mr. Elliott. His latest sale, to J. A. Myles, the popular auctioneer of Heathcote, Ont., of the Toronto grand champion Thoroughbred stallion, Buccleuch, is a boon to the breeders of that part of the County of Grey, that they should not be slow to appreciate. He is certainly one of the best types of English Thoroughbreds ever imported into Canada. He was last year chief stallion of the Thoroughbred stud of Messrs. W. & A. Montgomery, Netherhall & Banks, Scotland, and stood at the service fee of \$50 for insurance. Mr. Myles' other purchase was the grand quality three-year-old imported Clydesdale stallion, Abbots-hall, a horse of superb mould and flashy quality. In Scotland he won a number of prizes, both as a yearling and as a two-year-old, and is a hard problem for the best to meet this spring. These, in addition to the Toronto-winning Hackney stallion, Brigham Lord, and two other Clydesdale stallions, will bring Mr. Myles' stud up to a standard the equal of any in the country. Truly, big Jim Myles deserves the thanks and support of the breeders for his energy in supplying them with the service of such grand horses as these. The imported Clydesdales on hand in Mr. Elliott's stable for sale are: Captain Sterling, a three-year-old, 1,750 lbs., son of the great Hiawatha; another is a three-year-old, 1,800 lbs., son of Baron's Best; he is Baron Farness; dam by Royal Favorite, grandam by Hiawatha, right royal breeding that. The other is Briton's Heir, a four-year-old, weighing 1,850 lbs., by Baron Briton, dam by Lord Londonderry. These horses are among the choicest of Mr. Elliott's last importation. They fill the bill for stylish conformation, Clydesdale character, and the kind of quality Canadians like, and will be sold at bargain prices, and on terms to suit, as Mr. Elliott wants the room for another importation.

WE ARE PRICING VERY REASONABLY 10 Choicely-bred Young Shorthorn Bulls

Also one extra good imported bull, 22 months old. We have always something good to offer in females. Imported or home-bred. Write for what you want, or come and see them. Bell phone at each farm. W. G. PETTIT & SONS, Farms close to Burlington Jct. Sta., G. T. R. FREEMAN, ONTARIO.

WILLOW BANK STOCK FARM

Shorthorns, Leicesters.
Herd established 1855; flock 1848. The great Duthie-bred bull, imported Joy of Morning = 32070 =, at the head of herd. A choice lot of cattle of either sex to offer. It will pay you to see them. Also choice Leicesters. JAMES DOUGLAS, Caledonia, Ont.

Imported Bull!

To save inbreeding I will sell the Cruickshank (Duthie bred) imp. bull, Sittyton Victor = 5093 = (87397), a proven sire of merit, gentle and active. Also some young bulls by him, out of imp. dams. Address:
John Brydone, Milverton, Ont.

7 Imported Scotch Shorthorn Bulls 7

Six imported bull calves from 9 to 14 months old, 3 reds and 3 roans. They are of such noted families as Clara, Jilt, Roan Lady, Butterfly, Claret and Broadhooks. One imp. bull 2 years old, red; a most valuable sire. One bull 11 months old, roan, from imp. sire and dam; promising for a show bull. Two bulls 12 months old from imp. sire and dam; suitable for pure-bred or grade herd. Also females all ages. Write for catalogue. Prices reasonable. Farm 3/4 mile from Burlington Junction station, G. T. R.

FRED. BARNETT, MANAGER. J. F. MITCHELL, BURLINGTON, ONT.

Shorthorns and Shropshires

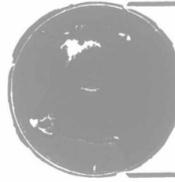
Herd headed by Imp. Queen's Counsellor = 64218 = (96594). For sale: Three young bulls; also cows and heifers bred to Queen's Counsellor. The Shropshires are yearling rams and ewes, bred from imported Buttar ram.

H. L. STEAD, Wilton Grove, Ont.
London, G. T. R., 6 miles; Westminster, P. M. R., 1 mile. Long-distance phone.

Scotch Shorthorns!

I am offering a few choice young bulls, also heifers in calf to imp. bull. Will be pleased to furnish pedigrees and prices upon application.

JOHN MILLER, Brougham, Ontario.
Claremont Stn., C. P. R.



SOME SHOW PROPOSITIONS IN BOTH MALE AND FEMALE

SHORTHORNS

as well as a number of the useful sort of both sexes. Prices right. Large lot to select from. Up-to-date in breeding, etc. Catalogue.

JOHN CLANCY, Manager. H. Cargill & Son, Cargill, Ont.

Shorthorn Cattle AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

A. Edward Meyer, P. O. Box 378, Guelph, Ontario,

Breeds SCOTCH SHORTHORNS Exclusively

Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68708 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

An Opportunity MAPLE SHADE FARM.

Long-distance telephone.

PRINCE GLOSTER 40998

IS FOR SALE. Also four yearling bulls, and a few heifers. Shorthorns that will do good. Good breeding and show quality.

STATIONS: MYRTLE, C. P. R. BROOKLIN, G. T. R. JOHN DRYDEN & SON, BROOKLIN, ONT.

GEO. AMOS & SON, Moffat, Ontario.

For sale: Imp. Ben Lomond = 45160 = 80468, that grand stock bull, sire of first-prize calf herd at Toronto, 1908; and Augustus, a good Bruce Augusta bull calf; also females, various ages. Write, or come and see us. Farm 11 miles east of City of Guelph, on C. P. R.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.
JAMES McARTHUR, Gables, Ontario.

WHY NOT BUY A HIGH-CLASS SCOTCH SHORTHORN COW, Or a Heifer, Or a Bull, Or a Few Shropshire Ewes, Or a Few Cotswold Ewes, NOW, While You Can Buy Them Low?

I can offer you something in any of them that will make a start second to none. Write for what you want.
ROBERT MILLER, STOUFFVILLE, ONT.

SPRING VALLEY SHORTHORNS

One 14 months' old imported bull, bred by A. M. Gordon. Good enough to head any herd. Five Canadian-bred bulls from 12 to 16 months. Will be priced very reasonable, as we do not want to run them over.

KYLE BROS., AYR, ONT.

Greengill Shorthorns!

Our present offering consists of 10 young bulls, from 8 to 20 months. All nice reds and roans. A number of them from imp. sire and dam. Prices right.

R. Mitchell & Sons, Nelson P. O., Ont.
Burlington Jct. Sta.



VALLEY HOME SHORTHORNS AND BERKSHIRES

For sale: 6 grand young bulls from ten to eighteen months old, young cows with calves at foot, and ten one and two-year-old heifers. All our own breeding. Some are very choice show animals. Also young sows, and a fine boar 12 months old.
S. J. PEARSON, SON & CO., MEADOWVALE P. O. AND STATION, C. P. R.

