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VOL. XLIV.

LONDON, ONTARIO, MAY 20, 1909.

No. 869

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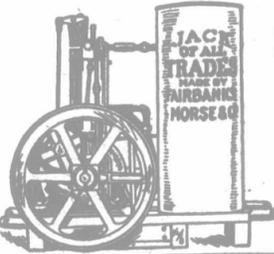
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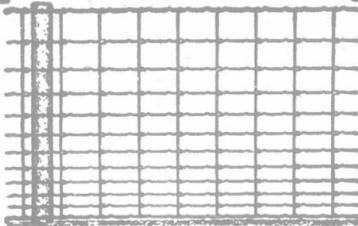


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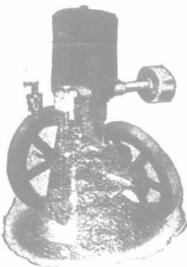
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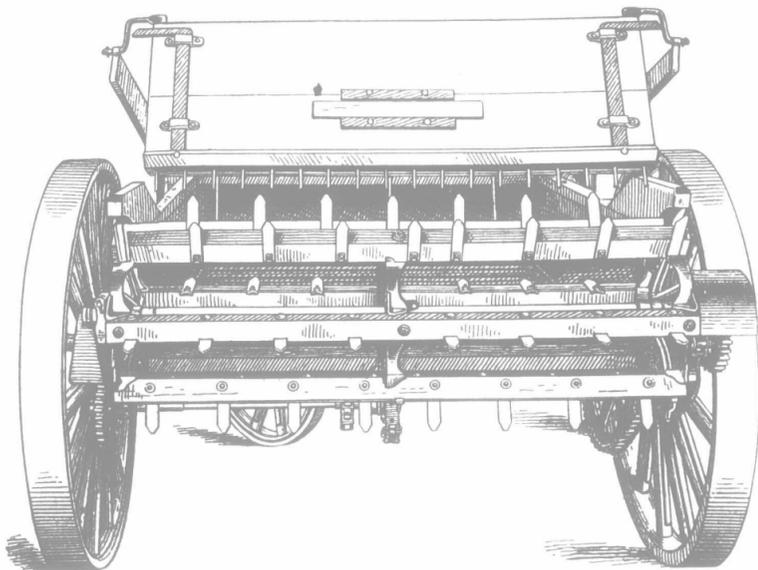
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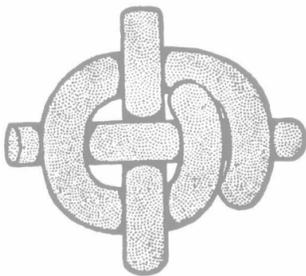
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Third—On top of these four layers is a *real mineral surface*. This surface requires absolutely no painting, and adds materially to the life of the roofing. It is fire retardant. It is permanent.

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The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established 1866

Vol. XLIV.

LONDON, ONTARIO, MAY 20, 1909

No. 869

EDITORIAL

Raise Hogs.

It is generally recognized as being neither a Christian nor yet a prudent business principle to cut off one's nose to spite his face. Even supposing it were a revenge on the face, is it not a greater catastrophe to the person who has to wear the deformed lineament? This axiomatic principle seems to bear a striking application to the present state of the Canadian hog and bacon business.

Canadian pork-packers are not philanthropists. Some of them, we fear, are not even intelligently selfish. All the worthy sentiments we have heard in times past about co-operation between packer and farmer to develop an export trade in Wiltshire sides, was intended for the farmer. The packer wanted his co-operation to the extent of raising the hogs for him (the party of the second part), to buy as cheaply as he could, and make as much out of as possible. Any thought of being in the packing business for the joint benefit of himself and the producer never entered his mind. It is not the way of packers, nor, for that matter, of any other class of business men. They are in the business for, what they can make out of it. Some of them are honorable to the extent of living up to their word and obligations; others are not, if they see a loophole. Some are far-sighted, and disposed to placate and feed the goose that lays the golden eggs; others are short-sighted, brusque, and simply snatch the eggs when they are laid, heeding not the next clutch, or thinking, perhaps, that the other fellow will get them, anyhow, like as not. Such is the nature of pork-packers, good, bad and indifferent. Prices paid for hogs at any period are regulated by the supply of raw material, prospective demand for the cured product, and relative anxiety of packers to secure hogs to keep their plants operating at a profit. There seems no longer any good reason to doubt that there is real competition in buying hogs.

Take the packer as he is. Expect no favors, watch your own end of the game, and let him attend to his; picture him at his worst; weigh the matter from a cold, calculating business point of view, free from considerations of sentiment, malice or sympathy. Discount the prospects from a standpoint of prospective prices and profits. Contemplate the buyer as an impersonal law of chance, which in effect he is. After this hard-headed manner of logic, consider the question whether it will not pay to raise hogs.

Recognize the fact that price fluctuates, and reckon returns on a basis of averages. Go into the hog business, not for the high spots, nor for the low, but to stick to it through thick and thin, dipping in a little heavier when others slacken up, for in the long run such will be found, in the majority of cases, to prove the more remunerative policy. Drift not with the crowd. Court the opportunities your neighbor ignores, and strive to sell at a period when scant supply makes prices high. Pursued on such lines, there is seldom a year but some money can be made out of hogs, if economically fed by a skilled and attentive swineherd, and judiciously marketed.

In the dairy districts, what better stock have we as a medium for marketing skim milk and whey? A recent correspondent of "The Farmer's Advocate" estimated that he made skim milk worth 50 cents a hundredweight for this purpose. The estimate may be high; doubtless it is, but place the figure at 25 cents a hundredweight. In what other way can the returns from the dairy cow be so well supplemented?

A thrifty lot of young baconers, weaned at six

to eight weeks of age, and fed afterwards on skim milk or whey, plus shorts, mixed grains, and some green feed, including roots and clover chaff, or alfalfa, can be easily marketed as first-class, 200-pound singers at between six and seven months of age. We will go farther, and say that when this result is not obtained, under the conditions specified, there is something radically wrong with the pen, the feed or the feeder. And the feed cost of producing such a hog, even in winter, need not usually much, if any, exceed \$5.00 per cwt., counting everything; while, in summer, by utilizing alfalfa pasture, the cost for feed need not run over \$4.50, including the rent of the land. How many times have there been, in the last five years, when these figures of cost would not leave a margin of profit? The trouble is there are too many early-weaned, ill-fed, stunted, rheumatic pigs, wallowing in wet dung in clammy pens, with an excess of stale feed in their troughs. Not one pig in ten is fed as he should be with a view to profit. We speak from experience and somewhat wide observation. Another difficulty is that too large a proportion of the supply comes on the market in the latter part of October, November and December, bringing the cured product on the British market at a period when the demand for bacon is curtailed by the consumption of poultry and other meats.

With an embargo upon American live hogs, and a duty of three cents a pound on American fresh pork, the Canadian hog-raiser enjoys about all the Government favor that can justifiably or effectively be granted him. Legislation never made an angel out of a pork-packer, and never will. The one thing needed to revive the Canadian bacon industry is about one to five good brood sows and ten to fifty well-fed, growthy shoats on every farm. It is time to cease grumbling at the packer, but take him as we find him, make the best of the business, and, for the sake of our own pocketbooks, raise hogs.

Seeding Under Difficulties.

A subscriber, who says he sowed oats in a well-prepared seed-bed on April 17th, writes that on May 10th they were not yet out of the ground, and that it was then raining as though it had never rained before. Alluding to our editorial on timeliness, thoroughness, and despatch in seeding - practice, he expresses a desire to learn of a method of preparing a seed-bed in the mud.

We have no method of seeding to advocate that can be followed, irrespective of weather, but the suggestions offered in the editorial referred to are calculated to produce successful results, in so far as these can be insured by any method under the untoward conditions prevailing. Indeed, the points advocated are of especial advantage in just such a season. Those who were in a position to rush the work will find themselves ahead in the end. It is somewhat surprising, and very unusual, that oats sown April 17th should not have been up by May 10th, but if the seed was good, we would have little or no concern for the final result. The probabilities are that a great many fields will have required harrowing after seeding to break the crust and allow the plants to come through.

There is this consolation to be offered in the present backward spring, for, while the man who misses his opportunities to sow at the proper time usually suffers for it, yet, when one does his best, and commits the seed to the ground in good condition as soon as land and weather permits, he not infrequently secures a full crop, even though the season may have opened later than usual. It is a case of one doing the best he can under the circumstances.

Milk Situation at Toronto.

The decision of the milk and cream producers in the vicinity of Toronto to enter the retail field, marks an interesting development in city milk business. Needless to say, they are not undertaking the scheme for pleasure. Ultimately, it is hoped that higher net prices will be derived, and that a steady and certain outlet for the milk produced on their farms will be secured.

A profit from the business, amounting to interest on capital invested, and a reasonable return for the raw product, are two essentials. Evidently, then, the assumption is either that the dealers are at present deriving substantially more than interest on capital invested, or else that the management of businesses now in operation is not economical. Other considerations that may be taken into account include higher quality in the supply, and more efficient service. None of the producers have complained that too much is being paid for the milk as it comes from the farm.

As a rule, the development of a successful business is a slow process. Sometimes a high-salaried manager, who understands details from start to finish, by practicing economy, and yet by judicious expenditures, succeeds in showing a healthy situation after a comparatively short period of operations. On the average, however, even with shrewd business management, it is found to be up-hill work.

One of the difficulties of co-operative effort in Canada is to induce the co-operators to make "the long pull, the strong pull, and the pull all together, my hearties," in the face of temptations and seducements accidentally or purposely thrown before them. The Toronto milk-producers will not find the operation of their own retail business by any means smooth sailing. If they succeed, their example will certainly be emulated, and will attract wide attention as a phase of unique co-operative enterprise.

Increase the Corn Acreage.

The lateness of spring-grain seeding throughout a large area of Eastern Canada, owing to cold, backward weather the latter part of April, followed by a snowfall on the night of the 29th, with later flurries in May, and much wet weather since then, will probably have the effect of curtailing the acreage of grain and increasing the area devoted to corn, millet, buckwheat, rape, and other crops adapted to a later planting period. If this proves to be the case, the backwardness of the season will in all probability turn out to be a not unmixed disadvantage, perhaps a benefit. It is safe to say that if Canadian farmers were awake to their opportunities, there would be at least four times the corn grown in Canada that has usually been raised in the past. The advantages commence with the planting season, which, coming after the grain seeding, lengthens the time for putting the plowed land under crop. The second advantage consists in that it affords remunerative employment in its summer cultivation, with a splendid opportunity to rid the fields of noxious weeds. A cornfield, cultivated as well as it should be for the good of the crop, will incidentally be freed of all weeds by horse work, except an odd one close to the hills or in the rows, which will require the hoe, or perhaps hand-pulling. Intertillage may be—and, in fact, should be—largely accomplished with the weeder and two-horse or three-horse corn cultivator, for cultivators are now made which will straddle two rows at a time, being drawn by three horses, and guided by a man behind. This is faster than many farmers of the old way work their summer-fallows, and almost as thorough in

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.
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regard to weed eradication. A third, or, should we say, a fourth, advantage of the corn crop is its special adaptability for utilizing the decaying mold of an inverted sod, leaving the land in excellent tilth for a succeeding crop of grain. And one of the strongest advantages of all is that, of all crops, excepting, perhaps, only alfalfa, it produces about the greatest yield of cattle feed, not the least important feature of which is that it may by use of the silo, be preserved in first-class condition as succulent winter feed, while a surplus may, with no depreciation to speak of, be carried over for midsummer, or even for a second winter's feeding. Especially where alfalfa and clover are largely grown should corn be extensively planted, for the legumes supply an excess of protein to balance up the deficiency in the corn, and the two together provide an immense quantity of first-class economical rations, which lay the basis for profitable cattle-feeding. It is time for Canadian farmers to cease toying with this giant grass, and get to work to raise corn in earnest. This is a good season to commence.

Make Your Own Rod.

"On Thursday evening, shortly before eight o'clock, lightning struck the large barn on the Fallon farm, lot 16, con. 4, Ops, and in a remarkably short time the building was a mass of flames. The farm and buildings are the property of Owen Traynor, and the burned structure contained a large quantity of seed grain, a threshing machine, and some hay. There was some insurance on the barn, but the contents are a total loss."

The foregoing paragraph, doubtless typical of hundreds that will be read in the newspapers this summer, is taken from a daily of recent date, which gave in the same column three similar accounts. Many a tragedy is thus disposed of, not only often entailing the sacrifice of many years' savings, but not infrequently of human or animal life.

The case is all the more pathetic when it is realized that the great majority, if not all, of these disasters, caused by the violent electrical

discharge, might be avoided for a few dollars' expense. Any farmer of ordinary intelligence, by following the instructions so often given through "The Farmer's Advocate," and repeated again last week, can make for himself out of nine strands of number nine soft, galvanized wire, as good a lightning-rod as any he can buy, and a better rod than many claimed by interested parties to be equal or superior. It is now clearly established and recognized by experts who have investigated the subject, that good lightning-rods, properly put up and properly grounded, are a very efficient, if not actually a perfect means of lightning protection to the buildings on which they are placed, their virtue consisting in that they provide a medium for leading the current harmlessly downward to the moist earth. Statistics prove that very seldom, indeed, is a building damaged which is properly rodged, with the wires and all connections in good repair. Telephone companies protect their posts by placing lightning-rods at intervals between the horizontal telephone wires and the ground. In fact, the efficacy of lightning-rods is no longer open to intelligent debate.

The renewed emphasis upon the value of this form of protection is leading to renewal of the lightning-rod agents' business, and his misleading and extortionate devices. Naturally, the agents are not at all favorable to the erection of home-made rods, and the unscrupulous among them endeavor to reflect upon the efficiency of the home-made article. They will tell you, for instance, that iron has only a fraction of the conductivity of copper, which is true, but this is one reason why experts advise the former instead, the explanation being that a discharge of lightning on to a copper rod is liable to be of so violent a nature as almost to amount to an explosion, causing risk of fire, while with an iron rod the current is drawn downward more quietly. The fact of the matter is that so-called copper rods are sometimes copper only in name, while often they are flimsy and easily broken. On the other hand, a twisted nine-strand cable of galvanized wire is substantial and durable. A considerable number of barns in Middlesex and other counties have been protected with these rods. Among others, the well-known dairy farmer, Henry Glendinning, of Manilla, informed us that he had put them on his barn, and stated further, that one day when threshing, a thunderstorm came up, staying the operations. During the storm a vivid flash, immediately followed by a deafening crash of thunder, led the men to believe that the barn had been struck. Going out after the storm, they found that a log lying against the rod had been displaced, and charred, or splintered, if we remember rightly, indicating at all events that the current had followed the rod to the ground. Not improbably it saved the barn, and perhaps some lives as well.

As to cost, the materials for rodging a seventy-foot barn, forty feet high, wires, standards, staples, nails and corks, will cost \$4.50, or less than 2½ cents per foot of rod. Carpenters and handy men can make good wages putting them up for five cents a foot, furnishing everything. The lowest we have heard of agents charging is eleven cents per foot, and from that up to twenty cents, or higher. Any farmer who, after reading this article, can be humbugged into paying \$30 for a job that can be better done by himself, or a handy neighbor, for \$10, can only be regarded as exemplifying the old saw about a fool and his money being soon parted.

Not Mine, but Ours.

Will you kindly change the name on our "Farmer's Advocate" from Thos. Adams to "T. H. Adams & Sons," as our plan is to have the boys grow up with the idea that they are part of the concern. Boys were city chaps for a number of years, knew nothing of country life, and were greenies of the first water. Now they think there is no place like the farm. They are very much interested in stock, seed plots and dairying. That is why I ask to have name on paper changed, as everything about the ranch is OURS. I am only one of the boys. T. H. ADAMS, Essex Co., Ont.

We wish about ten good feeders in every county would keep an accurate account of their pig-feeding operations, and submit results to "The Farmer's Advocate" once a year. Voluntary wanted.

HORSES.

The Horse Trade.

Horses of both the heavy and light classes are at present in greater demand and selling for higher prices than last year, and there is every prospect of an increasing demand and profitable prices for years to come for all the good ones likely to be raised in this country. Dealers experience difficulty in filling orders for work horses for the trade in the Northwest, and declare they could do a large export business in the heavy-draft class could they find horses large and weighty enough for the requirements of that market. Continued railway construction calls for a large supply, and the better class of carriage and saddle horses, owing to their scarcity, are bringing higher prices than for many years past. The stock of growing colts in the country, we are assured, is by no means large, and the probability of overproduction need cause no distrust as to the future of the industry, as the old stock, in the natural course, will be wearing out and dying off as regularly as usual, and young stock will be needed to fill their places, as well as to provide horse-power for the many thousands of acres of new land which will be brought into cultivation in the coming years, besides supplying the wants of the numerous growing towns and cities throughout the Dominion. Farmers have the business of horse breeding and raising practically in their own hands, and will do well to provide for the trade by producing the kind and quality the markets demand. The majority of farmers may profitably breed a colt or two each year without losing the service of the mares, as, with good management, they will do a large share of the farm work while raising their colts, and the youngsters be none the worse for it, since they may be early taught to feed in the stable while the mares are at work, and may run with them on pasture at night. Farmers who have good sound mares, of desirable type, should put them to breeding, and not yield to the enticement of the dealer to part with them. The scarcity of desirable horses at present is largely attributable to the dearth of good brood mares in the hands of farmers, who have been tempted by liberal offers to sell, rather than keep them, the result being that mares of excellent type, both of the heavy and the lighter classes, which should be breeding, are seen at service on our city streets.

There is no scarcity of good pure-bred stallions now, thanks to the enterprising spirit of breeders and importers, and there is in most districts no reasonable excuse for breeding to mongrel, grade or unsound horses. It pays well in the end to take advantage of the service of the best sire within reasonable distance, though the fee may be a little higher, as the chances are that the selling value of the produce will, at any age, be many times greater than the difference in the service fee of a superior, and that of an inferior or middle-class horse. The best policy to adopt is to keep one's best young mares, and breed them to the best horse available of the breed or class to which the mares most nearly conform. There is a keen demand, as we have said, for high-class horses of the heavy-draft sort, and also for the carriage and saddle classes, such as the Hackney and Thoroughbred sire are suited to produce, and the prospect is favorable to a continuance of the demand, at high prices, for the best of each of the types named.

Feeding the Orphan Foal.

In the event of the death of the dam at foaling time, the youngster may, by judicious management, be successfully raised by hand. The best substitute for mare's milk is cow's milk, but it must be remembered that the milk of the average cow is much richer in fat than that of the mare, and is deficient in sugar. To correct these conditions, the milk of a freshly-calved cow should be used; always the milk of the same cow, and, if practicable, of a cow whose milk is not rich in fat, and to this add one-fifth of warm water, adding to each pint of that a heaping tablespoon of white granulated sugar, and be always sure to feed it at blood heat. The colt should be fed little and often. If we study the colt when with its mother, we will find that it sucks from ten to a dozen times a day. Therefore, give him half a teacupful every hour at first, and gradually increase the quantity, while feeding less frequently, until he is fed six times a day, and then four times. The best way to teach the foal to drink is by means of a rubber nipple on the spout of a teapot. If scours occur, a little lime-water, warmed, should be added to the milk. To prepare lime-water, slake a lump of lime by pouring a little water on it; then add water and stir. Let this settle for several hours, and the clear water on top is the lime-water to be used. The foal should be kept in a loose box, well bedded, and may be taught to drink from a pail when a month old, and to eat ground oats and bran. When let out to pasture it should be stabled at night, or protected from rains.

Points of the Shire Horse.

In that excellent English treatise, entitled "Heavy Horses: Breeds and Management," edited by James Sinclair, and published in 1894, the characteristics of the Shire breed are thus described:

The Shire stallion should stand 17 hands or over; his legs should be as big and massive as it is possible to obtain them consistent with flat bone, which should measure at least 11 to 11½ inches below the knee, and 1 inch to 1½ inches more below the hock; the hair should be plentiful at all seasons, not wiry, but strong and decided, without any tendency to wooliness. The action should be most particularly noticed in the walk, which should be straight, level and true, and should be the walk of a cart horse, forward and free, but partaking in no respect of the jauntiness of the nag. The hocks should at all times be kept together, and in position. The feet should be wide and open at the heel, with wall of sufficient depth to avoid any resemblance to flatness of foot; the pasterns all round should have sufficient slope to enable the machinery to work smoothly, but long and consequently weak pasterns are to be avoided. The head in the stallion is of vast importance. It should be thoroughly masculine in character, and all trace of "ponyness" should be studiously avoided.

With regard to the attributes of the best type of Shire brood mare, it is perhaps correct to say that breeders and judges are possibly somewhat at variance, because the mare that usually produces the best results to the breeder is but seldom the animal to catch the judge's eye in the show-ring. On the female side, great size, or, in other words, height, is not only not an essential, but is usually detrimental. The typical brood mare should rather be long, low and wide, standing on short legs, with well-sprung pasterns and strong open feet, while the bone should be as wide and massive as can possibly be had, and the hair should be very abundant, and worn at all seasons; the depth of both the heart and short ribs should be conspicuously present, and the walk should be true and level, without any symptoms of rolling; this latter point, of course, applies equally to both mare and stallion. This type of animal being somewhat unpretentious in character, and wanting possibly in gay carriage and dash, often fails to find favor with the judges, but the breeder of experience will have little difficulty in selecting such animals for the purposes of their studs.

In former days, our forefathers for years struggled to foster and encourage the weighty element. Within the last fifteen years, however, a gradual lessening of weight has, to a certain extent, taken place, owing, undoubtedly, to the tendency of judges at shows to encourage quality. That the horse of former days was in certain instances coarse and somewhat fleshy-legged, is undeniable, but the result has been, as is often the case, that a proportion of breeders have occasionally gone to extremes, and bred for quality, without regard to weight. The consequence of this innovation has been that the weighty element is becoming once more in demand, and signs are not wanting that a revulsion of feeling is again taking place in regard to this question, and that stallions that possess some of the characteristics of the old-fashioned type will be sought after, in order to cross with mares of quality. Another outcome of the prevalence of shows has been that a great desire has naturally been cultivated among breeders to gain distinction in the show-ring, and this feeling has again stimulated the turning of studs in increasing numbers principally for showing purposes, which has entailed the maintaining of a large number of animals in a state of idleness. This, however, is one feature of the Shire-horse question that has been of very doubtful benefit to the breed at large. The end and object of all Shire breeding must eventually resolve itself into endeavors to produce the type of animal that will be the most profitable to the farmer, and experience has taught us that with-

out weight we are nowhere; for if we present to the dealer the nicest-turned and handsomest animal in the world, with sloping pasterns, and all the requisites that of late years have been so much sought after, what do we find? Why, that the price offered for such in the open market hardly repays breeding, and but little exceeds half the price readily obtainable for one with the requisite weight. There was also another circumstance that inflicted temporary injury on the breed, and that was the excessive demand for Shire stallions that for several years existed. This trade was "boomed," after the usual American fashion, and everybody jumped into it, expecting at once to become rich. While it lasted, certainly vast numbers of Shires left our shores, but it must be confessed that in many cases the quality of the animals so taken was quite a secondary consideration. A few importers then set up a certain standard of horse that was very far removed from the best class of Shire. This type of animal was cleanly-legged, up-headed and flash. For such stallions fairly good prices were given, until some English breeders almost began to imagine that, after all, probably Englishmen were mistaken in their type, and that the Americans were right. Those who took this view of the case, and acted on it, found themselves overloaded with horses that were almost unsalable, and their condition was certainly not to be envied. A little reflection should have taught these gentlemen that one single stallion that is up to the proper English

the faddists and busybodies who imagine that Government commissions are the panacea for every ill, social, business, or personal, whereas assiduous individual effort is what is really demanded.

There is just one probable benefit we anticipate from the appointment of this commission. If it turns our minds from the profitless controversy with the packers, and focusses attention upon the producing end of the industry, it may prove an indirect benefit. Anything further, it would be sanguine to expect. With what we have already learned from Denmark, Ireland, and other countries, and what our own experience and investigations have taught us, we probably know already a good deal more about hog-feeding under Canadian conditions than our friends the Danes can tell us. It is a case of putting into practice what we know. We can do this without a commission.

Still Money in Hogs.

Editor "The Farmer's Advocate":

Thinking that the experience of the writer, as to cost, etc., in keeping some pigs through the winter might be of interest to some of your readers, am enclosing statement of same.

There were eight in the lot—pure-bred Chester Whites. They were killed off at different times, as the supply of milk grew scarce. They were bought at a time when there was an over-supply on the market of young pigs, hence the low price, \$1.00 each. The usual price in this locality is from \$2.00 to \$3.00 in spring, and \$1.00 to \$1.50 in the fall. Many farmers advocate the killing of pigs when they will dress about 150 pounds, claiming that the first 100 or 150 pounds are put on the cheapest; yet, considering the cost of buying again to start another lot, it seems a question whether it is not quite as profitable to keep them until they will dress from 200 to 225 pounds.

While the profit on these was not large, yet, in spite of the high price of feed, it shows that one is paid fairly well for the trouble of caring for them, besides disposing of our skim milk at a fair price, and leaving, as well, a nice pile of manure for the corn crop.

Would you kindly give your opinion as to the advisability of breeding a pure-bred bull to his own heifers, if both are strong and vigorous?

STATEMENT OF PIG-FEEDING ACCOUNT.

Born Aug. 13th, 1908.	
March 9th—Sold four pigs, weight 615 pounds, at 9½c. per pound	\$58.43
April 19th—Sold two pigs, weight 405 pounds, at 10c. per pound	40.50
May 3rd—Sold two pigs, weight 436 pounds, at 10½c. per pound	44.69
Total	\$143.62
Cost of eight pigs, at \$1.00	\$ 8.00
Meal, corn and middlings	76.91
Milk, 1,139 gallons, at 2c. per gallon.....	22.78
	\$107.69
Profit	35.98
	\$143.62
Drummond Co., Que. T. HARRY EVANS.	

[Note.—We would like to publish several hundred detailed statements such as this, not merely the favorable, but the unfavorable ones, as well. It is impartial facts we are after. As to the question asked, except under most extraordinary circumstances, the breeding of a bull back to his own heifers is to be counselled against. Expert breeders may occasionally do it successfully for a specific purpose that cannot well be accomplished any other way, but, generally speaking, the risk outweighs the advantage. Most of our breeds have already had overmuch inbreeding.—Editor.]

A Simcoe Co. subscriber sends us a picture of two white-face September calves, fed on separator milk until stabled for the winter. He says they weigh now 1,200 pounds, and were cared for by a girl, who is seen standing between them in the picture. Unfortunately, the photograph is not clear enough for reproduction, but the figures are instructive, as indicating what can be done raising calves on skim milk, with good care.

The winter-feeding of export cattle in Alberta has grown to large proportions, and buyers for at least three large exporting firms are straining every effort to get cattle. There is reason to expect large numbers of winter-fed cattle exported from the Sunny Province each spring.



Tatton Dray King (23777).

Shire stallion; bay; foaled 1904. Recently sold at auction for \$18,900.

standard is worth at the very least as much as several animals of the other sort, while at the same time he is a benefactor to the breed at large, instead of helping to deteriorate it. Englishmen are once more rapidly coming to their senses, and find that in breeding Shire horses they must not turn either to the right hand or to the left; they must not be carried away by passing fancies and fashions, but at all times, and in every possible way endeavor to keep the Shire horse in the position that he occupies—at the head of all the draft breeds—by upholding weight, and by recollecting that what is estimable in a mare is almost invariably a defect in a stallion; that, in selecting a sire, true masculine character throughout must be at all times kept prominently in view, and that it is not always the horse whose showy career has been most brilliant that is calculated to do the greatest amount of good at the stud.

LIVE STOCK.

Pork Commission.

In deciding to send a commission to investigate the methods of Danish and Irish pork producers, as is reported to be the case, Hon. Sydney Fisher, Minister of Agriculture, has chosen the lesser of two evils. He was asked from some quarters to recommend raising the duty on American pork, to which he wisely replied that it was not, in the long run, in the interests of the agricultural class to clamor for more protection. It is to their advantage, and to the advantage of consumers generally to have customs duties scaled downwards. Feeling, doubtless, that political considerations demanded some show of acceding to the complaints and wishes of hog-raisers, he evidently turned to the commission idea as one which, in the words of one of its champions, "could not do any harm"—that is, it could not harm the pork industry. The objection, of course, is that it is a superfluous expense, and a concession to

Steer-feeding Returns.

Results from cattle-feeding, obtained from a farm not 60 miles from London, Ont., furnish interesting food for thought. Eighty-eight head purchased 16th October, 1908, and sold 21st April, 1909, showed fair gains, but labor given and feed consumed demand serious consideration in arriving at net profits.

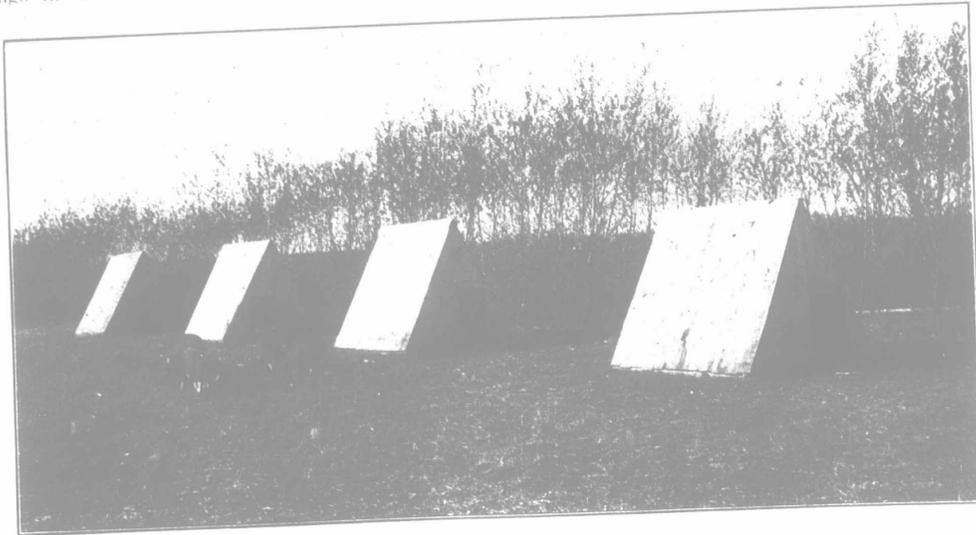
The cattle were purchased, and weighed, on delivery, well shrunken, 1137 pounds each, costing \$47.30 each for 88 head, laid down in the stable. They were of various breeding, but principally Shorthorn grades. They had been on pasture during the summer and fall. About December 1st they were put into the stable, and fed lightly at first, gradually increasing, until, at the finish, they were getting practically all they could take. They were fed hay uncut, turnips and mangels, silage, cut straw and grain, the latter consisting of one-third corn to two-thirds oats, peas and barley mixed. The animals were tied in the stalls. When stabled, the cattle averaged 1,137 pounds, and 1,324 pounds when they came out. They sold for 5½ cents, showing an increase in value of \$28.80 per head. A close estimate shows that the whole gain in value obtained was consumed by the cost of bringing them through, and that the profit on the transaction is represented by the manure produced. From this, the feeder decides that it does not pay to prepare cattle for market in this way, unless the farm is kept in first-class condition as regards fertility. A man can do better with his money than to buy cattle and buy feed, and then sell them under such conditions. A man with a farm is obliged to feed stock, because, if he sold the produce, the farm would rapidly depreciate in value.

Shelter for Grazing Hogs.

In the summer time, swine should be on the ground. It is natural for them, and one seldom makes much mistake in following nature. Hogs which are pastured on alfalfa will make rapid and very profitable gains with small grain allowance. If a small quantity of skim milk or whey can be added for a month or so after weaning, so much the better, but, in the absence of dairy by-products, alfalfa pasture makes the best substitute, and, with or without milk, it should be provided. If one has not alfalfa, let him use clover, or even an old grass meadow. Rape, artichokes and mixed grain sowing may also be employed. Anything to get the pigs out on the land, and to provide pasture to reduce feed bills.

For grazing hogs, suitable shelter sometimes becomes a problem. In some cases convenient access may be had to the piggery. In other instances, portable pens must be provided in the pasture-lot. The main thing is to give the pigs a clean, dry, sheltered sleeping place. It need not be enclosed. Fresh air is as good for hogs as for other animals. It should, if possible, be movable, in order to change it around from one pasture to another, and to prevent the hogs killing out the grass or clover in spots by close eating and trampling, especially trampling when wet. The accompanying illustration of farrowing pens on a Minnesota farm suggests an excellent plan of providing shelter for grazing hogs. They may be used summer and winter, but, for reasons of convenience, are of special adaptation to summer conditions, for which purpose they are better with one end removed, all but a cross-piece or two for support.

The trough may be outside, and should be of heavy plank, with a two-foot piece at each end, to avoid upsetting easily. The pigs should have rings in their noses to keep them from rooting.



Movable Farrowing Pens on a Minnesota Farm.
A modification of these pens are excellent for grazing shoats.

Grain, especially ear-corn, may be fed on the ground, and the shorts mixed with milk, whey or dish-water, fed in the trough, at least three times a day. Where a large number of pigs are kept, a cart or old democrat may be used to distribute the feed. It is better not to have too many hogs in one pasture, and to have the field divided into sections, changing the pigs from lot to lot for the good of the pasture. There is money in this way of raising hogs. Try it.

THE FARM.

A Business-bringer.

I have had a barley advertisement running in your paper for some time, which I would ask you to discontinue, as the barley-seed season is about over. I feel that I cannot let the opportunity pass without extending to "The Farmer's Advocate" very great thanks for the many inquiries and orders this great paper has brought me. I have received somewhat over 200 letters since my advertisement was first inserted. Of course, I had it in several other papers, but I can safely say "The Farmer's Advocate" sent the bulk of the orders, and that, from all over the Province. I have shipped something over 500 bushels from Hensall station, 10 bushels going to Richmond, Quebec; 10 bushels going to Nairn, on the Soo line, north of Lake Huron. I even heard from an inquirer from Nova Scotia, who saw my advertisement in "The Farmer's Advocate." In all, I have sold over 700 bushels of No. 21. It is easily seen that a great many people are aware of the great qualities this barley possesses over the Mandscheuri, by the business people who are after same. I have sold same at \$1.00 per bushel, and I have received many very grateful letters for the quality of seed I supplied my customers. I have not had a complaint.
Huron Co., Ont. JNO. ELDER.

Forms of Phosphorus in Fertilizers

A Nova Scotia reader has sent us two newspaper cuttings, one of an article depreciating acid phosphate, and the other of an article discouraging the use of basic slag (otherwise known as Thomas phosphate powder) and the raw phosphates as sources of phosphoric acid, and naturally asks the question: "If neither acid phosphate nor basic slag are to be encouraged, what shall we use for our phosphoric acid?"

It is to be regretted that articles, in which unqualified statements are made regarding the desirability of using one particular source of phosphoric acid (or other essential plant-food ingredient) in preference to any other, should be published, since it is most confusing and misleading to farmers who may just be commencing the study of the fertilizer question.

One of the articles before us is an extract from an article by Prof. Charles E. Thorne, Director

of the Ohio Experiment Station, originally published in the "Ohio Farmer" of January 2nd, wherein Prof. Thorne testifies to the beneficial effect produced by an application of lime to the experimental plots at Wooster Farm, and makes the statement that since on the soil of that farm "the use of acidulated fertilizers is injurious to the clover crop—the use of acid phosphate has been abandoned at this station except to continue experimental work."

Naturally, in reading the abbreviated article referred to, one would conclude that the use of acid phosphate at the Wooster Farm had been unprofitable, but a brief reference to Bulletin 182, of the Ohio Experiment Station, shows that both on the Strongsville and Wooster Farms of that station, no source of phosphoric acid was more profitable than acid phosphate.

Both the Strongsville and Wooster soils contain a large proportion of clay, but are deficient in lime, which accounts for the beneficial effect of the lime application.

For our present purpose it is only necessary to quote a few brief passages from Bulletin 182, which all go to show that acid phosphate in these experiments proved rather more efficient than any other source of phosphoric acid.

Page 159. "Table XVIII. shows that, for the rotation as a whole, acid phosphate has been the most effective fertilizing material, and that its effect has been greater during the second rotation than during the first, and greater during both periods at Strongsville than at Wooster."

Page 167. "The combination of acid phosphate with either of these salts (potash and nitrogen), produces a much larger increase than either substance has produced when used separately."

Page 175. "Taking acid phosphate as 100, the relative efficiency of the four phosphates is as shown in table XXVII."

TABLE XXVII.—RELATIVE EFFICIENCY OF CARRIERS OF PHOSPHORUS.

Phosphate.	5-year Rotation.		Potato
	Wooster.	Strongsville.	Wooster.
Acid Phosphate	100	100	100
Raw Bonemeal	83	96	94
Dissolved Boneblack	85	85	98
Basic Slag	87	100	100

The other article with which we have to deal is by W. H. Bowker, of commercial-fertilizer fame, and is reprinted from the Maine Farmer.

While Mr. Bowker's article is, on the whole, interesting and instructive, we cannot agree with his opinion as expressed under the head "Tetra-lime Phosphate, or Slag Phosphates," which is as follows:

"These are, no doubt, valuable in their place, but they have their limitations. According to the official methods of analysis in this country, slag phosphates contain no soluble phosphoric acid. Therefore, when one applies them, he is only adding to the sum total of phosphoric acid in the soil, of which the soil, as we have seen, contains enough for a number of centuries.

"Slag phosphates, however, are made up of about one-third free lime, and are valuable when the soil is acid. Probably a considerable part, if not all the efficiency of slag phosphates, is due more to the free lime than to the phosphoric acid they contain. If one needs to apply lime to sweeten his soil, and does not care about the insoluble condition of the phosphoric acid, why not make a mixture of 1,000 lbs. of agricultural lime and 1,000 lbs. of 'floats' (raw rock phosphate), and thus have a ton that will contain as much phosphoric acid and more active lime than the slags contain, and costing about \$5 a ton less? The lime in such a mixture would be quite as active as the lime in the slags, and chemists tell us that the phosphoric acid in either case is insoluble.

"Again, slag phosphates contain about 15 per cent. of iron, which is regarded as a bad thing in a phosphate, producing insoluble salts or reversion. The mixture of 'floats' and agricultural lime will avoid this objectionable feature."

In order to show where Mr. Bowker is in error, it is necessary that we first of all explain the nature of the various phosphates of lime.

