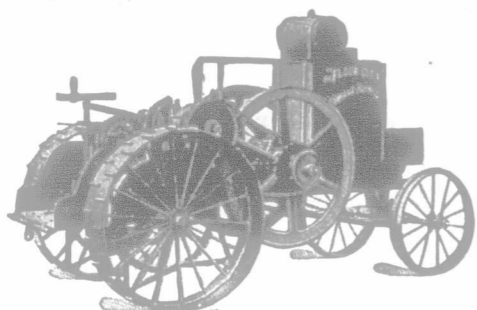


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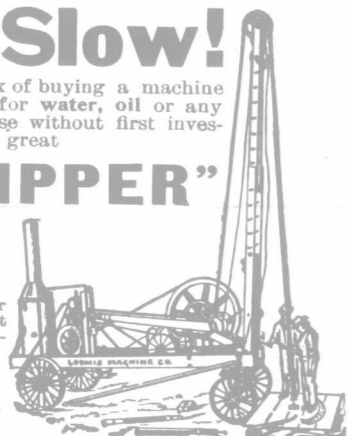
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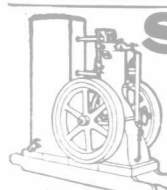
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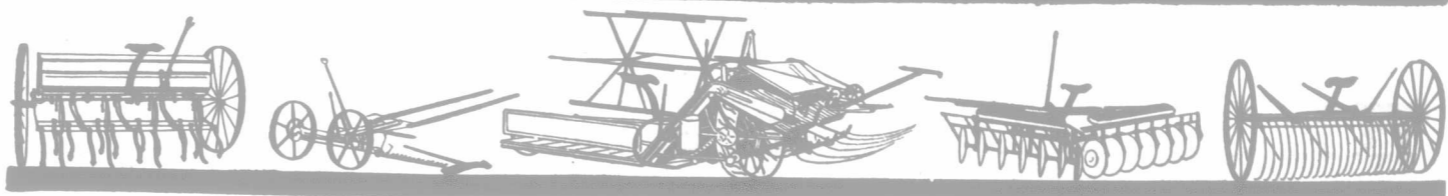
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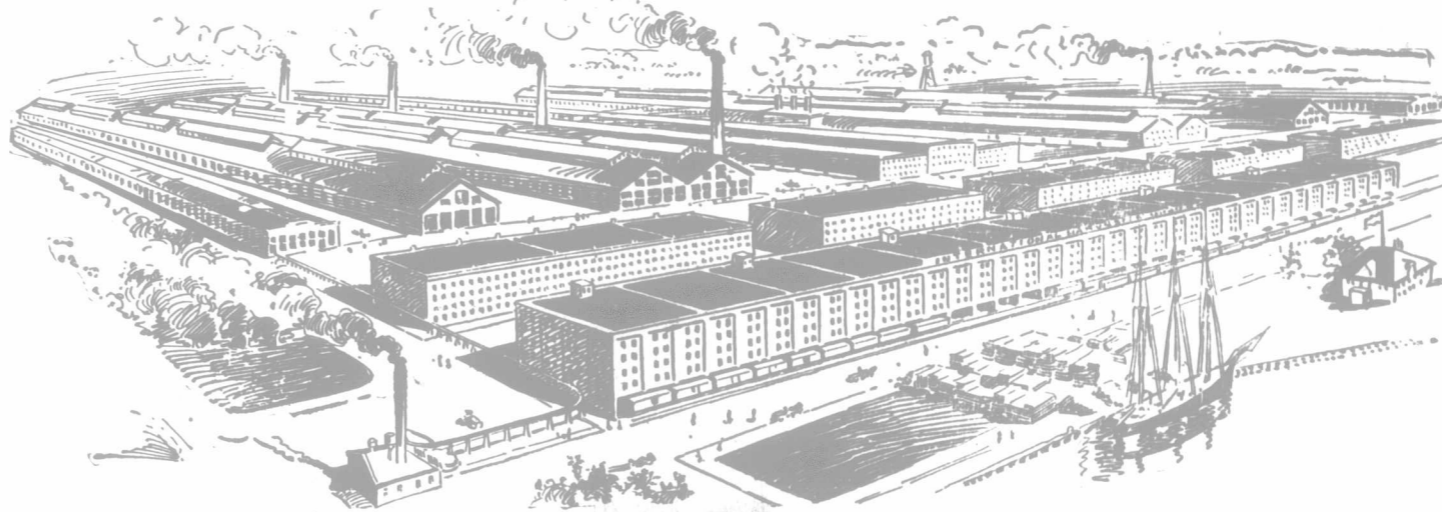
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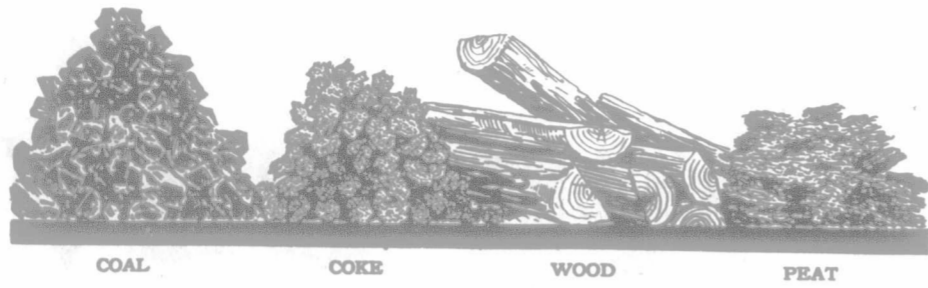
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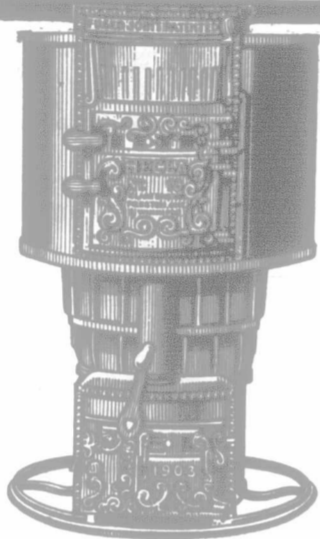


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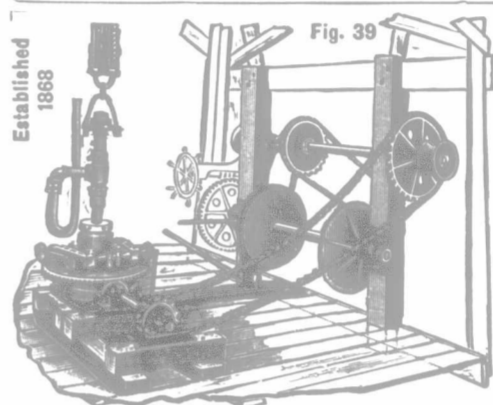
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* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.*

VOL. XL.

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NO. 662.

WINNIPEG, MAN. MAY 31, 1905. LONDON, ONT.

Editorial.

Federal Control of Crown Lands.

So far the discussion on the bills to erect the new Provinces has centered on the question of Provincial rights and its sub-question, the educational clause, regarding which the opinion of this paper has been announced, and to this opinion we have nothing to add. With regard to the determination of the Federal Government, as expressed in the bill, to retain for some time the administration of lands, there is little to be urged against it, if the building up and settling of the country is kept steadily in view.

Our objection to making two Provinces was based on the disadvantages of a multiplication of Governmental machinery, with the resultant expense, and the same principle is the basis for our opinion that for the present it is better that the Federal Government retain the lands. It has been argued that, if the Provinces got the lands, free homesteads would be done away with, which may or may not be true, but if true would be unfortunate, as these are a great lodestone to intending settlers, especially from south of the boundary.

An article appeared in Collier's Weekly recently, headed "Building Canada with Americans," from which the following excerpts are made, as showing what an attraction free homesteads are:

"Intelligence of good farm land does not fly like the tidings of a gold strike, however, and these principles, if let alone, would have been a long time in peopling the great Canadian Northwest. In the past two or three years the interested parties—the Canadian Government, the speculators, and the railways—have been planning a great campaign of concerted action, which, despite the fact that so little has been heard of it, is now in full blast. Where a few years ago we lost good citizens by the hundred by migration over our borders, we are about to lose them by the hundred thousand, and I do not hesitate to say, from examinations I have made of numbers of parties, either en route or about to depart, that they are the very best stock from our settled rural communities. It is a leak at the 'top' and not at the bottom.

"Of course, it is unfortunate that the tens of thousands of desirable citizens who have left the country to better their condition could not have found this betterment by going west in the United States to equally good lands, which, thanks to the exquisite operations of our political system, are not now open to homesteading, as they have been grabbed in recent years by corporations and speculators. Having been robbed under the nose of a complacent Government of what was rightfully theirs, they cannot be blamed if the pastures look better under the British flag.

"The truth is that the westward tide has bumped into the unyielding front of ranch, timber land, and mining-tract grabs, and so turns north into Canada—ere long in numbers of a hundred thousand per year—birthright-plundered expatriates!

"The gods of Progress and Change now have breached our walls to the northward, and the first rush of what is destined to be a mighty hegira is pouring from the United States into Western Canada. It is wholly an artificially directed movement—the work of the Canadian Government, the Canadian railways, and the Canadian land speculators. Sound, economic principles, however, underlie the superficial causes that have set the tens of thousands on the move."