Canada's greatest living sire, Mildred's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated. GEO. GIER, Grand Valley P. O., Ont. Waldemer Sta., C. P. R.

JOHN GARDHOUSE & SONS

Always have for sale a number of first-class Shorthorns, Shires and Lincolns, of both sexes. Drop us a line, or better, come and see for yourself.
HIGHFIELD P. O., ONTARIO.
Weston Sta., G. T. R. & C. P. R. Long-distance phone in house.

SHORTHORN BULLS

Herding quality and breeding. Also good ones at farmers' prices. Females for sale. Write, or come and see. Farm adjoins town.
H. SMITH, EXETER, ONTARIO.

Afflicted for years with a Diseased Liver.

Mr. L. R. Devitt, Berlin, Ont., better known, perhaps, as "Smallpox Ben," has used

MILBURN'S LAXA-LIVER PILLS

He has also used them for his patients when nursing them, and it is a well-known fact that small-pox sufferers must keep the bowels well regulated.

Read what he says:—"I have been afflicted for years with a diseased liver, and have tried all kinds of medicine, but of no avail until about four years ago I tried your Laxa-Liver Pills, and got instant relief. Since then I have nursed different patients afflicted with small-pox, and in each case I have used your valuable pills.

"My wishes are that all persons suffering with stomach or liver troubles will try Milburn's Laxa-Liver Pills. I will advertise them whenever and wherever I have an opportunity and I hope that if at any time I cannot get the pills, I will be fortunate enough to get the formula."

Milburn's Laxa-Liver Pills are 25 cents per vial or 5 vials for \$1.00, at all dealers or will be mailed direct by The T. Milburn Co., Limited, Toronto, Ont.

SUMMER HILL HERD OF HOLSTEIN CATTLE

If you are thinking of buying a choice young cow or heifer in calf, come and see our herd. We want to sell. Will price anything, and guarantee it just as described. Our stock bull, Summer Hill Choice Goods, has 5 half-sisters that average 29 1/2 lbs. butter in 7 days, and one 4-yr.-old half-sister, Champion of the World, with 31.62 lbs. butter in 7 days. His dam gave over 18,000 lbs. milk in one year. Visitors cheerfully met at Hamilton by appointment.

D. C. FLATT & SON, MILLGROVE, ONT.
Bell Phone in House: 2471 Hamilton.

DON'T Buy a HOLSTEIN BULL till you get my prices on choice goods from five months to one month old, from best producing strains. "Fairview Stock Farm." FRED ABBOTT, Harrietsville, Ont.

There was once a pacer in New York named Wozy Wilkes. A trotter in Michigan several years ago was named Wooloomooloo, and a pacer in Missouri in 1908 was called Gooseberry.—Horse Review. That's nothing. A member of the Buffalo Hunt Club has just christened his favorite horse Africanobthinoceero-Roosey.

GRAND NEWS FOR OLD FOLKS

What Dodd's Kidney Pills did for Hiram Brown.

Cured His Aches and Pains and Gave Him Restful Slumber—Known as the Old Folks' Friend.

East Mapleton, Cumberland Co., N. S., May 3.—(Special).—Though well past the allotted span of life, Mr. Hiram Brown, of this place, is still one of the grandest sights in life, a hale and hearty old gentleman. And like many another Canadian veteran, he gives Dodd's Kidney Pills the credit for his abundant health.

"I am seventy-two years of age," Mr. Brown said, in an interview, "and I want to say that Dodd's Kidney Pills cured me of gravel and kidney trouble. I was troubled with backache, headache and dizziness, cramps in the muscles and stiffness of the joints. My sleep was broken, and at times my limbs would swell.

"But since taking Dodd's Kidney Pills, all these troubles have gone. I consider Dodd's Kidney Pills a wonderful medicine.

The aged man or woman who has healthy kidneys can afford to laugh at the ill of life. For healthy kidneys keep the blood pure and ensure good, restful sleep. Dodd's Kidney Pills always make healthy kidneys. That is why they are known as the Old Folks' Best Friend.

QUESTIONS AND ANSWERS. Miscellaneous.

GROWTH OF WALNUT.

"The Farmer's Advocate" seems to solve a good many problems through its Questions and Answers Department, so I am taking the liberty of sending one.

A black-walnut tree has been planted about ten years, and is about two inches in diameter. Could you give me some idea of its probable value twenty years from now, if it continues to grow reasonably for that time? Would the value increase faster as the tree gets older? The tree is for lumber.

QUESTIONER.

Ans.—The growth of black walnut, or any other tree, depends upon several factors, the more important being: The suitability of the tree to the climate; the nature of the soil; and the situation of the tree, i. e., whether growing in the open or in dense stand. A tree growing in the open, with a full, large crown, has a rapid diameter growth, but does not produce very many logs or saw material.

Any prediction as to future growth depends upon the above factors, and it can be readily understood that any estimate of future growth is somewhat relative.

At Guelph, there is a black-walnut plantation on a gravelly-clay soil, with the trees originally planted about 8 feet apart. This planting was done twenty-five years ago, and the trees are from 6 to 9 inches in diameter at the stump. This plantation is at fault for two reasons. It is not good soil for black walnut, and the plantation has been so open that grass grows beneath the trees, which retards proper tree-growth.

I know of individual black-walnut trees in Southern Ontario which have made from 10 to 12 inches' growth in twenty years, but this was on first-class, warm soil, with plenty of moisture.

E. J. ZAVITZ.

O. A. C., Guelph.

NEGLECTED ORCHARD—FIGHTING TANSY—ALFALFA AFTER FALL WHEAT.

1. I have forty old apple trees, full of old and dead, and with too many living limbs. Can I cut them out any time that I have to spare, without killing the trees?

2. I have four acres of fall wheat near the barn and would like to make it into pig pasture. Can I harvest the wheat, plow it up, and sow alfalfa, or would it be too late?

3. I have eight acres, plowed last fall, with big patches of tansy, very strong and matted roots. How can I root it out?

H. V. P.

Ans.—1. The dead wood can be cut out at any time, the sooner the better for fear rot sets in and destroys the whole, or, at least, a great part of the tree. It is well to apply a liberal coat of paint on the wound when large limbs are removed. With living wood, it is not wise to remove too much in one season. For trees that have been badly neglected, the best plan is to take about three seasons to remove the superfluous growth. Pruning can be done safely any time up to early June.