The most commonly occurring is the tri-calcic form, which we find in bones and the crude rock phosphates. It may be graphically represented thus:

(Lime) Tri-calcic
(Lime)Phosphoric acid—or three lime phosphate.
(Lime)

This tri-calcic phosphate is insoluble in water, but is soluble in acid. To render this phosphate available, it is treated with sulphuric acid, the resultant substance being then known as acid phosphate, or superphosphate. Its composition is:

(Water) Mono-calcic phosphate
(Water)Phosphoric acid or acid phosphate.
(Lime)

Here it will be seen that in the combination two parts of water have replaced two parts of

lime, and the phosphate is now soluble in water, and readily available to plants.

When applied to the soil, it gradually reverts to the di-calcic form of phosphate, which may be thus represented:

(Water) Di-calcic or
(Lime) Phosphoric acid=reverted phosphate.
(Lime)

In this form it is not soluble in distilled water, but is still readily available to plants, being easily soluble in water containing carbonic acid or salts of ammonia, or in weak acids.

The fourth form is the tetra-calcic phosphate, or four-lime phosphate, represented thus:

(Lime) Phosphoric acid=Tetra-calcic or
(Lime) four-lime phosphate.
(Lime)

This is the phosphate of lime present in basic slag. The combination is unusual and seems to be unstable, since in this form it is much more readily available to plants than the tri-calcic form, present in raw phosphate rock. It is not soluble in distilled water, but a large proportion is soluble in dilute soil acids.

Mr. Bowker says: "Slag phosphates contain no soluble phosphoric acid," and in analytical terms the statement is correct, for "soluble" phosphoric acid in an analysis means the phosphoric acid soluble in distilled water, but in the soils a large part of the phosphate which was insoluble in water is rendered soluble by dilute soil acids, ever present where there is decaying organic matter.

The phosphate of lime in basic slag has undoubtedly been proved more available than the phosphate in ordinary untreated raw ground phosphate rock, so that Mr. Bowker's suggestion to mix 1,000 lbs. of agricultural lime with 1,000 lbs. of "floats," in order to produce the equivalent of one ton of basic slag, must be taken as a joke.

Further on, Mr. Bowker refers to the 15 per cent. iron which slag contains as "a bad thing in a phosphate." Now, a certain amount of iron is essential to plant development, being associated with the chlorophyll or green coloring matter in the leaves of plants.

In raw rock phosphate, which is to be treated with sulphuric acid in order to render the phosphoric acid available, a large percentage of iron is objectionable, since it requires a larger amount of acid to accomplish the conversion of the phosphate. It will be readily seen, however, that this does not apply to basic slag.

Mr. Bowker also comments on the large quantities of raw phosphates shipped from the States to Europe, and the importation of basic slag from Europe, and declares that "if slag phosphates were as available and as valuable as they are claimed to be, not a ton would find its way to these shores." From this statement, one might infer that basic slag is not valued highly in Europe. If we examine facts, however, we find that about one-half the world's consumption of phosphoric acid, used as phosphate of lime, is in the form of basic slag.

There is no doubt that on the American Continent at the present time, acid phosphate is the most popular source of phosphoric acid, and per-

haps justly so, for in this form it is most readily available to plants, and would be expected to yield most of its efficacy in the season of its application, whereas basic slag would usually show more after-effect in subsequent seasons.

Without a knowledge of the conditions, no one can confidently assert that one particular kind of phosphate will give best results, for acid phosphate, slag phosphate and bone phosphates, all have their special adaptations.

On light soils, especially, and, in fact, on all soils which do not contain an excess of vegetable acids, acid phosphate will prove a most effective source of phosphoric acid for all crops. On heavy clays, on soils containing an abundance of vegetable matter, such as some swamp or muck soils, and all soils deficient in lime, basic slag may be expected to prove the most beneficial. It would be well to mention here, however, that some muck soils in Ontario have shown on analysis a high percentage of lime, and experiments conducted on these would seem to indicate that acid phosphate on such soils was equally beneficial in point of yield.

It is natural to suppose, however, that on sour soils basic slag would be the ideal form of phosphate to employ, for not only does the free lime of the slag tend to counteract the harmful effect of an excessive soil acidity, but the humic and other acids, produced by decomposing organic matter, help to render the phosphoric acid of the slag available.

Another valuable source of phosphoric acid which must not be neglected, is animal bone. This may be produced in various forms, such as bonemeal, steamed bone flour, etc. It is outside the scope of this article to treat these in detail, but it may be mentioned that, although the form of phosphate in bones is chemically the same as in raw phosphate rock, still it is more readily available, since bones, being of organic structure, are attacked by soil bacteria, which break up the bone phosphate of lime and liberate the phosphoric acid for the use of plants.

In purchasing bone phosphate, insist on getting a finely-ground product, since on this condition depends the degree of availability of the phosphoric acid therein contained. Steamed bone flour and other bone products, from which oil has been extracted, are to be recommended, since oil retards decomposition in the soil.

Basic slag ought to be purchased with a guarantee that at least 80 per cent. of the material will pass through a sieve having 10,000 meshes per square inch. Do not purchase low-grade slags.

To secure the greatest efficacy from either bone fertilizers or basic slag on the first crop, it is advisable to make the application in the preceding fall.

To our reader's question, "What shall we use for our phosphoric acid?" we reply: Use the material which, from the nature of your soil, is calculated to yield the highest return and, if possible, conduct a small comparative test, with the various sources of phosphoric acid. Do not, however, except under exceptional circumstances, attempt to produce crops with a phosphatic fertilizer alone, but see that your soil is provided with an available supply of the three essentials, nitrogen, phosphoric acid, and potash.

Concrete Silo Specifications.

Editor "The Farmer's Advocate":

I enclose you herewith specifications for concrete silo, which you may use if you think they will be of any service to some of your readers who are intending to build silos the coming summer. The proportions of the material required are as follows: One part best Portland cement; two parts clean, coarse sand; three parts clean, fine gravel; four parts clean broken stone. Mix sand and cement together thoroughly, and, when dry, spread out on mixing board, and place gravel evenly over same; then, on top of gravel, place the stone evenly and spread, after which use sufficient water to make a moderately dry concrete, then throw the whole into a pile in the center of mixing board, and turn over twice; place in the mold and ram thoroughly.

Make forms about four feet high, and fill to the top with concrete. The filling of the forms should take about one day, or, in other words, the silo should be brought up four feet daily. Set the first form on the foundation, which has been previously put in; see that forms are perfectly plumb, then fill to the top, thoroughly ramming each six-inch layer of concrete. After concrete has set hard, remove the forms, and raise them up so as to lap top of wall about two inches; then brace in position, and cover top of wall with cement grouting mixed half and half, and fill again, continuing thus to the top.

Place anchors in the wall at the top for nailing plate to, and make plate of 2-inch by 12-inch joist, cut to form. Lap these one over the other, so as to break joints, and spike thoroughly together. Then put on ordinary shingle roof.

The chute is made of 12-inch terra cotta T's and pipe. Use 2-foot lengths, and put in alternate lengths of plain pipe and T's, so as to bring the openings four feet apart. Use terra-cotta plugs when filling silo, which will be removed as silo is emptied, thus giving access to the chute from the inside.

Put galvanized-iron ventilator in apex of roof. Plaster entire inside of silo with cement and sand, in the proportion of two of cement to three of sand.

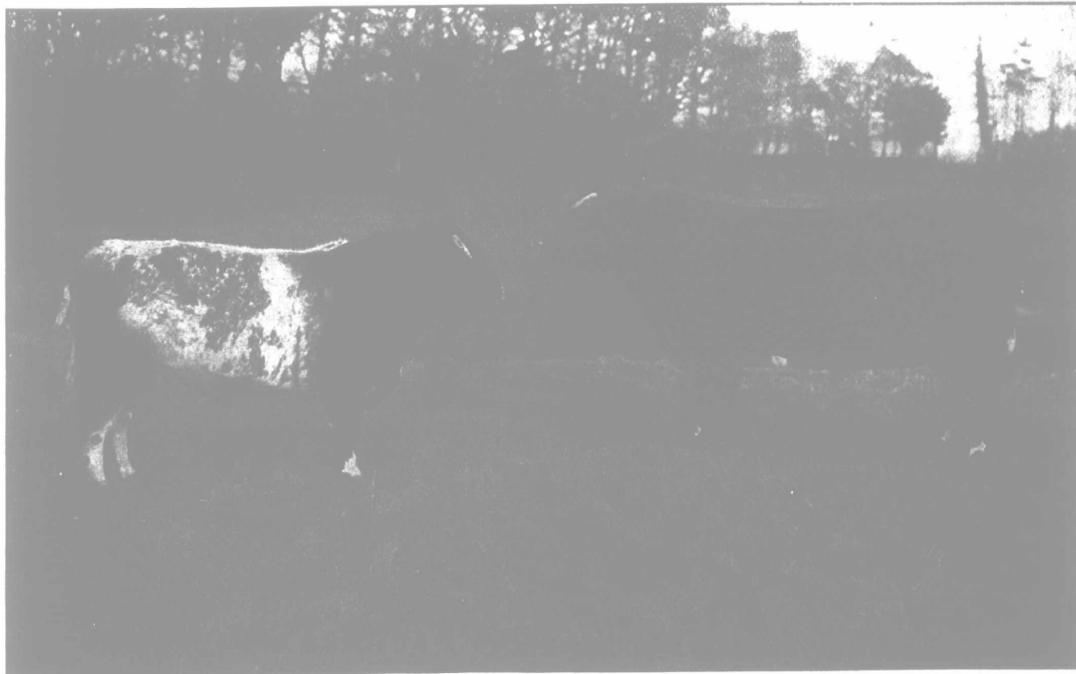
These specifications are given by an experienced superintendent of silo-construction, and will prove satisfactory if closely followed. J. E. M. Glengarry Co., Ont.

Results of Dragging are Its Reward

Editor "The Farmer's Advocate":

In answer to your inquiry whether I used the split-log drag last year, and with what result, I may say I did, and have a piece of road opposite my own property, $\frac{1}{4}$ of a mile, which I have kept in good shape with a V-shaped scraper, with two plates on, but last year decided to make a split-log drag, and I used it a few times, but found it would not take hold of the road when it got hard, as one would that had plates on, so I got one made by Trafalgar council, of two pieces of oak, 4 x 8, with three pieces of gas pipe between, with rods running through, and two steel plates, $\frac{1}{2}$ inch thick and 4 inches wide. This is the ideal leveller, if kept in use often enough. I scraped my piece of road with this eleven times last year.

Have already scraped it six times this year, and have the satisfaction of being told that I have the best piece of clay road anywhere between Hamilton and Toronto. I am proud of it, and am sure it is a pleasure to look at it and drive over it, especially this exceptionally wet spring. Not a particle of water is lying on it, whereas the roads all along here, in all directions, are a sea of mud, ruts and holes, and a disgrace to the township, which has had four large graders since 1896. It is not the township's fault, as they have, and will, whenever asked, send an expert man with the grader wherever they are asked, and are making the kind of levellers I have by the dozen, and any farmer or pathmaster who wants one can have it, but, in the majority of cases you can't get the farmers to level the roads more than once or twice in a season. Why? Because they say they must level the roads for the cursed automobiles, which destroy our clay roads, and go through our country Scot-free, without paying one cent to keep the roads up, nor will they pay, so long as they are backed up by people in authority who haven't the backbone to legislate against them. They go over our roads now when they are all mud, blowing furrows, and throwing the mud all out on the sides, and leaving great ruts for the water to lie in, and the only way to keep the roads in shape is to put the grader on and shape it up not



Caledon Model (98292).

Scottish Captain (93359).

Leading sires in the noted herd of the Earl of Caledon, County Tyrone, dispersed by auction by Messrs. Macdonald, Fraser & Co., April 16th, 1909.

too wide, and then keep it in shape with the split-log drag, with two plates on, like the one I have, which belongs to the council.

Our council haven't made any special effort to have the roads scraped systematically, any more than to supply part of the levellers; but I think they should offer a number of bonuses in different parts to the farmers who will undertake, with the leveller, to keep up the roads in front of their own places; and every farmer should take pride enough in the road in front of his own property to keep it in proper shape. I know of no better way that a farmer can keep his horses in condition for spring work than by going out on the roads and scraping them two or three times a week. If he gets too much dirt in the center, put a pair of light harrows over it, and then roll, and he will soon have a road which the water won't lie on, and the automobiles can't hollow out.

I get no compensation from the council, nor ask any, as they put my road in shape with the grader for me, and I do what I do for the satisfaction of having a nice piece of road in front of my own place, which pays me for all I do.

I must not close without thanking you for the interest you have taken in our roads. The success of the split-log drag is all due to the way you have kept it before the public in your valuable paper.

Halton Co., Ont.

Sow Buckwheat.

A buckwheat farmer is generally regarded as an agriculturist who is on his last legs. Now, while no one would recommend anyone to make buckwheat-growing his sole occupation, there are certain advantages about this crop that demand more attention than they ordinarily receive.

First, there is the benefit that accrues from the fact that buckwheat may be sown late. One, for example, has a field that is dirty, and requires cleaning, but which one does not care to run fallow, nor to put into corn or roots. This field may be worked throughout June, and for a week or two in July, and then sown in buckwheat. This crop being a quick grower, it usually gets the start of the weeds, and in this way, for the two reasons mentioned, the field is cleaned. Further, when an old strawberry patch is plowed after the season's yield has been marketed, ideal conditions are provided for a fine harvest of buckwheat. A field that is late for oats or barley, affords a chance for this crop.

A second advantage is that buckwheat, both in sowing and reaping, occupies the farmer's attention during periods of the year when other farm operations are out of the road. Add to these benefits the facts that this is an excellent grain for at least moderate and occasional feeding, that it is a fairly certain and prolific crop, and one that commands a paying price in the market, and we have abundant reason for the farmer's planning for utilizing at least one field annually for this valuable crop.

A Discouraging Season.

Editor "The Farmer's Advocate":

Your editorial regarding the "Tripod of Successful Seeding Practice," viz., timeliness, thoroughness and despatch, is very difficult to follow this spring, as in the past three weeks there has been such rains as to make it out of the question to work even on lands that are thoroughly drained. I sowed a field of oats on the 17th of April, and the land was in the best of condition, being very mellow, and it was worked up very rapidly. Today (May 10th) this field looks as if it had not been worked at all, it is so battered down with rain, and the grain has not shown up yet. Moreover, it is raining now, as I write, as though it had never rained before. Not one-tenth of the grain crop in this district has been sown yet, and the farms are presenting a very dismal sight, indeed. Any fool can prepare a field when it is dry weather, but if you or Prof. Zavitz can tell us how the good seed-beds can be made in such mud as we have, you will be bestowing a boon on the farmers that they would very much enjoy.

Northumberland Co., Ont. A. J. RUSSELL.

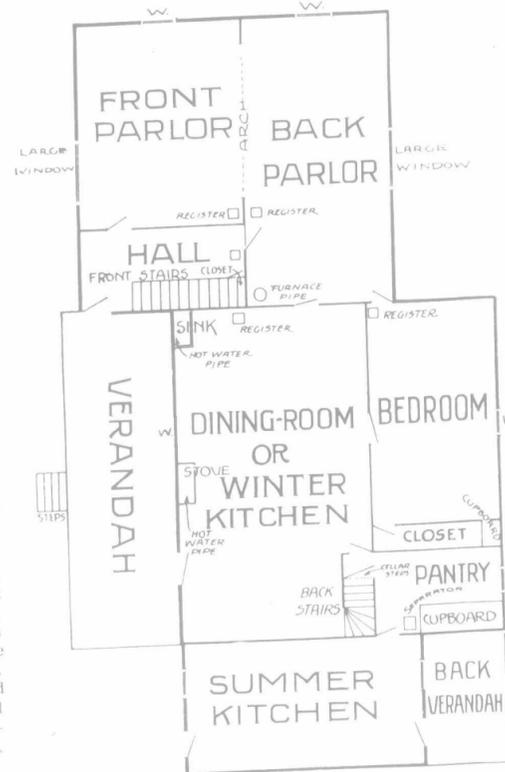
Scots to Farm on a Large Scale.

One of the members of the Scottish Agricultural Commission, which visited Western Canada last summer, has been in the West, with the intention of purchasing 10,000 acres of land for wheat-growing purposes. He represents a syndicate composed of the commissioners and a few of their friends, who purpose taking up a tract of land of about this acreage, and settling it with Scotch plowmen. The delegates last year were much impressed by the possibilities of farming irrigated lands, and it may be they will purchase in the vicinity of Lethbridge, or, if they decide on a mixed-farming section, the Red Deer country seems their choice. The farm is intended to be managed along progressive lines, and operated in the most practical manner.

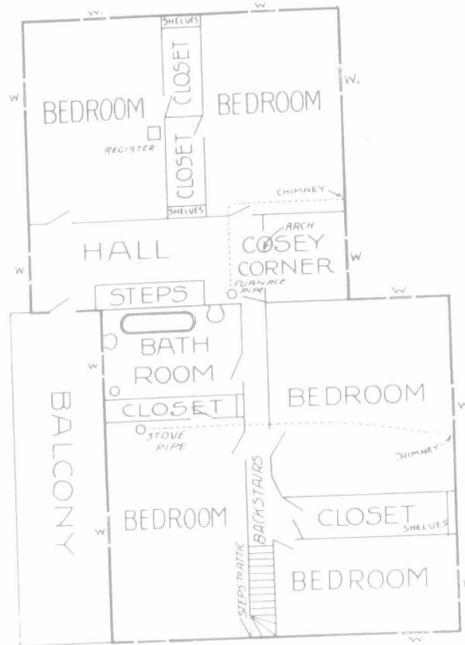
Another House Plan.

Editor "The Farmer's Advocate":

Having noticed in a recent issue a plan for a house, I thought I would send mine, for we find it a very handy house to work in. Of course, one could change this to suit his taste. I could not give the cost, as lumber is somewhat cheaper than when I built three years ago, and then, others might not care to use the same kind of material. You will notice closet under front stairs in front hall, which we find very handy to hang our coats in. Also, in the clothes closets you will notice shelves, which I find handy for



Ground-floor Plan of Daniel Frost's House, Northumberland Co., Ont.



Second-floor Plan of Mr. Frost's House.

keeping bedding on for each room. You will also notice that we go down cellar under back stairs, and then there are steps up to the attic over the back stairs. This is a very handy pantry. The separator stands close to the door leading to summer kitchen; also a cupboard is built in for dishes; it is large enough to do most of the work in. Before the extreme cold weather sets in, the back part of the house is heated with cool stove, and hot water boiler being in bath room, helps also, and keeps it warm until time to start the furnace. The two doors going out on verandah, also balcony door, have glass in, which takes the place of a window.

We have taken "The Farmer's Advocate" for

some time, and have saved most of the papers, and would not be without it if it cost twice as much. DANIEL FROST, Northumberland Co., Ont.

THE DAIRY.

Calculated Value of a Pure-bred Sire.

A few poor cows may do little permanent harm to the dairy herd, but a poor sire will do untold damage. Frequently, dairymen hold the penny so close to the eye it is impossible to see what a man is doing who has a good dairy herd of grade cows, and thinks he is economizing by buying a poor or even common sire.

If the good pure-bred sire improves the milking capacity of his daughters only 1 1/2 pounds of milk at a milking above the production of their dams, this would mean an increase of 900 pounds of milk for the ten months or 300 days an ordinary cow should give milk. The daughter would also be a much more persistent milker—that is, would give milk for a longer time in the year—and she would regain her flow of milk better after an unavoidable shortage of feed, as in a summer drouth. These daughters may certainly be credited with 1,000 pounds more milk per year than their dams produced. At the low estimate of \$1 per 100 pounds, this extra amount of milk would be worth \$10 per year. The average cow is a good producer for at least six years, or until she is eight years old. It will, on the average, be four years after purchasing the sire, before his first daughters will have brought in the first extra \$10. Eight dollars and twenty-three cents, kept at compound interest for these four years, at 5 per cent., will equal \$10, so the daughter's improvement or increase of income the first year is worth \$8.23 at the time her sire is purchased. The cash value of the daughter's improvement (inherited from the sire), figured in the same way for each of the last six years she gives milk, is shown in the following table:

Improvement first year	\$ 8.23
Improvement second year	7.83
Improvement third year	7.46
Improvement fourth year	7.11
Improvement fifth year	6.77
Improvement sixth year	6.45
Improvement for six years	\$43.85

The total increased income of a cow over her dam by having a good sire is, therefore, \$43.85.

In an ordinary dairy herd of thirty-five to forty cows, an average of seventeen heifers per year should be obtained, and twelve of these should be worth raising, making it easily possible for a bull to earn twelve times \$43.85, or \$526 per year. This would amount to \$1,578 in the three years that a bull is ordinarily kept in service.

Cost of providing every heifer one good parent:

	Pure-bred.	Scrub.
Cost of sire	\$150.00	\$ 30.00
Interest, 3 years, 5%	22.50	4.50
Cost of keeping 3 years	100.00	100.00
Risk, 3 years	50.00	10.00
Total expense, 3 years	\$322.50	\$144.50
Value at end of 3 years	100.00	30.00
	\$222.50	\$114.50
Extra cost good sire, 3 yrs.	\$108.00	
Extra cost good sire, 1 yr.	36.00	
Extra cost good sire, one daughter	3.00	

Considering the male calves as worth no more than if sired by a scrub, it would then cost \$36 to provide one good pure-bred parent for the twelve heifer calves which are raised each year, or \$3 per heifer. Where else can such an investment be found? Three dollars expended brings an average return of over \$7 per year for six years, or \$43.85 in all. This makes a clear addition of \$43.85 to the income of each daughter, or a net profit of \$40.95, and of \$1,470 for thirty-six daughters in the three years. Here is nearly 1,000 per cent. profit on the investment. The original cost of the good sire looks very small beside the \$1,170. It really pays as nothing else on the farm pays to put \$150 into the right kind of a dairy sire that will return practically ten times \$150 within three years.

An examination of details will show these estimates to be conservative. There is plenty of margin left for failures and unfavorable conditions. One thousand pounds of milk per year is a conservative estimate of the improvement of the daughter's production to credit to a good sire, and the details of figuring it may be varied to

suit conditions in different herds and different localities. One hundred and forty dollars is certainly a liberal allowance for the purchase of a pure-bred sire, and results here named are based upon having a first-class animal at the head of a herd. A herd of only thirty-five or forty cows is taken for illustration, while a vigorous sire, properly fed and exercised, is sufficient for a herd of forty-five to fifty cows, provided he is not allowed to run with them. There is another distinct improvement of the good sire's daughter, besides her milk production; it is the improvement of her blood or breeding, as the result of which her daughters will be better milk producers. This blood improvement of all the daughters accumulated through a series of years means a remarkable increase in the efficiency of the herd.

It is the common experience of dairymen who have used a really good improved dairy sire that the investment has made them royal returns. The \$150 cost price looks "too big" only to the narrow vision that cannot see the natural improvement of the herd certain to follow. Many a dairyman might have reason to say that he cannot afford to pay a big price for a fine cow, but the same argument does not apply at all to the purchase of an improved bull, because the sire's influence spreads so much farther and faster than that of the cow.

If the heifer calves are to be raised for dairy cows, there is absolutely no business or reason on earth for keeping a scrub bull. The dairymen who think there is pay a heavy price annually for maintaining that tradition. The scrub bull is the most expensive and extravagant piece of cattle flesh on the farm. He does not stop at being merely worthless, but will lose the farmer the price of two or three good bulls every year he is kept. The dairyman could not afford to keep a scrub bull if the animal were given to him, if he were paid for boarding the beast, and given a premium of \$100 per year for using him. The presence of the scrub in so many herds—many times without a single qualification except that he is a male—is an offence and disgrace to the dairy business, and a plain advertisement of the dairyman's thoughtless bid for failure. The only thing on earth the scrub sire is good for is sausage, and it is high time that this plain and simple truth was given practical acceptance on every dairy farm.

By all means get a good dairy sire, if you have to sell two or three cows to do it. The improved sire is, without question, the most economical investment in any dairy herd.—Wilber J. Frazer.

Persistent Education to Maintain Quality of Butter.

Editor "The Farmer's Advocate":

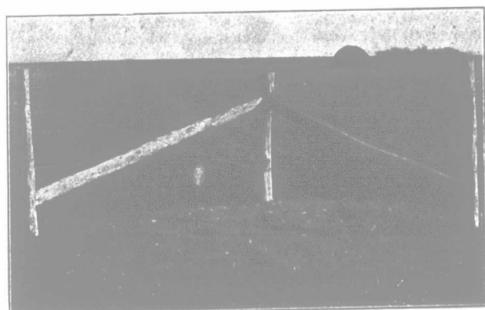
Regarding claims made relative to the introduction of cream separators on the farm in keeping down the price of creamery butter, I think much of the recent agitation has been misdirected. Had the energy spent in this agitation been directed to other channels, I believe the dairy interests of the Dominion would have been more efficiently safeguarded, and our reputation better than it is to-day. I cannot see where anything is to be gained by objecting to the introduction of cream separators on the farm. To control this situation is not in our power. Manufacturers have seen fit to manufacture this class of goods, and farmers, likewise, have thought it advisable to equip themselves with these machines. The situation is under their control, and in this case they have dictated, and will continue to dictate what course shall be pursued. No amount of opposition will readjust matters just now, and it behooves the manufacturer and buyer of dairy products to adapt themselves to the changed circumstances as best they can.

Looking at it from the farmer's viewpoint, the hand separator has many advantages. Personally, I believe that, generally speaking, butter made from gathered cream is not equal to that made from whole milk, but a mere statement to this effect will not convince the farmer that the advantages he derives from separating the cream on the farm, and delivering the cream to the creamery, instead of the whole milk, are affected by the difference in quality. Where the separating is done at home, he has fresh skim milk for his young stock; cream is delivered twice, or, at the most, three times a week, as compared with the daily delivery of milk, and, in addition to this, the expense connected with delivering, exclusive of time, is greatly reduced. These are factors that favor the farmer to such an extent that no amount of argument will, for the present, at least, persuade him to return to the whole-milk system; and, as I see the situation, this method will continue to grow in favor.

The many articles that have been written, advocating a return to the whole-milk system, are, in general, quite true, but the farmer's viewpoint must be considered; and, since the advantages are so many, and they control the situation, it is about time for dairymen to accept the inevitable, and commence some systematic effort to improve conditions under the cream-gathered system, instead of centering their energies on con-

demning it, and trying to induce a return to the whole-milk system. Why not concentrate our energies in endeavoring to show farmers the increased responsibility they assume by retaining their cream so long on the farm? A great deal has been said with respect to the care of milk and cream, but farmers generally do not understand why the cream-gathered system is likely to be detrimental to the industry, and until this is made clear, cream that is delivered twice a week will not likely get any extra care over that delivered three times a week, or every day.

There is a right and a wrong way to deal with this matter, and I am of the opinion that the wrong way has been followed. There is evidence of this in the fact that the system is developing and spreading, despite the widespread condemnation. I say, therefore, accept that which has been forced upon us, and unite in an endeavor to make the best of it, and I believe the people of the Dominion are sufficiently interested in this branch of



Proper Method of Bracing Corner Posts.

In addition to these braces, the post should be thoroughly anchored at the bottom, especially where woven wire is used, as the strain on a corner post is heavy.

farming, and quite loyal enough to our country and its reputation, to enthusiastically enter into the spirit of such an appeal, and convince our own people, as well as the consumers of our product abroad, that our reputation is not going to suffer by the changes which have come about.

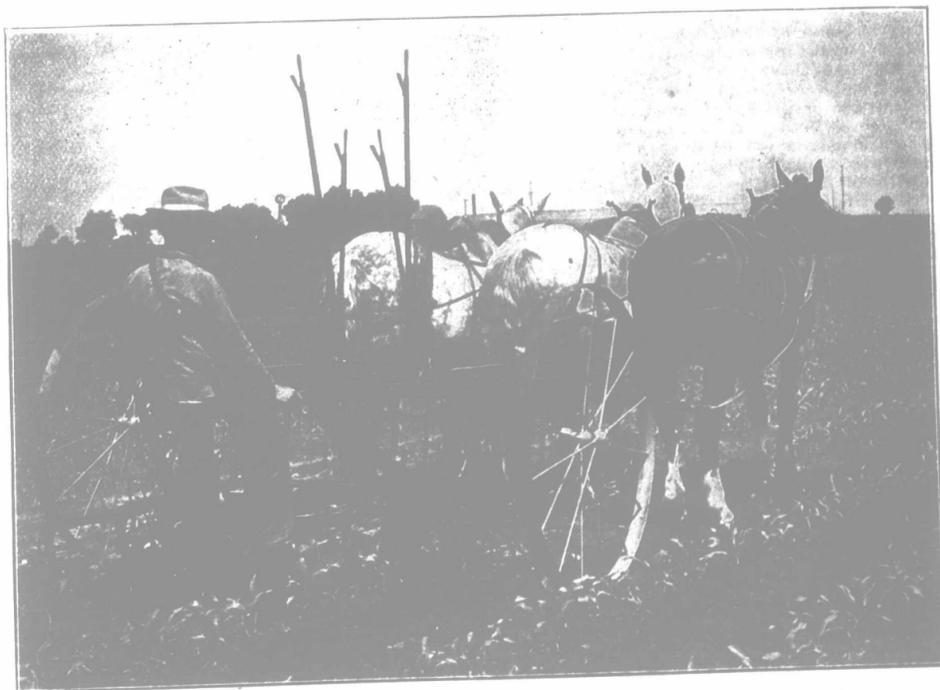
It is very difficult to say whether the price obtained for creamery butter has been reduced because of the introduction of cream separators on the farm. The market during the past few years has been much stronger than it was several years ago, and no one can justifiably say that, had the practice of separating the milk at the creamery been continued, a higher price would have been obtained for the product. Buyers and importers can speak authentically from their individual experiences, and, while some have experienced difficulties with respect to quality, others have not suffered any more inconvenience than formerly. The whole problem may be summed up in the "man." Get the right man in the district, and the quality of the butter will not suffer. It may give him extra trouble for a time, but he will eventually restore order out of chaos, and make first-class butter. Everything being equal, I have

no hesitation in saying that a superior quality of butter can be made from whole milk, and the reasons for this are perfectly obvious to everyone familiar with conditions followed under both systems. Nevertheless, we must consider that the farmer's returns are increased by lessening the labor on the farm and reducing the hauling cost, just as they are enhanced by an increase in the selling price of butter.

To best meet the needs of the changed conditions, the remedy that I would suggest is that of a persistent system of education among our patrons, which will make them thoroughly conversant with their increased responsibilities relative to turning out a first-class quality of butter. This cannot be done in a short period, but will require untiring efforts on behalf of Institute workers, buyers and creamery managers. We are by nature a progressive people, and because this situation has been forced upon us, there is no reason why we should shut our eyes to plain truths, and continue advocating the old system. The particular circumstances throughout each Province and the Dominion as a whole will determine the business principles that must be followed, and until the various settlements become thickly populated, and the farmers have large herds of cows, I do not think the whole-milk system will gain pre-eminence over the cream-gathered.

WANT 35-PER-CENT. CREAM.

At the present time, the average farmer does not produce as high quality of cream as he should. This condition can be improved by the united efforts of makers and instructors in endeavoring to have cream delivered that will test at least 35 per cent., together with more cleanly conditions on the farm and lower temperatures. Fermentation does not develop as rapidly in 35-per-cent. cream as in 20 or 25-per-cent. cream, and usually, where a man is careful enough to skim a 35-per-cent. cream, he is also sufficiently interested to observe cleanly conditions, and to reduce the temperature of the cream to that point which will retard fermentation. The practice of greater cleanliness has been voiced from many a platform, and it is an important factor, but the outlining of practical methods for securing low temperatures has been more or less neglected. Every buttermaker should keep a stock of guaranteed thermometers, and supply them to the patrons at wholesale price. He should make it his business to see that every one of his patrons is using this thermometer, and that his cream is delivered to the creamery at a temperature of 50 degrees Fahrenheit, or below. Most farmers are satisfied that they handle their cream in a cleanly manner. They claim that their opinion of cleanliness is equally as authentic as the creamery manager's, and it is sometimes difficult and often impossible to convince them otherwise. Besides, even under apparently commendable appearances, with respect to surroundings, stables, utensils, etc., there are those little things with which the farmer is not familiar, and which he unconsciously considers unimportant, such as feeding cows or cleaning stables before milking; milking with wet hands; not wining and moistening the udder before commencing to milk—all of which may send the milk with injurious life, that eventually causes trouble. Judicious and proper cooling, the de-



Two-row Corn Cultivator in Minnesota.

Does two rows each time across the field.

gree of which is accurately ascertained with the thermometer, not guessed at by inserting one's finger, will enable one to counteract, to a large extent, this difficulty. It is thus that the use of the thermometer disabuses all differences in opinion with respect to temperatures, and we all know that the presence of several thousand bacteria in cream does not materially affect its quality, provided the temperature has been reduced and maintained at such a degree that the germs will not develop. Besides, every farmer can see what he is doing, and if he fails to reduce the temperature of the cream to 50 or below when he has a guaranteed thermometer which distinctly points out to him with what degree of efficiency he has conducted his work, there is no excuse for neglect. "Prevention" at all times is better

than "cure," but since it is impossible to prevent germs from obtaining access to milk and cream, why not adopt the "cure," viz., the doctrine of "low temperatures"? This is the system which we follow in connection with the creameries under our supervision in Saskatchewan, and it has a splendid effect on the quality of our cream.

In closing, I would suggest that a definite policy be agreed upon by all buttermakers and instructors with respect to the fat content of the cream, and the temperature at which it should be delivered at the creamery, and unitedly advocate and insist on the farmers complying with this policy. In our own work, we are asking for a 35-per-cent. cream, and to deliver this at the creamery at a temperature of 50 degrees Fahrenheit,

or below. We spare no efforts in reasoning with our patrons the advantages to be derived from such a practice, and we are meeting with good results. I think the opinions of dairymen, as a whole, are quite too varied and disjointed, and, as a result, farmers are sometimes at a loss to know what to do. They will meet you with the argument that, if men who have made a study of the business cannot agree on certain points, how are we, who are not familiar with cause and effect, to decide which is the better course? We are quite ready to advocate co-operation among the farmers, but it sometimes occurs to me that there should be more co-operation among dairymen, with respect to their teachings.

W. A. WILSON,

Superintendent of Dairying for Saskatchewan

The Milk Problem in Ontario's Capital.

For several years the strained relationships existing between the producers of milk for consumption in Toronto, Ont., and those who pass that milk on to the consumer, have been followed closely by dairymen in Canada, particularly by those who are in any way connected with Toronto's daily milk diet. Increased interest now attaches to this branch of Canada's dairy industry from the fact that at least some of the producers have shown their dissatisfaction with the treatment meted out by the dealers, by an organized effort to remedy matters. This organized effort recently took recognized form in initial steps toward the formation of a company controlled by producers, with the intention of erecting a distributing plant, and dealing in dairy products in the city. A prospectus has been prepared, and twelve hundred shares of fifty dollars each offered to the farming public. Several of the prominent milk producers of the district surrounding Toronto have subscribed, and application has been made for a charter. The officers and directors are: G. S. Henry, President, Warden of York County, Oriole, Ont.; L. E. Annis, J. P., of the Canadian Commission to the Scottish National Exhibition, 1908, Toronto, Ont.; J. G. Cornell, President Toronto Milk and Cream Producers' Association, Scarborough, Ont.; A. J. Reynolds, Secretary Toronto Milk and Cream Producers' Association, Scarborough Jct., Ont.; W. C. Grubbe, Director T. M. & C. P. A., and Deputy Reeve, Etobicoke, Thistledown, Ont.; W. J. Bragg, ex-County Commissioner, Bowmanville, Ont.; J. W. Breakey, Thornhill, Ont.; R. M. Holtby, Manchester, Ont., and R. L. Crawford, Emery, Ont.

The trouble between producers and dealers in Toronto dates back many years. Up to the early part of this century, the dealers had matters pretty much in their own hands. The farmers had an organization, but little or nothing was done to regulate or control the prices they received for their product. About four years ago, however, the wide margin between the figures quoted by dealers to the producers, and those paid by the consumers to the same dealers, aroused the farmers to action. Led by a few enthusiastic men with business inclinations, the Milk and Cream Producers' Ass'n began to assert itself. Gradually new blood was infused into the staff of officers, and an energetic campaign was conducted, with a view to perfecting the organization and increasing the membership, so that the mass of those who supplied milk for Toronto's population could be made aware of the situation. Another object evidently in view was that the producers should have at least some say in the matter of prices. The dealers were approached, and invited to joint conferences. At times the demands were granted. Again a compromise was made. When, as was the case in the spring of 1907, differences of opinion between the conflicting bodies became too stringent, it was deemed expedient to submit the question of prices to a commission.

During these years of at least semi-annual negotiation, the producers succeeded in securing notable advances in price. Whether this was due wholly or in part to the worthy efforts of their rapidly-growing organization, is a matter of conjecture. A discrepancy of supply in relation to an increased demand perhaps had a natural tendency to improve the prices. At all events, the consequence is that the spring of 1909 finds an available supply of milk of such proportions that the dealers again find it convenient to lower the price to the farmer. This, along with divers petty grievances affecting individuals, prove to be the culmination of the long series of conflicts. The producers, at a mass meeting a few months ago, decided to attempt to handle their own product. How many of them will refuse to deal further with the dealers now in business, remains to be seen. The leading milk firms are doing a flourishing business, and find no difficulty in getting all the milk required to meet present demand.

In order that "The Farmer's Advocate" might ascertain particulars regarding the situation, a staff representative recently interviewed several of those most closely interested. The producers are sanguine that a reasonable price

to the consumer and a high-grade product will command a trade that will rapidly develop. The dealers, on the other hand, welcome the advent of further opposition. The larger firms feel secure in the support of a large proportion of the producers, as well as a loyal quota of citizens who appreciate their efforts at meeting the requirements in a milk and cream supply. Many of those in close touch with the situation do not hesitate to predict cheaper milk for Toronto, and lower prices to the man who milks the cows.

ON MODERN LINES.

"The Farmers' Dairy Company will be organized and managed along lines that the authorities will support. Later, we expect all dealers will be compelled to supply milk according to methods adopted by us. We anticipate some trouble as to price on the start, and realize that we must develop slowly." Such was the opinion expressed by L. E. Annis, of Toronto, formerly a producer of Scarborough, a past president of the Toronto Milk and Cream Producers' Association, and a member of the organization for about twenty-five years. "The question of forming an association, and taking up milk distribution in the city," continued Mr. Annis, "was mentioned two years ago. Nothing definite, however, was done until December last, when a mass meeting of the producers was held, and a committee appointed to investigate and report. As a result, it was recommended that the association undertake the business of disposing of their product.