An effective immigration policy is best conducted by a central authority. Although On-

tario for years has had possession of her lands, neither in the Old Country nor in the United States did she conduct an immigration propaganda worthy of the name. The Manitoba Government's Immigration Department has done its most useful work, not as an immigration department, but as a harvest-hands distributing bureau. British Columbia has done comparatively nothing, it being there practically left to individuals and municipalities to advertise the possibilities and attract people; and it would therefore be a public calamity if at this time the Federal Government were to abandon its immigration policy. Separate Provinces cannot afford the expense of an active immigration policy; united, the cost comes easier.

Another reason in favor of retention of the lands, is the splendid work done by the N.-W. M. P. in preserving law and order, and stamping out diseases of animals. Once that force were disbanded, cattle rustling and horse stealing would be far more common than now. Then, again, the Dominion Experimental farms system, already of great benefit, and fraught with great possibilities, will, we hope, be preserved and extended to meet the needs of this rapidly-developing country. So that, take it all in all, looking at the matter from a business point of view, and from the standpoint of national progress, we would reiterate our former abjuration, that, for the present, let the Federal Government retain the lands; and in saying this, no doubt or imputation is placed on the ability of the Provinces to handle the lands ably and honestly. The vacant lands being really an asset of the Dominion of Canada as a whole, can be advertised more cheaply and thoroughly by the one central authority than by three or four separate institutions. It is to be regretted extremely that the law-makers have not seen fit to incorporate in the bills for the two Provinces provision for making an endowment with sufficient land to adequately support an agricultural college for each Province. Such would have been statesmanlike; but one cannot expect statesmanlike deeds from men animated by politicians' ideas. In this matter of providing for the future of agriculture the Federal Government could well have afforded to imitate the people at Washington.

The Carnegie System of Distributing Wealth.

It is open to any millionaire to distribute his wealth as he pleases, and criticisms of his methods are unwarranted, providing he does not claim to do great good by his benefactions. The Carnegie system is based on the principle that education of a certain form is a panacea for the bulk of human ills, which is rather a large claim. Inspected more closely, the principle held savors of the very materialism it is supposed to avoid or combat, placing as it does a premium on mere knowledge.

Libraries are a most ornamental and useful adjunct to any community, but the great forces of ignorance and disease—the latter largely the child of the former—cannot be overcome by aggregations of books, or the frequenting of book storehouses. The great need of human kind to-day, in order to improve the race, is more healthful food and less disease. Given those two things, the brain can do its normal work; otherwise it cannot. Occasionally a genius in literature or art has sprung from an environment of poverty and disease, but such are few, and bear no relation to the rank and file of the people.

The Carnegie benefactions are vastly inferior in their conception and performance to those of Sir William Macdonald; the latter encourages

people to work as well as to read and think; the former supplies the opportunity to some people to waste time, to others to improve themselves.

What is the ideal form for a millionaire's gifts to take? The support of hospitals for the poor! The endowment of a hospital in centers of population is probably the best all-round method of distributing benefactions, without making such mere alms or charity.

Large free hospitals mean a benefit to the whole of mankind, more than is obtained by direct relief of suffering. At hospitals are great chances for the embryo medico gaining that rich clinical experience so essential to successful practice. Not only so, but cases which are more or less hopeless, can be kept under continuous, thorough and skilled observation, and the observations thus made may be of use in suggesting new and more successful methods of treatment. The hospital is an essential for the study of such diseases as cancer and other malignant maladies, and its scrupulously clean operating rooms can hardly be dispensed with if success in surgery is to be obtained. The person in need of food or health cannot think clearly or reason well, and the present form of donating libraries to cities and towns well able to afford to pay for them, is not, it seems to us, making the wisest and best use of one's riches.

Distribution of Shrubs by the Experimental Farms.

Discussing in these columns from time to time the work of the experimental farms, we have had occasion to criticise the system of free-seed distribution, on two scores—first, that the quantities were far too small to be of any great benefit; and, secondly, that we believed in people paying for what they got. It surely is a very serious falling away from the standard of ethics, that a Government institution should be found encouraging people to believe in the doctrine or principle underlying "gambling," namely, the getting of something for nothing.

Aside from this, the distribution of free shrubs is open to the objection of interfering with legitimate business, as there are now nurseries in Canada able to supply all the large and small-fruit trees and ornamental shrubs called for. In objecting to this free distribution by the experimental farms, this paper does NOT include the Forestry Branch of the Department of the Interior, which, by the way, is devoting its attention to the growth of shelter belts. Such work is one of the reasons for which the branch was created, and although some may object even to the free distribution of trees by that branch of the public service, we consider the arguments are not sufficiently strong to lead the "Farmer's Advocate" to support that view at the present time. It has been stated in defence of free tree distribution, that the prices asked by the nurserymen were out of all proportion to the value of the trees. That may or may not be the case; but, in any event, it has no bearing on the particular case before us. Shelter belts are essential to the successful growing of large and small fruits and ornamentals, and to home-building on the prairies. The ornamentals come into the "luxury" class, and the "Farmer's Advocate" believes that those wishing to possess luxuries should pay for them. At the time of the institution of this system of donations of ornamental shrubs and fruit trees, the Director may have been desirous of obtaining the experiences of farmers in other parts of Manitoba and the Territories with such plants, but such a reason is not a valid one now.

Why should shrubs or fruit trees or seeds be distributed free by the farms,

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THE LEADING AGRICULTURAL JOURNAL IN MANITOBA
AND N.-W. T.

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any more than settings of eggs? If trees, why not pigs, sheep and cattle?

This free distribution of seeds and trees calls for time and money allocated to the work of the farms, which would more properly and profitably be used in other avenues of work by the experimental farms, such as breeding hardy varieties of clovers and earlier-maturing varieties of corn.

Summer-fallow or Rotation of Crops?

It may be assumed, from the above heading, that when a system of crop rotation is recommended or suggested, bare summer-fallowing is not considered a legitimate part of any such system.

It is customary to speak of the progress of agriculture, which may be briefly outlined in the four stages following: A—Continuous grain cropping; B—Grain cropping, varied with an occasional bare fallow once in three or more years; C—Grain cropping, manuring on fallow, and some live stock; D—Crop rotations, live stock sufficient to consume bulk of the rough grain, manure applied on grass or with corn, roots or late barley, no summer-fallow. The fourth stage—one all farmers should aim at—is the most profitable in returns, distributes the work of the farm more evenly, stores up rather than depletes soil fertility, and is altogether the most satisfactory, because it demands manual and mental skill in the study of soils and live stock, and, therefore, places farming on a higher plane. There are two reasons advanced for the summer-fallow method, viz., conservation of soil moisture and weed eradication. The first reason is a feasible one, if continuous grain cropping is followed, but it is a question whether a system by which the supply of humus is diminished would not be preferable. There need be little fear of lack of moisture for the ordinary requirements of crops if the humus is present in normal quan-

tity. Weed suppression and restoration of fertility were the two primary claims for the bare fallow; the latter has been found to be untenable by experiments which show incontrovertibly that bare fallowing exhausts the land more rapidly than cropping in the ordinary way. There is left, then, the sole and main excuse for summer-fallowing, that it eradicates weeds, and while such happens to be a valid excuse, it is quite in order for each and every farmer to consider if the bare-summer-fallow method of weed eradication is not too expensive, and whether an equally effective method, less costly in labor, loss of fertility and loss of use of land, cannot be evolved and incorporated into systems of Western agriculture.

Prof. Shepherd's results with clover in North Dakota hold out considerable promise to farmers in Western Canada, and are quite optimistic when compared with the attitude of our experimental farms to clover-growing. From time to time in this paper mention has been made of variations from the bare-fallow practice of weed-killing, and it will do no harm to refer to such again. Barley, as a cleaning crop, is very useful, may be sown late and cut early, thus allowing destruction of young weed plants before sowing the barley, and heading off the weeds before they can seed. Others, again, sow lightly (one-half bushel per acre) with wheat or oats the land which would otherwise be used for summer-fallow, and then pasture the crop off, thus firming the land down well. Another method we have seen tried is to sow rape and pasture it off, thus getting a lot of valuable feed, besides keeping the soil well packed. In some locations this method may not prove acceptable, but in many others it will. We believe that advance in our methods of soil cultivation must come now—along the line of crop rotations.

Instances of Successful Co-operation: IV.

(Continued.)

I have already mentioned the Canadian cheese industry as one proving the advantages of farmers co-operating, and an editorial note in the previous article well stated that, though many of our cheese factories had more recently been taken over by private enterprise, their success had been achieved as co-operative concerns. In view of what has been maintained in these articles as to the right principles and methods of co-operation, it may be well to point out that in the cheese industry there is not the same need for a specific guarantee of milk supply by members; as milk, unlike live animals or other farm products, cannot easily be sold except to the nearest factory in most cases. The capital required was obtained from members instead of by loans. Without the guarantee as to care of animals and milk, which is universal in the creamery associations of Denmark, our factories, as we all know, have had the greatest difficulty in securing milk of the best quality, and, in consequence, our national cheese product has not been as uniformly excellent as it should be. The same is very true of our creamery butter, and for the same reasons. The Dairymen's Associations, however, are overcoming these difficulties in another way, and it is noteworthy that their tendency is distinctly towards co-operation in principle, and away from the spirit of Government compulsion.

Readers of the "Farmer's Advocate" are sufficiently familiar with the history, methods and principles of the Patrons of Industry, so that I need only mention the binder twine factory and salt supply enterprises begun under their auspices, and continued with entire success, breaking and keeping down piratical combines in both those directions. As in the cheese industry, conditions peculiar to these enterprises made it easy for them to succeed in spite of private competition, and in spite of the fact that they were not owned, organized or managed according to co-operative principles and methods. They are simply limited liability concerns, and the fact that a large number of their shares is held by farmers does not make the distinction any less real.