2. While summer seeding of alfalfa has been advised for more southern latitudes and practiced with success by some few farmers in Ontario, it cannot be said as yet to have been demonstrated to be the best plan for Canadian conditions. Moreover, the maturing of a crop of fall wheat in the same season is liable to leave the land pumped rather dry of moisture and soluble plant food. If, however, the field is in good heart, and in a protected place where snow generally lies, and if also moist, warm weather should set in about the time you have the land ready for seeding, it might be successful.

3. Your best plan would be to practice thorough cultivation until June, and then sow to buckwheat or rape or some other rank-growing crop that would tend to smother the tansy. If it persisted in coming on, you could plow down or pasture, running the mower over weedy places. Tansy is comparatively easy to fight on farms where a short rotation is in vogue. Be careful not to allow further seeding, and with due precautions in cultivation it will soon be conquered.

A Market for Your Cream

Our creamery affords you an exceptional opportunity for disposing of your cream to advantage, and

We can pay you more than you can obtain for your cream or butter from stores, commission men or others, because

We make the butter and sell direct to the consumer, cutting out the middleman.

There is no limit to the amount of butter we can sell. This means that our demand is constant, and we can take all your cream.

We are not at the great expense of gathering the cream, but provide cans for your use, and pay express from your station. You reap the benefit of our not having to pay for gathering.

We Pay All Our Shippers Twice a Month in Cash, increasing the price as the market price of butter advances. Write us for any further information you desire.

THE T. EATON CO. LIMITED TORONTO CANADA

HOLSTEINS and YORKSHIRES FOR SALE

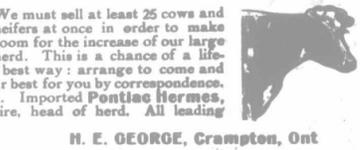
R. Honey, Brickley, Ontario, NORTHUMBERLAND COUNTY. Bulls fit for service, from cows with large records. Sows fit to mate, also young pigs, both sexes, of the very best bacon type. Prices reasonable.



Spring Brook Holsteins and Tamworths. Two choice bulls ready for service, one sired by Nancet Pieterje Paul, whose three nearest dams average over 25 lbs. butter in one week; two bull calves by Count Posch Mechthilde, of high R. M. stock. A few females to offer. Tamworths of best imp. English Royal winners. Stock of all ages for sale. A. C. HALLMAN, Breslau, Ontario, Waterloo Co.

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way: arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported Pontiac Hermes, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented. Putnam station, near Ingersoll.



H. E. GEORGE, Crampton, Ont.

MAPLE GLEN Holsteins

For sale: Only 1 bull, 11 months old, left; dam is sister to a 26-lb. tested cow. Any female in herd for sale, 7 with records 20 1/2 to 26 1/2 lb. official tests. An 8-yr.-old G. D. of Paul Beets De Kol, in calf to Oakland Sir Maida—her record 21.88 as a 5-yr.-old. Price \$400, or will dispose of herd en bloc, a great foundation privilege. G. A. Gilroy, Glen Buell, Ont. Long-distance phone connects with Brockville.

BUSINESS HOLSTEINS!

Over 60 head to select from. Milk yield from 60 to 85 lbs. a day, and from 35 to 47 lbs. a day for 2-yr.-olds. There are 10 2-yr.-old heifers, 8 1-yr.-olds, and a number of neifer calves. Bulls from 1-yr.-old down. Priced right. Truthfully described. W. Higginson, Inkerman, Ont.



LAKEVIEW HOLSTEINS

We have for sale 4 young bulls ready for service, 2 of them by Brightest Canary, whose P. test shows 4%; the other 2 equally as well bred. We have also for sale a few pure-bred females and a number of heavy-milking Holstein grades. LAKEVIEW FARM, BRONTE, ONTARIO. Write us for particulars. W. D. Brecken, Manager. Long-distance phone



HOMWOOD HOLSTEINS

For Sale: Only thrifty bull calves from 4% R. O. M. cows; some will make great herd headers and show animals. Write for prices and description. Station on the place. M. L. & M. H. HALEY, Springfield, Ont.

The Maples Holstein Herd! RECORD-OF-MERIT COWS.

Headed by Lord Wayne Mechthilde Calamity. Nothing for sale at present but choice bull calves from Record of Merit dams; also a few good cows at reasonable prices.

WALBURN RIVERS, Folders Corners, Ont.

MR. A. I. HICKMAN,

Court Lodge, Egerton, Kent, England, EXPORTER OF PEDIGREE LIVE STOCK Of all descriptions. During the summer months the export of show and stud flocks of sheep will be a specialty. Who can do better for you than the man who lives on the spot? Mr. Hickman will be at the Bell Hotel, Gloucester, during the week of the Royal Show, and will be pleased to meet all foreign and colonial visitors there.

HOLSTEINS Two bull calves, two yearling heifers, two two-year-old heifers. Prices right for quick sale. White Rock and Buff Orpington eggs. Utility pens, \$1 per setting; exhibition pens, \$2 per setting. DAVID RIFE & SONS, Hespeler, Ont.

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, durably bound, indexed and illustrated. Covers over one-hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

FLEMING BROS., Chemists
78 Church St., Toronto, Ontario

FAIRVIEW HERD HOLSTEINS

The greatest A. R. O. herd of in northern New York. Headed by Pontiac Korndyke, the greatest sire of the breed, having five daughters whose seven-day records average 29 1/2 pounds each, and over 4 3/4% fat. Assisted by Rag Apple Korndyke, a son of Pontiac Korndyke, out of Pontiac Rag Apple, 31.62 pounds butter in 7 days, and 126.56 pounds in 30 days, at 4 years old. Cows and heifers in calf to the above two bulls for sale, also young bulls sired by them out of large-record cows. Write, or come and inspect our herd. **E. H. DOLLAR, Nevelton, St. Lawrence Co., N. Y., near Prescott, Ont.**

Centre and Hill View Holsteins

We are now offering 8 choice young bulls from 6 to 10 months of age, with high official backing. These are a grand lot of young bulls. We are entirely sold out of females for the present.

P. D. EDE,
Oxford Centre P.O., Woodstock Sta., Ont.

Maple Hill Holstein-Friesians

Special Offering: One cow (bred), freshened in December. Two bull calves, calved in December; very choice.

G. W. CLEMONS, ST. GEORGE, ONT.

HOMESTEAD HOLSTEINS

For sale: Bull calves sired by the champion, Count Mercedes Posch, whose nearest dams' records average 25 lbs., and out of Advanced Registry dams.

G. & F. GRIFFIN,
Burgessville, Ont. Oxford Co.

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.,** Chicago, Ill., 104 Lake St.

CALFSKINS WOOL

WRITE FOR PRICES

Ship **E. T. Carter & Co.,** 84 Front St. E., Toronto.