"In the early days of our association, I remember selling milk as low as 82 cents per eight-gallon can. Of recent years it has gone considerably higher, and a year ago last winter the price was \$1.40. Organization was first deemed necessary to prevent dealers from shuffling and flitting from one patron to another, and to avoid the losses due to non-collection from small retailers. At that time, about twenty-five years ago, the milk-trade of Toronto was largely in the hands of men who bought a cheap horse and outfit, and started by arranging to get milk on a month's time. Perhaps, at the end of the month the prospective milk dealer had gone out of business, and the farmer got nothing for the milk supplied. Sometimes the milk trade was brisk, and then for a few years it would be quiet again.

"In 1905 and 1906 a vigorous fight was started. No producer seemed to be sure of his price, or even of being able to dispose of his milk. The large dealers in the city would disagree with the farmer as to figures, and then the former went wherever they could get milk at a low price. They seemed to ignore quality. Men who had cleaned up their premises, and sent A-1 milk, were dropped. In some cases the dealer went to a district where a cheese factory was located, and secured a supply of milk at a ruinous price, and in this way gained his point. In fact, the situation was in a very unsettled condition. We were obliged to further perfect our organization. Our membership increased rapidly, until now we have almost 800. By treating with the dealers, matters became much more favorable, both as to price and stability. At one time the producers went on strike, and the rate was set by arbitration. Throughout, the power of the producers' association was in evidence.

"In undertaking the retailing end of the milk business, we are not going into it blindly. Every feature has been given consideration by our executive. Last year, while I was in Great Britain as a member of the Canadian Commission to the Scottish National Exhibition, I had opportunity to make observations on the milk supply in Old Country cities. In Edinburgh, Scotland, a few years ago, the Board of Health ordered the pasteurization of all milk. Three years ago this mandate was rescinded, and pasteurization is not allowed where the supply goes to invalids or children. They decided it was best to start at the other end, and see that the milk came only from healthy cows, fed on wholesome food, in a clean and sanitary stable. Each cow must have not less than 500 cubic feet of airspace, and 50 square feet of floor. The walls

and flooring must be smooth, and hard enough to be impervious to moisture. Drainage, light and ventilation must be as good as it is possible to have. In addition, the yard must be dry and hard, and the manure deposited in a water-tight basin, and removed at least twice a month.

"These regulations are being copied as closely as possible in the production of milk to supply the requirements of our company. Every stable will be under the inspection of a competent official. All remodelling of stables will be in accord with these rules. We will put a premium on milk produced under perfectly sanitary conditions.

"The producers seem to look on the proposition with favor. In our prospectus we offer subscription to the farming public."

BASE SUCCESS ON QUALITY.

"With a supply coming from the best producers within a short distance of Toronto, we can guarantee our milk, and quality draws custom," said J. G. Cornell, the energetic president of the Toronto Milk and Cream Producers' Association, who is taking an active part in perfecting plans for the new business. "On the question of quality," he continued, "we base our success. For a few years the mass of the producers have been anxious for something along the lines now proposed. Friction between dealers and producers has existed for ten years or more. Now and then satisfactory arrangements were made. During the past three or four years, squabbles have been frequent. Now the prospectus is out, and a charter is wanted for The Farmers' Dairy Co. to start distributing milk from a central plant. The object is to place stock in the hands of the farmers, and the fact that they are financially interested will insure better care of stables, cows and milk, and hence any advantage that comes from superior quality goes to the producer.

"The total supply demanded by Toronto is approximately 100,000 quarts, or about 3,000 eight-gallon cans per day. During the last few years, it must be admitted that the Producers' Association has been instrumental in maintaining uniform prices. Our new move should have a further beneficial effect."

REGULAR SALE AT FAIR PRICE.

"The primary object is to insure regular sale of our milk at a fair price," said A. J. Reynolds, secretary of the Toronto Milk and Cream Producers' Association, when approached on the aims of the new organization. "Heretofore, we have been obliged to shift from one dealer to another. We don't purpose cutting prices to a low figure, but simply a fair price. A small advance, say three cents on a can, would in a year mean over \$10 extra to the producer. This amount is equal to five per cent. on an investment of \$200. It is our intention to put in a buttermaking plant, so that whatever milk is not retailed, can be turned to good account. This will avoid the inconvenience of having milk left on our hands, as has occasionally been the case.

"During my connection with Toronto's milk supply, there have been many changes in prices paid to the farmer. I have taken as low as 72 cents a can, net; at some points the figure was down to 65 cents. This was about 15 years ago, when times were bad. Recent years have found prices much better. Two years ago the price was set by arbitration, at \$1.23, with the farmer paying freight. Last year it was \$1.55 for seven months winter, and \$1.35 for four months summer, arrangements being made to shift the start of the winter term from November to October. At present, prices have dropped to \$1.15 to \$1.20, the farmer paying freight or wagon haul.

"Under existing conditions and food prices, the producer should get at least \$1.25 per can for five months in summer. In winter, an advance of 30 cents or more should be made.

"Toronto's milk supply comes from a wide area. By far the larger part comes from the West. Great quantities come down Yonge street by car or wagon. Some comes by C. P. R. from as far out as Locust Hill. Then, to the West, shipments are made all along the railways to Milton.

Georgetown and Inglewood. Some comes from Simcoe County, and considerable from Norfolk County.

"One year ago last fall the retailers raised the price one cent a quart, making the charge to consumers 9 cents for bottled milk. At this figure, there was a noticeable falling off in consumption, possibly ten per cent. or more. The prevailing price now runs at eight cents, and some give fourteen tickets for a dollar.

"A pleasing feature is the increasing demand for milk produced under up-to-date conditions. Many consumers are anxious to have milk that they know is produced under rigid inspection. The milk supplied by The Farmers' Dairy Company will meet their requirements."

FARMERS PUT PRICE ON GOODS.

"Men in other lines of business set a price on what they have to sell. Why should not farmers do the same?" Such was the question put by John Baird, a prominent producer a few miles east of the city. "I have been sending milk to Toronto for sixteen years, and lately I have not kept as many cows as I did at one time, because my chances of disposing of the milk are too uncertain. We never know what we are to get for our milk. It seems the farmers have no say in the matter.

"Of course, sometimes prices have been satisfactory. However, there always is a vast difference between the cash given the farmer and that taken from the consumer for the same quantity of milk. The average man on 100 acres scarcely can produce six cans of milk per day. Perhaps he has \$10,000 invested, and he is not making a fortune, even with hard work early and late. On the other hand, a man in Toronto, with a horse and wagon, makes money handling six or eight cans a day. In many cases he has not more than \$500 invested."

HOW THE DEALERS VIEW IT.

The retail milk trade of Toronto is in many hands. The situation, however, is largely controlled by Price's Dairy and The City Dairy. As far as can be learned, these companies enjoy a growing business, and endeavor to meet the requirements of the citizens. There is, of course, a difference of opinion as to the extent of the yearly dividends that may accrue from acting the part of middleman in Toronto's milk trade. In any event, the outlay is considerable. The money invested generally is in keeping with the business done, and the equipment for insuring first-class milk. In support of the contention that profits are not abnormal, it is stated that the number of small retailers is decreasing each year.

Reports are conflicting as regards the relationship existing between the large dealer and the men who furnish him with the raw product. In some quarters, it is argued that producers allow their milk to go to these men only because they have no other means of disposing of it. On the whole, however, the farmer is not complaining of the treatment he is receiving. The prompt return of clean cans and the prompt payment for milk sent in tend to breed a feeling of content with the man who wishes to dispose of his milk with minimum bother.

GROWTH OF BUSINESS.

"The recent money stringency and prevailing high prices of milk have tended to curtail the demand," remarked Thos. Price, of Price's Dairy. "We have more customers, but they take smaller quantities. It is interesting to study the attitude toward certified milk. Three years ago we started supplying Erindale high-grade milk at 12½ cents a quart. At first we disposed of about 12 quarts. Now we sell in the neighborhood of 400 quarts daily. Then the doctors of the city started an agitation for certified milk bearing a seal, which means that the milk contains less than 5,000 bacteria per cubic centimeter in winter, and less than 10,000 in summer. Every cow has to undergo the tuberculin test. On February 1st, last, we began a supply according to these regulations, at 15 cents a quart. Only six quarts were wanted. Now the total taken is 40 quarts.

"We have no objections to the farmers opening a distributing plant in the city. It is about the only way they will be convinced as to the expenses connected with this end of the milk business."

The development of Price's Dairy is interesting. Eighteen years ago a start was made with four gallons of milk. There has been a gradual growth, those in charge keeping in touch with all phases of milk supply. At present, the daily retail totals over 300 eight-gallon cans, in addition to some 200 gallons of cream.

FARMERS AND DEALERS.

"Oh, no, we have no objections to the producers entering the field," said Chas. Ed. Potter, manager of the City Dairy. "There can, however, be only two conditions under which they can successfully compete with the dealers now doing business, and take their trade from them. They either must offer as good milk and as good service, at a lower price, or they must offer better milk and better service, at equal price. As

to quality of product, it cannot be improved, unless the producers are 'skinning' the dealers at present. Again, unless the dealers are making abnormal profits, the new company cannot hope to make much money. The fact is there are few dealers now making over 7 per cent. on capital invested.

"A careful study of the milk business during the past few years has led me to believe that if the farmer would pay less attention to the dealers' end of the industry, and more to improving his herd and bettering conditions at home, he would profit more. A considerable per cent. of cows now kept are only manure machines.

"When The Farmers' Dairy Co. begin business, in order to peddle successfully, they will have to undersell established dealers. Our business then will dwindle away, or we will be obliged to meet the price. In order to do this, we must buy at such figures as will allow us to do so without loss. There are districts in which we can buy milk at 20 cents per hundredweight less than we pay producers near Toronto. We don't wish to change our place of buying, but conditions may compel us to do so.

"Prices necessarily must change to meet production, and to regulate it. A few years ago milk could be bought at 90 cents per can. Two years ago it soared to \$1.60. The extra expense connected with production was not so great as to warrant such a change. At present there is a ready supply. Our figures for milk brought in on the railway are \$1.13½ per hundredweight for summer, and \$1.39 1-6 for winter, or an average of \$1.26½ for the year. For wagon milk the price is 6 cents higher. Cream is bought at 32 cents per pound of butter-fat. In winter it is possible to bring the supply from 100 miles distant, and in summer about 80 miles is a safe limit.

"A peculiar feature of city milk trade is the fact that consumption is greater in winter, when production is low. This, along with increased cost for feed, and labor in connection with the production, means an advance in price for the winter months. Up to the present, the producers' association have been unable to regulate the supply. How can they hope to regulate the price? The net result of the farmers entering the retail part of the business will be lower prices to the producers of milk."

It is only fair to state that the dealers interviewed evinced every desire to treat the producers fairly and to pay a reasonable price, always regulated, more or less, by the available supply. The larger dealers have enormous sums invested, and, owing to lack of uniformity in consumption, are obliged to have a comparatively wide margin between buying and selling price. If the producers can demonstrate that this margin is too wide, they will prove a boon, not only to a large proportion of the farmers in the vicinity of Toronto, but also to the citizens of Ontario's capital.

Pasteurization of Cream for Buttermaking.

Editor "The Farmer's Advocate":

We are pleased to know that there is a growing interest in the question of pasteurization, as a method whereby our creamery butter may be considerably improved. We are also pleased that some of the butter merchants are offering a substantial premium for pasteurized butter. This of itself ought to stimulate our creamerymen to put forth a strong effort to adopt the plan, and carry out the work efficiently. Haphazard methods will not answer. It takes more skill to make pasteurized butter than it does to make the unpasteurized goods, and this may be the chief reason why some creamerymen are slow to adopt the system.

We know of no one thing which can be done at a moderate expense which is likely to have such an important effect on improving our Canadian butter as pasteurization properly done. This means a good heater (pasteurizer), a large cooler, with an abundant supply of cold water, the use of a pure culture where ripened-cream butter is made, and, above all, a buttermaker "with a head on him," to use a slang phrase. Given this combination, the value of our butter can be easily increased from one-half to one cent a pound. In this connection, I wish to call attention to an error, in fact, which was brought to my notice last winter, during my lectures to the dairy school, by a student, Geo. Nielsen, himself a Dane, now in charge of one of the Government creameries at Qu'Appelle, Sask. We gave the credit of originating the system of pasteurization, as applied to dairy work, to Prof. Storch, of Copenhagen, and so understood it from what we had read, and from what we gathered when in Denmark, but it seems we were mistaken, or misinformed, and we are glad to make known the truth, and give credit where credit belongs.

Mr. Nielsen wrote Prof. Bernhard Boggild, the present head of dairy work in Denmark, regarding the point at issue, and I am glad to be able to furnish a copy of Prof. Boggild's letter, translated:

Copenhagen, April 17th, 1909.

Mr. George Nielsen, Qu'Appelle, Sask., Can.:

In reply to your letter of March 31st, 1909, I beg to state that Prof. Storch, in the years from 1887 to 1892, has done bacteriological research with milk-souring germs, but the pasteurization of cream does not belong to his credit. Prof. C. J. Jensen, at that time a young lecturer and assistant at the Royal Agricultural College, at the request of Prof. N. F. Fjord, took up the difficulties in the buttermaking for investigation, on the Experimental Farm, Qu'Appelle. In his work there he applied heat to the cream to overcome troublesome bacteria. After that experiment, Prof. Fjord had this method on trial in several places. The dairy instructors soon afterwards commenced to use this method as a remedy against defects in butter. In the discussion after Prof. Storch's lecture, March 5th, 1890, it appears that Prof. Storch not even had thought of using pasteurized milk for propagating the lactic-acid germs. At a following meeting, held by the dairy instructors, the matter was inquired into, and it was introduced into practical work.

We are glad to make this correction of an error which we unwittingly made in our book, "Canadian Dairying," and which we shall have corrected in future editions. H. H. DEAN.

Dairy cows are like good land—if they are well and wisely fed, they will feed their owner's pocket with what he works for. If a farm will not pay when well farmed, it will certainly not pay when not farmed at all. So with a cow in milk: if she will not pay for fairly generous feeding, she will not pay on short rations. This dictum, in recent times, more than ever before, has been proved over and over again in instances that are literally countless, to be simply but emphatically correct.

GARDEN & ORCHARD.

Potatoes Without Hoeing.

The maximum of profitable production, with the minimum of expense and labor, should be the ideal aim of every farmer working his agricultural interests according to the highest scientific principles, and the following method of growing potatoes upon the most economical lines are in strict conformity with this excellent system of working. This article is written as the result of practical experience and extensive observation.

The ideal soil for potato culture is a sandy loam. With slight additional labor, however, a clay loam will give splendid results.

The soil should be evenly covered with well-rotted manure, preferably—50 loads per acre. Plow five or six inches deep, then disk and harrow until weed seeds are destroyed, and a fine tilth of soil obtained. Mark 30 inches one way, and plow shallow furrows about 3 or 4 inches deep. Every two furrows should be thrown towards each other. Do not plow many furrows ahead without planting, or the moisture will not be conserved in the soil. Place the sets from 9 to 12 inches apart. For early varieties, place the cut side down, and quicker results will be obtained. Throw the ridges back with the mouldboards, covering two rows at one time. If this handy implement cannot be obtained, use the plow. One horse only is necessary for this, and should walk upon the ridges. By the latter method, however, only one ridge at a time can be attended to. Leave the soil in its rough state for a few days, and then level with harrows. Keep the latter going every fourth or fifth day, or sooner, if ground is very weedy. This operation should be continued until the plants are two to three inches high. Frequent cultivation is then necessary to keep the soil clean and loose. Hill the vines with the mouldboards at the last, and all late weed seed, aided with the shade from the vines, will be destroyed. Hoeing is thus not required. The seed should be cut just before planting.

Do not cut a week ahead and pile them or place them in bags, or the vitality will be greatly decreased, if not destroyed. Mixing land plaster with the sets is an excellent way to preserve their full germinating value. Discard small, cull potatoes for seed. Experience has proven that the medium or large, smooth, well-shaped potatoes only are productive of the best results. For early varieties, the Dewey and Early Sensation can be confidently recommended; whilst, for fall harvesting, the Carmen and Irish Snow Flakes cannot be surpassed. The early varieties should have been planted as soon as there was any warmth in the soil, and the late from May 24th to June 10th.

Spraying according to the formula in a recent issue of "The Farmer's Advocate" will well repay the grower.

The above methods of planting and working have been followed by many prominent growers in this district, and have given great satisfaction. T. A. Baker, Middlesex County, obtained 230 bags to 1½ acres of ground, and advises all growers to give the system a trial. WM. BARTLETT, Jr., Middlesex Co., Ont.

Keeping Quality in Norfolk Apples.

The question of keeping quality in apples has received considerable attention in these columns during the past few weeks. Some contributors seemed convinced that winter apples grown in Southern Ontario will not keep late in the winter. Others, of a wide experience, maintain that proper cultural methods and reasonable handling of the fruit has overcome this defect that at one time was noticeable, and that still holds good for apples from neglected orchards, packed without any precautions being taken.

Direct evidence that the fruit remained sound, even after an unfavorable fall for harvesting and packing, is most convincing. James E. Johnson, manager of the Norfolk Fruit-growers' Association, has demonstrated to "The Farmer's Advocate" staff—once early in March, and again last week—that apples grown along Lake Erie can be kept in common storage. The last lot reached this office on May 12th, and were sound and clean. Mr. Johnson assures us they were grown in Norfolk County, along the shore of Lake Erie, and stored in an ordinary cellar.

Further evidence as to the keeping quality is furnished in testimonials received from those who use fruit packed by Norfolk Fruit-growers' Association. In every package a card is placed requesting the consumer to write the manager, giving his candid opinion regarding the apples. Some of the replies are very flattering. Writing from Berens River, Man., on February 13th, Rev. A. E. Oke, B. A., says: "Last fall I purchased a barrel of No. 1 King apples from you, per a Mr. Stewart. At that time of year, about October 10th, the winter varieties were not at all common. I was especially glad to procure them at that date, as I am a missionary among the Saulteaux Indians, Berens River Reserve, and I had to go up Lake Winnipeg to my home as soon as possible, a distance of about 200 miles from Winnipeg. At your solicitation, I now give you my candid opinion. The apples opened up in first-class shape. They were exceedingly firm and luscious, without even an intimation of scab, and are to date firm and good. Of those used, we only procured two apples that were in the least rotten, and we used parts of these. It gives me pleasure to give you this recommendation, as I believe it is your honest due. The barrel has given entire satisfaction, and I shall be glad to sample your fruit again in the future."

From Baldur, Man., under date April 24th, 1909, A. J. Brown, writes: I used the last of Grade No. 2 apples the last week of March; only one decayed; some not as fine as others, but yet a good fruit."

W. T. Bett, of Radway, Man., on May 1st, wrote: "Last fall I bought a barrel of apples from my groceryman in Winnipeg. They were No. 1 Baldwins. In the barrel was a card, asking the purchaser to let you know his honest opinion as regards the apples. Now, I don't as a rule think much of answering such requests, but, being a farmer, I think, when I come across a thing put up by a fellow farmer, I should do what I can to assist him. I therefore have great pleasure in informing you that the said barrel of apples were splendid, were well packed, and of even size. I put them in my cellar, and they kept good all winter. We ate the last of them about the middle of April."

Similar letters have been received from many sources, indicating that Norfolk winter apples, properly grown, and well packed, give entire satisfaction, even after long shipments.

In a recent letter to "The Farmer's Advocate," Mr. Johnson says: "I also want to confirm the statement made by J. A. Webster, of Elgin County, that our possibilities are great, and many of our orchardists in Elgin and Norfolk are yet asleep, and do not prize their orchards as they should. However, the good work is spreading rapidly. Our markets in Elgin and Norfolk Counties have been unjustly hurt by reports being sent out that winter apples grown in the counties bordering on Lake Erie will not keep in good merchantable condition in ordinary storage past the New Year, which is absurd. This report has been circulated at home and abroad, to our detriment. It is both discouraging and annoying to those of our growers who have made a study of orchard care, and are getting the best of results all through these southern counties. We are only too willing to assist other counties in this good work, and ask for the publication of the truth in regard to our winter fruit, its flavor, keeping qualities, etc. We have such faith in the future that we are replanting quite extensively with standard winter varieties."

Following close upon a recent announcement, made a few days ago, that the Kootenay Fruit-growers' Association had decided not to make any shipments of fruit this year, as an organization, comes the welcome news that a number of the largest growers, and representing about seventy-five per cent. of the output for this season, have formed a private organization to look after the shipping and marketing of their fruit.

Black-knot on Plums.

I have a plum tree (Lombard) that is terribly affected with black-knot. When I see it, I cut it off below the affected part and burn it, but I am afraid before long I will have it all cut down and burnt. What will cure it? I have another yellow-plum tree growing so close that the branches touch one another, and it has not been the least bit affected. D. A. A.

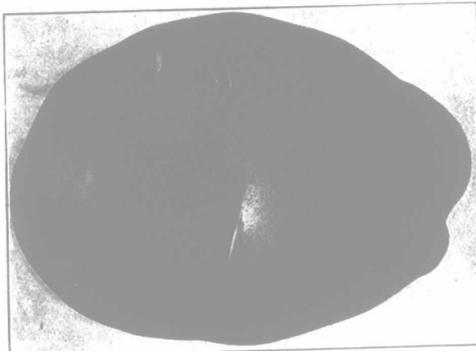
Ans.—Some varieties of plums are much more subject to black-knot than others. The Lombard is one of those very subject to it. The only remedy is to cut out the knots whenever they appear, and in doing so, the branch should be cut two or three inches below where the knot appears, as the mycelium of the fungus often extends some distance down into the branch, and when cut off close to the knot, often produces another on the end of the stub. Thorough spraying with Bordeaux mixture, and cutting out the knots as soon as they appear, to prevent new infection, is the best means of avoiding spread of this trouble. H. L. HUFF.

O. A. C.

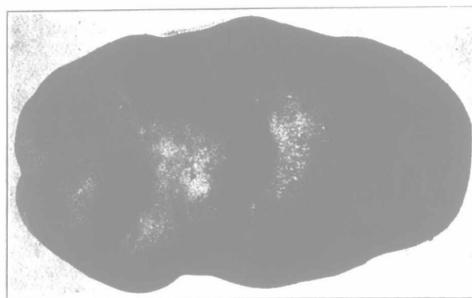
Smooth Potatoes.

Among the features that go to make quality in potatoes is the smoothness of the surface. Many otherwise desirable varieties have eyes so deep that they cannot be prepared for the table without great loss of time and excessive waste. In addition, they present a rough appearance when peeled.

The accompanying illustrations show the smooth potato, with shallow eyes, and a typical



Nice Type of Smooth Potato with Shallow Eyes (Carmen No. 3).



Rough Potato with Deep Eyes—Poor Type.

one of a rougher sort, with eyes so deep that waste is unavoidable. Both are sufficiently large to make first-class seed, capable of giving strong plants in suitable soil. Despite the fact that sometimes authorities give the returns from seed of different classes to show that medium-sized whole potatoes should be planted, the general practice is to cut the seed, leaving two or three eyes to each set. In every case it is best to split the bud end, or the end at which several small eyes appear.

Cherry Aphis.

We have a cherry tree that is covered with lice every spring, and we cannot get them off. They are under the leaves. We have sprayed it, and it did not take them off. Please let me know how to treat them. The ants run up and down the stem all summer. J. D.

Ans.—The insects affecting your cherry tree are what are known as the cherry aphis, or one of the plant lice. The best remedy is to spray the trees thoroughly with kerosene emulsion, when the first hatch of insects hatch from the eggs now upon the branches. If the spraying is neglected until they become numerous, the leaves curl over them and protect them, so that the spray will not reach them. The kerosene or coal-oil emulsion may be made according to the following formula:

Two gallons coal oil.
One gallon rain water.
One-half pound soap.

Boil soap in the water until all is dissolved, then, when boiling-hot, turn out into the coal-oil and mix with a spray pump for a few minutes, until it forms a thorough emulsion of a smooth, creamy nature. These three gallons of stock emulsion should be diluted with nine times the amount of water, making thirty gallons of the spray. H. L. HUFF.

O. A. C., Guelph.

That British Columbia is an importer of fruit is a matter of general knowledge, but that she imports to the extent of \$161,794 a year will come as somewhat of a surprise. Such is the case, however, and the figure named represents the value of her importations for last year.

If thinning of fruit on trees were adopted more generally throughout our country, it would be money well spent.—[J. J. Gilbertson, Norfolk Co., Ont.]

POULTRY.

Alphabetical Poultry Pointers.

Editor "The Farmer's Advocate":

Above all things, do not try to keep fifty hens in a poultry house scarcely large enough to hold twenty-five.

Be sure the poultry is provided with plenty of grit, a dust bath, and a fountain of pure, fresh water.

Chickens should be provided with shade, with small sharp grit, and should be fed at regular intervals on pure, wholesome foods.

Do not tolerate a loafing hen; the best place for her is in the stew-pot.

Everyone who raises poultry should keep a record this year, and see how the accounts balance at the end of the year.

Feed is an important factor in the poultry business, and especially at this time, when grain is so high in price. Therefore, no culls should be kept. Those that don't yield their owner a reasonable profit should be discarded, and that at once.

Growing birds require a great deal of exercise, and should have spacious runs, if they are confined. Do not crowd or hamper the young stock.

How much did you have left at the end of last year, after all expenses were paid? The amount tells your success or failure as a poultry-raiser.

I would not advise feeding sloppy food; it causes bowel troubles, and that carries off the chicks rapidly.

Just keep those lice and mites at a respectable distance from Mother Hen, coops, and the whole poultry premises. Whitewash is a good disinfectant, and should be applied freely to house, coops, nests, etc.; a two-per-cent. solution of crude carbolic acid will make it all the more effective.

Keep a watch for the chicks' enemies, namely, crows, hawks, weasels, cats, rats, skunks, and foxes.

Little chicks should be fed often, but never much at one time; they also should be provided with grit and pure, fresh water.

Many make the mistake of overcrowding their chicks in brooders.

Never allow the chicks' water fountain to become stale and dirty; it should be scalded at least three times a week. Their coops and runs should also be kept thoroughly cleaned.

Overfeeding is as bad as underfeeding, and, with chicks, the former occurs more frequently; and I again say, do not feed much at a time, but keep the chicks a little hungry. Make them learn the habit of scratching for their grain.

Poultry raisers should not buy poultry because it is cheap, but should insist on having a good standard-bred fowl, and, when such is obtained, strive to keep it as near the standard as possible.

Quality is more to be sought than quantity, and this stands good in the poultry business, as well as any other. Cull out your flock; keep no drones; they should go to the block.

Roosters should be separated from the hens after the mating season is past, and the young males should also be put in quarters by themselves.

Soft shelled eggs are a sign of lack of lime. Shells, gravel and charcoal should be accessible at all times.

The best breed suited to your needs, and the one you like best, is the best breed to keep.

Under no circumstances should lice and mites be allowed to harbor about the chicken coop. They are a dangerous enemy on the chick, and, therefore, they prove an enemy to your welfare.

Variety of food is essential, but one should not be changing constantly. The scraps from the table make an excellent food, affording a greater variety than most rations afford.

Woman who has made a success of raising poultry insists that if a young woman would devote each time to one hundred pure-bred hens

of any variety, as she does to twenty-five pupils in a cold school-room, her salary would be three or four times as much, and her health better.

Nantheus-legged fowls are market-toppers. Young chicks hatched by the artificial method are mostly free from lice, and you should put forth strong efforts to keep them thus. Zetetic method will bring results, where blind following of custom fails.

Renfrew Co., Ont. J. W. DORAN.

Finds Profit in Duck Rearing.

Editor "The Farmer's Advocate":

Some people think there is no profit in raising ducks, as ducks are reputed to eat their heads off long before they are ready for market. So they do, if you go about raising them the wrong way. I raised forty-five last summer, and the way I managed was this: I commenced with two ducks and one drake. I gathered the eggs every morning until I thought I had enough to set. I set two hens, each on eleven, as soon as I had eggs enough. And then, when I thought I had saved enough of eggs, I left the eggs in the nest every morning, so the old ducks would sit themselves as soon as the nest was full enough. One of them laid about sixty eggs.

I always try to set two hens at a time, so that one can take all that hatches out. I keep them cooped in a large, square enclosure for about two weeks, taking care to move it every day, or every other day, at least, so they can have lots of green grass. Then I lift one end so they can run out. They soon find their way to the slough near the barn, and then I always call them for feed about four times every day. They soon come out without calling. I commence feeding for market when they are about ten weeks old. I take a large pail of wheat chop and empty it into a couple of dishes or trough, and pour water over it to make a sloppy feed. Let them eat their fill, and away they go to the slough till next feed time. They generally come back about four times every day, and I give them all they want. I have them good and fat at about ten weeks old, when I sell them for fifty cents each, dressed and drawn, and, after two or three weeks, I sell them for fifteen cents per pound, and they bring as high as seventy-five cents apiece. I always try to set my first brooders on duck eggs, as the early ducks do so much better than early chickens, and I find that wheat chop is far better than anything else to feed ducklings on.

Saskatchewan. R. B. McNEIL.

Poultry-keeping the Farmer's Business.

No matter whether poultry-keeping is carried on by joint-stock companies, amateurs or farmers, a certain knowledge of breed, feed and management, is absolutely necessary. The farmer, beyond doubt, is the most favorably situated as to making his poultry pay. It is essentially his business. He has already a certain knowledge of live stock, in the majority of cases of poultry-keeping. His stock may not be pure, or his poultry house of the latest or best pattern. But these are obstacles which can quickly and cheaply be removed. He has the grain, the green food and other essentials in abundance, in many cases almost in the shape of waste.

But despite this, it should ever be remembered that to the farmer his poultry is only one of many branches of his farm work. It would certainly be misleading him to advise him to keep more fowls or hatch out more chickens than he can properly—which means profitably—handle. From 100 to 150 hens is all that I would advise the ordinary farmer to keep, and he should be able to hatch and rear from 100 to 150 chickens. If he has help from his family, a greater number may be hatched and raised. The great bulk of our supply of poultry and eggs must inevitably come from farmers, not from a few farmers with a large number of hens each, but from the many farmers with a few hens each. Should a farmer, however, desire to make a specialty of poultry, in combination with fruit-growing or dairying, there is no reason why he should not profitably do so.

[A. G. Gilbert.]

Meat Cooked or Raw?

"Is it better to feed meat cooked or raw?" was one of the questions asked A. G. Gilbert, of Ottawa, when giving his evidence before the Agricultural Committee, last year.

"It depends upon the manner of feeding," he replied. "If fed cooked, do not give it raw, or diarrhea may result." "Should it be cooked in all cases?" "I prefer its use when cooked, but it really does not matter. The principal point is to give the fowls meat in some shape." This, of course, applies to fowls in confinement.

I wouldn't be without "The Farmer's Advocate" for \$5 a year. Everyone in the house reads it. My mother, who is 78 years old, reads it through, especially the Quite Hour.

Halton Co., Ont. W. H. SPEERS.

THE FARM BULLETIN.

O. A. C. Examinations.

Some idea of the size of the classes at Ontario Agricultural College, Guelph, is given by the long lists of students who passed the final examinations in first, second and third years, held in April. Medals and scholarships were awarded as follows:

Governor-General's Silver Medal—First in general proficiency, first and second year work—Wade Poole, Whitevale, Ont.

Barton-Hamer Medal (awarded December, 1908)—N. D. McKenzie, Galt, Ont.

The Geo. Chapman Scholarship—H. A. Dorrance, Seaforth, Ont.

Valedictory Prizeman—W. W. Emerson, Foxboro, Ont.

Prize, \$10 in Books—First in general proficiency, first and second year work—Wade Toole, Whitevale, Ont.

Scholarships awarded for first-year work, Theory and Practice:

Twenty Dollars in Cash: Agriculture—P. O. VanSickle, Trinity, Ont.

Biological Science—F. S. Reeves, Tewkesbury, Gloucestershire, England.

English and Mathematics—R. Beckett, South Pelham, Ont.

Physical Science—J. M. McIlquham, Lanark, Ont.

In the classes, names are arranged in the order of proficiency.

FIRST YEAR.

- 1, VanSickle, P. O., Trinity, Ont.; 2, McIlquham, J. M., Lanark, Ont.; 3, Rebsch, C. C., Peachland, B. C.; 4, Knapp, J. S., Merrickville, Ont.; 5, Palmer, E. B., Carleton, Ont.; 6, Weir, E. A., Randwick; 7, Kelly, W. A., Aldboro; 8, Beckett, R., South Pelham; 9, Reeves, F. S., Tewkesbury, Gloucestershire, England; 10, Elliott, G. S., Tillsonburg, Ont.; 11, Dawson, W., Vars; 12, Phillips, H. L., Johannesburg, S. A.; 13, McRostie, G., Metcalfe, Ont.; 14, Davidson, W., Willow Grove; 15, McTaggart, A., Wellington, New Zealand; 16, Green, R., Oak Leaf, Ont.; 17, McCulloch, C., Epsom; 18, Bosman, A. M., Pretoria, Transvaal, S. A.; 19, Rylie, H. S., Oakville, Ont.; 20, Fraser, W. C.; 21, Powell, F. T. S., Ruddell, Sask.; 22, Shaver, F. D., Cainsville, Ont.; 23, Boyd, F. A. W., Toronto; 24, Fay, J. H., West Cheshire, Conn., U. S. A.; 25, Tipper, R. M., Ashworth, Ont.; 26, Webster, C. A., Dundas; 27, Murray, R. H., Avening; 28, McEwen, L., Wroxeter; 29, Clark, S. H., Cainsville; 30, Culver, L. D., Waterford; 31, Curtis, J. C., Virden, Man.; 32, Macdonald, R., Verschoyle, Ont.; 33, White, E. W., New Westminster, B. C.; 34, Davidson, D., Birch Hills, Sask.; 35, Shields, J. M., Smith's Falls, Ont.; 36, Fillerby, C. W., Woodbridge; 37, Bergy, S. A., Mannheim; 38, Rettie, J. E., Living Springs, Ont.; 39, McMillan, A., Dutton; 40, Wilson, J. A., Mt. Elgin; 41, Petch, C. E., Caledon; 42, Porter, G., Toronto; 43, Rogers, S., Johannesburg, Transvaal, S. A.; 44, Ross, W. H., Beaver-ton, Ont.; 45, Reinecke, O. S. H., Middleburg, Transvaal, S. A.; 46, Grimmer, N. N., Penden Island, B. C.; 47, Falconer, J. M., Hatuma, N. Z.; 48, Robb, D. M., Victoria West, B. C.; 49, Mogg, A. O. D., Redruth, Cornwall, Eng.; 50, Cherry, P. A. B., Upton-on-Severn, Eng.; 51, Johnston, J., Navan, Ont.; 52, Pollard, A., Patterson, N. J.; 53, Bland, A. G., Kelowna, B. C.; 54, 19; 54, Dunkin, G. S., Norwich, Ont.; 55, McLennan, C. M., Chicago, Ill., U. S. A.; 56, McRae, F. C., Beaverton, Ont.; 57, Barnett, C. A., Rannoch; 58, Wright, W. H., Delaware; 59, Herrman, O. A. H., Big Fork; 59, Lord, S. A., Old Harbor, Jamaica, B. W. I.; 61, Brown, R. W., Jordan Harbor, Ont.; 62, Goldhoorn, J. T., Middelstum, Holland; 63, Pate, A. W., Brantford, Ont.; 64, Burwash, W., Baltimore; 65, Diaz, R., Ferrol, Spain; 66, Auld, J. H., Guelph, Ont.; 67, Sorley, J. N., Cummings' Bridge; 68, Underhill, M. J., Richard's Landing; 69, Wilson, J., Epsom; 70, Dent, T., Woodstock; 71, Clemens, R. H., Berlin; 72, Stewart, P., Beaver-ton; 73, Neff, E. F., Hamilton; 74, Mussan, J. McD., Brown's Town, Jamaica, B. W. I.; 75, Davis, H., Woodstock, Ont.; 76, Johnston, G. T., Grafton; 76, Walker, C. T., Haysville; 78, Evens, W. A., Randolph; 79, Rogers, C., Johannesburg, Transvaal, S. A.; 78; 79, Coleman, H. W., Inkerman, Ont.; 78; 81, Greenwood, J. Y., Toronto; 82, Newell, C. A., Kilbride; 83, Kelso, M. U., Guelph; 84, Black, N., Orillia; 85, Bell-Irving, A., Torquay, Devon, Eng.; 86, 12; 86, Cooper, A. R., Buffalo, N. Y.; 87, Bourke, B. J., Pretoria, S. A.; 88, Millar, G. C., Bickford, Ont.; 89, Porter, D., Toronto; 90, Mendoza, H. P., Buenos Ayres, Arg. Rep.; 91, Hefler, F. L., Sackville, N. S.; 92, Upton, H. E., Peabody, Mass., U. S. A.; 93, Skene, H. A., Grand Coulee, Sask.; 93, 11; 94, Packard, E. W., Brockton, Mass., U. S. A.; 95, Alderwerelt, J. de Roo., Java, East Indies; 96, Bennett, F. A., St. Thomas, Ont.; 97, 16; 97, Harvey, J., Raymond, Alta.; 97, 16; 98, Reed, R. M., Cleveland, Ohio, U. S. A.; 98, 16.

- 99, Campbell, W. N., Victoria, B. C.; 96, 12; 100, Weber, M., Winterbourne, Ont.; 91, 18; 101, Renwick, F. W., Romney; 10, 18; 102, Francis, J. P., Burford; 1, 18; 103, Derrick, H. C.; 1; 104, Graham, W. L., Britannia Bay, Ont.

[Note.—The figures after the names indicate subjects in which the students failed, as follows: 1, English Literature; 2, English Composition; 3, Arithmetic; 4, Bookkeeping; 5, Soil Physics; 6, Mechanics; 7, Manual Training; 8, Inorganic Chemistry; 9, Geology; 10, Botany; 11, Zoology; 12, Horticulture; 13, Field Husbandry; 14, Animal Husbandry; 15, Dairying; 16, Poultry; 17, Apiculture; 18, Vet. Anatomy; 19, Materia Medica.]

SECOND YEAR.