That they have gained practically the same results as truly co-operative organization would have secured is due chiefly to the fact that the owners and managers were actuated at heart by the spirit and principles of co-operation. But they might, for their own benefit, have done otherwise, and the farmer consumers could not have done anything to control their policy or actions. That these owners and managers have thus operated according to the spirit of co-operation only proves that farmers can work together, "each for all, and all for each."

So much, then, for co-operative industries. But what the farmers produce, separately or jointly, must be sold, and what is sold must be carried (in our case

most of it a long distance) to market. The amount of farm products sold by Canadian farmers is enormous, and it might with great profit be done co-operatively.

It has been done co-operatively abroad. Denmark has its associations for sale and transportation of butter, bacon, eggs, horses, etc. Germany has nearly 2,500 associations for the same purposes. France and Belgium are similarly provided. By thus carrying their products to market, insuring them in transit themselves, the Danish associations actually save one-quarter of the price received on the British market! The western farmers of the United States are rapidly increasing their already numerous associations for co-operative sale of products and purchase of supplies. Iowa alone has over 200 of these local associations, owning their own elevators, dealing in lumber, coal, etc., besides handling their grain and live stock in combination. The Rockwood association alone handles over \$700,000 worth of goods annually.

In all these instances of co-operative packing, shipping and sale, the essentials to be noticed are the adoption of grading and uniform trade-marks. In the case of the Danish and other European organizations the control of the freight rate situation is also obtained as one of the first results. We will have this result also when our organizations are powerful enough.

The "Farmer's Advocate" has forestalled me again in the matter of co-operative or "mutual" insurance. Every farmer knows of such native organizations, and of their value in the community. It may hardly be in place just here, but it may be said that co-operative insurance is the only kind the farmers should adopt—but it should be truly a co-operative concern in every instance. And the scope of such insurance could be widened. In Europe the farmers have mutual insurance against sickness, loss of labor supply, etc.—the latter case being a suggestive one for the Canadian farmer.

Careful reading so far will show very well the principles and methods of the most successful farmers' organizations in the world, and will, I think, surprise many with the facts of the extent to which organization of that sort has been carried out, as well as of the wonderful results thus secured to the organizing farmers. I shall not attempt to outline cases, at home or abroad, where co-operation and agricultural prosperity are together absent, but I shall give an instance or two of importance, to show that the intent to co-operate, unless put into shape according to the principles and methods emphasized herein, may result in total failure.

FAILURE OF ATTEMPTED CO-OPERATION.

With the exception of one co-operative bacon factory, established in a Danish district where there were not hogs enough to keep it going, there is no discoverable instance in Europe where co-operation has failed. For failures we must, unfortunately, seek at home. The (so-called) Co-operative Bacon Factory at Palmerston will at once occur to everyone. This factory was organized, as was the binder twine factory at Brantford, as a limited liability company, with shares held among the farmers to a considerable extent. The Brantford Company succeeded, while the Palmerston Company failed. The reason is easily seen.

When the farmers' company started business, the private packers—who, be sure, understood long ago the dangers to them of co-operation—went to the farmers with increased prices for hogs. They went to the many farmers who didn't own shares in the factory, and also to the few who did. They offered such prices that the new factory lost one dollar on every hog they handled, and the new factory soon quit. It was very simple. The farmer who had \$10 in bacon-factory shares got his cash—\$10—in increased profits on one batch of hogs sold in Toronto, and could afford just then to see the shares worthless. But the fact is, he didn't expect the factory to fail because HE sold his hogs to the factory's competitors. He thought the other shareholders and the farmers generally would hold the factory up. And thus the factory failed. Had that factory been the property of a co-operative association, every member of which had given a guarantee to sell every hog raised, and a guarantee to pay his share of the liabilities if it failed, you may be sure it would be the biggest and most successful bacon-curing factory in Canada to-day. More, the complaint of one farmer, that he doesn't get fair prices for selects, and the content of another on getting too good a price for fat, corn-fed hogs, would be settled for good. The ten per cent. commission every buyer of hogs takes out of the farmer would go to the farmer's bank account, along with enhanced profits in other respects. As it is, we are deploring "the failure of co-operative bacon-curing," and saying it cannot be done. All that is nonsense. It can be done if the farmers do it themselves.

Another instance of so-called co-operative farmers' industry is the "Farmers' Co-operative Harvesting Machine Co.," at Whittby. It is, perhaps, too soon yet to decide whether it is a success or a failure. That is in dispute at present among the directors, one of whom is a prominent Toronto financier. But it certainly is not co-operative, and so far as can be learned most of the shares are not held by farmers. What concerns us—the farmers—is that the farmers should either buy or manufacture co-operatively not only their binders but all their implements. Truly organized according to the methods and principles outlined in these articles, they need only make their own terms with the firms who are already in the business. The following articles will show how the Canadian farmer can and should accomplish this and other objects by co-operative organization.

AUSTIN L. McCREDIE.

Horses.

Old Country Shire Men, Wake Up!

The F. & S., recently, under a heading, "The Shire Horse Abroad," points out reasons, which all who have attended horse shows in Canada and the United States know to be correct, why the Shire is not more commonly used on this side of the Atlantic, and refers to the Percheron fancy. One thing horse-breeders on this side of the Atlantic can make up their minds to is that, if pure-bred draft horses are wanted, the Shire pedigrees (either British or Canadian Books) are far more valuable than many of Percheron pedigrees, so called. It is remarkable that even yet the Shire horsemen of Great Britain seem to consider Canada a negligible factor as a horse-breeding country, whereas it is unexcelled in climate, etc., by any part of the world.

"More attention is now being paid to the possibilities of developing a better trade for Shire horses abroad. Hitherto the extremely satisfactory home demand and the high prices which horses are realizing was enough in itself to warn off any foreign purchaser who had not a sufficiently long purse to stem the current of home competition. Nowadays, however, there seems a greater disposition to view the foreign demand in the light of a thing that might be cultivated, and as useful for more than an inferior horse. How often have we heard the phrase used, when doubts were entertained as to the advantage of maintaining a colt entire, 'Oh, he will do for a Yankee.' This seems to be a rather unjust aspersion upon the possibilities of our foreign trade, although no doubt it is a correct reflection of popular opinion with regard to the present state of the foreign trade for Shire horses. It is much to be regretted in more ways than one. The foreigner, for example, can only have a very moderate opinion of the character of the Shire horse. How different has been the policy which has animated breeders of the Clydesdale and the Percheron in the United States. The Percheron is the great overshadowing power there in the draught-horse world, and it is just because the fatal mistake has not been made of sending indifferent animals over that this power is wielded and the fashion in draught horses so largely set. Chicago, for instance, looks for draught horses with as little hair on their limbs as possible, just because the Percheron has set the fashion, and the quality of the French breed exported has been infinitely higher than that of the Shire.

"Undoubtedly there is room for development in the foreign trade of the Shire horse. There is a growing disposition to look for even weightier stock than any possesses as the present moment in the United States, and, judging by a report, the activity which the native half-bred draught mare possesses is regarded as sufficient in itself to impart that quality, even where it is slightly wanting in the sire. But weight is a desideratum which experience proves to be absolutely necessary in a draught horse. Activity is not everything, although it is an extremely valuable feature, and the American-bred horse has not been lacking in that particular quality. If American breeders are looking more to weight than they have been in the past, it is a moral certainty that the Shire horse will be one of the first breeds to benefit, and a writer seriously considers the problem of the use of the Shire horse as a means of grading up the mares which produce the cart stock of the United States. It must always be remembered, however, that the Percheron interest is a powerful one to fight, and progress can only be made by sending out really representative animals, and not the class of stuff which, unfortunately, has left these shores so freely within the past ten years. The Shire Horse Society has been considering the question, but it is not one which can be dealt with satisfactorily by the society itself, and the slight encouragement which it affords to Shire admirers in America seems to be about as far as it is likely to go, at present, at all events. Private enterprise will require to effect an opening, as it has done in the case of other breeds. There are various difficulties in the way of the Shire Horse Society taking the matter up, but there is none beyond the question of expense and consideration of the probable results to bar the breeder privately undertaking to push a better class of Shire in the States. The question might very well be further considered, as its possibilities have been by no means exhausted, in view of the tendency of the times on the other side of the water."

What the breed needs in Canada is a man to take hold of it, as the Flatts, of Hamilton, did the Shorthorns and Yorkshires, and we sincerely hope to see the famous old breed brought more prominently to the front. Nothing excels the Shire cross on the farm mares of the country, either as drafty geldings or wearers.

Calgary Stallion Show.

To the Editor "Farmer's Advocate":
Referring to your criticism on the stallion show at Calgary, which took place on the 4th, 5th and 6th of April last, you say in your issue of 19th of April:

"The six Hackney stallions on exhibition put up a good show of style and action. Two types were very distinct, the fine, light harnessy fellow, and the horse of greater substance but a little less quality. It was just the same as in the Eastern and Old Country shows, the horse of heavy body, strong neck and heavy bone being supplanted by a finer type. We fear for the consequences of this pursuit of fineness. It savors too much of the thing that has made so many weedy Thoroughbreds and Standard-breds. But the most stylish horse won, and he was William Moody's Agility, by Puritan, a home-bred horse. He is not the type with substance, but he is a fine, proud goer, and won his laurels at the Dominion last year in Winnipeg."