A BETTER LOT OF AYRSHIRE Cows and Heifers

Were never to be seen before at Stockwood. Deep milkers, good teats; lots of size, just the kind for foundation stock. Young bulls from prizewinning dams; also heifers. Prices low. Terms to suit purchaser. All stock guaranteed before shipping.

D. M. WATT, St. Louis Sta., Que.

Stonehouse Ayrshires.

36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.

HECTOR GORDON, Howick, Quebec.

CHERRY BANK AYRSHIRES.

I am now offering young bulls and heifers true to type and high in quality. Some with imp. sire and dam; also will spare a few older females.

P. D. McArthur, North Georgetown P. O., Que.
Howick station, Que.

UTILITY GLENORA OF KELSO = 15798 = AYRSHIRES

at head of herd. For sale: Females of all ages, and several young bulls, some out of 11,000-lb. cows. Come and see, or address: **R. C. CLARK, Hammond, Ont.** Railway station, Hammond (G. T. R. and C. P. R.).

Ayrshire Cattle

Imported or Canadian bred, for sale at all times; satisfaction guaranteed. For particulars, write: **W. THORN, Lynedoch, Ont.**
Trout Run Stock Farm.

QUESTIONS AND ANSWERS. Miscellaneous.

SALE OF CATTLE.

A sold eight cattle to B for (as A understood) \$450, to be delivered ten miles, A accepting \$10 on sale. B understands purchasing price of cattle to be \$4.50 per hundredweight, a price A would not consider by full value.

1. Can B compel A to deliver cattle, to be weighed, at \$4.50 per hundredweight, the only point of difference being a misunderstanding of price, A maintaining the price to be \$450 lump sum, B's contention being that the price was \$4.50 per cwt., live weight?

2. How should A proceed?
Ontario. INQUIRER.

Ans.—1. We think not, unless B has satisfactory corroborative evidence available to support his contention.
2. He should return the \$10; unless he on his part is in a position to adduce effective corroborative testimony, in which case he should tender delivery of the cattle. He would then be in a position to proceed by action, if necessary, for the balance of price.

SICKLY CHERRY TREES.

Have a number of cherry trees that have done well every year up till last year. They had a good crop of cherries, but only grew to be one-half size, not worth picking, and no good if they were picked. Could you tell me the cause, and what to do for them?

SUBSCRIBER.

Ans.—The crop of half-grown cherries produced by your trees indicates that the trees are suffering from lack of nourishment in some way. This might be due to drought or injury of some kind to the trees; but it is most likely it is due to a weakening of the trees through winter injury. It is quite probable that the trees are suffering from what is commonly known as "Black Heart," that is, the interior wood of the tree is dead and black, which is really the result of winter injury, and may result in the ultimate death of the trees. If they do not recover and bear well this year, they might as well be taken out and replaced with healthy trees.

O. A. C.

CADDIS WORM.

Being a constant reader of your paper, can you inform me what the insect is which I enclose. The goose was in good health in the morning, and laid, and went to the creek in the afternoon, and by night was dead. On opening, we found two or three insects in the feed-pipe, with some grass. The mouth and bill turned a dark purple. We could not find anything else wrong, but think it was this insect. We lost a lot of goslings last spring, which died very suddenly. Where the insect was found, the feed-pipe was inflamed.

Ans.—I submitted the contents of the small package contained in letter from your subscriber to Arthur Gilson, which he describes as follows:

"The object submitted is one of the well-known cases of a caddis worm. These cases are found sometimes very commonly in clear streams and ponds. There is considerable variety in the size and shape of these larval cases. To some are fastened small pebbles and grains of sand, such as are attached to the one you submit; others have sticking to them small bits of twigs, or even pine needles. The caddis worm, of course, lives inside of the case. The head, with the mouth-parts, and the thorax, with the long, strong legs, are the only parts that protrude from the case. These worms crawl slowly about in the water, searching for food, which consists of bits of vegetable matter."

I would not like to say whether these worms were the direct cause of death or not, but the color of mouth and bill point to suffocation.

A. G. G.

TRANSPORTATION BUILDING.

Last week the corner-stone was laid for a new transportation building on the grounds of the Canadian National Exhibition at Toronto. The one-story structure will be 354 x 150 feet, and is located on the lake front, on the grounds that have been annexed west of the main entrance.



Stoneycroft Ayrshires

Choice young bulls and heifers of the very best breeding, combining show and dairy quality.

Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.

Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

Springhill Ayrshires

Present offering: A number of high-class bull calves, out of imp. sire and dams. Females all ages, imported and home-bred. Write your wants. Visitors always welcome. Phone connection.

Robt. Hunter & Sons, Maxville, Ont.

HOWGLEN AYRSHIRES!

For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to **ALLAN P. BLUE,** Eustis, Quebec.

AYRSHIRES

Bull and heifer calves from producing dams. Right good ones.

Hickory Hill Stock Farm, Dundas Station and telegraph. N. DYMENT, Clappison, Ont.

CATTLE AND SHEEP LABELS

Size.	Price, Doz.	50 Tags.
Cattle.....	75c.	\$2 00
Light Cattle.	60c.	1 50
Sheep or Hog	40c.	1 00

Postage paid. No duty to pay. Cattle labels with name and address and numbers; sheep or hog labels with name and numbers. Write for sample—free.

F. G. JAMES, BOWMANVILLE, ONTARIO.

AYRSHIRES AND YORKSHIRES!

Kindly send in your orders at once for imported stock. We can cable orders and have them shipped May 5th. Calves from imp. dams or from home-bred Record of Merit dams. Females any age. A few young pigs.

ALEX. HUME & CO., MENIE, ONTARIO.

HOARD'S STATION, G. T. R. Phone in residence. E. V. HUME

TROUT RUN AYRSHIRES

Imported and Canadian-bred. Our herd of 30 Ayrshires are producers. We will sell six 2-yr.-old heifers in calf to imported bull, twelve yearling heifers (imp. sire and dam), 1 imp. yearling bull, and one home-bred yearling bull. A choice lot. **Wm. Thorn, Lynedoch, Ont.**

ARE YOU IN WANT OF A CHOICE BULL TO HEAD YOUR HERD?

We are offering choice bull calves sired by Fountain's Boyle, who won first prize at Toronto, London and Ottawa, who also headed first-prize herd at Toronto and Ottawa. Also offering some choice heifers.

D. DUNCAN, DON, ONT.

DUNCAN STATION, C. N. O.

Pine Ridge Jerseys—For Sale

(Earl Denton head of the herd.) Females, all ages. Yearling bull and a bull calf, 5 months, from a 10,000-lb. cow. Can spare also a few young cows and heifers due to calve soon.