- 1, Toole, W., Whitevale, Ont.; 2, Clement, F. M., Virgil; 3, Strong, W. J., Hatfield, Pevelar, Essex, Eng.; 4, Whale, I. B., Goldstone, Ont.; 5, Cohoe, D. P., New Durham; 6, Toole, A. A., Mount Albert; 7, Martin, L. R., Jordan Harbor; 8, Cogan, R. B., Coutts, Alta.; 9, Spry, J., Easton's Corners, Ont.; 10, Bradt, E., York; 11, Ewing, E. A., Englehart; 12, Emerson, W. W., Foxboro; 13, Dorrance, H. A., Seaforth; 14, King, V., Gravesend, Kent, Eng.; 15, Filson, H. S., Stella, Ont.; 16, Dempsey, P. C., Trenton; 17, Schuyler, R., Jarvis; 18, Innes, R., Halifax, N. S.; 19, Baker, A. C., London, Ont.; 20, Palmer, F., Victoria, B. C.; 21, Ross, W. A., Edinburgh, Scotland; 22, Howard, C. F., Hagersville, Ont.; 23, Fisher, P. A., Burlington; 24, Herner, M. C., Mannheim; 25, Culp, S. H., Vineland; 25, Hopkins, E. S., Lindsay; 27, Galbraith, A. J., Hornby; 28, Edgar, F. G., Toronto; 29, Young, J. C., Kensington, London, Eng.; 30, Buchanan, C. W., Florence, Ont.; 31, Galbraith, C. A., Hornby; 32, Hutchinson, A., Mount Forest; 33, Clark, T. O., Calgary, Alta.; 33, McKillican, C. G., Vankleek Hill, Ont.; 33, Thomson, R. G., Boharm, Sask.; 36, Reid, W. J., Reid's Mills, Ont.; 37, Austin, R., Tottenham; 38, Monk, B. F., Springfield; 39, Andrew, D. A., Lucknow; 40, Baldwin, M. M., Colchester; 41, Callister, G., Reading, Eng.; 41, Peart, G. S., Freeman, Ont.; 43, Baker, A. W., London; 44, Forsyth, F., Glasgow; 44, Henderson, I. B., Hampden; 46, Culp, A. A., Vineland; 47, McArthur, M., Gobles; 47, Orser, O. R., Kepler; 49, Marcellis, F. N., North Winchester; 50, Orvis, W. G., Dryden; 51, McAleer, H. A., Chestnut Hill, Philadelphia, Pa.; 52, Light, P., Hensall, Ont.; 53, Cowie, A. J., Caledonia; 54, Presant, J. E., Guelph; 55, Howell, J. S., Jerseyville; 56, Shortill, R. J., R., Ballinafad; 57, Smith, W. H., Chatham; 58, Lawson, J. D., Brockville, Newport, Scotland; 59, Keegan, H. L., Monkstown, Dublin, Ireland; 60, McFayden, C., Caledon, Ont.; 61, Chessor, W., Aberdeenshire, Scotland; 62, Palmer, C. L. S., Upper Sydenham, London, Eng.; 63, Scott, W. R. M., Toronto, Ont.; 64, Whyte, M. I., Banbridge, Ireland; 64, 6; 65, Gordon, D., Elora; 66, Coke, J., Erin; 67, Marryat, U. G., Alix, Alta.; 68, Shepherd, F., Bloomingdale, Ont.; 69, Schuyler, C., Brantford; 70, Main, C., Sheffield; 71, Smith, A., Guelph; 72, Freek, E. M., Barrie, Ont.

The following students did not obtain 1,500 out of a possible 3,000 marks, and have, therefore, failed to make the 50 per cent. on general proficiency necessary for entrance to the Third Year: x 73, Wright, C. H., Agassiz, B. C.; x 74, Fairhead, N., Toronto, Ont.; x 75, Rice, E. L., South Swansea, Mass., U. S. A.; *3; x 76, Schartow, C. H., Toledo, Ohio, U. S. A.; *5, 6; x 77, Cleverley, H. S., Bayonne, N. J.; *1, 2; x 78, Sinha, S., Calcutta, India, *2, 10, 11; x 79, Day, W., Powles' Corners, Ont.; *1, 3; x 80, Hoffman, C. W., Plattsville, *5, 6, 7, 12; x 81, Harley, L., Harley, *1, 4, 7, 8, 9; 82, Sanders, R. G., Tillsonburg, Ont.

Students conditioned in more than two subjects are considered as having failed. X preceding the name indicates that the student did not obtain 60 per cent. in English, and is, therefore, not eligible for admittance to the Third Year.

The figures after the names indicate subjects in which the student failed, as follows: 1, English Literature; 2, Animal Husbandry; 3, Animal Chemistry; 4, Agricultural Chemistry; 5, Bacteriology; 6, Economic Botany; 7, Systematic Botany; 8, Field Husbandry; 9, Forestry; 10, Agricultural Engineering; 11, Poultry; 12, Composition and Public Speaking.

THIRD YEAR.

- 1, Ellis, F. E., Truro, N. S.; 2, Todd, S. E., Guelph, Ont.; 3, Tohill, J. D., St. Andrew's, Bungay, Eng.; 4, Blanchard, B. H. C., Baddeck, Cape Breton, N. S.; 5, Lloyd-Jones, J. C., Llandinam, Montgomeryshire, Wales; 6, Robinson, E., Guelph; 7, Faulds, Rochester, N. Y., U. S. A.; 8, Fraser, R., Galetta, Ont.; 9, Kennedy, S., Applehill; 10, Neville, S. J., Cottonwood, Sask.; 11, Learmonth, C. M., Galetta, Ont.; 12, Reek, W. R., Romney; 13, Packard, R. C., Brockton, Mass., U. S. A.; 14, Clancey, R. H., O. A. C.; *2; 15, Harries, Cardiff, S. Wales; 16, Guillet, H. J., Mille Roches, Ont.; 17, Snyder, A. A., Blair; 18, White, O. C., Ashburn; 19, Edwards, W. E. J., Balsam; 20, Laughland, J., Hartney, Man.; 21, Moorhouse, R. L., Cairo, Ont.; 22, Knauss, H. L.,

Detroit, Mich., *1; 22, Nunnick, F. C., Scotland, Ont., *7; 24, Cooley, R. B., Canifton, *1, 4; 25, Shaw, A. M., Niagara Falls, South, *4, 7; 26, Collins, G. W., O. A. C., *4; 27, Bowman, W., Georgetown, *2, 4; 28, Smith, A. S., Chester-ville, *4; 29, Ryan, W., Melbourne, Derbyshire, Eng., *1, 5, 6, 8; 30, Lewis, J. M., Knoxville, Ill., U. S. A., *1, 4, 5, 7; 31, Carpenter, J. F., Fruitland, Ont., *3 (took Xmas. exams., December, 1906).

Note.—The following named students did not attend 75 per cent. of the lectures in the subjects indicated, and were, therefore, not eligible for examination: Bowman—French and Composition; Clancey—Composition; Kennedy, Shaw, and Smith—French.

The figures after the names indicate subjects in which the students failed, as follows: 1, English Literature; 2, English Composition; 3, Economics; 4, French; 5, Quantitative Chemistry; 6, Organic Chemistry; 7, Cryptogamic Botany; 8, Plant Physiology.

Solving the Naval Problem.

If England must have ten Dreadnoughts to Germany's five, and Germany must have seven Dreadnoughts to England's ten, what's the answer?

For some time this difficult problem has been engaging the earnest attention of the ablest financiers of both nations. The other day, a member of the London Stock Exchange discovered a solution of it—maybe.

The London broker—whose proposal is commended by that eminent authority upon British finance, the Economist—suggests that the Government levy a tax of half a penny upon each newspaper, issued.

He calculates that such a tax, after allowing for a great shrinkage in circulation, would still bring in twelve million pounds a year—most welcome to a heavily-burdened exchequer—and that, "at the end of one year, or probably earlier, the press would discover that our navy was quite adequate."

With such a tax for naval purposes in both countries, adds the Saturday Evening Post, each would be daily instructed to love its neighbor better than itself, and a statesman who proposed building anything more formidable than a ferry-boat, would be denounced as the enemy of mankind.

Nova Scotia Notes.

Winter has certainly "lingered in the lap of spring." No grain sown yet (May 8th), though several harrows and plows started to-day for the first, and seeding will begin immediately, if the weather permits.

Seed time is short, at the best, in this country, and when we are ten days late beginning, it makes all the more of a hurry when we do get at it.

Live stock has come through in good condition, and prices for all kinds of live stock are high, with the possible exception of sheep. The low price of wool is against high prices for sheep. Beef is selling at \$4.50 to \$5.50, live weight; milch cows are very scarce and high, in fact, too high for the quality. Horses are in great demand; good sound, young horses of 1,200 to 1,400 pounds are selling around \$200, and some up to \$225. Butter (fresh-made) is 25 cents; eggs, 18 cents.

Grain and mill feeds are very high; oats, 65 cents; good seed oats, 70 cents. Hay is very plentiful, and a considerable quantity will be kept over.

Clover and grasses, though late, have come through the winter fairly well, and at present there is a prospect of good hay crops.

Cumberland Co., N. S. C. H. BLACK.

Vegetable-growers' Report.

The fourth annual report of the Ontario Vegetable-growers' Association, just issued, is replete with valuable information of a practical nature, and pertinent illustrations of crops, implements and field scenes. Almost every phase of vegetable production is given elaborate consideration. The addresses and discussions at the last annual convention contain many hints that assist in avoiding losses and disappointments.

Brown-tail Moth Still in Nova Scotia.

Reports in the Nova Scotia press indicate that the brown-tail moth has been found in the vicinity of Bridgetown, in sufficient numbers to cause some alarm. A special effort is being made to have farmers examine their orchards and remove the nests before the caterpillars leave them.

In a national certified-milk contest, comprising over 80 of the finest dairies in the United States and Canada, it is reported from Cincinnati that Price's Dairy Farm, near Toronto, Ont., took third place, being only 1½ points below the winner.

P. E. Island.

At this date (May 10th) a few farmers are beginning to work on the land, but we do not consider it in proper condition yet. There have been heavy rainfalls here during April, and so far in May. It will all be needed, as winter set in very dry, and, though there was a lot of rain in January, the ground was frozen so hard that most of it ran off, and springs were low all winter. Farmers here are in luck again this year, and are rejoicing in the prospect of a good clover crop. The new meadows are beginning to look green, and there are abundance of clover plants, and, though they do not look quite so strong as last spring, with a good season they will develop into a fine crop.

Some of the dairy stations have begun to make cheese already. This is three weeks earlier than usual, but the low price of butter has turned attention to cheesemaking, instead. Kensington Dairy Company has just started making butter from cream gathered from hand separators. It is the first factory to operate on the cream-gathering plan. The hand-separator agents are doing a rushing business here, and our butter business in a few years will likely all change to the cream-gathering plan. We think this will be a move in the right direction, and will help both our summer and winter buttermaking, as most factory patrons have to draw milk long distances, at heavy expense, and the gathering of the cream will cost much less, and leave the skim milk at home in the best condition for feed.

We are looking forward to a successful dairy season. Milch cows are in fine condition, and there is promise of good pasturage.

Our Commissioner of Agriculture has made arrangements with the Dominion Department of Agriculture for a large number of horticultural meetings. G. H. Vroom, of Nova Scotia, will have charge of them, and will give illustrations in spraying, grafting, pruning and properly caring for fruit trees at each meeting. An effort is being made here to get into working condition the Co-operative Fruit-packing Company that got incorporation at the last session of our Legislature. Fruit-growers are being solicited to buy shares, and the company propose, as a beginning in business, to buy packages and provide expert packers to handle the coming fruit crop.

Fruit trees have come through the winter well, and seem to be free from disease or injury, except that some young trees have been girdled with mice, for want of a little care in the fall to protect them. Strawberries have wintered well, and are starting to grow. Prices are good for produce: Oats, 50 cents; potatoes, 30 cents to 35 cents; eggs, 16 cents; cattle 4½ cents to 5 cents, live weight; horses, from \$140 to \$200; dressed hogs, 9 cents.

Dairy farmers should now prepare for a succession of green-fodder crops, such as oats and peas, and corn, to keep up the milk flow all through the season. Dairying cannot be made a success without, any year. W. S.

Institute Annual Meetings.

In announcing the dates on which annual meetings of the numerous Farmers' Institutes in the Province of Ontario will be held, Superintendent G. A. Putnam says:

"Reports from speakers and officers show a new life in the Institutes during the past season, and the young men of the country are taking a more important part in the work. The readiness with which those in attendance ask questions and take part in the discussions indicates an awakening on the part of the farmer, and an inclination to study his calling from a business standpoint.

"We note, however, that in a few places the attendance has not been sufficient to warrant us in sending the speakers again, until we have some assurance from the farmers of the locality concerned that they will give a more hearty support to the efforts of the Department and the local Institute officers. We are therefore asking that the farmers in the vicinity of such places furnish us with a petition signed by at least twenty farmers of the locality, to the effect that they wish a meeting, and will do all they can to make the meeting a success by advertising, attending if at all possible, extending invitations to their friends and neighbors, and assist the delegates by furnishing local talent.

"There will, no doubt, be an increased demand for short courses in stock and seed judging, and along fruit lines. The Department will be prepared to hold a large number of these judging classes during the winter of 1909-1910. Encouragement will also be given to the establishment of Farmers' Institute Clubs. This line of work during the past season has been most encouraging, and the Institute officers will be urged, at their annual meetings, to make plans to further extend this feature of Institute work."

Arrangements have been made to have Professors G. E. Day, H. H. Dean, R. Harcourt, W. R. Graham, W. P. Gamble, J. B. Reynolds, S. F. Edwards and W. H. Day, and Messrs. H. H. LeDrew, D. H. Jones, R. W. Wade, J. W. Crow, W. J. Squirrel, J. E. Howitt, and W. F. Bailey, of the Ontario Agricultural College, and Messrs. G.

G. Publow, of Kingston; T. G. Raynor, of Ottawa, and Dr. H. G. Reed, of Georgetown, attend one or more meetings, to discuss problems with the farmers. The dates run from May 28th to June 29th. Everyone should be interested. The dates of the local meetings can be learned from the secretary, or by the local press.

Montreal Horse Show.

The annual horse show, held at Montreal last week, was one of the best on record. The elite from several points in the United States helped to swell the attendance of Montreal horse-lovers, and make the event a huge success. Horses of high value and rare quality were present in greater numbers than ever before. The expert judges in many cases found difficulty in selecting the winner.

In the class for Clydesdale and Shire stallions, Dr. Duncan McEachran got first on Selborne; T. B. Macaulay second on Lord Aberdeen, and Robt. Hunter & Sons third on Kayama. Hackney stallions were strong. In the section for any age, first and third went to J. B. Hogate on Samuel Smiles and Chaigeley Admiration, and second to Senator Beith's Cedar Go-Bang. The latter got first in the class for stallions 14 hands 2 inches and over.

For Thoroughbred stallions three years and over, in a class of seven, the awards went to the Canadian National Bureau of Breeding Horses, as follows: First, Rosemount, S. Nesbit, of Petite Cote; second, Ostrich, A. Bullcroft, of Outremont; third, Javlin, Dr. Webster, of Ottawa; fourth, Masterman, Fox-hunters' Association, of Montreal. In the class for Thoroughbred stallions four years and over, the first prize went to Rosemount. The Rapids Farm, of Lachine Rapids, got second on Dublin. Third and fourth went to Javlin and Masterman.

Canadian Crop Conditions.

Recent reports for April, sent out by the Census and Statistics Office, Ottawa, show that in all parts of Canada weather conditions have been backward, and seeding operations delayed. Spring work has been carried on in Ontario for the most part only in Counties along Lakes Erie and Huron. Winter wheat, hay and clover were in fair condition. Fodder for stock was sufficient to meet all requirements. Farm stock wintered well.

Backward weather also prevailed in the Northwest. In the northern parts of Manitoba little was done on the soil in April. In other sections a fair start had been made. In Saskatchewan, a small per cent. of the wheat was in, but no oats or barley. Some reports from Alberta indicated that nearly half the fall wheat had been winter-killed. The late and cold spring had checked its growth.

In connection with the foregoing information, a representative of "The Farmer's Advocate," returned from the West, reports that it was estimated that 75 to 80 per cent. of the wheat in the prairie region would be sown by the end of last week.

The Suspicious Crow.

One of the simplest and easiest effective means of keeping crows away from the cornfield at that critical stage when the seedling shoot affords the wise old bird a convenient handle to pull up an appetizing morsel of soft, swollen seed corn, is to string twine around the outside of the field, and here and there across it. On the stakes to which the twine is attached, and also here and there along the string, hang small bunches of bright tin clippings. The least stirring of the air will cause a motion of the twine, of which for some time the crow will be suspicious, making him wary of crossing it. The clippings will add considerably to his misgivings, for the burnished surface dangles glistening in the sun, and it will, as a rule, be some time before the crow will acquire that contempt which familiarity breeds. The twine and tin clippings are better not put up until the corn is almost ready to peep through the ground.

The Milk Commission.

Following W. K. McNaught's bill, the Ontario Government has appointed a commission to investigate conditions under which milk is produced and supplied to consumer or to factory. The members of the commission are: Dr. A. R. Pyne, of Toronto, and three members of the Legislature, Messrs. J. R. Dargavel, of Leeds; F. G. Macdiarmid, of West Elgin, and W. F. Nickle, of Kingston.

Hon. Sydney Fisher, Minister of Agriculture, has moved in the Dominion Parliament a resolution appointing a commission to investigate the present condition of the natural resources of the country, obtain information, make recommendations, and put forward statements of facts concerning these resources, with a view to their conservation.

There are over a hundred split-log drags in use in the one Township of Clinton, Lincoln Co., Ont.

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MARKETS.

Toronto.
LIVE STOCK.

At West Toronto, Ont., on Monday, May 17th, the receipts were 52 cars, including 1,090 cattle, 25 hogs, 20 sheep, 87 calves. Trade was fair, and prices steady. Exporters, \$5.70 to \$6.40; bulls, \$4.50 to \$5.25; prime picked butchers', \$5.40 to \$5.60; good, \$5.20 to \$5.40; cows, \$4.55 to \$5.25; milkers, \$35 to \$60; calves, \$3 to \$5.50 per cwt. Sheep, \$5 to \$6 per cwt.; yearling lambs, \$7 to \$8 per cwt.; spring lambs, \$4 to \$6 each. Hogs, firmer; selects, \$7.80, fed and watered, and \$7.55, f. o. b. cars at country points.

REVIEW OF LAST WEEK'S MARKET.
 Receipts at the City and Union Stockyards last week were very heavy, especially for fat cattle. The railways reported 406 carloads, consisting of 7,393 cattle, 3,566 hogs, 374 sheep and lambs, and 918 calves, with 100 horses.

The quality of the bulk of the cattle was good. Trade, at the beginning of the week, was good. Prices were higher, especially for the export class.

Exporters.—Export steers sold from \$5.60 to \$6.50, the latter price being paid for one prime-quality load, but \$6.40 was paid in several instances. The bulk of export steers sold at \$5.90 to \$6.20. Export bulls sold at \$4.50 to \$5.25; export cows, \$5 to \$5.50, and in one instance \$5.75 was paid for a bunch of fine-quality, heavy cows.

Butchers'.—Prime picked lots of heifers and steers sold at \$5.40 to \$5.65, and even \$5.75 was paid; loads of good, \$5.20 to \$5.35 and \$5.40; medium, \$4.90 to \$5.15; cows, \$3.50 to \$4.75; bulls, \$3.75 to \$4.40.

Feeders and Stockers.—Trade in feeders has been light, owing to high prices for butchers' cattle. All steers with a fair amount of flesh, were taken for killing purposes. Prices are quoted about the same as last week, as follows: Steers, 1,000 to 1,100 lbs., \$4.75 to \$5.50; steers, 800 to 900 lbs., \$4.15 to \$4.60; stockers, 500 to 700 lbs. each, \$3 to \$3.75 per cwt.

Milkers and Springers.—The market for milkers and springers was strong, with prices firm, at \$35 to \$65 each, the bulk of the good to choice going at \$45 to \$60 each. One lot of eight cows sold at \$55 each.

Veal Calves.—Receipts large, quality generally not good. Prices ranged from \$3 to \$6.50 per cwt.

Sheep and Lambs.—Receipts moderate. Prices a little firmer. Ewes, \$5 to \$5.50 per cwt.; rams, \$4 to \$4.50; yearling lambs, grain-fed, \$7.25 to \$8.25; common yearlings, \$5 to \$6 per cwt. Spring lambs, \$3.50 to \$8 each, the bulk selling at \$4 to \$6 each.

Hogs.—Receipts light; prices firmer, and likely to go higher still. Selects, fed and watered, \$7.75; selects, f. o. b. cars at country points, \$7.50 per cwt. The prospects were for \$8 hogs.

Horses.—Receipts of about 120 horses at the Union Horse Exchange this week met with ready sale, not enough horses are to be had at prices that will pay the dealer to go to the country to buy. More good horses would have sold. Prices ranged as follows: Drafters, \$160 to \$210, with a few top-notchers at \$250; general-purpose, \$140 to \$180; wagon, \$150 to \$200, and \$220; drivers, \$100 to \$150, and \$200 for choice, serviceably sound, \$35 to \$80.

BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, \$1.25 to \$1.28. Manitoba—No. 1 northern, \$1.28; No. 2 northern, \$1.27; No. 3 northern, \$1.24, at lake ports. Rye—No. 2, 74c. to 75c., outside. Peas—No. 2, 96c. to 97c. Oats—No. 2 mixed, 47c. to 47c., outside. Barley—No. 2, 61c. to 62c.; No. 3 extra, 58c. to 59c.; No. 3, 56c. to 57c. Buckwheat—No. 2, 64c. to 65c. Corn—American, No. 3 yellow, 81c. to 82c.; Canadian, 75c. to 76c., Toronto freights. Flour—Ontario, 90 per cent. patents, \$5.50 to \$5.75, buyers' sacks, Toronto; Manitoba first patents, \$6.20; second patents, \$5.70; strong bakers', \$5.50.

HAY AND MILLFEED.

Hay.—Baled, in car lots, on track, Toronto, \$12.50 to \$13.50. Straw—Baled, car lots, on track, Toronto, \$7 to \$7.50. Bran—Car lots, track, Toronto, \$23 to \$24. Shorts—Car lots, track, Toronto, \$24 to \$25. Manitoba meal, sold by C. Caldwell & Co., Front street, Toronto, \$28.50 per ton. Flax-seed meal, pure, \$3.75 per cwt.

FRUIT AND VEGETABLES.

Apples.—Prices firm, for good quality, which are hard to get, at \$6 to \$6.50 per bbl., for Spies; Greenings, \$3.50 to \$4.50. Potatoes.—Market steady, at 85c. to 90c. for car lots, in sacks, track, Toronto; onions \$1.30 to \$1.45 per bag; turnips, 35c. per bag. North Carolina strawberries, 20c. per quart basket.

COUNTRY PRODUCE.

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

Eggs.—Market steady, as 19c. to 20c. Cheese.—New, 13c. for large; 13c. for twins. Old cheese, firm, at 14c. for large, and 14c. for twins.

Honey.—Market unchanged. Extracted, 10c. to 11c.; combs, dozen sections, \$2.75 to \$3.25.

Poultry.—Turkeys, 20c. to 25c. per lb.; last year's chickens, 18c. to 22c.; spring chickens, 50c. 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, 11c.; No. 2 inspected steers, 60 lbs. and up, 10c.; No. 1 inspected cows, 10c.; No. 2 inspected cows, 9c.; country hides, 8c. to 9c.; calf skins, 12c. to 16c.; horse hides, No. 1, \$2.50 to \$2.75; horse hair, per lb., 30c.; tallow, 5c. to 6c.; sheep skins, each, \$1.25 to \$1.50; raw furs, prices on application.

Buffalo.

Cattle—Prime steers, \$6.40 to \$6.75. Veals—\$6 to \$7.75. Hogs—Heavy and mixed, \$7.60 to \$7.70; roughs, \$6.40 to \$6.65; dairies, \$7.25 to \$7.50. Sheep and Lambs—Lambs, \$4.50 to \$8.40; a few, \$8.50, wethers, \$6.50 to \$9.25.

Montreal.

Exports of live stock from the port of Montreal during the first week of May included 1,474 head of cattle.

The local cattle market exhibited a strong undertone last week, and prices advanced fractionally, in sympathy with a similar movement in Western Canada. However, the highest price reported here was 6c. per lb., paid by exporters, this being 1c. less than was paid in the West. The supply here was fairly large, and 6c. was paid in one or two cases, by butchers, for fancy steers, and the holder of a few fancy bulls asked as high as 6c. for them. Choice steers sold at 6c., fine at 5c., good at 5c. to 5c., medium at 4c. to 4c., common at 3c. to 3c., and a few inferior at perhaps less. The market for sheep and lambs was rather on the easy side, notwithstanding the light supplies. Yearling sheep sold at 6c. to 6c. per lb., old sheep being 5c., and spring lambs at \$3 to \$6 each, the latter being rather steadier than sheep. The offering of calves was large, and the quality showed a slight improvement, although there were a number of very poor animals available at \$1.50 to \$2.50. The better quality ranged to around \$8 each. The market for hogs showed very little change, prices ranging from 8c. to 8c. per lb., for selects, weighed off cars.

Horses.—Dealers still speak well of the market. Last week showed very little falling off, although the continual rains had a rather bad effect on business all round. The demand was mostly from local sources, the quality of horses wanted being good, heavy, carting animals. A few farming horses of the light-draft grade, of good quality, were also in demand. Prices held about steady, being as follows: Heavy draft, 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$185 to \$240 each; small animals, 1,000 to 1,100 lbs., \$100 to \$150; and inferior, broken-down animals, \$75 to \$100 each, while choice saddle or carriage animals were in occasional demand, at \$300 to \$500 each.

Dressed Hogs and Provisions.—Demand for live hogs seemed to keep up well, and prices were maintained at a steady level, being 11c. to 11c. per lb. for fresh-killed, abattoir-dressed hogs. There was an excellent demand, also, for bacon. Lard was steady, at 9c. to 9c. for compound, and 13c. to 14c. for pure. Barrelled pork held steady, at \$21 to \$25.50, demand being steady.

Potatoes.—Export to the United States continued, but the local market did not advance last week, although the tone was very firm. Prices between dealers here, carloads, on track, were \$1.05 to \$1.15 per 90 lbs., for Green Mountains; 90c. to 95c. for P. E. I. stock, blue; and 95c. to possibly \$1, for P. E. I. red Dakotas. Some quoted \$1.10 as top for Green Mountains.

Eggs.—Dealers made another attempt to get prices down in the country. They paid 18c., and tried to get them down to 17c. Meantime, straight-gathered stock sold here at about 20c. per dozen, No. 1 stock at about 19c., and selects at 22c. Demand for eggs was excellent, and large quantities are being put in cold-store, notwithstanding the feeling that they are too high, and may bring heavy losses to the trade.

Butter.—As was expected, the markets in the country broke at the end of the first week in May, being down to 21c. and 21c. in the Townships. This was followed by a drop in the ideas of buyers in Montreal, and although some large lots seem to have changed hands at 21c. to 21c., the trade was holding off as long as possible in the hope of getting the goods at 21c. Dairies could not be sold at more than 19c. to 20c., nor fresh rolls at more than 18c. to 20c. On Monday, creamery butter was firmer in Townships, holders asking 21c. to 22c. wholesale, here.

Cheese.—Although the feeling in the market for cheese was easy, prices recently showed more strength in the country, selling up to 12c. to 12c. in the Townships. White Quebecs have been bought at 11c., and Ontarios at 12c. Holders asked, fractionally, more than these figures. Monday last found cheese strong, at country points. Holders here asked 12c. for Quebecs, and 12c. to 12c. for Ontarios.

Grain.—The general tone of the market

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for oats was firmer, No. 2 Canadian Western oats being 52c. to 53c. per bushel, carloads, in store; No. 1 extra feed, 51c. to 52c.; No. 1 feed, 51c. to 51c.; No. 3 yellow American corn is 80c. to 81c., No. 2 peas, \$1.05 to \$1.06; No. 2 barley, 70c. to 72c.; Manitoba feed barley, 60c. to 60c., and buckwheat 69c. to 70c.

Flour.—The market throughout was very firm, and prices have advanced considerably, particularly in winter-wheat grades, these being now \$6.15 to \$6.25 per barrel, for patents, and \$6 to \$6.10 for straight rollers. Manitoba grades were in good demand, with prices slightly higher also, being \$6.80 for first patents, \$5.80 for seconds, and \$5.60 for strong bakers.

Seeds.—Dealers reported having experienced a very dull market of late, owing mainly to the continued rains and the backwardness of the season. Prices were firm and steady, at \$13 to \$14 per 100 lbs., for red clover; \$16 to \$18 for alsike, and \$5.25 to \$6.50 for timothy.

Hides.—The market for beef hides has experienced the biggest advance in years, prices jumping 3c. per lb., to 10c., 11c. and 12c., for Nos. 3, 2 and 1, respectively. The demand was very active, indicating a return of activity in the boot and shoe, harness, and other leather-using industries. Quality of hides continues very poor, owing to the grub. Calf skins were steady, at 13c. and 15c., sheep \$1, and lamb skins 10c. each; horse hides, \$1.50 and \$2; rough tallow, 2c. to 3c.; rendered, 2c. to 6c.

Cheese Board Prices.

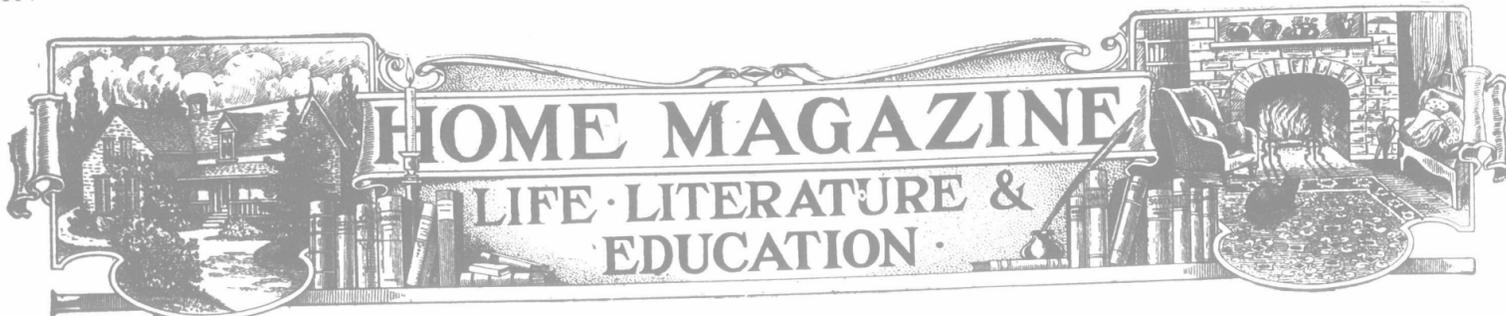
Farnham, Que., butter sold at 21c.; Campbellford, Ont., cheese, 11 5-16c. to 12c.; Stirling, Ont., 12c.; Tweed, Ont., 12c.; Woodstock, Ont., 11c.; Brockville, Ont., 12 1-16c. bid, no sales; Belleville, Ont., colored 11 15-16c., white 12 1-16c. to 12c.; Kingston, Ont., 12c. to 12c.; Alexandria, Ont., colored 12 1-16c., white 12c.; Napanee, Ont., 12 3-16c.; Picton, Ont., colored 12c., white 12 3-16c.; Cornwall, Ont., 12c.; Iroquois, colored 12c., white 12c.; Huntingdon, Que., colored 12 1-16c., white 12c.; butter, 21c.; London, Ont., 11 13-16c.; St. Hyacinthe, Que., cheese 12 3-16c., and butter 21c.; Cowansville, Que., cheese 12c., and butter 21c. to 21c.; New York, U. S. A., butter, creamery, specials, 26c. to 26c.; official price, 26c.; creamery, extras, 26c.; creamery, thirds to firsts, 21c. to 25c.; process, common to special, 15c. to 23c.; Western, factory, firsts, 19c. to 20c. Watertown, N. Y., cheese, 12c. to 12c.

Chicago.

Cattle—Beves, \$5.10 to \$7.25; Texas steers, \$4.60 to \$6.10; Western steers, \$4.75 to \$6; stockers and feeders, \$3.60 to \$5.65; cows and heifers, \$2.50 to \$6.25; calves, \$5.25 to \$7.50. Hogs—Light, \$6.85 to \$7.35; mixed, \$7 to \$7.45; heavy, \$7.05 to \$7.50; rough, \$7.20 to \$7.50, pigs, \$5.80 to \$6.75; bulk of sales, \$7.25 to \$7.40. Sheep and Lambs—Native, \$4 to \$6.50; Western, \$4.25 to \$6.40; yearlings, \$6.25 to \$7.50; lambs, native, \$6.25 to \$8.75; Western, \$6.50 to \$8.35.

British Cattle Markets.

London cables for cattle quoted 14c. to 14c. per lb. for Canadian steers, dressed weight, and refrigerator beef at 10c. to 10c. per lb.



The Railway Commission has ordered that stations and passenger cars be regularly cleaned out and kept in sanitary condition. This will be welcome news to a great many people. It is to be hoped that the order will be followed on all the railways by steps for a more general planting of vines and flowers about station-houses, which too often are masterpieces of bareness and ugliness. The C. P. R. already sends flower seeds to the stations along its lines, but we have not noticed, as yet, a general planting of vines, such as is in vogue on the American side, about these buildings. Flowers are good; vines are better. No other outlay of money can so transform ugliness into beauty, and, if outer trellises some few inches from the walls be provided, there need be no fear of the deleterious effect so long laid to the charge of these, nature's chief beautifiers.

Recent news-columns tell of the death of one young man, and the injury of another, by a lightning-bolt which struck a tree under which they were standing. It should be remembered that, to stand under a tree or in an open doorway during a thunderstorm is to risk a danger that might otherwise be averted.

Mr. Mackenzie King has noted that the International Opium Conference, at Shanghai, from which he has just returned, was, with the exception of The Hague gathering, the first international diplomatic or quasi-diplomatic conference held at which both European and Asiatic nations have been present, fourteen nations having been represented by the various delegates. The fact that a beginning has been made to such broadly international gatherings is auspicious. Such mingling of the nations, united for some beneficent purpose, must do more than can anything else to break down walls of misunderstanding and remove prejudices. It is necessary to get away from provincialism, to be willing to acknowledge good in other peoples, and to learn lessons from them—to recognize all men as very close in the great family of humankind—if the highest type of humanity is to be attained.

Ex-President Roosevelt is at present in Africa killing lions. It is interesting to speculate as to what his attitude will be towards a proposal made in the United States, that he be the chief spokesman in a movement to secure an alliance of Great Britain, the United States, France, Germany and Japan, to be formed for the purpose of insuring the peace of the world through The Hague Conference.

It seems not unreasonable to suppose that such an alliance might be formed, and with it an end put to the present ruinous preparations for a possible war. Commenting on the proposal, the New York Independent says: "We are making as rapid progress in public sentiment toward the establishment of a Parliament of the Nations as we are in the suicidal enlargement of our navies and armies. What with the latest scramble for Dreadnoughts, to be followed by a similar insane rivalry for war-fleets in the air, the financial ability even of the wealthiest nations approaches paralysis. The time is ripe for accomplishing the ultimate purpose of advocates of

universal peaceful arbitration. There is needed chiefly a leader who will have the splendid enthusiasm, energy and faith, which characterize Mr. Roosevelt."

This eulogy of the ex-President is not due to mere Americanism. Mr. Roosevelt has his enemies, as has every man who has ever tried to uphold a principle whose neglect meant monetary gain to others, but there is no more generally popular man today, perhaps in the world, and no one better suited to broach a herculean plan for the promotion of universal peace. Moreover, he is already identified with peace movements, since, during his presidency of the United States, he was awarded the Nobel Peace Prize for his efforts as intermediary in the war between Russia and Japan. No better crowning life-work could come to him than instrumentality in the carrying out of a proposition which must mean so much to mankind.

A Letter from British Columbia.

In your issue of February 18th, 1909, you quote a writer in Everybody's, making the statement that in the United States the number of women at gainful occupations, outside their homes, is increasing. Then you criticise the woman who goes outside her home to work at a gainful occupation too severely, I think. Will you kindly note the fact that you, with others, are in favor of the farmer's wife, sister and daughter working on the farm, outside the home, at anything they can do successfully, such as milking, raising poultry, keeping bees, making gardens, etc. It is quite evident that if a woman works outside on a farm, and lets all proceeds go into the man's purse, without care for the future, she is just right. I object to this being considered right for a woman, just because she is a farmer's wife. My reason for same is this: Custom has made men think it right that farmers' wives should in many cases work harder than the negro slaves worked before Emancipation in the United States. She is expected to rise early, and work till late alone—how dreadfully alone few realize who have never lived the long, hard-working farm days out at real work.

When the husband needs help, he gets it. How often can a farmer's wife get help when she needs it? The richer the farm he owns, in many cases, the harder the wife has to plan and work. There are many children to care for and try to get to school; more hired men to wait on; and, let me say, from a long experience, this is the hardest part of a wife's work on a farm—waiting on her husband's hired men. No other class of men in existence who give employment to so many men, expect their wives and daughters to do for their employees. This is where custom comes in again, and it is this barbarous adherence to custom that ruins many a farmer's wife's life. It is not because the farmers wish to be unkind or hard. The wife does all, often uncomplainingly, often till she lays her worn out body down in the last sleep, before those who are near see that she has been practically a white slave to custom. Let any farmer living go through the work of his wife for one week, while she is raising his children, cooking, washing, ironing, sewing, tending poultry, milking cows, and making butter for the family, and some to

help pay the store bill, perhaps, as well. Do you think that he would be willing to continue it through life? And, besides the work for her, there is motherhood, with all its suffering and cares. Is it any wonder that mothers do not encourage their daughters to get married to men who will not take time to think of the life they expect their wives to have with them on the farm? I know there are many exceptions to this class of farmers, but they are still too numerous in Canada, I am sorry to say; and in behalf of their wives I would speak, not for those who have kind, thoughtful husbands and brothers.

There is another aspect to this woman's working for herself. When she earns money, it is hers. When a farmer's wife earns money working for husband and family, it is not hers. She is entitled only to board and clothing (the same as the woman who does not earn one cent). A man in this Province (British Columbia) can dispose of his property, so that neither wife nor children have any legal right to one cent, if he so wishes, should he die first; and even if he wishes to leave his property to his family, lawyers are allowed to legally draw wills, so that they can practically, to all intents and purposes, do as they choose with property that is left for a family.

Do you not think, Mr. Editor, that a man's wife and children should be protected from lawyers? I have known of an old man who thought that he was leaving everything right for wife and children. He trusted his lawyers, as many do. An old, feeble man left a valuable property so that the lawyer (executor and solicitor) also has, he claims, power to do as he chooses with the property, according to the will which he himself drew up. Even the wife gets just what he chooses to give her, and then not directly; if he so wills, he can give it to another to take care of her. The children get nothing of the property at all. At a future time he may, if he so wills, give them a part of the income; that is, after the wife's death. There is no provision for the grandchildren inheriting, if the children should all die before the widow dies. Yet, it is called a legal will. The property is a large and valuable one. A feeble old man, who did not understand what he was doing, let a lawyer draw this legal will.

Is it right that our laws give lawyers the power to draw up wills for old men who do not understand what they are signing, giving the lawyer practically the right, and his heirs after him, to do as they like with what rightfully belongs to the family? This lawyer is executor and solicitor, and his heirs after him. And if the children or wife try to break the will, he will probably appeal.