I would like to call your attention to your remarks on the Hackney stallion which took first honors in this class, and also sweepstakes. It seems a pity that the Eastern and Old Country judges, who are in touch with the finest types of Hackneys that command the highest prices in the world, should not be of the same opinion as the expert judges of the "Farmer's Advocate." One point that seems to have been overlooked in your judgment of Agility is his age. This horse was only two years and nine months old when shown, and surely he could not want in substance when he was able to be easily placed at the top in such a strong class of imported Hackneys, trained in England and fully developed, and caused the Eastern judges to remark that he was an outstanding winner and that they did not know where to fault him, and I know that it was

than any other in Canada is Hillhurst Sensation, yet he is one of the lowest, thickest Hackneys we have ever seen.—Ed.]

The Shetland is a Favorite.

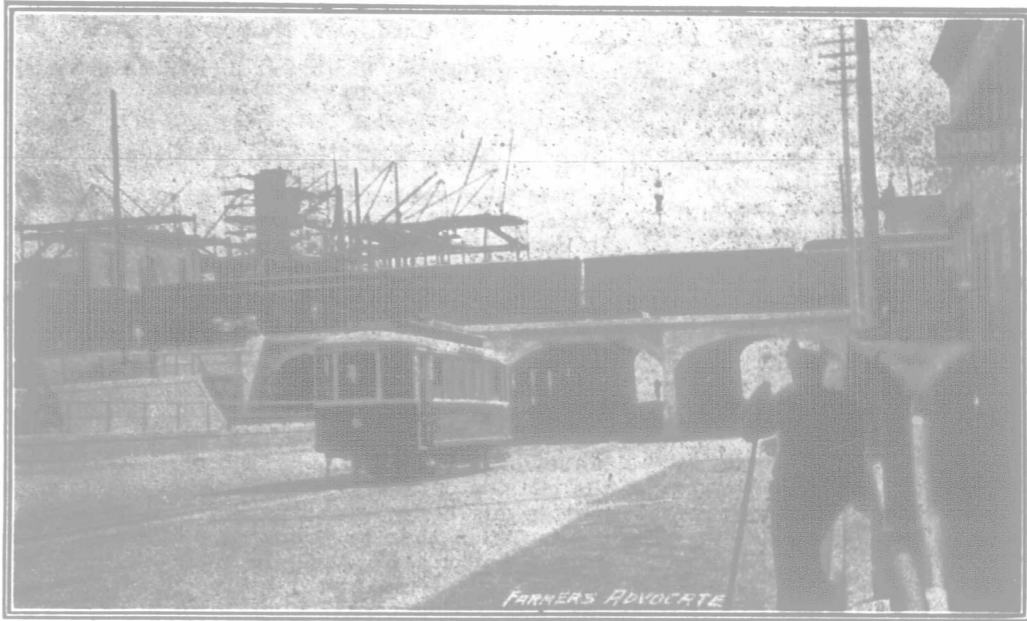
Possibly the Shetland is absolutely the purest-bred variety of horse in existence; that is to say, when he is pure-bred, which is not invariably the case with animals passed off as such. His diminutive size, however, is so soon increased by the introduction of a cross that the detection of foreign blood is not often a matter of much difficulty, and certainly the majority that can be picked up in the island are uncontaminated by such a taint. The Marquis of Londonderry's strain is admittedly the best in existence, but even his experienced manager finds it taxes his energies to the utmost to keep the size down, as Master Shetland is disposed to grow too big when indulged in respect of good feeding and housing. The head of a Shetland is very delicate and fine, even for an animal of his inches; his short neck is small at the setting on of the head, but thickens considerably at the shoulders, which are usually short and straight. His back is short, ribs well sprung, and quarters very big compared to his size, whilst his legs are flat and feet rather round. Ten hands or a little under is the average height, but smaller specimens are occasionally met with, and when they are they realize a good deal of money if well made. The prevailing colors are bay, brown and dun, but occasionally a black or skewbald is met with, and very rarely indeed a white.

In Manitoba until recent years only few of the breed were seen. J. E. Marples has, however, exhibited some in recent years at the Hartney Agricultural Society's show, and has, we understand, a breeding stud.

The Height of the Hackney.

Says a writer in the Live-stock Journal, England: "There are, I am aware, lovers of the

Hackney who are averse to increasing his height; 'the true Hackney,' say they, 'should range from 15 hands to 15 hands 2 in.—that was the original height of the breed.' True, but surely these gentlemen lose sight of the fact that many things have changed since the Hackney first flourished, when his duties mainly consisted in carrying his master, and often mistress, too, on visits to markets and friends; then height was immaterial, and



How Cement is Used in Big Bridge Work.

The Main St. subway under eight tracks of the C. P. R., Winnipeg. The new C. P. R. hotel in course of construction, and the last remnant of the old depot.

the prevailing opinion that these judges were well qualified for their onerous duties, and gave universal satisfaction, which, I am sorry to say, has not always been the case at Calgary shows, and I was glad to see that our Western horsemen showed by their enthusiasm when this award was given that they are after the right kind of Hackney, showing plenty of substance and quality with style and action, and not after a carriage-built cart-horse which fetches only a slave price in any market.

Speed not being the principal point looked for in a Hackney, I don't think with you that there is any danger of this class of horse becoming weedy, as you say so many of the Thoroughbreds and Standard-breds have become.

It will be a long time before we will have to complain of quality and action and that fineness which you seem to be so much afraid of. Stallions with these qualities are much needed to stamp out the plugginess of our carriage-bred brood mares, so as to enable us to raise high-class carriage horses, which fetch a great deal more money in the big American markets to-day than any other class of commercial horse.

[Note.—In reporting the sale, our representative took the opportunity to call attention to what he considers a dangerous tendency on the part of Hackney breeders, namely, to favor stallions in the show-ring that have every appearance of harness geldings, rather than those with a more masculine appearance and substance. As individuals to put into harness themselves, these stallions are about all that can be desired, but it must be remembered that they are used for breeding purposes upon mares of all classes. Probably the Hackney stallion that has sired more show-yard winners in the harness classes

a horse up to weight that could trot on and stay was all that was required. But in these days the horse which is most in demand at a good price is without doubt the harness horse of from 15 hands 3 in. to 16 hands 2 in., sound, with abundant quality and action. Now, this the Hackney can produce; therefore, is it not more profitable to the breeder, and more in the real interests of the breed, to sacrifice a little of the old type, and at the same time to supply a demand which otherwise is met by the foreigner, than to adhere religiously to type and to breed nothing but 15 hands to 15 hands 1 in. horses, for which, should they not prove sensational show animals (and there are not many of these bred in a year), there is practically no market? A few days ago I had a conversation with a well-known London dealer on the state of the horse trade: 'Trade was never better,' he said, 'it is the horses, not the customers, which are difficult to find; I cannot get enough really good big horses 15 hands 3 in. and over, with action; there are any number of small ones, but I cannot sell them.' That the breed is not increasing in height as much or as fast as we should like to see, or indeed as we supposed to be the case, is the regrettable conclusion to be drawn from the following figures. If we take the mare and gelding classes at the London Show for the past six years as representative:

	1900	1901	1902	1903	1904	1905
Mares and geldings over 15 h. 2 in.	33	21	26	39	30	23
Mares and geldings over 15 h. and not over 15 h. 2 in.	36	38	35	31	29	21
Mares and geldings over 14 h. and not over 15 h.			33	34	36	36

And it will be some time, I am afraid, before the entries in the big class outnumber those in the 15 hands to 15 hands 2 in.—that was the original Still, when we see such hesses as the champion Diplomatist, Copper King, Forest Star, Walden Squire John, and Windle Swell, and such mares as Knowle Belinda, the reserve senior champion, Mr. Jay's lovely mare Knowle Halma, and Mr. Evans' two-year-old Allixaus (the three latter, I believe, all upwards of 16 hands), all proving incontestably that the Hackney can be bred big without any loss of quality or action, we should not despair of size in future generations."

Points on Draft-horse Breeding.

A writer on the subject of breeding Shires, referring to the various points to be observed in mating and selecting breeding stock, offers some remarks which are as pertinent to Clydesdale, Percheron and Suffolk breeding, generally speaking, as to that of Shires:

It is often the experience of breeders of Shires that the largest stallions do not always get the most sizeable stock. It would certainly not be advisable to breed from a stallion whose sole recommendation is great height at the withers, but which lacks a proportionate amount of substance and weight. The thing to look for in the Shire stallion is roominess of build and a big framework; these are of more importance than mere height. For breeding purposes a big-made but not over-grown stallion is required. There are not a few horse-breeders who are not able to distinguish between a stallion that is built on big lines and roomily made and one that is overgrown, and yet it is of the greatest importance to the successful breeding of big Shire horses that the one should not be confounded with the other. A big and roomy stallion of symmetrical development and with a large framework will generally get big stock when suitably mated to mares of the right description. On the other hand, an overgrown stallion which is tall merely but lacks scale, and is not built on roomy lines, will more than likely get foals which eventually show a want of size.