WILLIAM WILLIS, Newmarket, Ont.
Pine Ridge Farm.

Brampton Jerseys

Canada's premier herd. Dairy quality. Bulls all ages for sale, from best dairy and show cows in Canada, and by best sires. Our herd is 175 strong.

B. H. BULL & SON, BRAMPTON, ONT.

Southdown Sheep

Unequaled for fine quality of both mutton and wool, hardness of constitution, and earliness of maturity.

STRIDE & SON,

Will sell by auction at **CHICHESTER, SUSSEX, ENGLAND,** on

AUGUST 18th and 19th, next, 1909, 6,000 Southdown ewes (August 18th), 500 Southdown rams and ram lambs (August 19th).

On **SEPTEMBER 15th, next, 1909,** 4,000 Southdown ewes. 500 Southdown rams and ram lambs.

Commissions at these sales, or any other time, carefully executed. Telegrams and cables:

STRIDE, CHICHESTER, ENGLAND.

Postal address:

Stride & Son, Chichester, Sussex, England.

American Shropshire Registry Association.

HENRY L. WARDWELL, PRESIDENT.

Largest membership of any live-stock organization in the world. Vol. 21 of the Record published. Write for rules.

Mortimer Levering, Sec., LaFayette, Indiana.

SOUTHDOWN AND COLLIES.

Long-distance Telephone. **ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.**

THANKS TO CUSTOMERS!

We fully appreciate the many kind words of commendation of **Sheep and Barley** shipped on mail orders. Not having had a single word of complaint makes us feel rather good again, as in past seasons. Kindly accept of our heartiest thanks.

J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

CLAYFIELD

Buy now of the **Champion Cotswold Flock of America, 1906.** Flock headers, ranch rams, ewes of different FARM! ages. All of first-class quality, and prices reasonable. Write, or call on **J. C. ROSS, Box 61, Jarvis, Ont.**

PLEASE MENTION THIS PAPER.

Hampshire Down Sheep.

SPLENDID MUTTON, GOOD WOOL, GREAT WEIGHT.

Unrivalled in rapid and WONDERFULLY EARLY MATURITY, hardness of constitution, adapted to all climates, and in quality of MUTTON AND LARGE PROPORTION OF LEAN MEAT.

Champion against all breeds at the great Smithfield Show, London, 1908.

Full information of **Secretary, Hampshire Down Sheep Breeders' Association, SALISBURY, ENGLAND.**

LINCOLN LONGWOOL SHEEP BREEDERS' ASSOCIATION

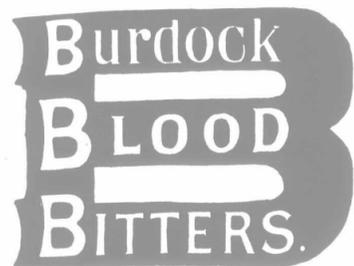
The 25th and 26th sales of Lincoln Longwool rams, by members, will be held in **Lincoln, England,** as follows:

July 9th and September 3rd

The sheep will be penned, on view, on the afternoon before each day of sale.

WILLIAM FRANKISH, Secretary, St. Benedict's Square, LINCOLN, ENG.

HEADACHE.



What Medical Skill Could Not Do Was Accomplished with Burdock Blood Bitters.

If you are troubled with Headache do not hesitate to use B.B.B. It is no new product, of unknown value, but has an established reputation.

COULD NOT WORK.

Miss Murial Wright, Muniac, N.B., writes: "I was sick and run down, would have headaches, a bitter taste in my mouth, floating specks before my eyes and pains in my back. I was not able to do any house work at all and could not sleep at night. Several doctors doctored me but I saw I was getting no help, and on the advice of a friend I got three bottles of Burdock Blood Bitters and they effected a complete cure."

TOWER'S FISH BRAND WATERPROOF OILED GARMENTS

are cut on large patterns—designed to give the wearer the utmost comfort

LIGHT-DURABLE CLEAN AND GUARANTEED WATERPROOF

AS SHOWN THE GARMENT FOR BOYS, SHOWS THE WAY OF THE FISH

TOWER CANADIAN CO. TORONTO CAN.

Maplehurst Herd of Tamworth Swine, Bronze Turkeys, Toulouse Geese, Pekin Ducks, S.-C. W. Leghorns.

Tamworths of excellent breeding and ideal bacon type. Herd won sweepstakes at Toronto and London, 1905-6-7-8; winnings at World's Fair, St. Louis, 1904.—sweepstakes aged and junior herd, and two grand championships. Apply to:

D. DOUGLAS & SONS, MITCHELL, ONTARIO. Bell phone in residence.

MAPLE LEAF BERKSHIRES

For sale: Young sows bred to farrow in May and June; boars fit for service; also young pigs farrowed in March and April. Imp. sires and dams. Pairs not akin. C.P.R. and G.T.R. Joshua Lawrence, Ontario, Oxford Centre.

A Norfolk farmer, riding through the Welsh mountains, came up with a mountaineer leisurely driving a herd of pigs.

"Where are you driving the pigs to?" asked the inquiring farmer.

"Out to pasture 'em a bit."

"What for?"

"To fatten 'em."

"Isn't it pretty slow work to fatten 'em on grass? Up where I come from we pen them up and fatten them on corn. It saves a lot of time."

"Ya-as, I s'pose so," drawled the mountaineer; "but, bless your heart, what's time to a hawg?"

DODD'S KIDNEY PILLS

FOR ALL KIDNEY DISEASES

CURES RHEUMATISM BRIGHT'S DISEASE DIABETES BACKACHE

NUMBER 23 THE PRO...

QUESTIONS AND ANSWERS. Miscellaneous.

DEPTH OF COVERING ALFALFA SEED.

I have been informed that it is best to sow alfalfa seed ahead of the grain box, or ahead of the cultivating teeth of the seeder, and in last issue of "The Farmer's Advocate" I see one man recommending sowing ahead of the drill. I changed my grass-seed box ahead on my seeder, which is a broadcast seeder, or an ordinary force-feed, spring-tooth cultivator. Do you think there is any danger of me burying my seed too deep with my rig? E. R. M.

Ans.—No; that is to say, unless you cultivate to an unusual depth. Many practice disking the seed in with good results.

PERCHERON REGISTRATION.

I have a Percheron colt, about nine months old, whose dam and grandam were both sired by pure-bred Percheron horses, the colt also being sired by a pure-bred Percheron, leaving him with three crosses of pure blood. Is he eligible for registration? Where should I write for full information, if he can be registered? D. G.