Can the voters not see that a law is passed to protect wives and children of farmers in their rights to the old homes where they were born? This, too, would help to keep the children on the homes longer.

Do you not think that Canada is enlightened enough now to give her women and children absolute protection? I believe the majority of the men would vote to give every woman and child on a farm-home what belongs to them, at the husband's death; the mother, the use of the full half till her death, then balance equally between the children. If there is a second wife, only a child

dren, give her the use of one-third of the property, balance to go equally to the children at once, or the income of same. "CHIPS."

B. C.

[We are very sorry that "Chips" has misunderstood us in regard to the farmer's-wife question. We have always held that the farmer's wife should not be overworked, although, when a woman is strong and healthy, and really enjoys gardening, poultry-raising, etc., as many of them do, we feel that she should have the privilege of doing as she pleases about it. We think you touch the point of overwork on the part of the women exactly when you say that many of them "do all uncomplainingly." Such passive, uncomplaining drudgery is by no means to be commended. We believe that the great majority of men are amenable to reason, and that those wives who present their case quietly and reasonably are likely to meet with fairness and consideration. Too often men are considered exacting, when they are only thoughtless or unobservant. As regards the wife's share of the proceeds of the farm, we have always held that, as partner of the husband, and contributor to the gains of the estate, she should have her fair share.]

Upon many other points, Chips' argument is well taken, and, we trust, will do some good in those cases—growing happily fewer year by year—to which they apply. Upon the legal question, not knowing every circumstance of the instances quoted, we make no comment. The law in British Columbia differs, we understand, on many points, from that in Ontario.]

Women's Institute Meetings.

By the "List of Meetings and Speakers of the Women's Institutes of Ontario," it is evident that the Women's Institute is again out for a full campaign during the summer. The meetings to which Institute Speakers will be sent will start on May 26th, and will be continued in various localities, until towards the end of July, the subjects taken up bearing on foods, sanitation, hygiene, architecture, home-management, child-training, etc., with demonstrations on the preparation of beverages. All the speakers have made an especial study of the subjects upon which they speak, an increasing number having had the advantage of training in the Lillian Massey School of Domestic Science, or in the Macdonald Institute, at Guelph.

The Women's Institute is making continuous growth in popularity, and deserves every encouragement. Do not fail to attend these special meetings when they come your way.

Alcohol's Only Value.

Professor Kraepelin, of Heidelberg, agrees with Dr. Osler in the view that alcohol is always detrimental to the system, and that its use can only be justified when it plays the role of a narcotic. It is also valuable in very hot weather, he declares, when a small quantity is added to the morning bath, or when the skin is rubbed with whiskey, brandy, or rum, the effect in each case being to keep the body refreshingly cool during the extreme heat of midsummer. Beyond this Kraepelin considers its use unjustifiable. He emphatically says it is worthless for old people.—Ex.

Hope's Quiet Hour.

"Enquirer's" questions about "Saints" have already been carefully answered by our readers, and space can no longer be reserved for discussion of that subject. In regard to her question about the Scriptural authority for the title "Reverend," as applied to ordained ministers of God, it is impossible to find room for all the answers received. The general impression of the writers seems to be that the title is only rightfully given to God, of Whom it is written, "Holy and Reverend is His Name,"—1's. cxi., 9,—and that it is giving His glory to a creature to apply it to a man.

And yet, when St. Paul says: "I magnify mine office," he is really glorifying God. He evidently thinks that to be an ambassador of God, sent by Him, is a far more honorable position than any merely earthly dignity. As for the statement made by some of our correspondents, that God "never delegated His honor to another," what then does our Lord mean by saying, "He that heareth you heareth Me; and he that despiseth you despiseth Me; and he that despiseth Me despiseth HIM that sent Me."—S. Luke x., 16. If you will look up the context of that mysterious and tremendous assertion, you will see that it was not addressed to the Apostles (though the same statement had already been made about them,—S. Matt. x., 40), but it was part of the commission given to the seventy disciples who were sent "before His Face into every city and place, whither He Himself would come."

One of our correspondents objects to the usual token of respect being used, saying: "A minister is not any more holy than any other saint." But the title of honor has absolutely nothing to do with the question of personal character; it simply shows that God's ambassador is treated with the respect due to one who is sent by the King of Kings. Any messenger sent by King Edward would be treated with honor here in Canada—I hope. At least, any failure in respect to him would be a sign that we either did not honor our Sovereign, or did not acknowledge the commission of his ambassador. The traitor, Judas, was one of the men sent out by Christ, and to him, as well as to the others, these words were spoken: "He that receiveth you receiveth Me, and he that receiveth Me receiveth Him that sent Me."—S. Matt. x., 40.

The ministers of God are constantly called "elders" in the Bible, and that title of respect is much the same as the modern "Reverend." The Bible authority is, however, seldom required for such titles as "Mr., Mrs., Esq., etc.," yet few people refuse the usual expressions of civility on that account. In fact, we are bound to follow the customs of our country, to a considerable extent, translating the spirit of an injunction into its modern equivalent. For instance, because the Bible commands men to remove their "shoes" on holy ground, they don't remove their shoes, but their hats—in this country. In some countries, travellers are expected to remove their shoes even yet, and there they do it as a matter of course.

Another of our readers asks a question about the life after death, whether a soul in bliss "will miss dear ones who are shut out." Our Lord, in the parable of the rich man and Lazarus, shows that even a soul which has grown hard, by years of selfishness, will after death be eagerly anxious about the spiritual welfare of brethren out of sight. Is it likely, then, that one who has been living a life of love should forget dear ones? If death could kill love, it would indeed be the King of terrors. "But how can a loving soul rejoice while a loved one is in pain?" God only knows. He, Who is Infinite Love, is also the God of Joy. Although the souls He loves are suffering. Surely it can only be because the suffering is itself a proof of undying Love. If anything can destroy God's perfect love for a soul He has made, then His Name is not rightly called "LOVE," for His love must have limits. A soul that really trusts Him can trust all dear ones in His care, also, knowing that He still loves them and is always doing what is wisest and best for them. Is God's love weaker and poorer than the love which He has poured into the heart of a mother

for a wayward child? Is He less willing to save to the uttermost?

"I would help him, but cannot, the wishes fall through. Could I wrestle to raise him from sorrow, grow poor to enrich. To fill up his life, starve my own out, I would— . . . Oh, speak through me now! Would I suffer for him that I love? So wilt Thou—so wilt Thou!"

Another correspondent asks about the possibility of reaching a soul through prayer, and says: "If I pray to Him to reach this wanderer, and trust Him, will He do the rest? Can it be possible that God can save this precious soul by my asking? If I pray to God for my friend to become a Christian any time before he dies, I'll have patience to wait that long. Oh, if I thought that one prayer would be answered, I'd die happy to-night."

The power and value of intercessory prayer is a great mystery. We know that God loves any soul we may be praying for, with a love which drowns our poor affection as the sunlight drowns a candle's flickering glow, we know that Christ ever liveth to make intercession for each of us; and yet our prayers are mighty to help—if offered with and through those of our Elder Brother. They may be very poor and imperfect, and yet they are never overlooked or despised when offered "with the prayers of all saints upon the golden altar" before the Throne of God, because "much incense"—the prayer of the Great High Priest—is mingled with them.—Rev. viii., 3, 4.

If your friend should die, apparently unrepentant, what need is there for despair? The mother of the penitent thief might have thought her son had died impatient, if that wonderful appeal from the cross of shame had only been whispered from the heart of the dying man into the ear of his listening Father. How many souls, who show no outward sign of trust in Christ, may have heard His voice saying: "To-day shalt thou be with Me in paradise." The seeds of holiness may have taken root in the soul, even though men know nothing about the hidden growth—and there is all eternity ahead. Do you think souls cease to grow when they step out into God's nearer presence? If "to depart and to be with Christ" means to cease growing into His likeness, then I should think it would be far better to stay here, where progress is possible. Why did our Lord, after His death, preach to "spirits in prison"—spirits "which sometime were disobedient" ages before—(1 St. Peter, iii., 18-20)—if they were in a hopeless state? St. Peter says that there was a good reason for preaching the gospel "to them that are dead, that they might be judged according to men in the flesh."—iv., 6. Of course, we know that we are on probation in this life, while the opportunities which may lie before us after death are not revealed. It is only at our deadly peril that we treat carelessly the offer of salvation held out before us here. God is not mocked—we must expect to reap the harvest which we are sowing in ungodly or in prayerful fashion. But those other souls are not ours to judge. They belong to the son of Man, Who loves them. We are not to doubt His love, nor to despair of His power. Neither are we permitted to question the wisdom of His dealings with any soul. "We can always trust."

I cannot tell you how prayer can help the friend you long to see strong and the noble—but I do know that it is the strongest power for good that any of us can use. I know that I should as little expect to do any good through this weekly chat without praying over it, as I should expect to have a harvest if I put seed into the ground and God failed to breathe into it His quickening, reproductive power. If we do our small and unimportant part, trusting "the increase" to higher hands, there is little need to fear that God will fail to do His mighty part. But don't be satisfied with asking only for the eternal safety of your friend. God wants you to "make your petition deep." Let us apply Bishop Brooks' advice to our intercessions for others. He says:

"Pray not for crutches, but for wings! Oh, do not pray just that God will keep

you from breaking down, and somehow, anyhow, help you to stagger and stumble through; pray for His light and life to come and fill you, that you may live like Him; that you may tread temptation under foot, and walk across it into holiness; that you may be enthusiastically good; that you may shine forth with His light on other lives."

Use that prayer also for your friend—and expect God to grant it in all its greatness.

DORA FARNCOMB.

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on.]

I was looking over some pictures of very pretty houses accompanied by some very convenient plans this morning, when the thought came, "What about those who cannot have a new house this summer, and never expect to have one?" For 'here are many such. Dame Fortune is a very fickle lady. She does not smile on all alike, and many who try hardest never seem to find the secret of how to win her favors.

Of course it would be delightful to have a new house, to plan for it, and then see one's dreams taking form in brick and stone and mortar. Still more delightful would it be if one were able to furnish the new house prettily with all the delightful things that are now to be found if one looks long enough. There is a pleasure in possessing pretty things, especially to a woman, whose artistic sense is usually rather strongly developed; and it is well that this taste exists, and that, under present conditions, so many are able to gratify it. The money so spent is sure to benefit others beside the final possessor,—the merchant, the salesman, the manufacturer, the agriculturist or stockman from whose domain the cotton or wool was first obtained.

But if we cannot have the new house or the pretty new furnishings, there is really no reason for caring much, especially in the country. I have often thought that life in the city would be much less pleasant without pretty things in the houses, because, you see, there are not so many things to make up for them. You can't see the sky, really, and you grow very tired of brick walls. The parks are often fine, but then you usually have to go a distance to see them. In the country it is different. You have only to step outside to see the whole dome of the sky, with its shifting clouds, its dawns and sunsets, things infinitely more beautiful than anything that man can make; and you have miles of green grass, and vistas of trees beside. If you are wise, too, you will have some flowers about your door, and trees not far from the house, and vines clambering over everything that would otherwise be ugly. Even in winter you may have about you the evergreens, the red-twigged dogberry bushes, and barberry and brier, with their red berries.

Indoors, too, there may be an air of comfort and refinement, no matter how plain the furnishings. Refinement does not depend in the least upon wealth—indeed, wealth may pave the way to the very opposite, as the vulgar, garish taste displayed in many a home where money shouts aloud on every hand, bears evidence,—but nothing but refinement can ever speak from the plainest home where cleanliness reigns, where there are plants in the windows and books on the shelves.

I often wonder that more people do not realize the value of books from a mere furnishing standpoint. Now, I know you will not misunderstand me. I know you will not imagine for an instant that I mean that anyone should buy books merely as furniture. What I do mean is that nothing can give the air of "homeyness," if I may coin a word, that books give; and that, if once you learn to care for reading, no other in-

vestment can begin to give you as much pleasure.

Give me a room with a fireplace in it, a table, some rocking chairs, books, and a few plants, and I care little what else you take away from it. A few dollars will supply all the rest that I really want; paint for the floor, short scrim curtains for the windows. I should like, too, perhaps, a rag rug in old blue or olive green, but that costs so very little. By the way, why do not farmers learn to build fireplaces for themselves? All the new town-houses of the better class have them.

Some people seem to have a mortal terror of spending any money in books, as though that were wasting it; and yet books cost so little, comparatively, and may be collected with quite long intervals between. If people only could realize how much an even fairly well-stocked private library could mean to them,—even twenty volumes of the right kind!—how many hours, otherwise gloomy, it could pass pleasantly away; how great the richness it could bring into life; how much ease in conversation it could ensure on chance meetings with people who know! Meet a stranger who has read the same books you have, and immediately you are on friendly ground, and your lips are unsealed. Above all, think of the enlightening of your own mind by the opening of so many doors as these books afford. You are no longer tied down to your own dooryard, or to the happenings in your own neighborhood; you are kin to all the world; you have interests everywhere. The world is yours if you will, but you will never encompass it all; there will be enough interesting things to last you all your life.

I hope to live right in the country again some day, and sometimes I plan the books I must have; indeed, I have started my library. So far it is chiefly literary, but if I were right in the country I think I should choose the nature books first, the books with colored illustrations of birds, wild flowers and weeds, and butterflies. They cost more than others, perhaps, but they open a door to the world closest at hand. Then I should buy some little volumes by John Burroughs, and thence off into many new fields of literature and art, and home economics. Possibly many would place the home economics first, and truly some would need to place it so.

A boy came into my office yesterday to look at some of the bird books,—a Normal School student he is, and such an enthusiastic lad,—some lucky school will have him for teacher before long. He has a passion for nature study, and I just thought when listening to his description of some of his books, and of his tramps about his home, that a real interest in, and a little understanding of, the things of the fields and woods is all that is necessary to make a great many boys and girls in love with the country. "It is just paradise around home!" he said.

Now, I must stop this ramble. Please forgive if I have crowded someone out this time.
DAME DURDEN.

Removing Liquid Soot.

Dear Dame Durden,—This is the first time I have written to your paper for help. I would like to know how to remove that black liquid from a chimney on a pair of cream linen lace curtains? Stovepipes had been removed, but continued heavy rains soaked them with it.

I wish to thank you for your many helps, but sweetest of all for the "Quiet Hour." Kindly don't think of giving this writing up, as I think you know my need week by week.

My people have taken "The Farmer's Advocate" almost continuously since it was founded, and it's just as welcome in our home to-day.
READER.

I have just telephoned a druggist about your curtains. He says it will be a very difficult matter to remove the stain, as it means the removal of both creosote and carbon. Washing with a strong washing soap will take out the creosote, but the carbon is insoluble. Perhaps some of our readers have found a method?

I will pass your verses on to Hope—Hope is not Dame Durden, you know. I am sure she has no intention of giving up writing the Quiet Hour, nor would "The Farmer's Advocate" like to let her go if she wished to.

Travelling Hints.

Dear Dame Durden,—Could you kindly give us a few hints through your paper on what to do and what not to do when travelling? We all enjoy your paper very much, and wouldn't do without it.

LUCY B. M.

You do not say whether you are going to travel by water or by land, but in either case, if you are out for a good time and do not want to be worried, do not make the mistake of taking too much luggage. I know some people who have been more than once to Europe. The first time they took all they thought they would need. The result was that on several occasions they were obliged to wait two or three days, where they did not want to stop, for trunks; once the trunks went astray altogether, and then, of course, there was a peck of trouble. Now these people "travel light," with light straw suit-cases, and as few articles of clothing as possible. Indeed, people who travel much never take much; to do so is usually a sign that one is "out for the first time."

A well-fitting suit of some dark color, with a silk blouse (rajah is the most serviceable) to match, is a necessity. A net waist may be taken to wear for evenings, and possibly a silk skirt like the blouse, which will give a silk suit on occasion. If going on the water, you will need a heavy wrap or coat of some kind, as cold winds often blow, and one must be prepared for them. Most travellers on the ocean add a steamer rug. Take just enough underwear to "keep clean with" easily,—many long-headed women now have underwear and night-dresses of pongee for travelling, and wash the pieces out when necessary, leaving them in the stateroom to dry. Pongee is very light to carry, is easily washed, dries quickly, and may be worn on a pinch without ironing. Now, if there is any room left, you may tuck in an odd shirtwaist or two, and you will get along nicely unless your trip is too long. For your head you will need a close sailor or panama, without much trimming, that can be worn with a veil, and a more dressy hat to wear to dinner or when "doing" the towns.

Now, for other things, your own sense of what is ladylike will help you through. A quiet manner and voice is, of course, indispensable, and a promptness to do the little favor that may come in one's way, or to acknowledge graciously any that may be done for one.

In regard to conversing with strangers who may be encountered by the way, we quote Emily Holt, the author of "Encyclopædia of Etiquette": "When a long journey of some days is undertaken, and a masculine passenger finds it in his way to frequently serve a woman or women who are travelling alone, he can expect that they will treat him with a pleasant friendliness, eventually tell him their names and ask to know his in return. However, during a run of a few hours he must not attempt to 'scrape an acquaintance' with any woman travelling alone."

While travelling, young women very often, nowadays, patronize the Women's Christian Associations, which are always safe stopping-places. If a hotel is chosen, it is first necessary to sign the register, upon which one's room is assigned. About an hotel one must be very chary about entering into conversation with strangers, but on long steamship voyages such conventionality is usually done away with, and passengers converse together quite freely.

The matter of tipping usually presents difficulties to the novice, and, indeed, this is an important subject, since failure to tip usually means very poor service. The usual tip to the porter on a train is ten cents for carrying one's luggage. In the dining car a tip representing ten per cent. of the cost of the luncheon or dinner is supposed to be quite sufficient for the waiter, although ten cents has become almost an established amount. In the hotel the elevator boy, bell-boy, and others who do any service, all expect tips varying in amount according to the amount of the service and the length of time spent in the hotel. "After a stop of over 36 hours, for example, the porter and chambermaid can be given 25 cents each, the waiter 50 cents and the elevator boy 10 cents. After a sojourn of a week the chambermaid will expect 40 or 50 cents,

etc., the porter's fee remaining at 25 cents."

On board a steamship the tip tariff is fixed, at the rate of \$2.50 all round, to the stewards and stewardesses, but if one is ill and requires much attention more is expected by the one rendering the service. A traveller who gives no trouble at all may reduce the fee to \$2 to each of the stewards and stewardesses who render service.

Now, I do not know if these hints cover all the things you want to know. If not, write again, please, and ask questions explicitly.

Packing Eggs—Bread Mixer.

Dear Dame Durden,—I see a great many inquiries for ways of packing eggs, and as my way is very simple and inexpensive, I will send it along. The lady who told me this way of preserving them always packed them down as soon as they came down in price in the spring, and at Christmas they would be like fresh eggs. Simply wrap each egg snugly in paper, so as to exclude the air, and stand little end down in a basket. Hang the basket up in some cool place. I hang mine in the cellar.

I think the protection of birds a good idea. The Institute had better take it up. I, for one, will not wear a bird on my hat. I think it would be an insult to a bird to be perched on some of the hats they are offering for sale this season.

In answer to Auntie's question about breadmakers, I will just say that I have used one for some years, and would not care to do without it for double the cost. Some people expect them to make good bread, no matter how poor the ingredients, but that is not what they are

fresh meat, so as to keep it fresh for using at any time:

Curing Pork.—To 100 lbs. meat allow 1 qt. salt, 3 cups water, 1 lb. brown sugar, 1½ ozs. saltpetre, 5 ozs. black pepper. Put on stove and boil ten minutes, then rub all over meat; spread out on a table or board. Do not let each piece touch. When dry hang up. Perth Co., Ont. FARMER'S WIFE.

The dairy editors say to make your butter carefully, washing very well to take out all traces of buttermilk, and salting with not more than 1½ ozs. to the pound. Pack very closely in crocks, or boxes lined with paraffine; lay butter-parchment, cut to fit, over the top; cover with a layer of salt; put on lid, and keep in a cool place.

Many thanks for the meat-curing recipe.

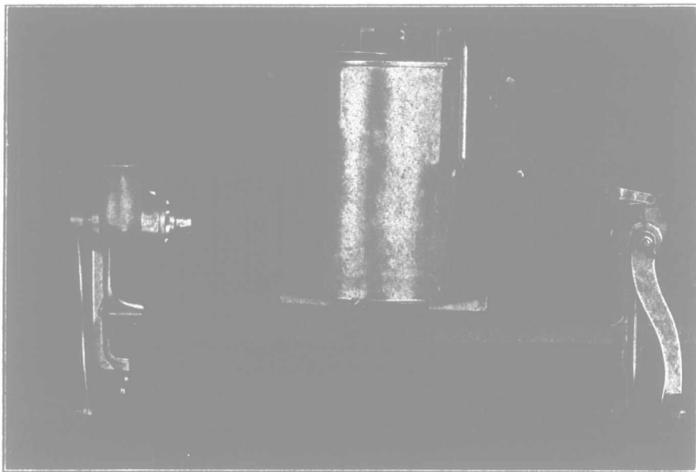
Azaleas.

Would you tell me how to treat Azaleas? How often do they flower a year? Wishing you and the Nook every success.

A NEWCOMER.

Middlesex Co., Ont.

Prof. Bailey writes as follows in regard to the Azalea: "The best soil for Azaleas, if grown in pots, is a sandy compost of half peat and half leaf-soil, with an addition of good fibrous loam. Plant firmly, and give very good drainage. During the summer they should be kept in a cold-frame, or in the open in a sheltered spot, with the pots plunged in the soil, or planted out in prepared beds, where they make a very vigorous and healthy growth. They must have plenty of water, and free syringing during the hot months. Repot and transfer to the greenhouse in September. The natural flowering time is from April to



Two Useful Utensils.

Bread mixer and meat grinder.

for. They make good bread more easily and quickly than the old way, but you must have good yeast and flour if you expect good results. Mine is the Universal, No. 8, and cost \$1.50.

OPHELIA.

You will probably enjoy the following. I clipped them for your especial benefit, Ophelia:

To the suffragettes: Is a woman who puts her head in a waste-basket qualified to vote?—[New York Tribune.

A New York milliner declares that she has never seen a suffragette wear a fashionable hat. This is a splendid compliment to the suffragettes.—[Chicago Record-Herald.

Packing Butter—Curing Meat.

Dear Dame Durden,—I am a constant reader of "The Farmer's Advocate," especially of the Ingle Nook. I have been helped a great many times, but have never tried until this time to help any one through the paper, as I have seven children, and do my own sewing and work, I do not have much time to play. I do my sewing for the winter in the summer, and for the summer in the winter. I would like a recipe, through Ingle Nook, how to pack butter in June for winter use—dry packing, not in a pickle.

I will send you a good recipe to cure

June, but in the greenhouse they may be had in flower from September to June. Against the red spider and thrips, from which Azaleas are liable to suffer if the air is too dry, free syringing with water is the best remedy."

Lankshire Lass's Recipe.

Dear Dame Durden,—Last year you published Lankshire Lass's recipe for potato syrup. I copied it off, and as she is unable to send it, I will gladly do it for her; she has my sympathy, and I hope she will soon be restored to health again.

Springtime has come again, and the scene about our Island now certainly is a busy one. The American Government is making a new channel for the ships that pass so frequently, so that those up-bound will not be compelled to meet the ones coming down in the narrow channel between Bois Blanc Island and Amherstburg. Much of this is rock, which has to be blasted with dynamite, and is then removed by dredges. In one section of the river an immense cofferdam of earth and rock has been built, and the water pumped out, leaving part of the river dry for a distance of over a mile. It is, indeed, interesting, as you may well imagine.

Potato Syrup.—Take enough little potatoes to fill a pot or kettle and with a

little brush scrub each one well and wash in several waters; then put them in boiling water. Have enough water to cover them, and do not let them boil until the skin breaks. Pour the water that they have been boiled in into a crock, let settle, and strain, then add enough light-yellow sugar to boil it into a thick syrup.

Nut Bread.—Four cups of flour, 4 teaspoons of baking powder, ¼ teaspoon of salt, ½ cup of granulated sugar, ½ cup of chopped English walnuts, 2 cups of sweet milk. Mix as you would biscuits, and let raise 40 minutes. Bake one hour in a moderate oven.

Bois Blanc Island.

The Nut Bread recipe sounds fine, Islander. Is no shortening needed?

Recipes.

Tribby Omelet (new).—Break 5 eggs into a bowl and add 5 tablespoons cold water, ½ teaspoon salt, pepper to taste; beat to a froth. Put a tablespoon of butter in frying-pan, and when hot (do not burn) pour in the eggs. Lift gently in places with a fork while cooking. Do not turn; simply fold over and serve.

Lunch Rolls.—One quart flour, ¼ cake compressed yeast, 1 tablespoon sugar, 1 tablespoon butter (softened), 1 teaspoon salt. First put 1 pint sifted flour in bread-pan, and pour over about 1 pint boiling water; stir in the butter, salt and sugar. When cool enough add the yeast, dissolved in ½ cup lukewarm water, and the remaining flour. Let rise over night. In the morning knead and roll out about 1½ inches thick; cut with round or oblong cutter; let get light enough, then bake 25 minutes in moderate oven. These are sweet, light and delicious. Remember that water used must be boiling.

Fried Mush.—Slice graham porridge left over into rather thick slices. Fry slowly with a little butter, and serve with maple syrup.

Prune Souffle.—To 1 cup stewed prunes, stoned and chopped, add ¼ cup sugar and the whites of 3 eggs, beaten stiff. Mix well. Sprinkle 1 teaspoon sugar over top and bake ten minutes. Serve with a custard made with yolks of eggs or with whipped cream.

Graham Cakes.—2 cups graham flour, 1 cup white flour, 3 cups sour milk or buttermilk, 1 teaspoon soda dissolved in a little water, 1 level teaspoon salt, 1 heaping tablespoon lard, 3 eggs beaten very light. Bake at once on a griddle.

Mock Pigeons.—Take bone from 2 filets of veal; flatten by pounding, and spread with seasoned crumbs. Roll up, bind with string, put in a covered pan with 2 cups water, and bake for 2 hours. When done season the gravy with pepper, salt and tomato catsup, and thicken with browned flour. Pour half of it over the meat, and send the rest to table in a gravy boat.

Mock Oyster Soup.—Four onions, 4 large potatoes. Cook in 2 qts. water until soft, mash fine, add 1 qt. rich milk, and season with salt and pepper.

With the Flowers.

Trumpet Vine.

For a number of years I have had a Bignonia, Trumpet Vine, and in all that time it has only produced a few meager blossoms. It grows on the end of a house, where it gets abundance of sun the greater part of the day.

Peel Co., Ont.

J. Y. M.

The Trumpet Vine (Bignonia radicans) is not entirely hardy in this northern part of the country, and although the vine may make fairly good growth and appear to come through the winter uninjured, the flower buds are usually more or less seriously injured, if not destroyed, hence scarcity of bloom. If you could protect the vine in any way, either by laying it down on the ground during winter and covering with straw or something of that nature, or by tacking matting over it on the wall to prevent exposure to warm sun during warm days in early spring, it would help very much to protect the blossom buds from injury.

O. A. C.

H. L. HUTT.

How We Learned to Stencil.

BY MARY P. BRADLEY.

(By kind permission of "Suburban Life.")

It was in a spirit of adventure, rather than with any fixed purpose, that we started to investigate our old barn, with its lofts, sheds and enticing doorways. But it was with a sudden appreciation of its thousand possibilities that, high up in the second story, we discovered a great loft which, when cleared of its venerable cart-wheels, poles and cobweb-draped boards and boxes, bid fair to make a good-sized work-room or studio.

We took possession at once, and spent the following days cleaning the old hand-hewn beams of a half-century's dust and grime, and dealing uncompromisingly with hordes of wasps and spiders.

By special invitation, the village carpenter was allowed to enter and employ his time cutting two small windows to the east, giving us a beautiful view of pastures and woodland, while below lay our apple orchard and row of prim, white hives. A sweep of air came as we opened the big door opposite on its creaking hinges, and looked west across the house and gardens.

But now that we had our studio, to what use should we devote it? We had

to send us two tubes. She left, and, after easing her conscience of the tubes, she might have resigned us to our own devices, quite forgotten. And, had she done so, our old brown-raftered room would doubtless be deserted now,—its fascination departing with its novelty and its spiders. But she did not. And the enjoyment, and the work of many happy days that have followed, will always remain in our minds as something of a gift from her, through her sympathy with the vague ambition of two girls.

In course of time,—a week at most,—we received from her an order for a pair of curtains for her daughter's room at school, and were flung in consequence into a state of excitement equalled only by our perplexity. What should we do, and what could we do it with?

We found the tubes of color, on examining them, quite as terrible as we expected—a shrill pink and a poisonous green. That was all we had, and, taking heart from the thought that at least they could not last, we mixed them.

The pink softened the green and the green subdued the pink; it was better than we had dared to hope. We cut from cardboard, with a sharp knife, a stencil of a little cabbage rose, quite formal in shape, and its bud. We bought soft cheese-cloth (our first outlay) and made a half-inch hem all around. Alternately we placed the rose and the bud on the curtain, and, using our stiff paint-brushes and our strangely-made colors, mixed with water, we rubbed the dye over the stencil. We worked very slowly and painfully with blotters under the cheese-cloth to keep it from running, and when the curtains were covered with the pattern we colored the little hems all around to make a dull-green border.

That was all—except that our backs were quite broken, and our brains reeling from the unwanted concentration. We have had a good many orders since then, and we have discussed the affairs of nations with the habitués of our studio-loft, the while shifting elaborate stencils and mixing complicated colors without a tremor; but the joy of creation has never come again in like degree to the making of those simple little rose curtains, which I am sure by now must have faded quite away.

Once felt, so felt nevermore.

Shortly afterward we learned that, during this interesting period of our lives, the world was already wise enough to know that naphtha mixed with oil-paint makes a practically indelible mixture, and consequently offers great scope for the kind of work we had in mind.

We learned also, from friendly and professional sources, that it was best to take out sufficient paint for the day's work and leave it on blotters to absorb all the oil possible. We learned, too, that it takes much patience and much despair before you can make the mixture of naphtha and paint stay on the spot designed for it; for, unless the brush is rubbed almost dry on a piece of cloth, it is prone to run, and so spoil many a curtain.

All this knowledge we had to acquire as soon as possible, for our friends and promoters, while we were yet dazed at having produced anything at all, were flourishing our little achievement in the face of anybody or everybody then en-

gaged in the decorating of a house. The next paralyzing moment occurred when we received inquiries in regard to our prices. What did we know of prices, forsooth? It was but another problem to grapple with.

We were then given by a humorous friend two volumes for double-entry book-keeping. I think there must have been a twinkle in that eye which we missed. For, as the only double-entry bookkeeping we had ever done dated back to our school days, and the one classic example with the barrel of sugar, we say all we have to say in the ledger, and press our stencils in the other. It's a nice book for almost anything.

To return, however, to the process itself. Little by little we learned to improve it in many particulars. We soon replaced the white Bristol-board with copy-press sheets, a cardboard with a glazed surface which does not absorb the moisture, and, consequently, break and ruin the stencils.

We felt that, as a stencil is of its nature very formal and somewhat crude, its possibilities are limited to simple and conventional forms, and, consequently, anything literal or realistic would be out of character.

After drawing a design, we trace it with a somewhat sharp point on the stencil-board, placing a blotter beneath, to make a more incisive impression. When the tracing is completed, we cut with a very sharp small-bladed knife along the impression. This must be done with great firmness and accuracy, leaving strong, narrow stencil separations. This careful cutting means much labor saved, if there are many curtains to be made from the same stencil, for stencils wear at the delicate joinings and easily break.

One writer on the cutting of stencils advises to use great care, as one slip of the knife will ruin the entire piece of work, there being no way to mend it. I am quite sure that, had this been the case, our business days would have been short indeed. As we always let the knife slip at least once on each stencil, we were soon forced to look about us for some practical device, in order to survive at all. We then found that thin mending tape applied to each side of the wounded work of art did very well indeed, and we could be as careless as we liked. This did not, of course, prove us first-class workmen, but it showed us to be at least sufficiently resourceful in invention, and time has mended our methods.

For beautiful and perfect cutting, we would advise any novice to buy, or at least study, the exquisite and delicate work in Japanese stencils—made of thin paper, to manipulate which requires considerable dexterity.

Once the stencil is cut, we apply it in whatever fashion we have in mind—as a border or an all-over—to the curtain already stretched taut on a large table (ours is a ping-pong table, justifying in this way its otherwise cumbrous existence). It is well to have blotters under the curtains, to prevent as much as possible the tendency of the paint to run. The stencil should be fastened securely with thumb-tacks before an attempt is made to paint over it. The brushes should be of varying sizes, according to the delicacy or boldness of the work, and should be held firmly and scrubbed hard. The solution, preferably naphtha, as the odor is less offensive than that of gaso-

line, should be as wet as possible and well mixed, to avoid paintiness.

In making borders for the curtains, a long straight-edged piece of stencil-board is pressed tight with the fingers, as well as with thumb-tacks, along the line of the hem. Then the brush, fairly dry, is rubbed quickly and lightly along. This makes a clean-cut outline, and is very effective with some arrangements and designs. Borders should be done on both the right and the wrong side of the hem, if the color has at all gone through from the right side; otherwise, the effect is spotty and far from attractive. As the double application of paint tends to make the borders stiff, the solution must be put on as lightly as possible.

The curtains may be pressed, after drying at least twenty-four hours, with a moderately hot iron, but it is our experience that they should hang nearly a week in an airy place before they are used,—unless, to some eccentric customer, the odor is agreeable.

In washing the curtains, or covers, etc., the water should not be too hot. Moderate care should be taken not to rub a coarse soap on the design itself,—otherwise the process washes with great success.

Fine cheese-cloth, unbleached muslin, cotton and linen scrim—in fact any soft hanging wash fabric—lends itself to this



Putting on the Color.

She is painting through the "holes" of the stencil. The stencil itself is not very evident here.



Cutting the Stencils.

both studied designing and possessed a common interest in old furniture and house decorations. Making experiments in this field, we had frequently wished for curtains and hangings that would go with our schemes of decoration, and had felt, as probably many have felt before, the lack of thin, transparent materials, simple in design and with some claims to durability. For, through the large, generous windows of our country houses, the sun beats uncompromisingly, and takes the heart out of most color, and we see a second summer begin with pale and faded draperies or sadly depleted purses.

Here, then, was a definite object,—but how to go to work to realize it?

One day we had a caller, who braved our trapdoor and uncertain ladder. On hearing our difficulties, she suggested trying some of the "Easy Dyes" which lure the credulous in department stores, and offered with ready interest and sympathy

ing this interesting period of our lives, the world was already wise enough to know that naphtha mixed with oil-paint makes a practically indelible mixture, and consequently offers great scope for the kind of work we had in mind.

We learned also, from friendly and professional sources, that it was best to take out sufficient paint for the day's work and leave it on blotters to absorb all the oil possible. We learned, too, that it takes much patience and much despair before you can make the mixture of naphtha and paint stay on the spot designed for it; for, unless the brush is rubbed almost dry on a piece of cloth, it is prone to run, and so spoil many a curtain.

All this knowledge we had to acquire as soon as possible, for our friends and promoters, while we were yet dazed at having produced anything at all, were flourishing our little achievement in the face of anybody or everybody then en-

process. Heavy linen is not so satisfactory. Owing to its fine, hard twill, it does not readily absorb the dye.

We find, in the matter of color, that the simpler the palette, the better it is for durability, as some colors are not fast. Most combinations can be made from the following list: Prussian blue, transparent gold ochre, chrome-yellows, burnt and raw sienna, crimson lake, carmine and vermilion and pink madder.

It is certainly advisable to clean carefully the front and back of the stencil after each application, otherwise the colors will become blurred and the work blotted. The brushes themselves should be kept in condition by cleaning them each day in naphtha.

A palette knife, cutting knives, a small whetstone and scissors for reaching in to clip clean corners, are indispensable tools; and among our latest acquisitions is a harness-punch, which makes round holes of different sizes. This fills a long-felt want, as a small round hole is undoubtedly difficult to cut free-hand.

And so it is that our stock of utensils, though still small, grows to meet some new demand, and our loft has assumed quite a businesslike air.
As naphtha is exceedingly volatile and inflammable, do not have any fire or lighted lamps in the room while using it. Keep windows open.

The Roundabout Club

Our Literary Department.

Answers, Study IV.—Rabbi Ben Ezra.

[Kindly refer to issue of April 8 when reading these answers, submitted by our students on Study IV.]

(1) "Uncouth—usually a term of approbrium, signifying 'awkward' or 'ungainly'. Here it simply refers to the rude efforts of youth."

"Uncouth" is here used in the unusual sense of 'lacking experience' or 'unskilled'.

"Uncouth"—Better youth should make occasional mistakes, or do things awkwardly, than not to strive, or to accept the foundation of others.

"Tempt"—try, put to test for proof, as 'God did tempt Abraham.' Might also be interpreted, as so many concluded, as "attempt," or "strive."

"Named"—The idea is that by striving after the Good and Right and Infinite, we make it a part of ourselves; hence the word 'named' would mean something akin to 'possessed'.

"Named"—is used in precisely the same sense as by St. Paul: 'Let everyone that nameth the name of Christ depart from iniquity.'

Other words mentioned in connection with this question were "crowded," here signifying "troubled" or "disturbed" (especially in regard to our faith), and "making," here meaning, as one student expressed it, "something akin to 'knowing,'" and another as "power to make," 'ability to act' for one's self, as in 'It will be the making of the boy.'

(2) (a) "As thou call'st . . . own," is used for the sake of emphasis. One may call his hand his own without fear of dispute. It is enough if he be as sure of what is Right, Good, and Infinite,—"with simple, perfect faith." Another student comments: "The poet may particularize here on account of the controversies regarding the word Infinite. It has been maintained by John Stuart Mill, and others, that 'we have no positive idea of the Infinite, that it is only a negative of an end or termination.' Another class asserts that the Infinite exists as a positive conception in the human mind."

(b) "Severed" and 'announced' both form completion of the verb 'be.'

(c) "The word 'whom' might be inserted.—Was I whom the world arraigned or were they whom my soul disdained right?"

(d) "Fancies . . . escaped": Flitting, fugitive images in the mind,—images so ethereal that they were never crystallized into thought, so were never spoken or written. A beautiful metaphor, which calls to the mind a brilliant insect winging through the sunlight, momentarily detained by a silky web, but breaking through and disappearing from 'our ken before we have more than a fleeting glimpse of its grace and vividness.'

"Tennyson voices the same sentiment when he says: 'And I would that my tongue could utter, The thoughts that arise in me.' We cannot always frame our thoughts, picture our fancies, or voice our feelings in words. It seems to us at such times that language is inadequate to express the height or depth of our feelings."