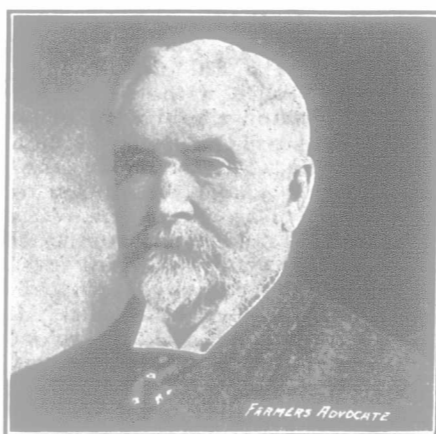
When aiming at breeding Shire horses as big and weighty as possible, it is essential that the mares should be big and deep, and that they should possess a deal of roominess. There must be plenty of depth and width about the body; if a big foal is wanted it must be seen that the mare is sufficiently big to afford ample room to her unborn offspring. If the mare is not roomy, and lacks depth and breadth of body, the space available for the growing fetus will not be so great as it might be, and development to the utmost possible size is naturally impossible. Besides looking for plenty of depth and width of body in the brood mare, the breeder should also see that the points of the hip bones are wide apart; the more widely they are apart from one another the better. As a matter of fact, it is always found that in a roomy Shire mare built on really big lines there is great width between the points of the hip-joints. Narrowness between them is highly objectionable in Shire mares intended for breeding purposes. It should further be seen that the hind quarters are not too short and compact in the brood mare. The quarters of the Shire are at best not by any means remarkable for their length; on the contrary they are, comparatively speaking, shortish. It is certainly not desirable to breed from a mare whose quarters are particularly short and wanting in scope. The quarters, like the barrel, should be as roomy as they can be, and they should possess plenty of development. Taking a rear view of the mare, she should show great width; the broader she is the better, provided, of course, that symmetry of build is not interfered with. There can be no two opinions as to the importance of plenty of breadth in the brood mare when breeding big and sizeable Shire stock. Breadth of body is due to long, well-sprung ribs, and to a large and wide shape of the pelvis, and these two points are, therefore, of importance, and should receive due consideration from the breeder of Shires.

With a view of getting the maximum amount of size in young Shire stock, it is very desirable that the mares should be put to the horse early in the season, so that they produce their foals at an early date. Early foals generally grow into the biggest horses and develop the most size, and the breeder will do well, therefore, to be particular about getting his mares to foal sufficiently early in the spring.

[Note.—It is well to plan to have foals come on Western farms either just before or right after the main work of seeding is done. On the range other reasons will govern. It is always an advantage to work the in-foal mares, provided such are in charge of careful men.—Ed.]

It will very frequently be found that the first foal of a young mare does not grow so big as her subsequent foals, and when a brood mare becomes very old her foals are generally apt to lose size. These points are worth noting when going in for the breeding of the heaviest and biggest stamp of Shires. In selecting fillies for breeding purposes, it is certainly best to select fillies bred from mares when the latter are in their prime. Loss of size may easily result when the first foal of a young and immature mare is retained for breeding purposes. If a filly is put to the horse and breeds a foal at a very early age, this may have a certain stunting effect upon her further growth and development if she is not fed liberally while in foal, or if she is backward in condition and growth when the service takes place. The age when a Shire filly may suitably be put to the horse for the first time without

risk of her growth and development being interfered with by breeding from her depends upon circumstances. If she is well developed, of satisfactory growth, and forward in condition, she can well be put to the horse at two years old without there being any risk of loss of ultimate size. Under these circumstances it is, however, of the greatest importance, as has already been pointed out, that the in-foal filly should be liberally treated in the way of food; she will require to be fed better than young fillies that are not carrying foals. When a filly is backward and lacks sufficient size, then it is not desirable to breed from her when she is two years old; in her case the breeder should wait till she is three years of age before putting her to the horse. With a view to breeding as big a foal as possible from a young Shire filly, it is best to breed her to a mature stallion not less than six years old. By mating together an immature stallion and an immature filly, the progeny will generally be smaller than when the sire is a mature horse.



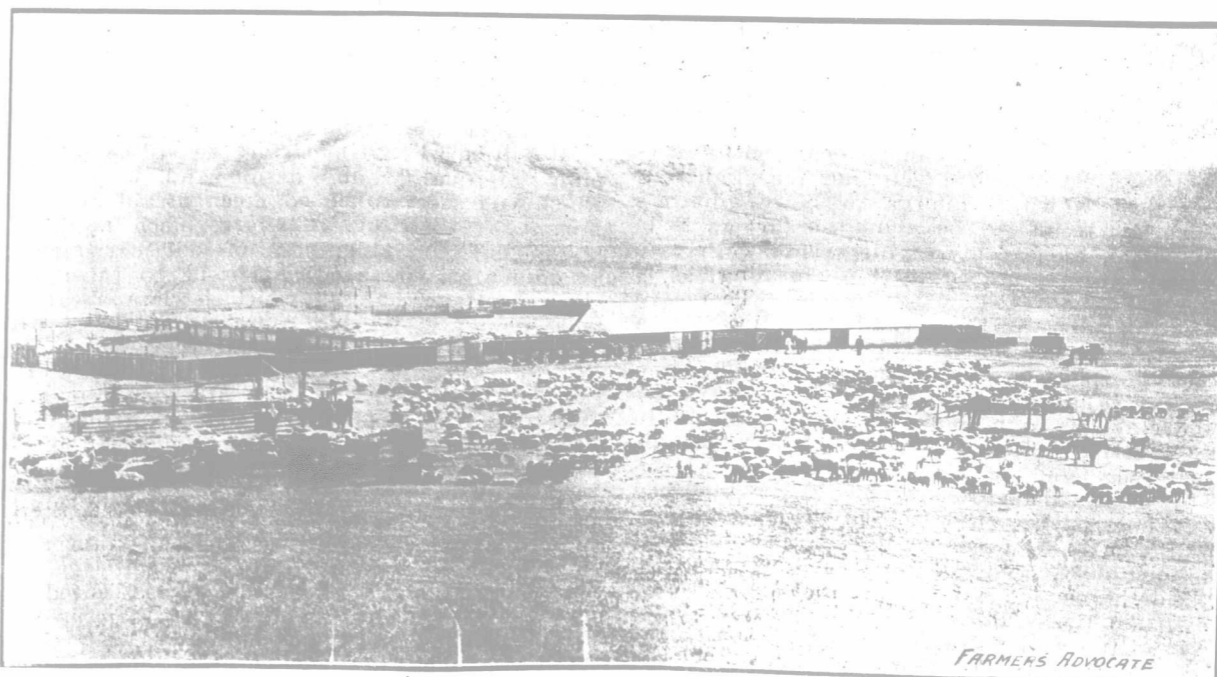
A. B. Macdonald, New Oxley, Alta.

Manager Glengarry Ranch, and ex-president of Western Stock-growers' Association.

How to Throw a Horse.

To thoroughly take the conceit out of a horse, there is no better way than to throw him. It certainly requires pluck and determination to throw a horse single handed, but if done, your horse is virtually conquered for good and all. To do this, put a good strong halter on your horse, take a strap with a ring in it and buckle it round the horse's off fore leg below the fetlock joint; take a rope eight feet long and tie it to this strap; place a surcingle round the horse's body; take up your position on the right side of the horse, bring the rope over the horse's back from the off side; take hold of the rope, and pull his foot to his body; take a firm hold of his foot, holding it in that position, then take hold of the horse's halter with the left hand, pull his head to you and press against his body with your elbow, using the words "Lie down."

The majority of horses can be thrown in this way in less than a minute, while others, of course, might fight longer. As soon as the animal has been thrown, take the rope that is underneath him, bring it under the surcingle and pass it through the ring of the halter, and back under the surcingle again, and thus you have the rope in position to bring his head over his shoulder. Make him put his head on the ground, and if he makes any attempt to get up, pull his head up immediately, which will prevent him from rising. This will give him thoroughly to understand that you are master. Once a horse realizes your power over him, he will do almost anything a horse can do.



Sheep Ranch and Corrals near Medicine Hat, Assa.

Stock.

Cattle Show and Sale at Calgary.

As was generally expected, the sale of pure-bred stock at Calgary two weeks ago did not prove very remunerative for those who consigned bulls. The low price of cattle last fall, the unsettled condition of the cattle-raising industry, owing to the dividing up of the range, and the very inferior quality of many of the bulls offered, all tended to keep down prices. From the first it was evident that the three hundred and fifty odd bulls in the sale, and the fifty odd offered at the Alberta Stock-yards, would be more than enough to supply the demand, hence there was no mad rush to fill orders. Large numbers, however, while they kept down the average, were not responsible for the low prices of the best; this was due, almost wholly, to the depressed condition of the cattle trade. Really good bulls were not plentiful, and while the bidding upon them was at times animated, they did not bring prices commensurate with their intrinsic value. The buying public were not unusually discriminating. On the second last day of the sale, one of the newer class of ranchers asked if the sale would continue the next day, and on being assured that it would, assumed a bored expression and remarked, "That reminds me, I have to get a few bulls this year." This, of course, was an extreme case, but the indifference to the stuff on offer is much too common. On the whole, the character of the bulls was an improvement on other years, and the fact that many were sent out unsold may result in a very great improvement in the future.

On the first day judging was done in all classes by Mr. Duncan Anderson, Rugby, Ont., who had associated with him in the ring Hon. John Dryden, ex-Minister of Agriculture for Ontario. Herefords were judged first, the classes being fairly well filled. The championship for best Hereford bull bred in the Territories was won by the two-year-old, Bonny Brae Hesiod 16th, owned by Mr. Oswald Palmer, Lacombe. He afterwards sold for \$175. The first-prize bull in the aged class, King of the Cedar, also brought \$175. He belonged to P. F. Huntley, Lacombe. Mr. O. Palmer had eight bulls in the sale, which made an average of \$122. Another good average was made by Mr. Robert Sinton, of Regina, who had seventeen, which totalled \$1,720. Mr. J. Tough, of Edmonton, also had seventeen, most of them imported from the States last year, which averaged \$75. The Mossom Boyd Co., of Prince Albert, had entered some thirty-five bulls and thirteen females.

Only a few Angus and Galloway cattle were out, and brought only fair prices.