Ans.—Percherons must trace to animals imported from France, and registered in the French Percheron Studbook. They cannot be made eligible for registration by "grading up," no matter how many crosses of registered sires they may have.

The Canadian Percheron Studbook, which is one of the National Records, only recognizes pedigrees recorded in the Percheron Studbook of France, or the American Percheron Studbook, G. W. Stubblefield, Secretary, Chicago, Ill. Application blanks and full information can be obtained by addressing Accountant National Live-stock Records, Ottawa, Ontario.

CORN FOR SILO—NITRATE OF SODA FOR TIMOTHY—ALFALFA FOR GREEN FEED.

1. For a silo, and planting White-cap Dent corn in hills, would it be wise to plant as close as three feet in check rows? How close?

2. With hay at \$10 per ton, would it pay to sow on an old timothy meadow 200 lbs. nitrate of soda per acre, or is there any preferable commercial fertilizer? Would it pay on a new meadow?

3. If a man has nine acres of alfalfa, would you advise sowing some peas and oats for soiling, i. e., just to supplement the pasture. G. W. A.

Ans.—1. We should prefer hills forty-two inches apart, each way, with an average of four or five stalks in a hill. Thus planted, it ears up and matures into a very nutritious quality of ensilage corn, and quality is more to be desired than extra bulk, because it reduces grain bills.

2. It might, but no one can tell positively whether a certain kind of fertilizer will be profitable on a certain soil without trying it. Generally speaking, a complete fertilizer, that is, one containing potash and phosphoric acid, as well as nitrogen, gives best results on timothy, but it is a little late in the season now to apply any but the most soluble and readily-available fertilizer, hence, for the present year, it might be worth trying a little nitrate alone, say one hundred pounds per acre, on part of the field. Nitrate of soda is a very expensive fertilizer, and as it is very soluble, hence very subject to leaching, it is best applied in two or three dressings, the first just as growth is commencing, and the others at intervals of two or three weeks. Had this question been asked us last fall, we would have suggested a trial of 125 lbs. nitrate of soda, 250 lbs. acid phosphate (or 300 lbs. basic slag), and 100 lbs. muriate of potash, the phosphate and potash being applied last autumn, and the nitrate in two dressings this spring, as advised above. On a clover meadow, we would use little or no nitrate, as clover can draw its nitrogen from the atmosphere.

3. Unless one had a very large herd, or very poor pastures, nine acres of alfalfa would provide a liberal quantity of first-class green feed, and a crop or two of hay besides. Alfalfa is a soiling crop par excellence.

SEA GREEN & PURPLE SLATE

SEA GREEN AND PURPLE SLATE is nature's own product—not man made. Quarried from solid rock—split into convenient form for laying, and then in its natural state ready for the roof. **SOLID ROCK CAN NOT WEAR OUT.** It can't burn, rust, warp, crack, tear, or decay. That's why Sea Green or Purple Slate Roofs never wear out and never require painting and repairing like all other roofing. Sea Green & Purple Slate Roofs are suitable for any building, new or old. Give perfect protection. Reduce insurance rates because spark and fire-proof. Afford clean cistern water. Not affected by heat or cold. First cost—only a trifle more than short lived roofing. Settle your roofing question for all time. Don't spend more money for poor roofing. Write to us for our free book "BOOPS"—it will save you money. Give name of your local roofer. Write today. **AMERICAN SEA GREEN SLATE CO., Box 3 Granville, N. Y.**

ROOFS NEVER WEAR OUT

NEWCASTLE TAMWORTHS, SHORTHORNS AND CLYDESDALES. Present offering: 1 registered Clydesdale mare due to foal April 30 to imp. Clyde stallion; 3 Shorthorn cows with heifer calf at foot, 3, 4 and 5 months old respectively and bred again; a choice lot of Tamworth boars and sows from 6 weeks to 5 months old, also a few choice sows bred to farrow in April, May and June. **A. A. COLWILL, NEWCASTLE, ONT.**

March Offering!



A choice lot of young **SOWS in pig. BOARS ready for service.**

A good lot of September and October pigs. Pairs supplied not akin. Orders taken for young pigs. Prices moderate. Write or call on:

H. J. DAVIS, WOODSTOCK, ONT. Importer and breeder of Shorthorns and Yorkshires.

Morrison Tamworths, Shorthorns and Clydesdales. Tamworths from Toronto winners. Either sex. Any age. Sows bred and ready to breed. Pairs not akin. **CHAS. CURRIE, Morrison, Ont. Schaw Sta., C. P. R.**

MONKLAND YORKSHIRES

are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now. **JAMES WILSON & SONS, FERGUS, ONTARIO.**

Willowdale Berkshires! Won the leading honors at Toronto this fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. **J. J. WILSON, MILTON, ONT., P. O. AND STATION, C. P. R. AND G. T. R.**

SUNNYMOUNT BERKSHIRES Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand, good lot. Also younger ones. Pairs not akin. **JOHN McLEOD, C.P.R. & G.T.R. Milton P.O., Ont.**

OHIO IMPROVED CHESTER WHITES.—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 4 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. **E. D. GEORGE Putnam, Ont.**

DUROC-JERSEY SWINE Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. **MAC CAMPBELL & SONS, HARWICH, ONT.**

Pumps Vim Into Worn-Out Men



Take This Belt for What it is Worth. Wear it Until You Are Cured. Then Pay Me.

If you feel tired and stupid, with no ambition to get out and hustle; if you have spells of despondency and a desire to give up the fight, you need new energy. The race is to the strong. Show me a failure and I'll show you a weaking, lacking in courage, strength and ambition, three essentials to the make-up of a successful man.

I can take a man like that and pump new energy into his body while he sleeps, and in a few weeks' time transform him into a giant in strength and courage. It is proven that energy and electricity are one and the same thing. If you lack this energy you can get it only by filling your nerves with electricity. Dr. McLaughlin's Electric Belt does this. Wear it while you sleep. Feel its invigorating stream of electric life in your nerves, its vitalizing spark in your blood. You wake up in the morning full of new life, new energy, and courage enough to tackle anything.

My Belt sends a steady current of electricity into the nerves and vitals, building up vitality and strength, and removing the cause of disease. No pain can exist in a body charged with electric life. You can have no rheumatism, no weakness, no inactive parts,

for the life generated by this appliance gives health and strength to every organ.

Dr. McLaughlin:

Dear Sir,—I am pleased with your treatment. I feel like a new man. I have gained over 20 pounds. I would not be without it for any money.—**DAVID CRAWFORD, Oso Station, Ont.** If you are skeptical, all I ask is reasonable security for the price of the Belt, and you can

PAY WHEN CURED. FREE TO YOU.