Other students quote:

"To mingle with the Universe, and feel
What I can ne'er express,
yet cannot all conceal."
—Byron.

"The song and silence of the heart,
That in part are prophecy, and in part
Are longings wild and vain."
—Longfellow.

"Thoughts that do lie too deep for
tears."
—Wordsworth.

widens, he sees that men as wise and good as he 'shun what he follows,' 'slight what he receives.' His confidence in his own wisdom is shaken, yet he is unready to accept the verdict of those others. Thus the need of an arbitrator arises. Hence the question."

(4) "Vulgar mass"—Work of any kind, no matter how menial, so long as it calls forth honest effort, is ennobling. The work in itself amounts to nothing; it is simply a 'vulgar mass.' We are not rewarded solely for the work that we do in this world.

Those who, apparently, accomplished nothing, but have honestly and bravely worked well, even in the face of discouragement, may be far more deserving, or at least as much so, as those who have accomplished great things."

"The poet, in referring to 'vulgar mass,' called 'work,' sums up all work which the people about us can see and test. Any casual onlooker can appraise acts which have concrete or evident effects, but these are not the whole of what is summed up in our eternal account. Much that the world never dreams of, that even our intimates do not deem us capable of, that we ourselves do not place to our credit, is valued by God for us, more than what 'took the eye and had the price.' The soul alone discerns the fine fibres of soul."

"He uses these terms to represent low standards." "Vulgar mass," 'low world,' 'world's coarse thumb,' mean that the work which is seen, on which the world can lay its hand, and measure, and pass sentence, is not that by which God judges a man."

One student read the commercial idea even more strongly into this. Her interpretation is worth reading: "The 'low world' here mentioned is the merely money-getting world, without sentiment or motive but that of accumulating riches,

a world akin to the 'low kinds,' 'poor and finite clods, untroubled by a park,' a world that judges man solely by his value as a machine, useful for 'turning out work that will command a price. And this is the 'work' spoken of by Browning, with contemptuous quotation marks—a 'vulgar mass,' a work without soul, well done, but for the money, and not from principle. Even by his noblest work, man cannot be wholly judged (by man—Ed.), much less by the daily drudgery of daily fight for bread. The most discerning cannot see in his work man's highest aspirations, his true worth, much less will they be felt by the 'world's coarse thumb and finger,' hardened as they are past all delicate touch, by continual grasping of gold, in 'wretched and wretched ambition and dispute for dust.'

The use of the word "thumb" here is interesting and suggestive. The significance of the thumb has aroused much attention from psychologists, educationists, etc. We shall try to give a sketch of this in some issue of the near future.

Still one more answer: "World's coarse thumb"—This suggests tyranny. Fashion and wealth, which exert such influence and power in the world, are exacting tyrants. Their devotees come under the weight of their thumb and find a crushing, selfish, unrefined toll is exacted."

Two or three made the great mistake of thinking that Browning, in Stanzas XXIII, XXIV., refers to the "masses," the "common people." Browning could never sink to such a narrow view as that. He knew, as every thoughtful man must know, that the low level, the "coarse thumb," the low, grovelling nature, may exist in a king on the throne; and that the poor old woman, perhaps washing for a living, might be of the salt of the earth.

(5) Five essays have been selected as best. Two of these are given below; others will follow.

Rabbi Ben Ezra.

STANZAS XVIII. - XXV.

Essay 1.—St. XVIII: The destiny of finite beings is fulfilled, if, day by day, they closely follow the Great Exemplar. We, with our little understandings, our growing, learning souls, may falter by the way; our lack of insight may cause the final outcome to be obscured to our sight; but if, in spite of souls unskilled in foreseeing ultimate issues, we stumble on, satisfied to learn from the Master-Craftsman, by littles, according to our capacity, and careful to use as wisely as we can His great lessons, we have done what is required of us.

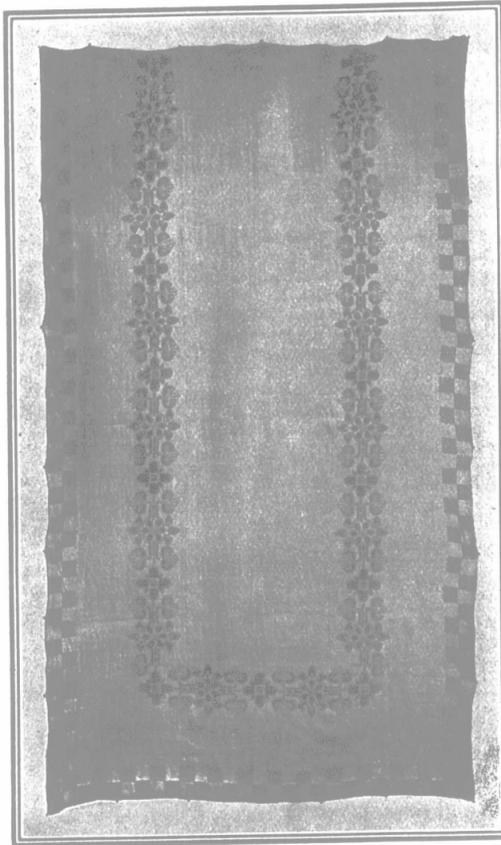
"The life so short, the craft so long to learn,

Th' essay so hard, so sharp
the conquering."

Chaucer says in Canterbury Tales: The Assembly of Foules.

St. XIX.—So, inexperienced youth should not rest in his ignorance and lack of dexterity, but should strive toward that fuller, wider life of soul and skill of hand which age should enjoy; age, which, after the buffetings of life, should be content to look back on a life well lived. And with anticipations of higher perfection should he await death, with no forebodings, as in early life he calmly awaited the period of age.

St. XX.—Now is the time of ripe judgment, born of years of intimate relation with the Spirit of the Creator; a time when, with unwavering discrimination he can indicate the Right, the Good, the Infinite. He knows their marks, their very essence, as certainly as he distinguishes his own hand from that of another—without a possibility of doubt. This absolute soul-knowledge—beside which intellectual power is a puny weakling—Dr. Bucke, in his "Cosmic Consciousness," names as



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a possession of all the great world-leaders: Buddha, Mahomet, and—pre-eminently—Jesus Christ, who was altogether divine. We, having passed through the formative period of simple consciousness, and self-consciousness, attain in later life a consciousness which is informed with a supreme knowledge of the cosmos, akin to that of God, free from any element of doubt or indecision. "Old things have passed away." "By the invasion I lay passive to, in rushed new things, the old were rapt away."

St. XXI.—This absolute soul-knowledge it is which severs great minds from small. Between mere intellectual power, based on the phenomenal, and thus fallible, and this rich maturity of spirit which assimilates the hidden principles of things, and satisfies all that is highest in us, there is a "great gulf fixed." The poet presents most dramatically the difficulty of judging as to who is living the true life.

"Was I, the world arraigned,
Were they, my soul disdained, right?"

St. XXII.—As diverse as individuals are the estimates of the real worth of our loves and hates, our tastes and our pursuits. The nature-lover is moved to fervor by the grandeur of Niagara Falls, but another visitor complains that there is nothing there to see, "Nothing but the water; no merry-go-round—nothing!" Over and over again is this being repeated; one removes his shoes in awe and reverence; others "stand round and pick blackberries." In brain and brawn they appear equal; the soul is what makes the difference. Hence, we must not judge by the outward. Our souls must believe that those matters which lift us above the material and keep us in remembrance that "man has Forever," are right.

St. XXIII.—The world does its work and receives its price, appraises all according to its own calibre, lays its hand upon things which are on its own level and [XXIV.] approves them. But the great sum of our lives is made up of what is too fine for its judgment, instincts, purposes, [XXV.] thoughts, fancies, possibilities, unknown or unappreciated virtues: these, all in the ger., seen by none but God, Who implanted these seeds of "the Right, the Good, the Infinite," in our souls, and Who waits for the harvest.

As Burns said to the "Unco Guid":
"What's done we partly may compute,
But know not what's resisted."

To use Browning's own metaphor: God knows the possibilities of the clay, and shapes from a priceless pitcher.
—Jer. and Isaiah.

Essay 2.—Rabbi Ben Ezra is like a marvellously-woven tapestry of rare and intricate pattern. Shimmering threads of thought forming here a bud, are woven over by others, to reappear there as a full-blossomed rose. Back across its figured texture we find, "Should not the heart beat once, 'How good to live and learn?'" And six fair line-petals form our flower. "For more is not reserved for the tool's true play." This is what it is to live and learn. Each day to the worker brings its lesson. The great and wise man will learn it and put it into practice, thus building gradually a fair and sure foundation of learning to be finally crowned by age's wisdom. In the last three lines of Stanza XVIII. is embodied a thought on which books have been written. Ruskin has said, in effect, that from only those who are living practically useful lives can a lesson of the mystery of life be learned, and learned only by joining their usual labor. "Here (in youth's strong years), work enough to watch the Master work." To "those that dig and weave, and plant and build," workers in all materials, if they keep their eyes and ears open, their minds awake, is given to see in nature, in their separate fields of labor, something of the Master's methods of work, by which they may improve their own. To none but earnest workers is the mystery of life unfolded.

Here the thread of thought in St. XXII. reappears (St. XIX.), in the commendation of youth's natural enthusiasm for making discoveries, the crude but honest efforts of the young to be pathfinders, ambitious, to lead the way into new fields of labor with new methods of work, and equal commendation of the

quiet wisdom, the mild outlook on life, the calm waiting for death, of the aged, unfitted as they are, by physical weakness, for exciting, strenuous life.

"Enough now"—in middle life, with full strength, unhampered by youth's indecision or weakness of age—"if the Right and Good and Infinite" attributes of God, and, therefore, to be believed in with implicit faith, are recognized here as being as real and sure as our possession of our own hands. Here, in the middle life, it is enough; no need to listen to the many who, with multifarious advice and cramming of knowledge, try to hasten youth's development, and in so doing leave no time for thought or originality, as if a chrysalis could, by restless rolling about and fretting in its cocoon, turn itself into a butterfly!

But in age, the rabbi, who is speaking, prays that there may be determined for each his life's worth; may time have proved the greatness or meanness of contemporary lives, that he may know whether he was right when, called to answer in the world's court the world's charges, he contemptuously defied his adversaries.

Here in the present, though, who is to act as umpire for the disputants? The rabbi stands alone against ten, who, with equally sound faculties and physical powers, totally disagree with him; whose likes and dislikes are in direct opposition to his. Instead of weakly following them, knowing that all human judgment is at best mere conjecture, he asks in perplexity, "Whom shall my soul believe?"

Not by the work adjudged good by the money-making world because it brings gain, can a man's worth be reckoned. This world, from its low level, is skilled in valuing articles of commerce, but these products of toil are not the measure of a man. They show nothing of the aspirations that failed, longings unfulfilled, inspiration flashes that faded, and thoughts that fled before they could find expression in word or deed. Of all these things the world of mammon knows and cares not; and of them the busy life to which they come may only be only semi-conscious. But every emotion is taken account of by God in His weighing of the human life, for, as the potter knows with perfect understanding the nature and possibilities of his clay, though the world sees only the finished surface of his vessels, so God knows, as the world cannot know, the work of His hands.

The Golden Dog (Le Chien D'Or.)

A Canadian Historical Romance.

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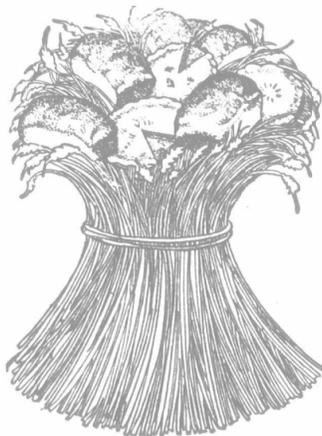
CHAPTER XVII.—Continued.

"I am a simple quail," thought he, "to be caught by her piping. Par Dieu! I am going to make a fool of myself if I do not take care! Such a woman as this I have not found between Paris and Naples. The man who gets her, and knows how to use her, might be Prime Minister of France. And to fancy it—I came here to pick this sweet chestnut out of the fire for Le Gardeur de Repentigny! Francois Bigot! as a man of gallantry and fashion, I am ashamed of you!"

These were his thoughts, but in words he replied, "The Lady of Beaumanoir is not my wife, perhaps never will be." Angelique's eager question fell on very unproductive ground.

Angelique repeated the word superciliously. "Perhaps! Perhaps!" in the mouth of a woman is consent half won; in the mouth of a man I know it has a laxer meaning. Love has nothing to say to 'perhaps'; it is will or shall, and takes no 'perhaps,' though a thousand times repeated!

"And you intend to marry this treasure-trove of the forest—perhaps?" continued Angelique, tapping the ground with a daintier foot than the Intendant had ever seen before.



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"There is no sport that my daughter enjoys more than playing tennis. She organized a club last summer, and the young people had such good times with their practice games and at the tournament which they had at the end of the season that she didn't care to go away on a vacation.

"All the girls were planning to have new skirts for the tournament—but Alice—my daughter, had a Diamond Dye party at our house instead, and they took turns dyeing their old skirts. They had such fun during the process of changing the colors, and were so happy over the way their skirts looked when they were dry and pressed, that I feel very sure that it will lead to their making other experiments with Diamond Dyes."

MRS. ERNEST EASTMAN, Harrisburg, Pa.

Important Facts About Goods to Be Dyed:

Diamond Dyes are the Standard of the World, and always give perfect results. You must be sure that you get the *real* Diamond Dyes, and the *kind* of Diamond Dyes adapted to the article you intend to dye.

Beware of imitations of Diamond Dyes. Imitators who make only one kind of dye, claim that their imitations will color Wool, Silk or Cotton ("all fabrics") equally well. This claim is false, because no dye that will give the finest results on Wool, Silk, or other animal fibres, can be used successfully for dyeing Cotton, Linen, or other vegetable fibres. For this reason we make two kinds of Diamond Dyes, namely: Diamond Dyes for Wool, and Diamond Dyes for Cotton.

Diamond Dyes for Wool cannot be used for coloring Cotton, Linen, or other Mixed Goods, but are especially adapted for Wool, Silk, or other animal fibres, which take up the dye quickly.

Diamond Dyes for Cotton are especially adapted for Cotton, Linen, or other vegetable fibres, which take up the dye slowly.

"Mixed Goods," also known as "Union Goods," are made chiefly of either Cotton, Linen, or other vegetable fibres. For this reason our Diamond Dyes for Cotton are the best dyes made for these goods.

Diamond Dye Annual—Free. Send us your name and address (be sure to mention your dealer's name, and tell us whether he sells Diamond Dyes), and we will send you a copy of the famous Diamond Dye Annual, a copy of the Direction Book, and samples of dyed cloth, all FREE. Address:

WELLS & RICHARDSON CO., LIMITED
200 MOUNTAIN STREET, MONTREAL, P. Q.

"It depends much on you, Mademoiselle des Meloises," said he. "Had you been my treasure-trove, there had been no 'perhaps' about it." Bigot spoke bluntly, and to Angelique it sounded like sincerity. Her dreams were accomplished. She trembled with the intensity of her gratification, and felt no repugnance at his familiar address.

The Intendant held out his hand as he uttered the dulcet flattery, and she placed her hand in his, but it was cold and passionless. Her heart did not send the blood leaping into her finger-ends as when they were held in the loving grasp of Le Gardeur.

"Angelique!" said he. It was the first time the Intendant had called her by her name. She started. It was the unlocking of his heart, she thought, and she looked at him with a smile which she had practiced with infallible effect upon many a foolish admirer.

"Angelique, I have seen no woman like you, in New France or in Old; you are fit to adorn a Court, and I predict you will—if—if—"

"If what, Chevalier?" Her eyes fairly blazed with vanity and pleasure. "Cannot one adorn Courts, at least French Courts, without if's?"

"You can, if you choose to do so," replied he, looking at her admiringly; for her whole countenance flashed intense pleasure at his remark.

"If I choose to do so? I do choose to do so! But who is to show me the way to the Court, Chevalier? It is a long and weary distance from New France."

"I will show you the way, if you will permit me, Angelique; Versailles is the only fitting theatre for the display of beauty and spirit like yours."

Angelique thoroughly believed this, and for a few moments was dazzled and overpowered by the thought of the golden doors of her ambition opened by the hand of the Intendant. A train of images, full-winged, and as gorgeous as birds of paradise, flashed across her vision. La Pompadour was getting old, men said, and the King was already casting his eyes round the circle of more youthful beauties in his Court for a successor. "And what woman in the world," thought she, "could vie with Angelique des Meloises if she chose to enter the arena to supplant La Pompadour? Nay, more! If the prize of the King were her lot, she would outdo La Maintenon herself, and end by sitting on the throne."

Angelique was not, however, a milkmaid to say yes before she was asked. She knew her value, and had a natural distrust of the Intendant's gallant speeches. Moreover, the shadow of the lady of Beaumanoir would not wholly disappear. "Why do you say such flattering things to me, Chevalier?" asked she. "One takes them for earnest, coming from the Royal Intendant. You should leave trifling to the idle young men of the city, who have no business to employ them but gallanting us women."

"Trifling! By St. Jeanne de Choisy, I was never more in earnest, Mademoiselle!" exclaimed Bigot. "I offer you the entire devotion of my heart." St. Jeanne de Choisy was the sobriquet in the petits appartements for La Pompadour. Angelique knew it very well, although Bigot thought she did not.

"Fair words are like flowers, Chevalier," replied she, "sweet to smell and pretty to look at; but love feeds on ripe fruit. Will you prove your devotion to me if I put it to the test?"

"Most willingly, Angelique!" Bigot thought she contemplated some idle freak that might try his gallantry, perhaps his purse. But she was in earnest, if he was not.

"I ask, then, the Chevalier Bigot, that before he speaks to me again of love or devotion, he shall remove that lady, whoever she may be, from Beaumanoir!" Angelique sat erect, and looked at him with a long, fixed look, as she said this.

"Remove that lady from Beaumanoir!" exclaimed he in complete surprise; "surely that poor shadow does not prevent your accepting my devotion, Angelique?"

"Yes, but it does, Chevalier! I like bold men. Most women do, but I did not think that even the Intendant of New France was bold enough to make love to Angelique des Meloises while he kept a wife or mistress in stately seclusion at Beaumanoir!"

Bigot cursed the shrewishness and innate jealousy of the sex which would not content itself with just so much of a man's favor as he chose to bestow, but must ever want to rule single and alone. "Every woman is a despot," thought he, "and has no mercy upon pretenders to her throne."

"That lady," replied he, "is neither wife nor mistress, Mademoiselle; she sought the shelter of my roof with a claim upon the hospitality of Beaumanoir."

"No doubt"—Angelique's nostril quivered with a fine disdain—"the hospitality of Beaumanoir is as broad and comprehensive as its master's admiration for our sex!" said she.

Bigot was not angry. He gave a loud laugh. "You women are merciless upon each other, Mademoiselle!" said he.

"Men are more merciless to women when they beguile us with insincere professions," replied she, rising up in well-affected indignation.

"Not so, Mademoiselle! Bigot began to feel annoyed. "That lady is nothing to me," said he, without rising as she had done. He kept his seat.

"But she has been! you have loved her at some time or other, and she is now living on the scraps and leavings of former affection. I am never deceived, Chevalier!" continued she, glancing down at him, a wild light playing under her long eyelashes like the illumined under-edge of a thunder-cloud.

"But how in St. Picot's name did you arrive at all this knowledge, Mademoiselle!" Bigot began to see that there was nothing for it but to comply with every caprice of this incomprehensible girl, if he would carry his point.

"Oh, nothing is easier than for a woman to divine the truth in such matters, Chevalier," said she. "It is a sixth sense given to our sex to protect our weakness; no man can make love to two women, but each of them knows instinctively to her finger-tips that he is doing it."

"Surely woman is a beautiful book written in golden letters, but in a tongue as hard to understand as hieroglyphics of Egypt." Bigot was quite puzzled how to proceed with this incomprehensible girl.

"Thanks for the comparison, Chevalier," replied she, with a laugh. "It would not do for men to scrutinize us too closely, yet one woman reads another easily as a hornbook of Troyes, which they say is so easy that the children read it without learning."

To boldly set at defiance a man who had boasted a long career of success, was the way to rouse his pride, and determine him to overcome her resistance. Angelique was not mistaken. Bigot saw her resolution, and, although it was with a mental reservation to deceive her, he promised to banish Caroline from his chateau.

"It was always my good fortune to be conquered in every passage of arms with your sex, Angelique," said he, at once radiant and submissive. "Sit down by me in token of amity."

She complied without hesitation, and sat down by him, gave him her hand again, and replied with an arch smile, while a thousand inimitable coquetries played about her eyes and lips, "You speak now like an amant magnifique, Chevalier!"

"Quelque fort qu'on s'en defende, il y faut venir un jour!"

"It is a bargain henceforth and forever, Angelique!" said he; "but

Tree Pruners

**Simplest
Cheapest
Best**



**HOOK ON AND
PULL SLIGHTLY.**

Nothing To Get Out Of
Order. **CLEAN-CUT**

If not represented in your
locality, write us direct.

JOHN WATSON MFG. CO.
(LIMITED).
AYR, ONTARIO.
BOX E.

Cowan's Cake Icings

**If you had trouble with
prepared Cake Icing, it
was not Cowan's.**

**Even a child can ice a
cake perfectly, in three
minutes, with Cowan's
Icing. Eight delicious
flavors. Sold every-
where.**

**The Cowan Co. Limited,
Toronto.**

A young man had been calling now and then on a young lady, when one night, as he sat in the parlor waiting for her to come down, her mother entered the room instead and asked him in a very grave, stern way what his intentions were.

He turned very red and was about to stammer some incoherent reply when suddenly the young lady called down from the head of the stairs:

"Mamma, mamma, that is not the one!"

You needn't be afraid.

One day a lady who had been reared in the careful luxury of the old-fashioned English home was invited to visit the kitchen of a great metropolitan hotel. She wanted to go, but was afraid. When asked why, she replied, "I'm afraid I'll see something that will forever destroy my appetite for hotel food." She went, and found everything delightfully clean.

Good housewives consider cleanliness and purity first of all; that's why Quaker Oats is their choice among all oatmeals. In making Quaker Oats the grain is sifted and resifted, passing through more than fifty processes of cleaning before it is cooked and rolled.

If you took a handful of oats and scrubbed and polished and wiped each separate grain, it wouldn't then be nearly as clean as Quaker Oats. No human hand ever touches a single grain of Quaker Oats from the field to your kitchen. The best advice on foods you could have is: Eat Quaker Oats every morning for breakfast.

You'll find Quaker Oats put up in two size packages, the regular size and the large, family size for those who are not convenient to the store. The large package contains a piece of handsome china for the table. Quaker Oats is one of Canada's greatest products.

I am a harder man than you imagine. I give nothing for nothing, and all for everything. Will you consent to aid me and the Grand Company in a matter of importance?"

"Will I not? What a question, Chevalier! Most willingly I will aid you in anything proper for a lady to do!" added she, with a touch of irony.

(To be continued).

'The Farmer's Advocate' Fashions.



DESIGN BY MAY MARION.

6274 Fancy Waist with Vest Effect.
6204 Four-Piece Skirt.

Waist No. 6274, sizes 32 to 40 inches bust.

Skirt No. 6204, sizes 22 to 32 inches waist.

To be made of pongee embroidered in heavy silk, chemisette of tuck net, and little vest of black or colored satin.



6273 Child's Rompers
or Coveralls,
2 to 8 years.

The above patterns will be sent to any subscriber at the very low price of ten cents per pattern. Be careful to give Correct Number and Size of Patterns Wanted. When the Pattern is Bust Measure, you need only mark 32, 34, 36, or whatever it may be. When Waist Measure, 22, 24, 26, or whatever it may be. When Misses' or Child's pattern, write only the figure representing the age. Allow from one to two weeks in which to fill order, and where two numbers appear, as for waist and skirt, enclose ten cents for each number. If only one number appears, ten cents will be sufficient.

Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

Cream Separators

**Certainly Study Them All, and Then Come
Back to the MAGNET.**



We like to see a man study the construction of the Cream Separator well before deciding. It shows he is a thinking man, a careful buyer and capable of appreciating merits when he finds them, and of giving credit where it belongs. To such a man the MAGNET makes strong appeal. The light of honest comparison discloses the many features wherein the MAGNET differs, and is better than others:

The heavy solid frame of the MAGNET.

Strong square gear (not light worm).

Large steel bowl "with double support" (MAGNET patent).

Strong one-piece skimmer.

MAGNET Brake circles the bowl (MAGNET patent).

Heavy spouts and tank.

All parts covered, no friction, easy to turn, easy to clean, skims perfectly. The machine being so constructed and balanced that every part runs in perfect harmony with the whole. Will not wear out in fifty years. Pretty big claim, but true.

THE PETRIE MANUFACTURING CO., LIMITED

Head Office and Factory: **Hamilton, Ontario, Canada.**

Branches:

Winnipeg, Man.; St. John, N. B.; Regina, Sask.; Vancouver, B. C.; Calgary, Alta.

THE ONLY WAY WE CAN DO BUSINESS
WITH YOU, say in

Groceries or Harness

is to show by a trial how you can buy through us, not only subject to your full approval of the goods, but at prices to save you a surprising amount of profit on what they now cost you. No co-operative or premium scheme about this. For particulars write

The Clement Brown Trading Co., Toronto.

PURE-MILK PRECAUTIONS.

"Have you thrown the cow into the antiseptic tank?"

"Yes."

"Have you washed the can with carbolic-acid solution?"

"I have."

"Have you plunged into the germ-destroying bath yourself?"

"Certainly."

"All right. Go ahead now and take the cow into the air-tight glass cage, but keep on the lookout that no stray bacteria get into the milk."—Bohemian.

LAY FOR WEEKS AT DEATH'S DOOR

**But Dodd's Kidney Pills Cured
Mrs. Thompson's Dropsy.**

It started with Backache and grew worse till the doctor said she must die.

Holt, Ont., May 16.—(Special.)—All the countryside here is ringing with the wonderful cure of Mrs. Samuel Thompson, who lay at the point of death for weeks, swollen with dropsy so that the doctor five different times decided to tap her, but desisted because, as her husband said, "It might be better to let her die in peace." After the doctor had given her up, Dodd's Kidney Pills cured her.

Mrs. Thompson's terrible trouble started with pain in the back. She grew worse, and the doctor treated her for jaundice for eight weeks. Then her feet and legs began to swell, and it was realized that dropsy was the trouble. For seven months she suffered. The doctor said there was no hope; she must die.

As a last resort, Dodd's Kidney Pills were tried. The improvement was slow, but gradually her strength came back. To-day Mrs. Thompson is a well woman. She says, and the countryside knows, she owes her life to Dodd's Kidney Pills.

If the disease is of the kidneys, or from the kidneys, Dodd's Kidney Pills will cure it.

GOSSIP.

The famous trotting mare, Sunol, 2.08½, by Electioneer, dam Waxana, by General Benton, died May 4th, aged 23 years. It is likely that her history will be as a performer only, for only one of her produce is living.

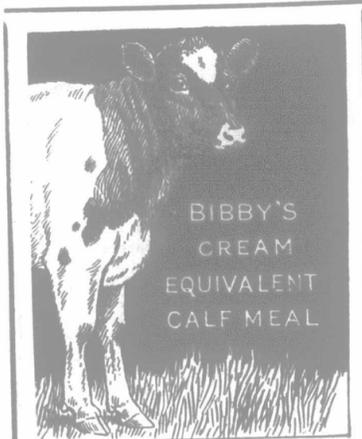
In the case of horses, it pays to not only grow the colt to maturity, and keep it in good flesh at all times, but to break it to work at maturity. There is usually \$25 difference between a broken and an unbroken horse. The farmer who grows the horse ought to be the best man to break it to work, for he knows all of its personal traits. He ought to be able to break it at less cost than the man who buys it without knowing its characteristics. A young horse in good, round flesh, or fat, and well broken to work, is a finished animal. Such are as salable as flour or sugar, and always command a "tip-top" price.

A HEALTHY SOCIETY.

The report of the treasurer of the American Jersey Cattle Club, submitted at the annual meeting held in New York May 5th, makes a very healthy financial showing, the receipts for the past year totalling, in round numbers, \$43,485, and the expenditures \$41,954, and the balance on hand March 31st, 1909, was \$14,789. While the assets of the club are given as \$100,431, and its liabilities \$81,185, the net credit to the club fund being \$91,969, and the net gain March 31st, \$10,784. The pedigree entry fees for the year amounted to \$35,069, for 15,107 animals recorded. These figures indicate a considerable volume of business, and a growing popularity of the better breed.

ALGETY BROS.' CLYDESDALE SALE

The date fixed for the auction sale of Dalgety Bros.' new importation of Clydesdale mares and fillies is May 25th, which renders available single-fare railway tickets for those starting on the 24th. The sale will commence at 1 p. m., at the Fraser House, London, Ont. This importation, we are assured, is quite equal to former offerings of the firm, which have been up to a high standard. Size and quality, combined with first-class breeding, characterizes the shipment, and this sale will afford a good opportunity to secure mares that will breed the class of stock that tops the market. The prospect for a continued active demand and high prices for heavy horses is bright, and Dalgety Bros. handle only the best.



BIBBY'S
CREAM
EQUIVALENT
CALF MEAL

CALVES

FEED CREAM EQUIVALENT
PROPERLY PREPARED.

Guaranteed to keep calves in first-class condition. Prevents scouring and other ailments. Recommended by highest authorities. Sold by all dealers.

WM. RENNIE CO., Limited, TORONTO.

POULTRY AND EGGS

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

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

BARRED Rock, Buff Orpington. Fertile eggs from best laying strains. \$4 per 100; \$1 per 13. Wilbur Bennett, Box 298, Peterboro, Ont.

BARRED Rock eggs, satily packed in Morgan baskets. One dollar per fifteen. C. H. Chalmers, Smith's Falls, Ont.

BLACK MINORCA—Pure-bred eggs for hatching from heavy-laying strain, one dollar per thirteen. Edward Hacker, Beachville, 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.

BUFF Orpington eggs—Two pens specially selected for excellent laying and market qualities; headed by large, very vigorous males, unrelated. \$1 per 15, \$2 per 40. Edgar Staples, Bright, Ont.

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.

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—Buff Orpingtons, from excellent winter layers, one dollar per fifteen. Wm. Whetter, Lorneville, Ont.

EGGS FOR HATCHING—Barred and White Rocks, White and Silver Wyandotters, 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.

GREAT reduction. Reds. Eggs from our grand exhibition and great egg-producing strain of R. C. Rhode Island Reds, only 75 cents. Bert Smith, 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.

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.

SINGLE-COMB Brown Leghorns, free range, prompt shipment; twenty eggs, one dollar; fifty eggs, two dollars; one hundred eggs, three dollars. Isaac Reed Ardrea, Ontario.

WHITE Wyandottes (Martin & Wright strain); eggs, \$1 per 15. John Morgan, Wales, Ont.

Single-comb White Leghorns

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

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

Advocate Advertisers Reap Results.

GOSSIP.

LAMBING.

Mr. James Peat, Edenwood, Scotland, has a Cheviot ewe which gave birth to five lambs by an Oxford-Down ram, and all are well. This ewe had four lambs last year.

THE BROCKVILLE HOLSTEIN SALE.

Attention is again called to the announcement of the joint sale of high-class Holstein-Friesian cattle, from the noted herds of G. A. Gilroy, Glen Buell, and G. H. Manhard, Manhard, Ont., to take place at Brockville, Ont., on Tuesday, May 25th, when will be sold 50 registered cows, heifers and young bulls, bred from Advanced-Record and officially-tested stock of the best class. These herds stand high among the leaders in rich breeding, on the lines of heavy-milking and high-testing cows, and this sale affords a good opportunity for securing foundation stock of the best class.

LAST CALL FOR HALLMAN'S SALE.

Thursday, May 27th, be it remembered, is the date announced for the auction sale of 36 head of Holstein-Friesians, cows, heifers, and young bulls, and 35 choice Tamworth hogs, from the noted Springbrook Farm herds of A. C. Hallman, at Breslau, Ont., 13 miles west of Guelph, on the G. T. R. This herd ranks high among the best in the Dominion in prize-winning, and in official record, breeding from high-testing stock, carrying the blood of many of the most noted families. Cows, milking and in calf to richly-bred sires; heifers, bred; and young bulls are included in the sale, which affords a good chance to secure first-class representatives of this heavy-milking breed.

HOLSTEIN-FRIESIAN OFFICIAL TESTS FOR APRIL, 1909.

Buckeye Maid 3rd (3039), at 8 yrs. 10 mos. 6 days of age: 17.30 lbs. butter-fat, equivalent to 20.18 lbs. butter; milk, 598.0 lbs. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.

Seven Spot De Kol (8586), at 6 yrs. 10 mos. 11 dys.: butter-fat equivalent to 19.76 lbs. butter; milk, 475.5 lbs. Owned by Gordon H. Manhard, Manhard, Ont.

Flora Wayne Sarcastic (6316), at 3 yrs. 10 mos. 7 dys.: butter-fat equivalent to 19.63 lbs. butter; milk, 486.0 lbs. Owned by David Caughell, Yarmouth Centre, Ont.

Lady Waldorf De Kol (4408), at 6 yrs. 6 mos. 4 dys.: butter-fat equivalent to 19.00 lbs. butter; milk, 520.7 lbs. Owned by W. W. Brown, Lyn.

Tosco De Kol C. Mercedes (7307), at 2 yrs. 10 mos. 4 dys.: butter-fat equivalent to 18.63 lbs. butter; milk, 434.2 lbs. Owned by David Caughell.

Aggie Bell De Kol (4263), at 6 yrs. 10 mos. 15 dys.: butter-fat equivalent to 18.26 lbs. butter; milk, 500.2 lbs. Owned by Gordon H. Manhard.

Princess Dixie De Annandale (3132), at 8 yrs. 25 dys.: butter-fat equivalent to 17.52 lbs. butter; milk, 438. lbs. Owned by Ed. B. Purcell, Bloomfield, Ont.

Princess Calamity De Kol (7017), at 4 yrs. 2 mos. 3 dys.: butter-fat equivalent to 16.30 lbs. butter; milk, 385.8 lbs. Owned by W. W. Brown.

Posch Inka Sylvia (5942), at 4 yrs. 1 mo. 5 dys.: butter-fat equivalent to 16.25 lbs. butter; milk, 403. lbs. Owned by Gordon H. Manhard.

Pride of Dundas 2nd (6491), at 4 yrs. 16 dys.: butter-fat equivalent to 15.95 lbs. butter; milk, 421.7 lbs. Owned by Gordon H. Manhard.

Burkeye Keyes 2nd (6316), at 3 yrs. 18 dys.: butter-fat equivalent to 15.57 lbs. butter; milk, 389. lbs. Owned by Ed. B. Purcell.

Gaza Aemeth De Kol 2nd (7334), at 7 yrs. 4 mos. 1 day: butter-fat equivalent to 15.47 lbs. butter; milk, 467.9 lbs. Owned by T. L. Dunkin, Norwich, Ont.

Mareh Beauty (4537), at 6 yrs. 12 dys.: butter-fat equivalent to 15.22 lbs. butter; milk, 353.5 lbs. Owned by Thos. Goodison, Manhard, Ont.

Polly T. Korndyke (6150), at 4 yrs. 1 mo. 6 dys.: butter-fat equivalent to 14.32 lbs. butter; milk, 375. lbs. Owned by A. D. Foster, Bloomfield, Ont.

Centre View Maid Jewel (6309), at 4 yrs. 1 mo. 1 day: butter-fat equivalent to 14.54 lbs. butter; milk, 412.1 lbs. Owned by P. D. Ede, Oxford Centre, Ont.

NEW IMPORTATION OF Clydesdale Mares

BY AUCTION.

MESSRS. DALGETY BROS.

WILL SELL AT THE FRASER HOUSE, LONDON, ONTARIO,

Tuesday, May 25th, 1909,

1.30 P. M.

A number of newly imported Clydesdale Mares and Fillies. Several fit for show purposes.

DALGETY BROS., GLENCOE, ONTARIO.



The Ideal Green Feed Silo

will convert your corn into sweet, nutritious ensilage, because it is built upon principles that years of experience have proved to be the only scientific and correct ones. Built in all sizes, and shipped complete.

Write for Special Silo Catalogue C.

CANADIAN DAIRY SUPPLY CO., LTD.,
MONTREAL, QUE.

WANTED & FOR SALE

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.

HELP WANTED—Female—Reliable, steady woman as general help in family of two only. Good home for right party. Box 62, Southampton.

LAND FOR SALE—Veterans' Script entitles holder to three hundred and twenty acres of unlocated Dominion lands in either Manitoba, Saskatchewan or Alberta, at less than three dollars per acre. This is your opportunity. Write us for full particulars. National Realty Co., 47-49 Richmond Street, West, Toronto.

TRACTION Engine for Sale—One New Ross 16-horse-power, cheap. Has not been in use yet; also 30-horse-power firebox boiler, tested 200 lbs. C. W. P. repairers, R. J. Black. Apply H. E. Jolliffe, St. Catharines, Ont.

WANTED—Artichoke Roots. State quantity and price. Wm. Rennie Co., Limited, 190 McGill St., Montreal, Que.

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—Persons to grow mushrooms for us at home. Waste space in cellar, garden or farm can be made to yield \$15 to \$25 per week. Send for illustrated booklet and full particulars. Montreal Supply Co., Montreal.

WANTED—A good dairy stableman to take charge of a stable of 100 cows. Must thoroughly understand balanced rations feeding. Single man preferred. References required. State wages desired. Address: "Elmhurst Dairy," Montreal West, Que.

Korndyke Pietertje Keyes (7395), at 2 yrs. 10 mos. 16 dys.: butter-fat equivalent to 12.67 lbs. butter; milk, 368. lbs. Owned by A. D. Foster.

Burkeye Keyes (6924), at 3 yrs. 10 mos. 26 dys.: butter-fat equivalent to 12.52 lbs. butter; milk, 349. lbs. Owned by A. D. Foster.

Tidy Mercedes Calamity (8129), at 2 yrs. 2 mos. 22 dys.: butter-fat equivalent to 12.05 lbs. butter; milk, 329.5 lbs. Owned by T. L. Dunkin.

Vida Calamity (6934), at 3 yrs. 11 mos. 22 dys.: butter-fat equivalent to 11.68 lbs. butter; milk, 329.5 lbs. Owned by T. L. Dunkin.

Owned by Walter S. Schell, Woodstock, Ont.

Burkeye Keyes 3rd (8074), at 2 yrs. 23 dys.: butter-fat equivalent to 11.48 lbs. butter; milk, 314 lbs. Owned by Hubert McDonald, Bloomfield, Ont.

Beauty Verbeke Burke (7603), at 2 yrs. 11 mos. 28 dys.: butter-fat equivalent to 11.27 lbs. butter; milk, 354.4 lbs. Owned by Walter S. Schell.