Most of the prizewinning Shorthorns came from the country north of Calgary, the open championship going to D. Sinclair, Innisfail, on Alberta Prince, a bull bred by W. G. Pettit, Freeman, Ont., and the championship for best bull bred in the Territories also went to Innisfail, on Monarch, owned by H. J. Scott. When the grand champion came into the sale ring bidding got quite lively until the \$150 mark was reached, after which H. McPherson, Calgary, and Shantz, from the north, advanced him to over \$200; then A. Sullivan, of Olds, took a hand in the bidding, finally landing the victor, at \$225. The Territorial champion afterwards went for \$160. Some very good averages were made with Shorthorns by breeders from the north, where mixed farming and close breeding is followed. John Ramsay, of Priddis, made \$112 on seven; J. & W. Sharp, Lacombe, \$123 on eleven; Henry Talbot, Lacombe, \$83 on nine; P. Talbot & Son, \$70 on eight; J. L. Walters, Lacombe, \$91 on nine, and C. W. Peterson, Calgary, \$60 on six. (See "Gossip" for prize-list of show.)

Stockmen's Meeting.

On the evening of May 15th, the Territorial stockmen met at Calgary, to listen to addresses from the Hon. John Dryden, ex-Minister of Agriculture for Ontario, and Mr. F. W. Hodson, Live-stock Commissioner for the Dominion. Mr. Hodson first addressed the

meeting, placing before the stockmen the details of the arrangements entered into by the different breed associations of Canada, with the object of consolidating the many different records into one central body, with one separate book for each breed of stock in the Dominion. This subject has been fully treated in these columns before, but Mr. Hodson wished to assure the Territorial Stock-breeders that their interests would be carefully safeguarded by the officials appointed by the breed associations and the officer appointed by the Dominion Government, who affixes a seal upon each registration certificate, to certify that the Government recognizes the pedigree of any particular animal.

In answer to Mr. Turner, Mr. Hodson said that when the organization of the record societies had been finally completed the different provinces would be represented equitably upon the National Record Board, according to the membership of any particular breed association. These representatives must be selected at the annual meeting of the breed association in each province. Mr. Hodson also stated that in future the grants to exhibitions in each province would probably be allotted according to the profit arising from the recording of animals from that particular province. With regard to recognizing foreign certificates, that would rest with the different breed associations.

HON. JOHN DRYDEN.

Hon. John Dryden, on rising, said that although always a Canadian, he had never been able to visit the extreme West, but while he had been devoting himself to the interests of Ontario, he did so in the broader sense of working for all Canada. The interests of Alberta, he said, were as much at his heart as those of any other part, because it was part of Canada, and for Canada he wished to do his utmost. With regard to the Dominion Shorthorn Association, he assured the meeting that in the past his position prevented him taking an active part in that association, but in the future he intended to devote more time to the interests of Shorthorns all over Canada, and to do so he would do his best to have the breed fostered in the West. He would exercise his influence to have not simply the money actually due the West on the basis explained by Mr. Hodson, but would try to get more for the West, with the object of helping the breed in those places where most help was required, and where most good would result.

BEEF IN BRITAIN.

In studying the conditions in the British ports, Mr. Dryden found that three classes of beef were put upon the Old Country market—fresh beef from European ports, frozen beef from the southern countries, and chilled beef from the States. Over there there is no sentiment in the beef trade, but beef sells solely on its merit. If our beef does not bring the best prices in Britain, it is simply because it is not of the best quality; therefore, our aim should be to produce the best, and the fellow who would not try to produce this must be crowded out of the business.

HOW TO PRODUCE THE BEST BEEF.

In order to produce this best quality of beef only beef breeds should be used. He did not know where the dairy-bred yearlings from Ontario had gone, but he had been told they were going out West; if so, the people here probably had some experience with such stuff. Having decided to use beef breeds, Mr. Dryden begged his hearers not to use beef bulls simply because they were registered. Too many bulls are being used both here and in Ontario that should have been castrated. Using bulls simply because they are pure-bred is like trying to build without a plan. It is all chance. Then in order to get the best out of cattle they must never lose flesh from calfhood to market. As an example of what might be done he cited a case of a two-year-old steer which sold for six cents per pound, and totalled \$102. Another animal, a bull that he had, tipped the scale at 22 hundred at 18 months. These were animals that had been kept going right along, and never allowed to stop gaining. Formerly, when tallow was worth more than meat, a big, coarse, fat animal was popular; now things are changed—it is meat we want, not fat. Applying this principle to range conditions, Mr. Dryden believed that the practice of putting cattle out to rough it would eventually develop a class of cattle coarse in frame, but not early maturing, and the meat would not be tender and juicy.

With regard to shipping alive or dead, it was the speaker's opinion that we should have facilities for both, but he believed it would be more profitable to kill here, as it would save the shrinkage which always results from shipping alive. As a comparative stranger, Mr. Dryden hesitated to tell the stock-growers of the West how they should do, but he believed they should finish their cattle better; they should endeavor to make 300 cattle into six-cent beef, rather than 600 cattle into three-cent beef.

The embargo, Mr. Dryden believed, should be removed, not that all cattle might be shipped, but simply that everyone might be at liberty to ship as he liked, and to buy where he liked, so that one could get what he wanted no matter where. Should the embargo not be removed, something ought to be done at the port of slaughter. Out of Liverpool, where Canadian cattle are killed, the appliances for killing and storing beef are thirty years behind the times. When large numbers are landed and must be slaughtered in a given time, the meat is crowded into poorly-ventilated rooms, becomes tainted, loses in value, and eventually results in false reputation and loss to the producers of the West.

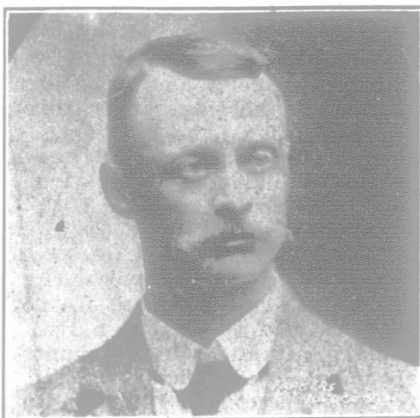
One idea Mr. Dryden wished to leave with the stock-

growers was this: Would it not be better to raise fewer cattle to better quality? Would it not be better to improve upon the methods of cattle-raising followed in the past? What we must do is to adopt modern methods of feeding, even if we must handle a smaller number.

In concluding his address, Mr. Dryden read several letters from the largest shippers, all of which emphasized the necessity of better finishing and improvement of quality, but he said the beef-raisers should not let the question rest there. This matter should be ruminated, for no one can afford to stop short of attaining the best. All through Mr. Dryden's address he emphasized the necessity of improving in quality, of developing early maturity, and of adopting more intensive methods of feeding.

ANNUAL MEETING OF THE TERRITORIAL CATTLE-BREEDERS' ASSOCIATION.

On May 16th, the Territorial Cattle-breeders' Association held its annual meeting in Alexander Hall, Cal-



R. G. Matthews, Macleod, Alta.

Secretary Western Stock growers' Association.

gary. The President, Mr. Peter Talbot, of Lacombe, not being present, Vice-President John A. Turner occupied the chair. The Secretary Mr. C. W. Peterson, read his annual report, and submitted his financial statement, which showed a balance on hand of \$590.48. This report and statement was adopted.

The meeting being thrown open, Mr. J. Caswell, of Saskatoon, rose to protest emphatically against the practice of outside cattlemen flooding Calgary with their stock during the week of the Territorial Cattle-breeders' show and sale. In his opinion the taking advantage of conditions secured through the association by outside breeders, was a breach of business etiquette, but no action was taken upon the matter, as everyone is at liberty to sell where and when he can.

After considerable discussion, it was moved and seconded that a new organization be formed, to be known as the Alberta Cattle-breeders' Association.—Carried. A rider to this motion provided that the breeders in the new Province of Saskatchewan be permitted to enter stock for the 1906 sale, should they not be sufficiently organized to hold a sale in their own territory.

On motion by Hon. Wm. Beresford, seconded by Mr. Geo. Duncan, it was decided that in future no animal under three years of age would be eligible for entry at the annual sales unless born in Alberta.

The election of officers for the ensuing year resulted as follows:—Hon. President, Mr. Peter Talbot, Lacombe; President, John A. Turner, Calgary; First Vice-President, Hon. Wm. Beresford, Calgary; Second Vice-President, Mr. Jas. Sharp, Lacombe. Directors—Shorthorns, J. McKay Andrews, Davisburg; Herefords,

J. Palmer, Lacombe; Aberdeen-Angus, J. Morton, Lacombe; Galloways, E. D. Adams, Calgary; General Director, R. K. Bennet, Pine Creek.

SOME PRINCIPLES OF BREEDING.

After the election of officers the Hon. John Dryden was enthusiastically received when he arose to address the cattle-breeders on the subject "Some Principles of Breeding." In his observation he had noticed that the best breeders have a very definite object in view, but with most of our breeders there was too much haphazard work. On investigation he had found there were certain underlying principles which govern the transmission of characteristics, and it should be our object to understand these principles. Advanced scientists now claimed that the principles were so well understood that they could breed color into feathers or horns of cattle.

Now if such definite objects as these are to be obtained, the breeder must know as much as possible about these principles, and always keep in mind a definite object. With beef-raisers this object is to produce a first-class carcass on the block, and the pure-bred herd is the means to this end. This being the case, the ideal steer should be fixed in each person's mind. Such a steer is of sufficient size, and capable of being matured and finished at an early age. He is rather low set, strong on his legs, not too fine, with a certain characteristic mellow-handling quality. Then this steer must have the inherent power to lay on flesh. He must naturally just make meat of all his feed.