Get my 80-page book describing my Electric Belt, with illustrations of fully-developed men and women, showing how it is applied.

If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon.

Consultation free. Office hours—9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.

Please send me your Book, free.

NAME ADDRESS

Send Now For Free Book and Sample

"For more than five years I have been experimenting with our experts to find the BEST culvert for all-round uses. We sought the markets of the world for one that was just right; and we didn't find it. If we had, we'd have bought the patent rights for Canada. Finally, last spring we struck the idea. Then we put in some expensive months in making that idea better,—and NOW we've got a culvert that is so far ahead of any other there's no comparison."



"You'll read something about it here; but to KNOW how 'way-ahead it really is, you'll want to see the sample (sent free) and read the booklet (free, ditto). With that before you, you will soon see why every Reeve, or Warden, or Town Councillor, or anybody who has any use for culverts at all,—will find it pays to get in touch with me right NOW. I am asking you to lay aside your notions of what makes a good culvert, and a cheap culvert, and find out about this NEW culvert. I don't expect you to buy a foot of it until it PROVES to you that Pedlar Culverts are in a class by themselves, and that you can't afford to overlook them. Let us start that proof toward you soon—address nearest Pedlar place."

G. A. Pedlar

Frost-Proof, Rust-Proof, and Wear-Proof

This triple-rib flange-lock principle, found only in Pedlar Culverts, not only adds greatly to the strength of the piping and makes a perfect joint—practically as good as if welded—but it also allows for expansion and contraction under cold or heat. Though a Pedlar Culvert, of any length, be frozen solid full of ice, it will not split nor spring a leak.

Send for Free Sample and Booklet 20 Address

State your probable needs and we will quote prices and discounts —



Agricultural Savings and Loan Co's

4% Debentures

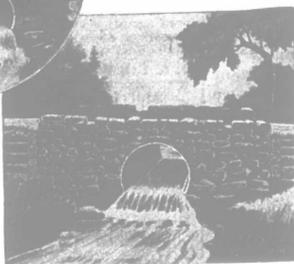
are an absolutely safe and profitable investment. Government authorizes Trustees and Executors to invest in them. Call or write us, at 109 Dundas St., London, Ontario.

PLEASE MENTION THE FARMER'S ADVOCATE.

Learn about the strongest, most practical, most durable and easiest-laid culvert ever made—that's



A structure like this, with Pedlar Culvert, won't wash out nor need repairs.



PEDLAR Perfect Corrugated Galvanized CULVERT

A few hours' work and a few dollars will put a modern and permanent culvert in place of a ramshackle bridge. Easily laid by anybody.

Made of Special Billet Iron, Extra Heavy

In every size of Pedlar Culvert, which comes in all standard diameters from 8 inches to 6 feet, we use nothing but the best grade of Billet Iron, specially made for us, of extra-heavy gauge (14 to 20 gauge, according to the diameter). This Billet Iron is curved into semi-cylinders—curved COLD, so there will never be any variation from exact dimensions; and it is then deeply and smoothly corrugated on a special press that puts a pressure of SIXTY TONS on every square inch of the metal. The corrugations, therefore, are uniform and very deep.

Galvanized After Being Pressed Up

When the corrugating process is done, the sections are galvanized by our exclusive process that covers the entire surface with a thick coating of zinc spelter. Every edge, every crevice, is heavily coated with this rust-proof, corrosion-proof galvanizing, not a spot is left unprotected. This is the only culvert galvanized after being shaped. Is absolutely **Rust-proof**.

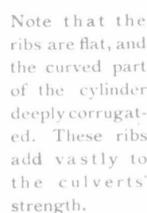
Will Stand Incredible Strains

The heavy-gauge Pedlar Billet Iron sections, deeply corrugated and locked together **without bolts or rivets** by our compression triple-rib (this rib is flat—not corrugated), make a culvert that will stand enormous crushing strains and neither give nor spring. A thin cushion of soil on top is all the protection such a culvert needs against traffic; and no special precautions need be observed in laying it,—it will stand what no other culvert can.

Compact—Portable Easily Laid



Half-sections nested for shipment



Pedlar Culverts are shipped in half-sections, nested—see Fig. 1. Saving freight charges and making carriage easy in roughest country. Quickly and easily transported anywhere.



Clinching the flange-lock—no bolts, no rivets, no makeshifts

Unskilled labor, with a single tool, quickly clamps the flanges together, making a triple-fold joint that is tighter and better than any riveted or bolted joint can be.

BRANCH WAREHOUSES

MONTREAL, 321-3 Craig St. W.
OTTAWA - - - 423 Sussex St.
TORONTO - - - 11 Colborne St.
LONDON - - - 86 King St.
CHATHAM - 200 King St. W.

GOSSIP.

Do not plow when the ground is too wet, as it injures the texture of the soil and makes it much harder to work afterwards. It does not pay to be in too big a hurry.—Leslie Taylor, Bruce Co., Ont.

DOCK THE LAMBS EARLY.

The matter of trimming the lambs is frequently neglected far beyond the proper time. At the age of about two weeks, when well straightened up and thrifty, I have found to be the best time for good results. At this time the shock seems to be less, and they have acquired sufficient strength to stand the ordeal and make the most rapid recovery. I always perform the operation in the morning, as they then have the sunshine of the whole day in which to recuperate. I never do the work during a damp day, nor when it threatens rain, and I care little how cold it is only so it is bright and clear, and not very windy. The only trouble I have ever had was when I first began, and did the work when it was raining, and the lambs took cold and swelled badly. I perform the operation in the simplest and shortest possible way, viz.: clip off about one-third of the scrotum, draw the testicles out with the thumb and finger, set the tail on a block, and with a sharp, broad chisel and mallet, sever it with one blow. Some use alcohol or turpentine on the wounds. I never use anything, unless the weather is warm and there is danger from the blow-fly, and then I use tar. One of the decided advantages of trimming early, is that all danger from blow-flies is avoided. The lambs will be well healed up before the advent of that pest. I have noticed that the most successful flockmasters always give prompt attention to all the little details of flock management, and the appearance of their flocks always shows it. Nothing gives a flock a more disreputable appearance than a lot of long-tailed, lanky, scraggly lambs mixed in.—E. P. Snyder, in Ohio Farmer.

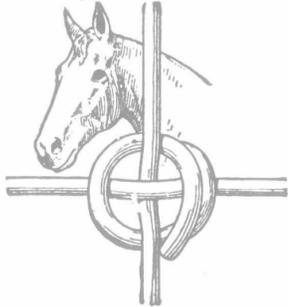
A. A. COLWILL'S TAMWORTHS AND SHORTHORNS.