Houwte Pietertje Akkrum (8497), at 2 yrs. 4 dys.: butter-fat equivalent to 10.47 lbs. butter; milk, 299.3 lbs. Owned by T. L. Dunkin.

May Queen Posch (9052), at 2 yrs. 3 dys.: butter-fat equivalent to 10.11 lbs. butter; milk, 272.0 lbs. Owned by Walter S. Schell.

Keyes Triumph (8178), at 1 yr. 10 mos. 3 dys.: butter-fat equivalent to 9.68 lbs. butter; milk, 336. lbs. Owned by A. D. Foster.

Ruby Jean (7595), at 2 yrs. 11 mos. 17 dys.: butter-fat equivalent to 9.34 lbs. butter; milk, 279.2 lbs. Owned by P. D. Ede. G. W. CLEMONS, Sec.

TRADE TOPICS.

No matter what we try among the new cereal foods, there's always a feeling that when we are through experimenting we will go back to good old Quaker Oats.

In another column will be found some of the reasons for eating Quaker Oats; everyone who has eaten this food regularly will recognize the truth of the statements made in these advertisements.

PRUNING SHEARS—For keeping orchard or ornamental trees in condition, nothing is more desirable than a good pruning outfit. In many cases, all trees are now pruned for this season, but it is not too late until June. Besides, pruners can be used to advantage at almost any time, removing suckers, and keeping trees in shape. Write to John Watson Mfg. Co., of Ayr, Ont., whose advertisement appears on another page.

Harness, and the various lines of groceries, are offered in this issue by The Clement Brown Trading Co., of Toronto. Goods are handled on a large scale, but not by any premium scheme. Write them for particulars, and you will be sure to want a trial order. Mention "The Farmer's Advocate" when writing.

A Connecticut country newspaper recently contained the following advertisement:

"Full-blooded cow for sale, giving milk, three tons of hay, a lot of chickens and several stoves."



Use This Loader and Hire No Men

One man can build the load because the Loader pushes the hay well forward on the wagon. This feature saves one man's wages, over other types of Loaders, every day used. An adjustable apron at top keeps hay from spilling or blowing away.

Here's a Loader that takes hay clean from swath or windrow. The nine rakes are so shaped they can't wrap or tangle, they automatically self-adjust, each independent of the other and pick hay out of low places, don't tear up ground in high places. Wheels set underneath so you can gather hay close to fences or ditches.

You can couple it in a few seconds to any height wagon and uncouple it from top of load. No cog gears, or crossed chains, to cut out, no long crooked crank shaft to break, no ropes to rot, no rollers, cans, or what-nots to wear and make trouble.

Great DAIN Loader

is a model of simplicity, and efficiency. It is light draft, easy to operate and substantially built of best material to stand hardest service. We have specialized on Hay Tool for a quarter of a century. The name Dain on a Mower, Rake, Loader, Stacker or Press guarantees best work, lightest draft, most labor saved, a perfect machine.

Ask your dealer to show you the whole line.

Handy Hay Book FREE

Tell us your hay tool needs and we will send you our new book "All About Hay" containing facts on how to make hay-growing more profitable and other information valuable to hay makers. Send for it.

DAIN MANUFACTURING CO.
Mention this paper. Preston, Ont.

Revolution in the Price of

RIDING BREECHES 10/6 PER PAIR

SEND FOR PATTERNS And Easy Self-Measuring Forms. B. R. D., Farmer's Advocate, London, Ont.

YOU CAN SAVE 50%
WHAT A CUSTOMER SAYS:
Dear Sir,
Breeches to hand. At all that can be desired; they certainly are better than a pair I paid 21/- for a few months ago. Please keep measure.—G.H.
This gentleman measured himself according to our easy measure instructions MADE TO YOUR MEASURES. Testimonials from all parts of the World.

BEDFORD RIDING BREECHES CO.
51, KINGLY STREET, REGENT STREET, LONDON, ENGLAND.

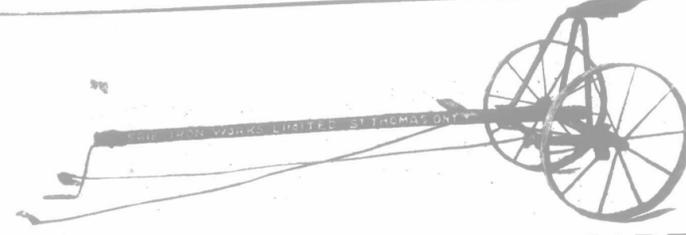
Also in better qualities at 13s. 11d. & 15s. 11d.

Choice Western Farms.

Desirable Locations.

We are offering good values in specially-selected blocks of unimproved lands, also improved farms, with buildings and breaking done. PRICES and TERMS VERY REASONABLE. Call and see us, or write for literature.

THE UNION TRUST COMPANY, LIMITED
REAL ESTATE DEPARTMENT
174-176 Bay St., Toronto, Ont.



ST. THOMAS HARROW CART

Not a lazy man's tool. It's up-to-date. It is easier to pull the driver in the cart than to drag lines on the bit. Made by

ERIE IRON WORKS, LIMITED, St. Thomas, Ont.

If your dealer does not handle them, send direct to us for further information. This cart suits any harrow.

QUESTIONS AND ANSWERS.
Miscellaneous.

CERTIFICATE OF SERVICE WITHHELD.

1. We have an imported sow which we shipped to Woodstock, to imported boar over a year ago. We paid the service fee of ten dollars at the time, also for her keep the three weeks she was there. We have been writing to him to send us a certificate as to the service, and fail to get a reply of any kind. Could we compel him to furnish certificate?

2. Could we have the pigs registered without him doing so?

3. Could you give us the registration number of Quality Jim?

Ontario.

Ans.—1. We think it ought to be managed through a solicitor, and that you ought to instruct one for the purpose.

2. The rules of entry of the Dominion Swine-breeders' require signature of owner of service sire. There is no provision to record a pedigree otherwise.

3. The number of Quality Jim is 20950. It might be well to write A. P. Westervelt, Secretary, Dominion Swine-breeders' Association, Parliament Buildings, Toronto, giving him full particulars.

DATE WHEN PENALTY FEES CAME INTO EFFECT.

In "The Farmer's Advocate" of April 15th, 1909, on page 626, you say that J. W. Sangster, Secretary of the Clydesdale Horse Association, writes "The Farmer's Advocate," giving the rules and regulations regarding Clydesdale registration. He says that the rule regarding the imposition of penalty fees on colts over one year of age comes in force on July 1st, 1909. We sent an application for registration, with the usual fees, to the Accountant of the National Live-stock Records, he says the double fee came in force on April 2nd. Please say in "The Farmer's Advocate" which of the officials is correct.

J. M.

Ans.—The date, July 1st, 1909, in the article mentioned above, was a mistake, although Mr. Sangster may have understood that was the date intended. As no date appeared in the resolution adopting the new scale of fees, they came into force as soon as the amendment was incorporated by the Department of Agriculture, Ottawa. The date this office received notification by the Department was April 2nd, 1909, therefore, the date, April 2nd, is correct.

ACCOUNTANT NATIONAL LIVE-STOCK RECORDS.

WELL FOR DRAINAGE.

1. Can an artesian well be sunk for drainage purposes?

2. Do you know of any?

Ans.—1. Since artesian wells mean the continuous flow of water from the earth, it would be absurd to think of drainage being secured in this way. The sinking of an artesian well would mean more water on the surrounding area. It is possible that a large well, or cistern, could be dug, into which the water would collect from the surrounding area. This water, then, would have to be removed by pumping with windmill or other power, and carried away by pipes. Again, it is possible, that at some distance below the earth's surface, there is a strata of sand or gravel, which, if reached, would afford a drainage outlet for water held by an impervious strata above. King, in Physics of the Soil, in

referring to basins without outlets, says "Occasionally such basins are underlaid with gravel or sand which is well drained, and the water is retained on the surface only by a comparatively thin stratum of clay subsoil. When this is true, one or more wells may be sunk through the clay into the sand or gravel, and filled with cobblestone and gravel. Into this under-drains may be led from various directions to collect the water and bring it to the subterranean outlet thus provided."

2. No. Perhaps some of our readers know of some.

GOSSIP.

BACON'S STRICTURES ON SELF-SEEKING.

The eminent Elizabethan philosopher, Lord Francis Bacon, scores self-seeking in these scathing terms:

"It were disproportionate enough for the servant's good to be preferred before the master's; but yet it is a greater extreme when a little good of the servant shall carry things against a great good of the master's. And yet that is the case of bad officers, treasurers, ambassadors, generals, and other false and corrupt servants which set a bias upon their bowl of their own petty ends and envies, to the overthrow of their master's great and important affairs. And for the most part, the good such servants receive is after the model of their own fortune, but the hurt they sell for that good is after the model of their master's fortune. And certainly it is the nature of extreme self-lovers, as they will set an house on fire, and it were but to roast their eggs."

Substitute for officers the word politicians, and how applicable this characterization is to-day!

Proceeding, he remarks: "Wisdom for a man's self is in many branches thereof a depraved thing; it is the wisdom of rats that will be sure to leave a house somewhat before it falls; it is the wisdom of the fox that thrusts out the badger who digged and made room for him; it is the wisdom of the crocodiles, that shed tears when they would devour; but that which is specially to be noted is that those which, as Cicero says of Pompey, are sui amanates sine rivali, are many times unfortunate; and whereas they have all their time sacrificed to themselves, they become in the end themselves sacrifices to the inconsistency of fortune, whose wings they thought by their self-wisdom to have pinioned."

TRADE TOPIC.

The old feeling that riding behind machinery used for cultivation is a lazy practice is fast dying out. The progressive farmer prefers to save man labor where feasible. No longer does he insist on a man dragging through the loose soil behind the harrows, when a cart can be attached on which to ride, with very little extra work for the horses. Write to the Erie Iron Works, Ltd., of St. Thomas, Ont., for particulars. This firm has an advertisement in this issue.

The May issue of the Dairy Bulletin, published by the Vermont Farm Machine Co., to make better known the merits of the U. S. Cream Separator, is an unusually interesting and informative publication. Beside being well illustrated with half-tone engravings, there are several well-written articles that appeal to every farmer and dairyman, besides complete descriptions of the various models of U. S. Separators. A copy of this publication may be obtained free for a post-card request, by addressing the Vermont Farm Machine Co., Bellows Falls, Vt., and mentioning "The Farmer's Advocate." The leading article deals with Guernsey cattle. Special attention is given to the necessity of cleanliness in every detail around the dairy.

FOLLOWING THE PRECEDENT OF LANDIS.

Houlihan—"Oi hear as how Fogarty was up forinst the court laht week, an' got tin dollars, for batin' his old woman."

Shannah—"Thru fer yez, an' fwhats more, the Joodge says as how if he cooms up agin, 'twould be a case of re-batin and the foine wud be \$20,000,000, be tubers."



NEW CENTURY

with strong rigid Wringer Stand

This new Wringer Attachment is "head and shoulders" above any other. The entire stand is absolutely rigid—always in position—never in the way—and the water drains right into the tub.

"New Century" Washing Machine—complete and delivered at any railway station in Ontario or Quebec—only \$9.95. Write for free booklet.

DOWSWELL MANUFACTURING CO. LIMITED,
HAMILTON, Ont.

RENNIE'S

SOLD BY

RELIABLE DEALERS

IN SEALED PACKAGES

WM. RENNIE CO.,
Toronto, Limited.

SEEDS

CANADIAN PACIFIC

Very Low Rate for Summer Trip to Pacific Coast

\$74.10

Return from LONDON Good Going May 20 to Sept 30

Return limit Oct. 31. Liberal stopovers. Wide choice of routes. Go by the direct Canadian line—see your own country—the West, the Rocky Mountains. Visit the Seattle Exposition and other special attractions.

Talk it over with nearest C. P. R. Agent, or write:

R. L. Thompson, D. P. A., Toronto.

FIT'S Trial Free

CURED

Falling Sickness, Epilepsy, St. Vitus' Dance, Nervous Trouble, etc., positively cured by LIEBIG'S FIT CURE. Free trial bottle sent on application. Write Liebig Co., Phoebe St., Toronto.

Oh! Fame, will man ne'er cease to bow the knee
Before thy bloody shrine, and strive to free
His spirit from thy heavy, galling chain
Which bows it down to toil, and guilt, and pain?
Can he not see that at thy Altars rise
No insense but of tears, and groans, and sighs?
That Disappointment, Madness and Dispair
Are the High Priests that love to linger there?



Frictionless Empire.

The object of the "one-method agent" is to sell you his single type of machine no matter what your needs may be.

Do you know the difference between the cone and disc methods of cream separation? You should know the facts before choosing a separator.

There are two standard methods of cream separation—the cone and the disc. The cone is more suitable for one dairyman, while the disc is better for another. You can tell which is best for you when you know the difference between them. The Empire agent stands ready and willing to give you complete information.

It is to his advantage to tell you the truth about each method, because the Empire Line contains both cone and disc separators. His object is to help you select the method and the size your needs require.

Both Frictionless Empire (cone method) and Empire Disc are made of Empire-quality of materials. Complete line of sizes in each type.

The **Frictionless Empire**—the original cone separator—has such exclusive features as Ball Neck Bearing and 3-ball Bottom Bearing. No Closed Bearings on spindle where others have one, generally two. Easiest-to-turn, easiest-to-clean, closest skimmer—the peer of all cone separators.

The **Empire Disc** is in reality the leading disc machine of Europe, with addition of several Empire patented features. No other disc skims as closely as this improved European champion. None runs so easily, or so quickly and thoroughly cleaned.



Empire Disc.

FREE Dairy Book

Write for your copy. Explains both machines in detail. Tells about a guarantee that really guarantees, and a generous FREE TRIAL offer.

EMPIRE CREAM SEPARATOR CO. OF CANADA, LTD.
Western Office, Winnipeg. Head Office, Toronto.

EMPIRE LINE OF Quality Cream Separators.

QUESTIONS AND ANSWERS. Veterinary.

PYEMIA.

Three-year-old mare took sick at night. Next morning her mouth was swollen, her tongue swollen and hanging out of her mouth, her jaws were also swollen, one worse than the other. A foul-smelling, greenish matter escaped from her nostrils. She died about 4 o'clock. Is it contagious? W. J. F.

Ans.—She died from acute pyemia (a form of blood poisoning). In such acute cases, treatment is of no avail. It is caused by the entrance into the blood of some septic matter. In some cases a wound or sore is present, while in others it is not possible to say how the blood became contaminated. It is not contagious. In mild cases, the administration of antiseptics as carbolic acid in 50-drop doses, or hyposulphite in 6-dram doses, three or four times daily, will effect a cure, but in acute cases the patient usually dies in from 18 to 48 hours. V.

Miscellaneous.

COW SUCKING HERSELF.

What is a cure for a cow that sucks herself? She is a young cow, and a good milker, and I would like to keep her. A. W.

Ans.—There are several devices modelled to prevent cows from sucking themselves. Some time ago, one of our readers wrote: "The contrivance we use to prevent a cow from sucking herself is this: Take a common head-piece of a halter and put it on the cow's head; then put a rather wide strap around the cow's body, just behind the front legs, buckling it so as not to make the cow's back sore. Next take a small, tough stick, about 2½ feet long, with a ring fastened to each end. Fasten one ring to the halter, and, passing the stick between the front legs, fasten the other ring to the surcingle. The cow has perfect ease, but cannot turn her head to her udder." Another device consists of two ropes, or straps, encircling the neck with three or four pieces of wood on each side, reaching almost from the jaws to the shoulder. Others again put a halter on the cow's head, having driven long, sharp nails through the strap that goes around the nose. The sharp nails prick the cow's flank when she attempts to suck herself.

EVERGREENS FOR HEDGE.

How can I best set out a hedge? Which is cedar or balsam preferable? How large should the trees be, and how far apart? How long should I wait before trimming them? A. J. K.

Ans.—Cedar is much more preferable than balsam. White cedar is about the best of the evergreens used for hedge purposes. For best results, the ground should be thoroughly prepared the previ-

NEW IMPORTATION OF

Clydesdale Mares

BY AUCTION.

Messrs. Dalgety Bros. will sell at the FRASER HOUSE, LONDON, ONT., about the THIRD WEEK IN MAY, a number of newly imported Clydesdale mares and fillies. Several fit for show purposes.

EXACT DATE WILL BE ANNOUNCED LATER.

DALGETY BROS.,

GLENCOE, ONT.

CLYDESDALES AND SHORTHORNS.—Both imported and Canadian-bred, at Columbus, Ont., the Home of the Winners. Our last importation landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marsells, Sir Everest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 6 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance 'phone in houses. 'Phone office, Myrtle station, Myrtle station, C.P.R.; Brooklin station, G.T.R.; Oshawa station, G.T.R. **Smith & Richardson & Sons, Columbus, Ont.**



Clydesdales and Hackneys

We have for sale a few choice Clydesdale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and mares for sale always. **HODGKINSON & TISDALE, BEAVERTON, ONTARIO.** G. T. R. and C. N. R. Long-distance 'phone.



IMPORTED SHIRES

At their St. Thomas stables, the John Chambers & Sons, of England, have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address **DR. C. K. GEARY, St. Thomas, Ont.**

Clydesdales and Hackneys

My motto is: Quality, not quantity.

THOS. L. MERCER, MARKDALE, ONT., P. O. AND STA.



I HAVE STILL LEFT THREE CLYDESDALE STALLIONS

two of them 3 years old, the other a 4-year-old; big flashy fellows, full of quality and character, and right royally bred. I will sell them cheap and on terms to suit, as I want the room for a new importation. **T. D. ELLIOTT, BOLTON, ONT.**



IMPORTED CLYDESDALES

My new importation has now arrived—stallions and fillies—personally selected. Richest in breeding; highest in quality; with abundance of size and character. Sold on terms to suit. **GEO. G. STEWART, HOWICK, QUE.**



IMPORTED CLYDESDALES

My new importation of Clydesdale stallions and fillies, landed a short time ago, are an exceptionally choice lot, full of flashy quality, style and character, and right royally bred. I will sell them at very close prices, and on terms to suit. **C. W. BARBER, Gatineau Point, Quebec.** "Close to Ottawa."



For a prize-winning Clydesdale, Hackney or French Coach Stallion

write me. I have generally something choice on hand. **HENRY M. DOUGLAS, STAYNER, ONTARIO, LATE OF MEAFORD.**

ous fall so that the young trees can be transferred to mellow ground. Select trees 2½ to 3 feet high, set them a foot to eighteen inches apart, and cut bark to 1½ feet when planting. A strip extending one foot or more on each side should be thoroughly cultivated throughout the summer. Perhaps a mulch of coarse manure can be used to advantage. Planting can be done at almost any time, if

care is taken to protect the roots. May is, however, perhaps the best month. Many advocate planting evergreens just after grain-seeding. Set the trees slightly deeper than they were before moving. Later trimming will have to be regulated according to the height and width you wish to have the hedge, remembering always that cutting off the tips of branches tends to produce more branches.

TROUBLE IN HATCHING GOSLINGS.

We keep geese every year and do not often have very good luck with them, because when they are hatched out they are very weak and delicate. It is also very hard for them to get out of the shell. What advice could you give? W. W.

Ans.—If the breeding stock are in good condition, there should be no trouble in hatching goslings. The most frequent cause of weakling offspring is the overfed condition of the parent stock. The tendency is to feed too much grain to geese during their term of winter life. If possible, the breeding stock should have as much green stuff as possible if in confinement. Perhaps circumstances will permit of the breeding stock having a run where they can have grass. Old stock are preferable as breeders. If eggs intended to be used for hatching are laid in cold weather, care should be taken that they are not chilled, as they are apt to be. In certain cases it is necessary to help the goslings out of the shell. In this case, it is likely the newly-hatched birds were weak, owing to the parent stock being out of condition. A. G. G.

TRADE TOPICS.

Our readers will do well to note the advertisement of The Brantford Cordage Company, Limited, in reference to the superior quality of their several brands of binder twine, which have become so popular with Canadian twine-users. No better proof of this fact could be submitted than the increased sales from year to year, and the enviable reputation the four Maple Leaf brands has attained, necessitating several additions to their factory, which is now one of the most complete plants in Canada, and is operated to the utmost capacity to take care of their orders. At the present time their mill is running overtime. The company has always given special care in the selection of their raw materials, which is absolutely essential to obtain that bright, clean appearance, uniformly even and strong-working qualities which their twines possess. Their different brands are put up in good, full-length, strong bags, and each bale is tied with a good, serviceable, laid-rope lashing, instead of the old style of worthless waste, which is practically useless to the farmer. All their twines are daily tested for length, evenness and strength, and subject to the inspection of the Dominion Government Inspector of Binder Twines. The product is sold through dealers from one end of the country to the other. If there is no agency in your town, do not fail to write them direct, making mention of "The Farmer's Advocate."

"Yes," said the bride of three short months, "I had made up my mind to remain in the spinster class, then John appeared upon the scene and I accepted him because he was so unlike other men."
"Oh, of course, he's different," rejoined the envious lady friend. "He proposed."

MAY 20, 1909

HORSE OWNERS! USE
COMBAULT'S
CAUSTIC
BALSAM.



A safe, speedy and positive cure. The safest, Best ELIXIR ever used. Removes all bunches from Horses. Impossible to produce scar or blemish. Send for circulars. Special advice free.

SEE LAWRENCE-WILLIAMS CO., Toronto, Canada

Dr. Page's English
Spavin Cure

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, King-worm on Cattle and to remove all unnatural enlargements.



This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., Druggists,
 171 King St. E., TORONTO, ONT.

Ormsby Grange Stock Farm,
ORMSTOWN, P. Q.

DUNCAN McEACHRAN, F. R. C. V. S., D. V. S.,
 Proprietor.

Importer and breeder of **CLYDESDALES.**
 High-class pure-bred. Farmers or ranchmen starting breeding Clydes, pure or grade, specially invited to correspond.

Shetland, Welsh and Iceland Ponies

I have on hand a number of single ponies and matched pairs; all ages; thoroughly broken to harness and reliable in every way.

E. DYMENT, Copetown P.O. and Sta.

W. R. Stubbs, a leading Republican of Kansas, took his little son to Washington recently, and visited the Senate gallery with him. Rev. Edward Everett Hale, especially interested the boy. Mr. Stubbs explained that Mr. Hale was the chaplain of the Senate. "Oh, he prays for the Senate, doesn't he?" asked the lad.

"No," replied Stubbs; "he gets up and takes a look at the Senate, and then prays for the country."—New York Tribune.

QUESTIONS AND ANSWERS.
 Miscellaneous.

PROPERTY IN LINE FENCE.

Have recently bought an improved farm. There was a commons on one side. The man I bought from had built a fence and kept it up. Since then a man has bought up the commons and is fencing it. Has he the right to pay me for one-half the line fence, or I the privilege of removing it? H. M. D. Ontario.

Ans.—The matter ought to be arranged in the way you suggest, that is, by the adjoining owner paying you, reasonably, for half the line fence. If he will not do this, then, assuming that the fence is either on the boundary line or on your side of it, and not on his land, we think your removal of it as proposed would be justifiable.

HEAVES.

A valuable mare has the heaves; has had a dry, hacking cough for four or five months. Veterinary prescribed, and medicine seemed to relieve her for a time, but it is now as bad as ever, and her flanks have that peculiar bellows-like movement when expelling the air from her lungs. Please tell me if it has gone too far for medicine to cure her. She has been bred once or twice this season. She is given timothy and clover hay mixed, mostly timothy, four quarts of oats chopped, and some bran, and does some of the work on the farm. She is not doing well; is losing flesh. Would it be best for her to be turned out to pasture during the day, when she is not working? R. L. S.

Ans.—There is no cure for heaves, but the symptoms may be considerably relieved by feeding only first-class food, and dampening her hay and grain with lime-water. Care should be observed to avoid fast driving or heavy work on a full stomach. Be careful, also, to not allow her to overload the stomach at any time. It will be all right to allow her to run out on short pasture by day, or when nights are not cold.

HOUSE UNSATISFACTORILY LEASED.

I rented a house in town, to take possession immediately, and stay until fall, paying three months rent in advance. Written agreement as to rent in advance, and notice if sold to be given one month to allow him a chance to move, and he to have same chance as anyone to buy. He took possession March 20th, stayed less than two weeks, having bought another house cheaper, moved without giving notice, and rented to another man, who moved in the same day first man left, all without knowledge of owner.

1. What measure can I take to get second man out, he having been in house one month about now?

2. I got three months rent from first man. Can second stay till that time is up?

3. He has bought a place also near at hand, and says he intends moving probably the last of May. Can I collect damages for the wear and tear of house through so much moving, having just finished renovating house completely in the fall?

4. Whom can I hold responsible, the first or second man?

5. Some posts I had for raising the house were left till roads would allow their being removed. These men have used and destroyed the most of them. They were loaned me for the purpose. Can I make them come good for them? Ontario.

Ans.—1. We cannot answer this question, or any of the others, positively, without seeing the written agreement; but it does not appear to us that you are in a position to legally eject this second occupant.

2. Apparently so.

3 and 4. We do not see that you can collect damages from either in respect of this matter of wear and tear.

5. Yes. We would add that you seem to be entitled to look to the first occupant for payment of the full amount of the rent called for by the agreement—that is, in respect of the entire term of the tenancy agreed upon, less, of course, the three months' rent already paid; also to make good any damage to the premises beyond ordinary wear and tear of same.

Spring Clearing
 BY USING
STUMPING POWDER
 MANUFACTURED BY
Hamilton Powder Co.

You will find it to be the best, cheapest and quickest way of clearing your farm lands of STUMPS and BOULDERS. STUMPING POWDER is indispensable to farmers who have these pests on their lands.

This cut shows how stumps are removed by using our new explosive.

WRITE: **HAMILTON POWDER CO.'S OFFICE**
 (nearest to where you reside)
TORONTO, ONT. MONTREAL, P. Q. VICTORIA, B. C.
 For FREE descriptive catalogue and prices. Write to-day.

UNION Horse Exchange
STOCK - YARDS WEST TORONTO, CANADA.
 The Greatest Wholesale and Retail Horse Commission Market.

Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.

The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile open track for showing horses. Northwest trade a specialty. **HERBERT SMITH, Manager.** (Late Grand's Repository).

NEW CLYDESDALE IMPORTATION.
 My new importation of 24 Clydesdale stallions is now in my stables. I invite inspection and comparison. I think I have the best lot for size, style, character, quality and action ever imported. 27 Clyde stallions and 8 Hackney stallions to select from. Prices right, and terms to suit.

T. H. HASSARD, MARKHAM, ONT.
 POST OFFICE, PHONE AND STATION.

CLYDESDALES AND FRENCH COACHERS

We have still on hand a few choice Clydesdale stallions—all young—that for size, style and quality will stand inspection. We have also a few Clyde fillies—imported and Canadian-bred, and two French Coach stallions. Correspondence and inspection invited. Our prices are easy and terms to suit. Phone connection.

R. NESS & SON, HOWICK, QUEBEC.

2nd Annual Shorthorn Sale
 ON WEDNESDAY, JUNE 2nd, 1909,
 At the farm, Valley Home, 1 mile from Meadowvale Station, C.P.R., the property of **S. J. Pearson, Son & Co., Meadowvale, Ont.**

There will be sold 19 HEAD of high-class and richly-bred Shorthorns: 4 young bulls, 10 heifers and 5 young cows with calves at foot. An exceptionally choice offering. Terms: Cash, or 5 months' on bankable paper, with 5% interest. Visitors from Toronto and north will be met at Meadowvale station, from the west at Streetsville Jc. station. Sale at 1 p. m. Lunch at noon.

Geo. Andrews, Milton, Auctioneer. Catalogues on application.

Rowan Hill Shorthorns The 1908 Toronto grand champion, Royal Chief 65495, heads my herd. For sale are: 3 spring bulls and a few heifers, sired by him, and out of show cows. These are choice young things that are sure to please. **R. F. DUNCAN, Carlisle P. O., Ont.** Caledonia Station, G. T. R., or station 13 Hamilton and Brantford Electric Road.

Choice Scotch Shorthorns We are offering several very choice heifers: Duchess of Glosters, Broadhooks. High-class show heifers among them. Also a few extra good young bulls.

S. F. Johnston & Son, Ashburn P. O., Myrtle Station.

SHORTHORNS Calves for sale by our grand quartette of breeding and show bulls: Nonpareil Archer, Imp., Proud Gift, Imp., Marigold Sailor, Nonpareil Eclipse. Females, imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers.

Belmar Parc. John Douglas, Manager. **PETER WHITE, Pembroke, Ont.**

SALEM SHORTHORNS
 A few young bulls and choice, at tempting prices.

J. A. WATT, SALEM, ONT. ELORA STATION, G. T. R. AND C. P. R. Bell telephone.

SUBSCRIBE FOR "THE FARMER'S ADVOCATE AND HOME MAGAZINE."

Fence Friends
 Every buyer of Peerless Fence becomes a friend of ours because Peerless fence saves him trouble, money and time. **PEERLESS Woven Wire Fence** is made of all No. 9 Steel Wire well galvanized. **PEERLESS FENCE** requires very few posts, and you save money on the net cost of your fence.

PEERLESS
 The Fence That Saves Expense

One of the reasons why **PEERLESS Woven Wire Fence** is better than other fences is because of the **PEERLESS** lock. It holds securely and without damaging the wire, yet there is just enough elasticity to prevent snapping from sudden shocks, changes in temperature or from any other cause. Stock cannot get through it—under it or over it. There are so many advantages in buying **PEERLESS** Fence in preference to others that we have not room in this advertisement to tell you of them.

Your name on a postal brings you our new printed matter, containing much useful information in regard to fencing. Write for it today.

The Banwell Hoxie Wire Fence Co., Ltd.,
 Dept. B
 Hamilton, Ont. Winnipeg, Man.

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 Advisor.

Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.

FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

Shoe Boils, Capped Hock, Bursitis are hard to cure, yet ABSORBINE

will remove them and leave no blemish. Does not blister or remove the hair. Cures any puff or swelling. Horse can be worked, \$2.00 per bottle, delivered. Book & D free.

ABSORBINE, J.B. (mankind, \$1.00 bottle.) For Boils, Bruises, Old Sores, Swellings, Goitre, Varicose Veins, Varicocelitis, Allays Pain.

W. F. YOUNG, P.D.F., 258 Temple St., Springfield, Mass.
LYMANS Ltd., Montreal, Canadian Agents.

ANCHYLOS

THE MODERN CURE FOR Bone Spavin and Ringbone. Read the following testimonial from a satisfied user:

J. A. McLarty: Dear Sir— I am giving you this testimonial, and will verify it to any person who asks me, that your Anchylos is a perfect cure for Bone Spavin. Every person in town knew how lame my horse was, and all agreed he never could be cured, but Anchylos does not punish the horse. After six weeks old Dock lost his lameness, and he has never shown a limp since, driving in the livery every day, and they all want him for a long drive. You should advertise Anchylos to all horsemen, for I am convinced you have the first cure for Bone Spavins ever sold to the public.

WILLIAM WHITE, Thessalon, Ont.
Anchylos is \$1.00 by mail. Address, mentioning his paper:

J. A. McLarty, Thessalon, Ont.
Manufacturing Chemist.

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.

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,
"Grape Grange" Farm, Clarksburg, Ont.

Aberdeen-Angus

For sale: The right sort, some of them by Klondyke, imp. Drumbo station.

WALTER HALL,
Washington, Ontario.

GLENGORE ABERDEEN ANGUS

Present offering: Two choice bulls 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.

HAVE YOU SECURED ONE OF "THE FARMER'S ADVOCATE" KNIVES?

GOSSIP.

As one writer puts it, no man with brains is likely to advertise widely an article which is not up to specifications. No man with brains is likely to be a poor judge of the commodity he is dealing in. No man without brains is likely to have enough money to advertise anything.

When President Scott took over control of the Cincinnati Southern Railway, he was continually harassed by the numbers of claims for cattle and horses killed, or said to have been killed, by trains passing through the grazing regions of Kentucky. Horses, particularly, fell victims. So numerous were the claims, it seemed as though the railway must run through every paddock in the State; and further, every animal killed, whether plow horse or screw, when run over, at once became a descendant of the best stock in the country, with a pedigree as long as a "ticker tape," the claim for compensation bearing, of course, due relation to the declared excellence of the horse. It was the number and size of these claims that inspired Mr. Scott's remark that he "knew nothing that improved stock in Kentucky like crossing it with a locomotive."

Fred Abbott, of Fairview Stock Farm, Harrietsville, Ont., reports a great demand and sale of Holsteins. Among the recent sales are bulls to Ed. McLeod, of Oliver; W. W. Day, of Thamesford; John Bell, of Dorchester Station; Silas W. Hyatt, of Mt. Brydges; G. H. Yocom, of Selkirk; John F. Miller, of Ridgemont; Herbert Richard, of Dorchester Station; P. H. Richard, Crampton, and W. Monro, of Thorold. All were well pleased with their animals; the last named particularly so. He wrote, thanking Mr. Abbott for the honest representation of the animal, not having seen him till he was delivered, and stating that he was all and more than he was represented to be. Mr. Abbott has still a few choice bull calves for sale, some very closely related to the great cow, Boutsje Q. Pietertje De Kol, of O. A. C., and Calamity Jane.

James Douglas, of Caledonia, Ont., in changing the wording of his advertisement for next issue, writes: I wish to draw attention to a bunch of extra-choice 2-year-old Shorthorn heifers that I am offering at present, at very low prices, as I have too many to carry. They are all bred, and with calf, to the grand Duthie-bred bull, Imp. Joy of Morning; are a specially good lot, in fine flesh, have lots of size, and, being in calf to such a grand bull, should be worth looking after. They are from good families, some from imported cows. I also have some choice young cows, bred to same sire, to offer, very cheap. They are in fine flesh, also, and it is surely a very favorable time to buy—just the beginning of the cheap feeding period. And two head may be taken in next fall for the one turned out, as mostly all of these heifers are due to calve in the early fall. A call from intending buyers will be appreciated.

TRADE TOPICS.

RIDING BREECHES.—Serviceable trousers or riding breeches are offered in this issue by Bedford Riding Breeches Co., of London, England. Patterns and easy self-measuring forms can be had from "The Farmer's Advocate," London, Ont. Specials are offered at 10 shillings 6 pence a pair. This is a very low price, considering that absolute satisfaction is guaranteed.

Full particulars regarding the laying of metal roofs are contained in an elaborate price list just issued by The Metallic Roofing Co., of Toronto. After discussing the tools required, details connected with roofing for all kinds of roofs, as well as for siding, eavestroughing, conductor-pipes and ventilators, are given most clearly in both English and French. It is pointed out that the material used is fire, lightning, rust and storm proof. Write for literature, and mention "The Farmer's Advocate."

SEA GREEN & PURPLE SLATE ROOFS NEVER WEAR OUT

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 use.

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 roof question for all time. Don't spend more money for poor roofing. Write to us for our free book "ROOFS"—it will save you money. Give name of your local roofer. Write today.

AMERICAN SEA GREEN SLATE CO., Box 3 Granville, N. Y.

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 Broadhocks. 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 ¼ mile from Burlington Junction station, G.T.R.

FRED. BARNETT, MANAGER. **J. F. MITCHELL, BURLINGTON, ONT.**

Shorthorns and Shropshires

Head 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 Sta., 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 Here (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68708 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

During the Busy Season

If you need a Shorthorn bull we will ship one on approval, and if you are not suited you may ship him back. Write us for terms and conditions. Just two ready for service. Both Cruickshank Lavenders.

MAPLE SHADE FARM. STATIONS: } MYRTLE, C. P. R.
 } BROOKLIN, G. T. R.
Long-distance telephone. **JOHN DRYDEN & SON, BROOKLIN, ONT.**

5 Good Young Bulls

at very reasonable prices in order to clear, also 2 VERY CHOICE JUNIOR YEARLINGS IN SHOW CONDITION. We can sell some extra well bred cows and heifers (bred or with calves at foot) at prices which should interest intending purchasers. Our farms are quite close to Burlington Jct., G. T. R. Long-distance telephone.

W. G. Pettit & Sons, Freeman, Ontario.

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, Gobles, 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 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.

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.

KYLE BROS., AYR, ONT. **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.

Scotch Shorthorns

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 Short-horns, 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

Herd-heading quality and breeding. Also good ones at farmers' prices. Females for sale. Write, or come and see. Farm adjoins town.

H. SMITH, EXETER, ONTARIO.

WAS WEAK AND THIN ONLY WEIGHED 73 POUNDS. NOW WEIGHS 113 POUNDS.

Had Heart Trouble and Shortness
of Breath for Six Years.

MILBURN'S HEART AND NERVE PILLS
cured Mrs. K. E. Bright, Burnley, Ont.
She writes: "I was greatly troubled, for
six years, with my heart and shortness of
breath. I could not walk eighty rods with-
out resting four or five times in that short
distance. I got so weak and thin I only
weighed seventy-three pounds. I decided
at last to take some of Milburn's Heart and
Nerve Pills, and after taking eight boxes
I gained in strength and weight, and now
weigh one hundred and thirteen pounds,
the most I ever weighed in my life. I feel
well and can work as well as ever I did,
and can heartily thank Milburn's Heart and
Nerve Pills for it all."

Price 50 cents per box or 3 boxes for
\$1.25 at all dealers, or mailed direct on
receipt of price by The T. Milburn Co.,
Limited, Toronto, Ont.

You cannot possibly have
a better Cocoa than

EPPS'S

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

COCOA

Sold by Grocers and Storekeepers
in 1/2-lb. and 1-lb Tins.

HAWTHORN HERD OF DEEP-MILKING



Shorthorns

For Sale: 2 young bulls and 10
heifers, sired by Aberdeen Hero
(imp.) = 28840 =. Some bred to
the Lavender bull, Lavender Lorne = 68706 =.
WM. GRAINGER & SON, London, Ontario.

Imported Bull!



To save inbreeding I will sell the
Cruickshank (Duthie bred) imp.
bull, Sittytton Victor = 50993 =
(87397), a proven sire of merit,
gentle and active. Also some
young bulls by him, out of imp.
dams. Address:

John Brydone, Milverton, Ont.



Willow Bank Stock Farm SHORTHORNS AND LEICESTERS.

Herd established 1855; flock, 1848.
Am offering a special good lot
of young females, bred to the
great Duthie bull, Imp. Joy of
dams. Address:

Morning = 32070 =. Also young bulls and Leicester
sheep fitted for showing. Write for prices.
JAMES DOUGLAS, CALEDONIA, ONTARIO.

1854—Maple Lodge Stock Farm—1909

Shorthorn bulls and heifers of extra
quality and breeding, and from best milk-
ing 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.

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.

Scotch Shorthorns 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.