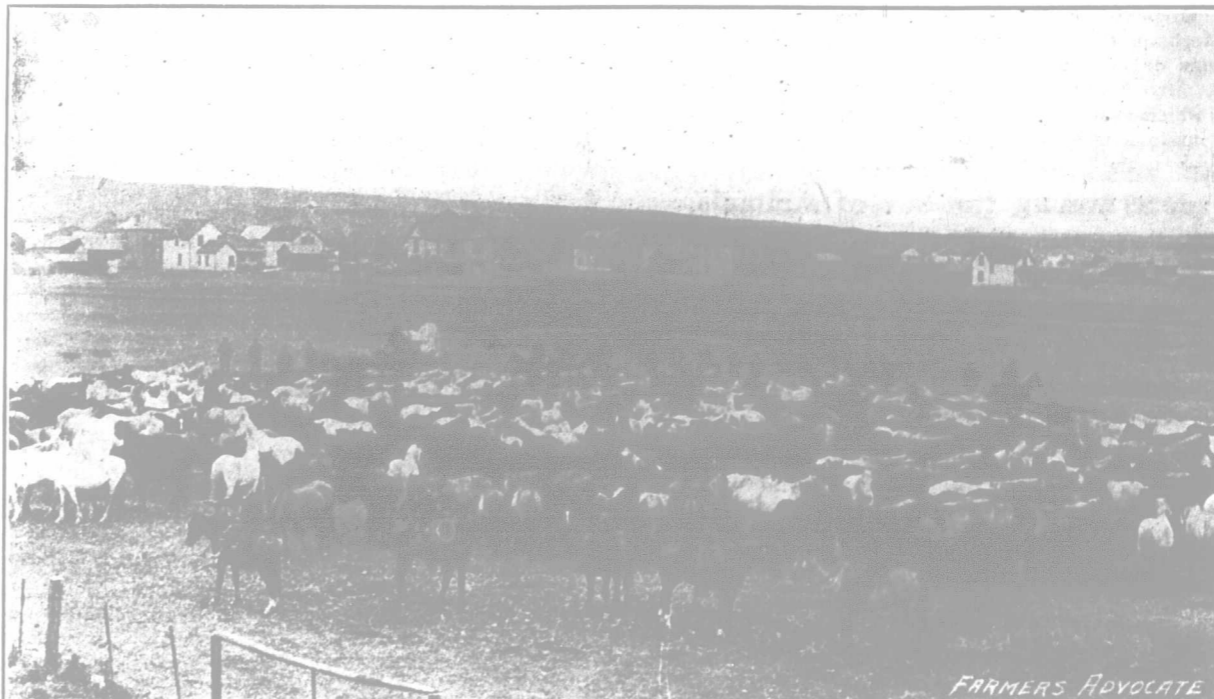
To produce such a steer we must have a suitable herd of females. Never shrink from a cow because she is registered, nor buy a cow simply because she is registered. Study female character, and get cows with good beef conformation, and with that feminine motherly appearance always associated with good breeders. Then upon these females use bulls that will remedy any defects in the cows, and always have him pure-bred. One essential requisite in the bull is prepotency. His chief duty is to stamp his likeness upon his offspring. Get them broad, thick, and low, with a bold, strong, masculine appearance, free carriage, and a mild but not indolent disposition. Then always see that the bull has constitution. After a suitable individual has been found turn to his pedigree. Pedigrees are only valuable as they reveal the intensity of the blood of the animals, and disclose to the reader the characteristics of the ancestors of the animals to which they belong, and such an understanding of pedigrees can be gained only by a study of breed history.

With regard to imported animals, Mr. Dryden gave it as his opinion that it did not matter one iota whether an animal is born on the west side or the east side of the Atlantic, and advised his hearers not to be misled by those sometimes mystic letters, "Imp."

WORK OF TERRITORIAL DEPARTMENT OF AGRICULTURE.

The above was the subject of the address by the Hon. Wm. Elliott, Commissioner of Agriculture for the N.-W. T., before a meeting of stockmen, in Alexander Hall, Calgary, on the evening of May 17th. In opening, Dr. Elliott reviewed the history of the Department since its organization. Its work includes the collection of data upon rainfall; sustenance, inspection and management of hospitals and charitable institutions; inspection of the Territories, with the object of eradicating weeds; assisting grain-growers, by experimenting with wheat to determine the milling value of different grades; the enrollment of stallions kept for breeding purposes; the supervision of brands, which includes the listing, registering and allotting of over twenty-five thousand brands. With regard to the future allotment of brands, Dr. Elliott suggested one of two different methods, either to allot similar brands in widely separated districts in the two new provinces to be, or to leave the work to an inter-provincial commission.

Other duties of the Department are the destruction of wolves, the administration of the affairs of agricul-



The Round-up. Horses are Displacing Cattle on Many Parts of the Range.

tural societies (distributions of grants, appointing of expert judges, etc.), organization of farmers' institutes, conducting stock-judging classes, co-operative experiments in connection with agricultural societies, encouragement of agricultural libraries.

With regard to the future, Dr. Elliott expressed the hope that the work of the Department as conducted in the past would be continued under the new regime, and trusted that the new Province of Alberta would soon be equipped with at least one experimental farm. He also suggested the practicability of providing for short, practical courses in stock-judging and other agricultural subjects.

THE DEVELOPMENT OF AGRICULTURE

was the subject of Hon. John Dryden's address at the Wednesday evening meeting. In introducing his subject, Mr. Dryden called attention to the great difficulty in organizing and developing agricultural resources, on account of the extensiveness of the country and the isolation of those engaged in agricultural pursuits. But this work must be done because agriculture is the great basis of our national wealth, because the products of the farm represent so much new wealth, because the great majority of our people are engaged in it, because the farm is the best place in which to bring up a family, and because all other industries depend upon its success.

In the construction of the governments of the new provinces, Mr. Dryden said the best possible men and the strongest positions in the government should be devoted to the interests of agriculture.

One deplorable feature in connection with the development of agriculture was the working at cross purposes by those who have common interests. The agricultural interests require a directing head, and that head should always be the Provincial Department of Agriculture. It is more closely in touch with the requirements of its territory. It can best look to the improvement of quality in products, leaving the work of market expansion to the Federal departments.

As to how this end is to be accomplished, Mr. Dryden strongly advocated more general education upon relevant questions. Legislation he did not believe in as a reforming or improving force. The people must learn that a thing is good before it will be adopted. Co-operation among farmers and stock-growers is a force that might be further developed and employed. As a result of work of this kind, figures from the Bureau of Industries of Ontario were read, showing that after a campaign of agricultural education and adoption of co-operation the output of cattle, horses, swine, cheese and grain increased in the seven following years by one hundred per cent., without any increase in the area of land under cultivation.

Following Mr. Dryden, Mr. Mossom Boyd, of Prince Albert, gave a short resume of his experience in breeding up a herd of polled Herefords from a sported bull. In this work Mr. Boyd had corroborated the theory of scientists, as expressed in Mendel's law, a digest of which we shall publish in the immediate future.

A resolution was then passed, asking the Dominion Government to further regulate the importation of purebred stock, and to prevent the incoming of Mexican cattle.

Another resolution asked that the Government consider the advisability of improving the abattoir and cold-storage facilities at Birkenhead.

HORSE-BREEDING.

On Thursday evening, the last day of the Territorial cattle sale, Mr. Duncan Anderson, Rugby, Ont., and Mr. T. N. Willing, Chief Weed Inspector for the Territories, addressed the stockmen upon horse-breeding and weeds, respectively. Mr. Anderson emphasized the importance of selecting brood mares with hard, flat bone, springy pasterns, sound joints, and broad, strong feet. With these mares should be a stallion of good size, well mottled, with proper legs and clean, true action. With regard to raising young horses, Mr. Anderson is a strong advocate of the practice of keeping the young colts' flesh on right up to maturity, never allowing the weanlings or yearlings to get down in flesh or cease to grow. Mr. Willing illustrated his lecture by lantern slides, which assisted very materially in identifying many of the noxious species.

Predetermining the Sex of Animals.

From Berlin comes the following little press despatch, which reveals nothing new, only that the ideas of the late Dr. Schenk, Vienna, is supported by others:

"The question of the predetermination of sex received much attention at the medical congress which has just concluded its sessions at Wiesbaden. In a paper on the subject, Dr. Wiell, a celebrated specialist, of Schwalbach, asserted that the class of food eaten by the parent plays a great role in determining the sex of the embryo. Experiments made with bees, rabbits, pigs and cattle, show that if in the nourishment the carbonaceous element predominates, more male progeny is produced; if the albuminous element predominates, there are more females. There is a constant struggle for ascendancy between the male cell and the female cell, and a special diet, declared the specialist, can place the preponderance of influence on the one or the other side."

Readers of the Vienna Professor's book published in the nineties, will remember that he

claimed to have helped, by prescribing his theories, many aristocratic families whose estates were entailed, and which, failing male heirs, would have gone to comparative strangers. If the theories can be made operative in the lower animals, especially the mammals, it can be expected to become operative in the human family—quite a remote possibility.

Our Scottish Letter.

The British Board of Agriculture and Fisheries has become a very vigorous and aggressive institution. It has embarked on an investigation of the causes of epizootic abortion in cows, and there is every prospect of a lengthened and exhaustive enquiry being the result. In connection with this, the Highland & Agricultural Society has come to the aid of the Government, and while the Government is prepared to spend £5,000 on the project, the Scottish National Society spends £1,000, if need be. The Government experts will, first of all, endeavor, by independent enquiry, to test the findings of Professor Bang, the eminent Danish expert, as to the identity of the bacillus causing abortion. For this purpose it will not be needful at the outset to kill any cows—only to deal with the ejected fetus. Thereafter the work will be more exhaustive, and a farm will likely be secured, at which the investigations will be carried through to a successful issue. This is, perhaps, the most ambitious scheme yet put forth by the Government Department, which, under Dr. Stockman, its new veterinary head, is destined to become a real live institution, doing great good to the country.