Superior showing type and quality has for twenty-five years characterized the Newcastle herd of Tamworth swine, the property of A. A. Colwill, of Newcastle, Ont. For years bred from championship-winning stock, the herd is certainly one of the best in Canada, headed at present by that grand hog, Imp. Cholderton's Golden Secret, imported two years ago, his superiority as a sire being well proven in the high-class character of his get. Second in service is the splendid son of Imp. Knowles' King David, one of the best Tamworth hogs imported to Canada in the last quarter of a century, and out of a sow that has won her spurs at all the leading Canadian shows. With two such high-class stock hogs in service, with the dozen or more six and seven hundred pounds brood sows, the progeny is just what it should be expected to be, ideal in type, rapid and easy growers, smooth, even, and full of quality. Of this kind of stuff, there are still on hand about twenty young sows, from five to six months old, and three young boars about five months of age, besides two litters out of a pair of daughters of the several-times champion, Colwill's Choice. All these mentioned are sired by the imported stock hog. The younger ones are now about four weeks old, and will be ready for shipment the latter part of May. Parties wanting choice Tamworth breeding stock should order early as the demand is exceedingly active. The Shorthorns are a dual-purpose herd, founded on the Syne and Snowball tribes, for years Scotch-topped. In the large herd are a number of very thick, heavy-fleshed females, easy feeders and good doers. A number of the others are essentially dairy Shorthorns, giving a heavy flow of milk, and put up on dairy lines. These, of course, are not so heavy fleshed. A man can pretty nearly get what he wants in Shorthorns in this herd. The present stock bull and sire of all one year old and under, is Baron Tulip =53879, a roan son of the Missie-bred bull, Baron Beauport (imp.), dam Tulip Queen 2nd (imp.), by Marbeth. He is nicking well on the herd, and leaving splendid, thick youngsters. For sale are a number of cows, with calves at foot, that are good, cheap breeding. There is long-distance Bell phone connection.

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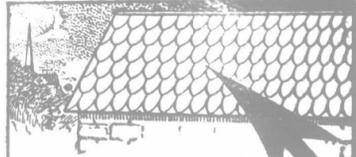
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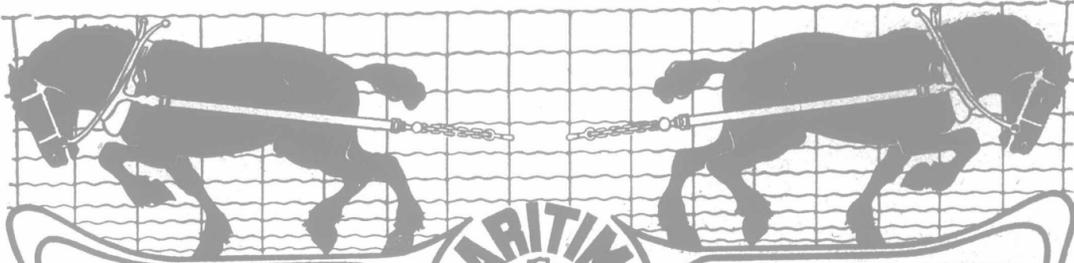
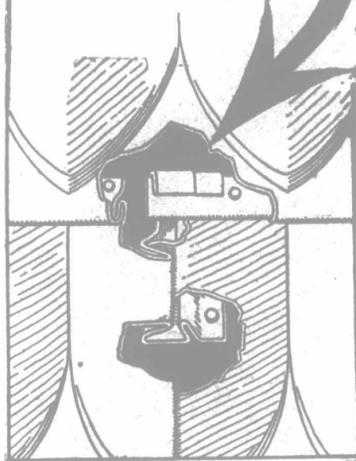
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Saves Room, Time, Toil
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Have a Common-sense Kitchen

MR. Man-of-the-house, do you half realize what toilsome drudgery it is for the women-folks to get the meals in your kitchen without a Chatham Kitchen Cabinet? It is about as up-to-date as if you cultivated your crops entirely with the hoe, instead of the cultivator; as if you mowed your grain with a scythe, instead of a self-binder; as if you threshed with a flail, instead of a threshing machine. You see to it that the farm work is done by modern methods, with labor-saving tools. Outfit your kitchen with this labor-saver—give the wife what rest and ease you can buy her,—kitchen work is hard enough at its easiest. This greatest kitchen convenience makes it far, far easier.

Look at It in the Picture

SHOW this advt. to your wife. Ask her what it would mean to have a cabinet that held everything used in cooking,—focussed the whole kitchen-battery in one spot, right in easy reach of a woman seated, instead of making that woman trot from pantry to cupboard, from cupboard to table, from pot-closet to range, back and forth a hundred times a day. The Chatham Cabinet saves, easily, five hundred steps a day in any kitchen; and the kitchen is easier kept tidy, gets rid of endless clutter, and the foodstuffs are kept in far better shape and wasted less. Isn't it worth while to save the women-folk 150 miles of needless kitchen walking in a year? This cabinet does just that.

Sells for Less than Any Ordinary Cabinet

CHATHAM Improved 1909 KITCHEN CABINET

Guaranteed To Satisfy You In Every Detail

So Practical — So Compact.

LET your wife see the picture here of The Chatham Kitchen Cabinet. She will perceive at a glance that it combines pantry, cupboard, baking kit and kitchen table all in one, and yet takes up less space than the ordinary table alone. Note the large enclosed closet for kettles and larger utensils, with the extra shelf at back for smaller pots, etc. Shelf-rack across closet door holds six aluminized canisters, air-tight,—supplied free with Cabinet, as are also six large canisters seen on table section. See the big flour-bin at the bottom, below the drawers—glides out on roller-bearings, has metal bottom, is dust, fly and mouse proof, and holds 75 pounds.

Table-Top Is Zinc and So Roomy.

NO drawer nor bin opens on the table-surface, which is covered with heavy sheet zinc, easy to keep clean, and unwearoutable. Drop leaves at each end, self-locking when lifted and strong enough to hold a man's weight, almost double the table's surface. Nothing about in its own way; roomy, handy, right,—within Table top is 2 ft. 8 in. from floor; whole 6 ft. high, than a good and yet has for everything, spices, package tea, baking kit, and pans,—used in getting

Handsome, Solid, Sensible

EVERY Chatham Kitchen Cabinet is framed throughout of finest selected hardwoods, richly finished; metal bottoms are provided every place they'd be useful; drawers are of snowy basswood; glass and mirror (at top, centre) of best quality; catches and knobs heavy copper finished,—every part of it BUILT RIGHT, and better built than any other cabinet sold. Metal bottom under whole cabinet, and dust-tight back; mounted on triple-action roller casters,—easily moved about.



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