Shorthorn Bulls Ready for service. One will
make a show bull. Also
young things from Matchless, Crimson Flower, Miss
Ramsde, Rosemary, Diamond and Lady Fanny
dams, the best of Chancellor's Model. Prices to suit
times. See and see. Israel Groff, Elmira, Ont.

GOSSIP.

A. A. Colwill, Newcastle, Ont., writes:
I will have to ask you to change that
advertisement of mine again, as I have
sold all those Tamworth sows, bred to
farrow in April, May and June. I now
have a few bred during April and May,
which are real good ones, and will be
sold, well worth the money. I have had
a splendid demand for sows of late, also
for suckers, and have still a fine lot of
very choice ones left to sell; some good
show stock in the lot. The Shorthorn
cows, with heifer calf at foot, are well
worth looking after; they are worth for
beef purposes almost the money I ask.

Messrs. John A. Boag & Son, Queens-
ville, Ont., report the following list
of sales of Clydesdale stallions: But-
tress (imp.), to Robert D. Bowes, of Elm-
hedge, Ont.; Squire (imp.), to Joseph
Phillipps, of Maidstone, Ont.; Lord New-
lands (imp.), to Robert Graham, V. S.,
Schomberg, Ont.; Timothy (imp.), to
Peter Kelly, of Brechin, Ont.; and State-
ly Chief (Canadian-bred), to D. Morton
& R. Brown, Sask.; and mare, Rose
Comble (imp.), to Mr. Bruce, Saskatch-
ewan. Messrs. Boag expect to have a
new importation from Scotland landed
about the middle of July.

L. A. Wakely, Bolton, Ont., ordering a
change in his advertisement of Short-
horns, writes: The past winter has been
the best for sales for over 20 years that
I have been interested in Shorthorns,
having sold nearly all the females of
breeding age I care to dispose of just
now. The following are some of those
who bought females, solely as dual-pur-
pose stock: G. A. Robinson, Claude;
Thos. Ford, Newton Brook; Jno. E.
Jackson, Mono Mills; Jabez Wakely,
Bolton. The following are now in pos-
session of bulls that were advertised:
Henry Hesp, Bolton—Humber Monarch, a
dark red, attractive, short-legged, and
proving a very sure breeder; Alfred T.
Harper, Castlederg—Albion's Monarch, al-
so a dark red, a show bull from every
standpoint; Wm. Lochart, Coleraine—
Merry Monarch, dark red, a lengthy fel-
low, worthy of a place in any show-
ring. The above bulls, and a number of
other young stock on hand are got by
Chief Monarch, out of Monarch's Lady
= 55705 =, an Orange Blossom cow, bred
by J. G. Robins & Sons, Horace, Ind.,
got by Gay Monarch (imp.) = 40381 =.
Chief Monarch = 62549 = is no less fa-
mous on his sire's side, being got by
Chief Ruler (imp.) = 45165 = (80694),
that for a period graced the herds of
such famous stockmen as J. M. Gard-
house, Weston, and Senator Edwards,
Rockland.

GLENGORE POLLED ANGUS.

The Glengore herd of Aberdeen-Angus
cattle, the property of Geo. Davis &
Sons, of Alton, Ont., have wintered well
and are in splendid condition to go ahead
rapidly on the succulent spring grass.
The Messrs. Davis are enthusiastic ad-
mirers of the black Scotch "doddies" as
the beef cattle par excellence, and this
splendid herd is looked after with a care
that ensures their bodily thrift. On
blood lines, the herd is entirely made up
of the noted Fair Lady and Mayflower
strains, the latter being the same founda-
tion as the great Martin herd of world-
renowned "Blackbirds." At the head of
the herd just now is the splendid, evenly-
fleshed bull, Cochrane of Tweedhill
1905 (C.), 107704 (A.), sired by College
Monarch 827, dam Nina of Tweedhill, a
Mayflower, by Britannia of Willow Grove.
Mr. Davis made no mistake in selecting
this bull as a herd-header, as he is prov-
ing a sire of sterling worth. During the
last year, Mr. Davis reports a very de-
cided increase in the demand for Angus
cattle. He has sold and shipped to dif-
ferent parts of Ontario, and as far west
as Manitoba, nearly all by correspond-
ence, with entire satisfaction to the
buyer in every case, as he always en-
deavors to give a true and honest descrip-
tion. Only one young bull is left, nearly
fit for service, and he will certainly
please the buyer. He is 11 months of
age, sired by Monarch of Inerleithian,
dam Mysie 3rd of Glengore, a Mayflower,
by the Corskie-bred bull, Hamilton Boy.
Several females could be spared, of a
quality that would make a grand herd
foundation.

A Public Sale

WILL BE HELD

TUESDAY, MAY 25, '09,

COMMENCING AT 12.30 P.M., AT
FAIR GROUNDS, BROCKVILLE, ONT.

50 HEAD REGISTERED 50 Holsteins

No reserve or by-bidding allowed. All must go. Greatest bunch
of A. R. O. breed cattle ever offered by public sale in Canada.

Six cows with records over 20 pounds butter each. A daughter and
g. daughter of Paul Beets De Kol (world's greatest sire), as well as a
sister to Francy 3rd, winner of test, Ottawa, 1908-1909. A son of
King Segis. Also many heifers and cows bred to the richly-bred sires:
Oakland Sir Maida and Brightest Canary.

Catalogues now ready.

Sale will be held under cover.

TERMS OF SALE.—Cash, or five months' time bankable paper,
with interest at 6 per cent.

Don't miss it. Your best chance to secure good blood.

Colonel B. V. Kelley,
Syracuse, N. Y.,
Auctioneer.

CONSIGNORS:

G. A. Gilroy, Glen Buell, Ont.

T. R. Beale,
Athens, Ont.,
Clerk of Sale.

Gordon H. Manhard, Manhard, Ont.

HOMEWOOD 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, Springford, 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, Falden's 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.

Sunny Hill Farm No more Holsteins
for sale at present.
Eggs from choice White Rocks and Buff Orping-
tons, one dollar per setting. DAVID RIFE &
SONS, Hespeler Ontario. Waterloo County,
C. P. R. and G. T. R.

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 life-
time to buy good cattle at bargain prices. The best way to 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

Centre and Hillview Holsteins

For sale: 5 choice bulls fit for service now, from
dams of extra good backing. Their sires are
Brookbank, Butter Baron and Bonheur Statesman.
Their dams and sires' dams and grandams average
over 24 lbs. butter testing over 4 per cent. in 7 days.
P. D. EDE, Oxford Centre P. O., Woodstock
Sta. Ont. Long-distance phone, Burgessville.

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.

LAKEVIEW HOLSTEINS

We have for sale 4 young bulls ready for
service, 2 of them by Brightest Canary, whose
several nearest dams average 25 lbs., and whose B. F. 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.

HOMESTEAD HOLSTEINS

For sale: Bull calves sired by the
champion, Count Mercedes Posch,
whose nearest dams' records aver-
age 25 lbs., and out of Advanced
Registry dams.

G. & F. GRIFFIN,
Burgessville, Ont. Oxford Co.

DON'T Buy a HOLSTEIN BULL till
you get my prices on choice
goods from five months to one
month old, from best produc-
ing strains. "Fairview Stock Farm." FRED
ABBOTT, Harrietsville, Ont.

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 heif-
ers, 8 1-yr.-olds, and a number of
heifer calves. Bulls from 1-yr.-old
down. Priced right. Truthfully
described. W. HIGGINSON, Inkerman, Ont.

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.

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 3/4 pounds each, and over 4.5% fat. As-
sisted 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 in-
spect our herd. E. H. DOLLAR, Heuvelton, St.
Law. Co., N. Y., near Prescott, Ont.

SUBSCRIBE FOR "THE FARMER'S ADVOCATE AND HOME MAGAZINE."

Binds More Sheaves with Less Twine



Plymouth Binder Twine is made right. It works smoothly, ties properly, and the last of the ball feeds as freely as the first. No knots or breaks. Fifty per cent stronger than the strain of any machine actually requires.

PLYMOUTH Binder Twine

is used more than any other twine because it is known to be the best. Made by the oldest cordage establishment in the United States, where quality and honesty are spun into every ball of twine. Farmers who insist on seeing the wheat-sheaf tag on every ball of twine save money and avoid harvest delays. Get Plymouth Twine of the local dealer.

PLYMOUTH CORDAGE COMPANY
Largest Rope Makers in the world—Oldest in America.
Plymouth, Mass.

Bog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.
FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

Football FREE

For selling Pictures Post Cards and Collar Buttons.



card will do. **THE RELIABLE PREMIUM CO.**
Dept. X Waterloo, Ont.

Well DRILLING & PROSPECTING MACHINES.

Fastest drillers known. Great money earners!
LOOMIS MACHINE CO., TIFFIN, OHIO.

Farmer (to lad put to plowing the first time—"What on earth be at, messin' about all over the place like this?")

Farm Lad—"Wull, you told I to look at summat an' go straight to it, an' I bin tryin' to foller that ther cow till I be tired, an' now I be waiting for 'er to be down."

QUESTIONS AND ANSWERS. Miscellaneous.

UNPRODUCTIVE PLUM TREE.

We would like to ask, through "The Farmer's Advocate," what would be a successful treatment to prevent the falling of the blossoms from a Burbank plum tree. It has blossomed very heavily for 5 or 6 years, and never held more than 6 or 7 plums. It is in a sheltered spot. The tips of the young growth very often die through summer.

J. M. M.

Ans.—Evidently, there is something lacking in the vitality of your Burbank plum, that it should drop all its blossoms without setting fruit. This may be due either to some inherent weakness in the tree, or possibly to winter injury to fruit buds. From the fact that you mention that the tips of the young shoots die back during the summer, I would judge that the tree would be unthrifty, in which case I would dig it out and plant another, or make sure that the conditions surrounding it were all favorable for tree-growth. The Japanese plums, of which Burbank is a variety, are not the most suitable for your district. I would recommend trying some of the European kinds, such as Bradshaw, Lombard, Imperial Gage, or Reine Claude.

O. A. C.

PEACH-LEAF CURL AND OTHER QUESTIONS.

1. Peach tree is about four years old. Last year it had quite a number of blossoms, but none formed into fruit. The leaves seemed to all curl up, as if they were diseased. The tree has grown nicely. Should it be pruned lightly or severely? When is the best time to do the pruning? When is the best time to prune small fruits, such as currants, etc.?
2. How can cuttings be obtained from Columbia raspberries, and from blackberries?

3. What kind of soil, and what location is best for roses?
4. What is the best spray to use to kill the aphid on roses?
5. What will kill or prevent the aphid found on golden glow?

6. From whom may I obtain a spray calendar?

W. J. FARMERY.

Ans.—1. From the symptoms given, your peach tree is evidently affected with "peach-leaf curl," a fungous disease which causes a peculiar twisting and curling of the leaves early in the season. These diseased leaves usually fall about mid-season, and often the fruit crop is lost at the same time. New leaves, however, replace those which fall, and the tree is not usually severely injured. The best way of preventing this disease is by thorough spraying with lime during winter, or, better, lime-sulphur in the spring. The latter, however, is somewhat difficult to prepare, unless you have all appliances for boiling it. Peach trees usually are better of more or less severe pruning, which induces growth of vigorous new wood, upon which fruit is produced the year following. The best time to prune the peach tree is early in the spring, after severe frosts, and before the buds swell. Small fruits, such as currants and raspberries, may quite as well be pruned in the autumn, although it might be left till spring; but the sooner it is done in the spring, the better.

2. The Columbian raspberry, as well as the black raspberries, are propagated by rooting of the tips of the new canes. These should be bent down and covered with earth during the latter part of the summer, whenever they show by their snaky appearance that they are ready for rooting. The blackberry or thimbleberry is propagated from suckers or root cuttings.

3. Roses do best upon a somewhat heavy soil, and in an open location, where they will have plenty of sunlight.

4, 5, 6.—The best means of destroying the aphid or plant lice on roses or golden glow is to spray thoroughly with tobacco water or kerosene emulsion. Directions for making and applying these may be found in the spray-calendar number of "The Farmer's Advocate," issue April 1st, 1909.

H. L. HUTT.

O. A. C.

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, 2nd's Homestead, Pietertje, 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.,

Col. B. V. Kelley, Syracuse, N. Y., Auctioneer. **Breslau, Waterloo County, Ontario.**

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.



Cattle Labels \$2 and fifty tags \$1.50 for fifty tags. Sheep Labels, \$1 for fifty tags. With name and numbers. By return mail, prepaid. Write today. Sample free. **F. G. JAMES, Bowmanville, Ont.**

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, Pine Ridge Farm, Newmarket, Ont.**



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.

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.**



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.**

AYRSHIRES AND YORKSHIRES!

Kindly send in your orders at once for imported stock. We can cable orders and have them shipped in May. 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.



Ayrshire Cattle—Imported or Canadian bred, for sale at all times; satisfaction guaranteed. For particulars, write:

W. THORN, Lynedoch, Ont.

Trout Run Stock Farm.

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.

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.



AYRSHIRES

Bull and heifer calves from producing dams. Right good ones.

Hickory Hill Stock Farm.

Dundas Station and telegraph.

N. DYMENT, Clappison, Ont.

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.).

SOUTHDOWNS AND COLLIES.

Long-distance Telephone.

Orders now solicited for especially-fitted sheep. Your choice of early lambs from imported and prizewinning Canadian-bred ewes, and by the sire of the Grand Champion wether at Chicago, 1907. Twenty shearings, the choice of last year's lamb crop, also for sale.

ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.

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

Fairview Shropshires

We now offer Excellent ewes, choice rams. And the best lots of lambs ever offered.

All sired by our famous Chicago and St. Louis Grand champion rams. His Best and B. Sirdar.

J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

CALFSKINS WOOL

WRITE FOR PRICES

Ship **E. T. Carter & Co., 84 Front St. E., TORONTO.**

CLAYFIELD Buy now of the **Champion Cots-Stock** **weld Flock** of America, 1908. Flock headers, ranch rams, ewes of different **F A R M!** ages. All of first-class quality, and prices reasonable. Write, or call on **J. C. ROSS, Box 61, Jarvis, Ont.**

CURE FOR DYSPEPSIA

As is well known, this troublesome complaint arises from over-eating, the use of too much rich food, neglected constipation, lack of exercise, bad air, etc.

The food should be thoroughly chewed, and never bolted or swallowed in haste, stimulants must be avoided and exercise taken if possible.

A remedy which has rarely failed to give prompt relief and effect permanent cures, even in the most obstinate cases, is

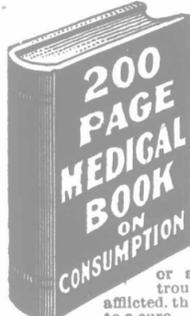
BURDOCK BLOOD BITTERS

It acts by regulating and toning the digestive organs, removing costiveness and increasing the appetite and restoring health and vigor to the system.

Mr. Amos Sawler, Gold River, N.S., writes:—"I was greatly troubled with dyspepsia, and after trying several doctors to no effect I commenced taking Burdock Blood Bitters and I think it is the best medicine there is for that complaint."

For Sale at all Druggists and Dealers.

Consumption Book



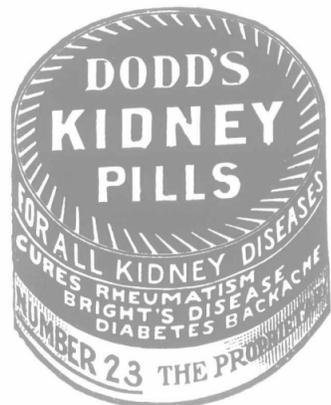
FREE

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.

A correspondent writes to the Newark News to ask the editor how he pronounces "chauffeur." This is the reply given: "We usually pronounce 'chauffeur' the way the other fellow pronounces it. If he says 'chaw-fer,' we say 'chaw-fer' too." It is the only safe thing to do in an age when everybody is suspected of trying to appear refined. Among the most common pronunciations of the word are the following: Sho-fur, shuf-fer, sho-fure, shov-er, shaw-fer, chaf-fer, chaw-fer, chow-fer, shif-fer, she-fur, sho-foot; sho-feer."

A young captain, who was drilling the awkward squad, commanded thus: "Now, my men, listen to me. When I say 'Halt!' put the foot that's on the ground beside the one that's in the air, and remain motionless."



GOSSIP.

Henry M. Douglas, Stayner, Ont., reports the ready sale of the half-bred Hackney horse recently advertised by him in "The Farmer's Advocate." The buyer arrived on the 5 p. m. train, closed the deal, loaded and shipped out on the 6.30 p. m. the same day.

At the Nottingham sale of Yorkshire swine on April 27th, nearly one hundred head were catalogued, and 99 head sold for an average of \$45 each, the top price being \$120, for the sow, Nottingham Royal Buttercup 18th, purchased by the Earl of Ellesmere. At the dispersion sale of the Yorkshire herd of R. R. Rothwell, 69 head sold for an average of \$40 each, the highest price being \$200, for the sow, Fulwood Miss Nottingham 4th, to E. Newton.

SHORTHORNS BY AUCTION.

The second annual surplus-stock sale from the noted Valley Home herd of S. J. Pearson, Son & Co., of Meadowvale, Ont., will be held at the farm, one mile from Meadowvale Station, C. P. R., on Wednesday, June 2nd, when 19 head will be sold, exclusive of calves at foot. There will be four young bulls, three of them ready for service; ten heifers from one to two years of age, and five cows with calves at foot. This offering presents a most favorable opportunity for farmers to stock up with a few choice heifers, thus making ready for the inevitable advance in prices in the very near future. Look up our next week's issue.

Colonel Beck's thinking horse, Denmark, is the pride of the animal kingdom of a city in Eastern Pennsylvania. He is the one horse among all others that everybody seems to know, and not only knows, but loves, as well. He is known by all horsemen within a radius of some thirty miles. He is a beautiful bay gelding, fifteen years old. Every grocer in the city of Reading knows this horse, for the little boys and girls are the grocers' patrons, for lumps of sugar to feed him while he may be standing at a street corner awaiting his owner to come back to the carriage. Denmark has never been frightened. He is fearless as a man who is used to the dangers of life. Colonel Beck has driven him across the two-foot walk for pedestrians on a trolley bridge over the Schuylkill River. He has at other times driven him with his nose to the front of steam engines, and at one time he placed his two feet on the driving wheel of a locomotive while the whistle was blowing and the steam hissing, eating at the same time an apple from the hands of the engineer in charge of the engine. Denmark has many peculiarities. He is a fine saddle horse; he can walk, trot, foxtrot, pace, singlefoot, canter, march, waltz, two-step, cake-walk, side-step, pirouette, or climb stairs, while bridled or unbridled, at the option of the rider. He can change his gait from one style to the other at a moment's notice, without being touched with a spur or whip, and the fact is that neither Colonel Beck nor Miss Beck have ever touched him with either. Colonel Beck, whenever out driving, leaves Denmark to himself at any and all places, and follows his business. When he returns to the vehicle, Denmark is always there at the same spot and in the same spirits. He never gets restless, as his reasoning powers seem to tell him that his owner will not stay longer than necessary to transact his business.

TRADE TOPIC.

Clearing the land of stumps and stones is done much more rapidly by the use of powder than by the old method of chopping or dragging out the former, or grubbing up the latter by hand or horse. In past days, some found justification for pulling stumps in the excuse that they were wanted for fences. Now, however, such fences are out of date. All now realize that time is money, and the quickest way of removing obstacles from cultivated areas is the best, provided the cost is not excessive. Write to The Hamilton Powder Co., of Toronto, whose advertisement appears in this issue, for cost and detailed instructions about blast-

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.

NEWCASTLE TAMWORTHS, SHORTHORNS AND CLYDESDALES. Present offering: 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 really good sows bred during April and May. A. A. COLWILL, NEWCASTLE, ONT.

For Sale: CHESTER WHITES

of the right type. Apply to:

DANIEL DE COURCY, BORNHOLM, ONTARIO.

Shannonbank Clydesdales, Ayrshires, S. Yorkshires.—One stallion rising three years, by imp. Hopewell. Two young bulls ten months, and some heifers from six months to two years. Yorkshires of both sexes. W. H. TRAN, Cedar Grove, Ont. Locust Hill 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.—Large strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 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.

Men, Be Strong.

Take This Belt for What It Is Worth. Wear It Until You Are Cured—Then Pay Me My Price.



Every man should understand that physical power, large muscles, strength and endurance come from animal electricity. My treatment will pump every part of the body full of that, and perfection will result. It not only restores vigor and increases nerve power, but it cures Rheumatism, Pains in the Back and Kidneys, Indigestion and Constipation, and all troubles which result from weakness of any vital organ. I have learned to put a lot of confidence in men, especially men who are weak, sickly and delicate, who have tried everything to restore their vitality and failed, who have lost faith in themselves and humanity in general, because they have been led to try so many remedies which were no more use than as much water. These are the men I want to wear my Belt, and I will wait for my pay until they are cured. All I ask is that they give me reasonable security while the Belt is in their possession and use. If it don't cure you it costs you nothing. Is there anything more fair?

GET SOME LIFE INTO YOU

Where there is any physical constitution to work on, my treatment will develop perfect manhood. It will take the slightest spark of manly vigor and fan it into a flame which will encompass the whole structure and charge every nerve and muscle in the body with the vigor of youth.

Ellesmere, Ont., March 20, 1908.

Dr. McLaughlin:—

Dear Sir,—I am pleased to be able to report to you that the Belt I purchased from you last December has done me a world of good. It has taken the pain completely out of my back, and I can now work all day without feeling it at all. Yours very truly, G. LLOYD.

MR. C. W. TINDALL, 188 Humber-side avenue, Toronto Junction, says my Belt cured him of a bad case of Nervous Weakness.

Dr. McLaughlin:—

Dear Sir:—I am pleased with your treatment. I feel like a new man. I have gained over twenty pounds. I would not be without it for any money.—DAVID CRAWFORD, Oso Station, Ont.

Wherever you are, I think I can give you the name of a man in your town that I have cured. Just send me your address and let me try. This is my twenty-fourth year in the business of pumping new vim into worn-out humanity, and I've got cures in nearly every town on the map. All I ask is that you secure me and pay me only when your cure is complete.

READ WITH CARE DR. McLAUGHLIN'S ELECTRIC BELT is positively the only Electric Belt offered to the public where you have a regular physician in attendance. You have his advice and consultation FREE OF CHARGE.

FREE TO YOU Business transacted by mail or at offices only.—No agents.

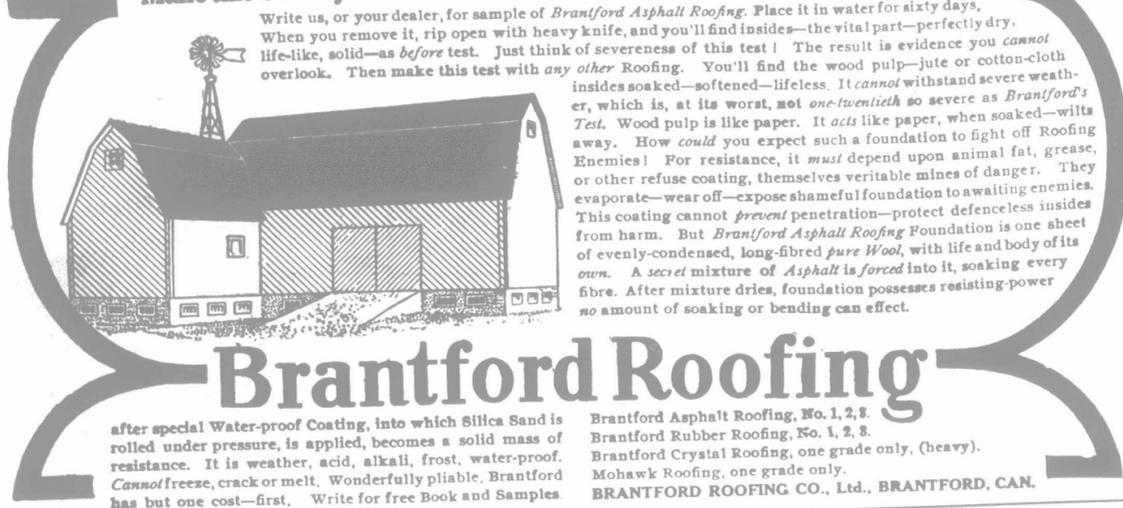
Get my 80-page book describing my Electric Belt, with illustrations of fully-developed men and women, showing how it is applied. If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon. Consultation free. Office hours 9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.

Please send me your book free.

NAME ADDRESS

Make this 60-Day Test of Brantford Roofing—then Test Any Other Make



Write us, or your dealer, for sample of *Brantford Asphalt Roofing*. Place it in water for sixty days. When you remove it, rip open with heavy knife, and you'll find insides—the vital part—perfectly dry. Life-like, solid—as before test. Just think of severeness of this test! The result is evidence you cannot overlook. Then make this test with any other Roofing. You'll find the wood pulp—jute or cotton-cloth insides soaked—softened—lifeless. It cannot withstand severe weather, which is, at its worst, not one-twentieth so severe as *Brantford's Test*. Wood pulp is like paper. It acts like paper, when soaked—wilted away. How could you expect such a foundation to fight off Roofing Enemies! For resistance, it must depend upon animal fat, grease, or other refuse coating, themselves veritable mines of danger. They evaporate—wear off—expose shameful foundation to awaiting enemies. This coating cannot prevent penetration—protect defenceless insides from harm. But *Brantford Asphalt Roofing Foundation* is one sheet of evenly-condensed, long-fibred *pure Wool*, with life and body of its own. A secret mixture of *Asphalt* is forced into it, soaking every fibre. After mixture dries, foundation possesses resisting-power no amount of soaking or bending can effect.

Brantford Roofing

after special Water-proof Coating, into which Silica Sand is rolled under pressure, is applied, becomes a solid mass of resistance. It is weather, acid, alkali, frost, water-proof. Cannot freeze, crack or melt. Wonderfully pliable. Brantford has but one cost—first. Write for free Book and Samples

Brantford Asphalt Roofing, No. 1, 2, 3.
Brantford Rubber Roofing, No. 1, 2, 3.
Brantford Crystal Roofing, one grade only, (heavy).
Mohawk Roofing, one grade only.
BRANTFORD ROOFING CO., Ltd., BRANTFORD, CAN.

QUESTIONS AND ANSWERS. Miscellaneous.

A WOUNDED DOG.

I would like to know the law about shooting dogs. I had a valuable dog shot and wounded. The dog was shut up in barn till half past six in morning, and came back bleeding and wounded before seven, said dog having done no harm, only lying on neighbor's place, which is not more than sixty rods away.

Ontario.

SUBSCRIBER.

Ans.—It is probable that you have a right of action for damages against the person by whom your dog was shot.

CEMENT WHEY TANK.

We are thinking of putting an elevated tank for whey at our cheese factory, and pasteurizing the whey. Could you give us an idea of the cost of a 70-barrel tank, made of cement, similar to a silo, and who would have apparatus for constructing such a tank?

H. G. M.

Ans.—The dairy authorities of Ontario have ceased to recommend cement whey tanks, experience having been that the acid in the whey ate out the cement, causing the material to disintegrate. This was, of course, at a time when the whey in the tanks was customarily sour. It is possible that if the whey were pasteurized and kept sweet, an extra-well-constructed cement tank might prove more durable than has been the common experience. However, considering the expense of construction, the inconvenience of building an elevated whey tank, and the possibility, if not probability, of the acid eating out the cement, we think it inadvisable to build such a tank. Steel or wood is decidedly preferable. A wooden tank, in which the whey is pasteurized right from the beginning, should give first-class satisfaction.

VALUE OF A FERTILIZER.

1. I bought fertilizer this spring, and on the bags was stamped: Nitrogen, 1.65 to 2.47; equal to ammonia, 3 to 4; soluble phos. acid, 6 to 7; reverted, 2 to 3; available, 8 to 10; insoluble, 1 to 2; total, 9 to 11; potash (K 20), 10 to 11; equal to sul. potash, 18.50 to 20.35. Is that a high-grade fertilizer, and what should the cost be, of such fertilizer?

2. I gave one dressing of it on ground before harrowing at the rate of 800 lbs. per acre, with 30 loads of manure plowed under per acre. Now I have put in my onions, if I could sow broadcast after onions come up at the rate of about 400 lbs. of fertilizer per acre, on top of ground before hoeing, would it hurt onions? Some say you dare not sow fertilizer after anything comes up, or not to let it touch the plant, or would I have to put it in between the rows?

A. B. M.

Ans.—1. According to the analysis given, your fertilizer is a fairly high-grade one, as "ready-mixed" fertilizers go, and is worth from \$25 to \$30 per

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It is not economy to have such a furnace in your own home, or in your tenant's home.

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As soon as you let the contract for your house decide on your furnace. The "Sunshine" man will be pleased to tell you just how the rooms ought to be laid out with an eye to securing greatest heat from the smallest consumption of coal.

If you want to experiment with the question don't specify "Sunshine."

If you want to settle the question specify "Sunshine."

McClary's

ton, according to the source of the various ingredients. The statement in the analysis, that 1.65-2.47 per cent. nitrogen is equal to 3-4 per cent. ammonia, is not quite correct; that amount of nitrogen is equal to only 2-3 per cent. ammonia.

2. A dressing of 400 lbs. of the fertilizer applied broadcast before hoeing will produce no ill effect, provided the operation is performed on a dry day, when the above-ground parts of the plants are free from moisture, but it is questionable whether a further application is necessary. Thirty loads of manure supplemented with 800 lbs. of the fertilizer, seems to us to be quite a liberal treatment, and according to the analysis, 800 lbs. of this fertilizer is equal to 100 lbs. nitrate of soda, 350 lbs. acid phosphate, and 160 lbs. muriate of potash.

B. L. E.

Veterinary.

WEAKLY COLT.

Three-year-old colt, 16½ hands high, has sweating spells in the stable, and his legs seem weak. He has always seemed to be overgrown, and often seems to lose control first of one hind leg, then the other, and one fore fetlock sometimes is knuckled. He is fed hay and 2 quarts oats three times daily. He has worms. I gave him two doses of 1 teaspoonful sulphate of iron, ¼ teaspoonful of fenugreek, and 1 teaspoonful of gentian.

A. & S.

Ans.—The colt has evidently grown too fast, and has not strength in proportion to size and weight. He may yet fill out and make a useful horse. You are not giving him enough grain. See that he gets regular exercise, and increase his grain ration to one gallon at each feed. For worms, take 2 ounces each of sulphate of iron, sulphate of copper, calomel and tartar emetic; mix, and divide into 24 powders. Give a powder every night and morning, and, after the last has been given, give a purgative of 8 drams aloes and 2 drams ginger. I do not think he has any disease other than worms, and it is probable his legs will gain strength gradually.

V.

LAME HORSE — FATALITY IN SOW.

1. Eighteen-year-old roadster went lame in off hind leg a year ago. We bathed fetlock and applied turpentine. He ran at pasture from May 24th to September 1st, and seemed somewhat better. He is driven 5½ miles and back daily, and he goes lame. He holds his foot up at nights as though in pain, and seems worse towards the end of the week. His hip is becoming more pointed. He is quite lame when backing out of stall, but after driving a mile or so he goes practically sound until after standing for a while again.

2. Sow farrowed and raised ten pigs until seven weeks old; then became sick, refused food, and died in two days. We could notice nothing wrong except a whiteness around nose and eyes. She was fed buckwheat, oats and swill from the house, and the last week was fed considerable corn.

M. A. McK.

Ans.—1. The symptoms denote spavin. The apparent sharpness of the hip is due to a shrinking of the muscles from want of function on account of the horse resting the foot so much when standing. As he is so old, a cure is uncertain. Get your veterinarian to fire and blister the hock. This will probably cure. Applications of liniments, etc., will do no good.

2. The symptoms given are so brief, it is not possible to diagnose with any degree of certainty. I am of the opinion she died from indigestion. A purgative during the early stages might have saved her.

V.

With a dazed look in his bloodshot eyes the man who had been on a jag for a week or more and had wandered over the country in a half-delirious condition without knowing where he was going, came to himself.

He was in a strange city. Everything around him looked unfamiliar.

"Officer," he said, stopping a policeman, "what town is this?"

"Amherst," answered the policeman.

"Then I've got 'em again!" he groaned.

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What's the worth of one horse's day's work? How much do you pay your hired man? Why not save many days' work for both? Turning the soil with a

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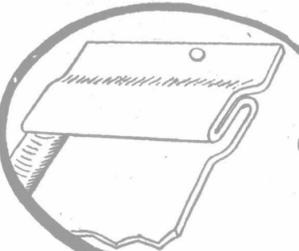
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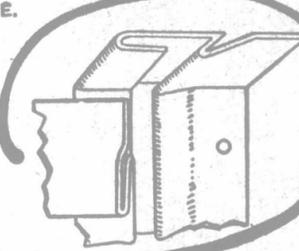
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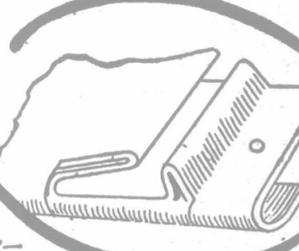


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This book is fair, frank, comprehensive. It tells all about the cost of each kind of roofing. It tells the advantages and the disadvantages of each. It is a veritable gold mine of roofing information.

The reason we send it free is because it tells too, about Ruberoid roofing.

Since Ruberoid roofing was invented nearly twenty years ago, there have sprung up more than 300 substitutes.

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Ruberoid roofing is sun proof, rain proof, snow proof, cold proof, weather proof. It resists acids, gases and fumes.

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It is so nearly fireproof that if you drop live coals on a Ruberoid roof it will not burn.

The secret of these wonderful properties of Ruberoid roofing lies in the Ruberoid gum—our exclusive product.

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If you are going to roof, though, learn about our roofs. To get our free book, simply write to Department 200 The Standard Paint Company of Canada, Ltd., Montreal, Canada.



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"Buco" Hand Cultivator does twice the work of Hoe in less time, less labor, trouble; more thoroughness. Digs deeply, extracting weeds by roots. Adjusted to any width for working around vegetables, etc. 4 1/2 ft. hard-wood handle; thoroughly tempered best steel Teeth. Simple, durable; lasts a lifetime; saves its own price many times first season. Sold by Hardware and Seed Stores. If dealer cannot supply you, send regular price, \$1.50, and "Buco" will be promptly sent you. Money refunded after 10 days trial if it is not satisfactory.

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Why do I sign all my advertising?



I STAND back of every word in this advertising, just as I stand back of my goods. That is why I sign them with my personal signature.

Every now and then some well-meaning, clever advertising expert says to me: "Pedlar, don't

you realize it is out-of-date to write your advertising in the first person singular? People don't sign their own ads, any more. It's the day of big corporations, not of individuals."

Maybe they are right—they ought to know. But I think I shall go on signing my ads, just as long as I sign my letters. You see, I consider this advertisement just as direct and personal a message to you as it would be if I wrote it to you in a letter. I expect you to believe what it says. So I sign it with my own name. Would I do that if it said anything but the exact truth?

I would like you to know that I mean every word in this advertisement—that I stand right back of every

statement it makes—that you can hold me personally answerable for every claim it makes—and my business and personal reputation amount to something, I think, without conceit.

That is what my advertising means to me, and what my signature means to you. That is why I sign my ads personally. I think I shall keep right on signing them.

G. H. Pedlar

What does it mean when we say 'guaranteed'?

THIS business was founded in 1861—almost fifty years ago. It has grown till it operates the biggest plant of the kind in the British Empire. That growth has come because Pedlar products have quality. The Pedlar reputation rests upon making that quality good enough to guarantee.

That specially interests the man who roofs with Oshawa Steel Shingles. From the minute that roof is on the responsibility for that roof's goodness rests on us—not on the buyer, but on this Company—not on some smooth salesman's say-so, but on a signed and sealed guarantee, backed by this Company's capital and reputation and the personal word of its President.

There is no quibble about the Pedlar guarantee. It isn't full of loopholes and gateways for dodging. It is plain, straightforward, honest. It says, simply, that every Oshawa-shingled

antee will go with the renewed roof.

And by "good" the Pedlar guarantee means good in every roof-sense of the word—means a roof free from leaks, free from rust holes, free from the need of paint or repairs—a roof that is just what a good roof ought to be.

Twenty-five years the guarantee covers. The roof that's Oshawa-shingled will be a good roof, though, for four times that long—for a century.

When you consider that no other roofing at all is guaranteed at all, and that every Oshawa-shingled roof is guaranteed this

way, there is scant room for argument about the betterness of Oshawa Steel Shingles (Guaranteed).

OSHAWA GALVANIZED STEEL SHINGLES

A new roof for nothing if they leak by 1934

roof, properly laid, will be a good roof for twenty-five years, or—that roof will be renewed free of all cost to the owner, and the same kind of a guar-

Why You Should Roof with Oshawa Shingles:

BECAUSE Oshawa Steel Shingles (Guaranteed) are made of extra heavy (26-gauge) semi-hardened sheet steel, evenly and heavily galvanized on both sides and all edges. Therefore, Oshawa-shingled roofs are proof against rust and will need no painting.

Because Oshawa Steel Shingles (Guaranteed) alone have the Pedlar four-way lock, which makes these Shingles the easiest and simplest roof to lay (no tools but a hammer and a tinner's shears), and yet makes one seamless, unbroken sheet of heavy steel, that is really wet-proof and that is also WIND-proof. Such a roof keeps a building cooler in summer, warmer in winter, and dry always.

Because Oshawa Steel Shingles (Guaranteed) actually cost less than five cents a year per square—two square feet—or about a tenth the cost of common wood shingles, yet an Oshawa-shingled roof is fire-proof as well as wet- and wind-proof; also, it is perfectly insulated against lightning—these steel shingles keep a building safer against lightning than lightning-rods will.

Because Oshawa Steel Shingles (Guaranteed) relieve your mind and your pocketbook of ALL roof worries there are—and still cost little enough to be an economy for roofing any permanent structure, from a great factory to a henhouse. They cover millions of dollars' worth of property all over Canada, and cover it right—else they wouldn't be there.

Send for the meaty little free book that tells you some roof facts you perhaps don't know, but ought to—tells you the comparative worth and cost of all kinds of roofing—puts the whole roofing question plain before you. Send for Roofing Right Booklet No. 16, before you spend another dollar for any roof. Learn that Oshawa Steel Shingles (Guaranteed) will pay you better, and why.

PEDLAR PRODUCTS include every kind of sheet-metal building materials—too many items to even mention here. You can have a catalogue—estimate—prices—advice—just for the asking. We'd like especially to interest you in our Art Steel Ceilings and Side Walls—they are a revelation to many people. More than 2,000 designs. May we send you booklet and pictures of some of them?

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WE WANT AGENTS IN SOME SECTIONS. WRITE FOR DETAILS. MENTION THIS PAPER.

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