The Government is also being pressed to take up seriously the question of glanders in horses. This disease is, unhappily, pretty prevalent in Glasgow, and this very day (12th of May) a deputation from the city has waited upon the Board of Agriculture, urging that steps be forthwith taken to stamp out the loathsome disease, which, like swine fever and sheep scab, should never be permitted to gain a footing in a clean country. The hotbeds of glanders in cities are old, worn-out stables in which sufficient light and heat are not found, and hence the abundance of disease germs lurking within them. The country outside of these town stables, has no record of this disease, and farmers are being warned not to encourage the introduction of horses from the towns into the country at the present juncture. Glanders may be long latent in an animal and do no injury. It is these latent cases, however, which provide centers of infection and do all the mischief. By means of the mallein test glanders in horses can be kept under control very much as tuberculous has been kept under control in Denmark by means of tuberculin. The aim of reformers here is to have the mallein test made compulsory.

The agitation in favor of amendment of the Act, 1896, so as to admit store cattle for feeding purposes from Canada proceeds apace. Demonstrations have this week been held in London, urging the Board of Agriculture to take Parliamentary action along this line. So far as the commercial interests involved are concerned, the demonstration was imposing enough, but the evidence of any agricultural backing was painfully evident. The amendment of the Act is desired by feeders in Aberdeen, Forfar, and East Lothian, in Scotland, and Norfolk and part of York, in England, but outside of these localities the attitude of farmers is either actively hostile or supine. They do not care a pin-point whether the Act be modified or not—only they know what they have, but they do not know what they might expect if the policy of 1896 were reversed. Two Canadian gentlemen addressed the meeting in London—Mr. Simpson from Moose Jaw, N.-W. T., and Mr. Greenwood, who, we suspect, is interested in the Canadian cattle trade. Mr. Simpson told the Minister of Agriculture, Mr. Fellowes, that the present policy was enriching the shipping combines and buyers, while it was robbing the poor ranchers. He drew a harrowing picture of the condition of certain ranchers who tried to get a share of the profits, but were effectually shut out by those gentlemen who imagine all they have is sufficient justification for the methods by which it has been secured. Mr. Simpson's words were useful, affording first-hand evidence of the state of feeling among the N.-W. T. breeders on this question. The other gentleman who spoke was Mr. Greenwood. He was vehement, and denounced all those who did not take his view in somewhat severe terms. He would be quite an exceptional speaker, if he only knew a little about his subject. The nutshell of the matter is that no steps will be taken by this Government to bring about a modification of the existing law. The agitation is to be maintained, a method of fighting being resorted to which might do big damage if the public could be got to believe that beef was really dearer than before 1896. Everyone knows that it is not so, and hence the certainty of the continuity of the British policy.

A Cross that Works Well in Shorthorn breeding, Scotch Upon Bates!

The Farmer and Stockbreeder, referring to milking tribes of Shorthorns, says the following: "Gloucestershire has long held an enviable place in the keen appreciation of breeders for a milking type of Shorthorn. Bates blood attracted some of its chief supporters in the cheese country, and while they have a proper appreciation of the value and significance of good milking cows, it must be added that in no sense have breeders been unmindful of the fact that popular fancy demands something besides mere milk production. The Shorthorn is a dual-purpose animal, and the attempt to combine two seemingly contradictory characteristics as beef and milk production, has not in every case been a success. Beef in the bulls and milk in the cows are the two chief aims of the Shorthorn breeder, and everyone who has a large milk contract to carry out will understand that, while it is not impossible to achieve the one, there is considerable difficulty in effecting the other. In breeding bulls, it may be regarded almost in the light of an axiom that the man who can most readily breed beef is most successful. That is why the Scotch cross is so very popular upon anima's imbued, if not fully, at least strongly, with Bates blood. The resultant cross has given to the country some of its best bulls. The introduction of such bulls as Councillor, bred by her late Majesty the Queen, and Loyal Squire, a grandson of the famous bull Prince Victor, which was sire of the celebrated Royal Duke, has undoubtedly imparted that width and thickness, as well as wealth of flesh, which the bull-breeder desires."

One of the great troubles has been that many a man, in his haste to achieve success as a bull-breeder, has neglected the milking functions in his cows. Such neglect means ultimately the ruin of a breed. Inferior milking qualities has some of the following sequences: Loss of fecundity and tendency to obesity to account for, and no stockman can afford to overlook the atrophy of the maternal function in his cows.

A Profitable Feedstuff.

There is no more healthful feed than oil meal or oil cake. Its general effect is to place the animal in fine condition, with a pliable skin, an oily, sleek coat and a good quality of flesh upon handling. No other farm feed has such a general beneficial effect on the digestive tract as has oil meal, and the feeder should always have a quantity on hand to deal out to his stock whenever judgment directs its use. A small quantity of oil meal may be fed to horses, but as it is fattening and does not make hard flesh, the allowance should always be limited. It is with fattening steers and with sheep that oil meal shows at its best. For steers, two or three pounds can be given daily in connection with other feeds. Larger amounts may be used, if prices permit.

At the oil mills, after crushing the seeds, the oil is removed by one of two processes. In the first the crushed seed is heated and placed between cloths, or in sacks, which are piled one on another, the mass being subjected to hydraulic pressure to extract the oil. The residue, after pressure, stripped of the wrappings, appears as hard slabs or cakes, about an inch thick by one foot in width and two in length. These slabs constitute the oil cakes of commerce, and in the entire form are shipped abroad for use by farmers in other countries. The unbroken cake is preferred for shipping, because it is the most condensed, and because the foreign feeder, suspicious of adulteration, knows that such cakes are always as pure as the seed from which they were produced. When required for feeding, the cake is reduced to the size of small hickory nuts or hazel nuts in a mill, the material being known as "nut cake." In this country the cake is usually ground to a meal at the factory, and is then shipped in bags. Where the oil is secured by direct pressure from the ground flax seed, as described above, the by-product is known as "old process" cake or oil meal.

In the manufacture of new-process oil meal, the seed is crushed and heated to 165 degrees Fahr., as in the production of old-process meal. The crushed mass while warm is placed in large vertical cylinders or percolators, and over it naphtha—a volatile petroleum compound—is poured, and allowed to drain out at the bottom of the cylinder. Naphtha dissolves the oil from the ground flax seed, being repeatedly added until nearly all the oil is extracted. After this has been accomplished, steam is let into the percolator, and the naphtha which did not drain off is so effectively driven out of the mass as vapor. This is so effectively done that no smell of naphtha is noticeable in the residue. From the percolators, after steaming, the meal is transferred to bins, from which it is elevated to the meal elevator.

And after the following simple method of ascertaining whether oil meal is new- or old-process, take a small quantity of the

meal, and put a level tablespoonful of it in a tumbler; then add ten tablespoonfuls of boiling hot water to the meal, stir thoroughly, and leave to settle. If the meal is new-process meal, it will settle in the course of an hour, and will leave about half of the water clear on top. Old-process meal will remain jelly-like."

Experiments have shown that "old-process" gave equally good results as "new process" in the feeding trials. Henry says, in Feeds and Feeding, that for growing calves oil meal may be used a tablespoonful at a feed, gradually increasing until half a pound a day is fed. A small quantity of oil meal daily is also a splendid correctiveness for brood sows at farrowing time, and serves to head off constipation. In another column will be noticed mention of a record shipment of this great foodstuff out of the country. Such should cause our stockmen to think.

Farm.

Making the Farm Pay Wages.

A common complaint coming from the discontented young farmer, especially the one who is starting on a small scale, is that his farm is not paying wages for himself and team, not to speak of interest on the capital he may have invested. Nor are these young farmers at all mistaken in their arithmetic; their farms are actually not paying them wages.

Any keen observer who has followed the agricultural development of a locality for any length of time can recall instances of two farmers beginning operations side by side, on farms equal as to fertility and other agricultural advantages, each man having about the same amount of capital, each meeting the same conditions and circumstances, and each, apparently, doing about the same amount of work; yet, while one of them advanced steadily in the scale of wealth and prosperity, the other scarcely held his own.

Why was this? Somewhere, something must be wrong, for, logically, where causes are equal the effects will also be equal; and since the two men had equal advantages in every respect, the inequality in the results must be due to a corresponding inequality in their methods of operation and general management of resources. But, as farm work consists of so many and varied operations, it would be impossible, within the limited scope of one article, to point out specifically the various causes which may have led to the success of the one man or to the failure of the other.

We might, however, by reviewing some of the principal departments in the management and economy of the farm, point out where and how the small farmer may pay himself wages for his work, as well as interest on the capital he has invested.

We will suppose the case of a young man just starting on his farm, and grant that he is equipped with the necessary machinery and horses to work the land, with, of course, the usual contingent of pigs, chickens, cows, etc. To that young man I would say, adopt for your motto at the very outset "Economy, thoroughness, care." You have to start with only a small capital, and you will need to exercise the wisest economy in the matter of expenditures. You may have a few dollars to invest, and while it is unwise to keep surplus money lying idle, you should avoid sinking it in expensive implements, or little "odds and ends," such as you might well do without. Rather let your purchases in these lines be governed by what you must have than by what you would like to have. Remember that machinery will not yield you profit on your investment unless you are in a position to put it to a profitable use, and that fifty dollars invested in a well-bred calf or colt is likely to pay you more interest than if invested in a new-fangled cultivator for which you have but little use. But of such implements as you do need, it will pay you to get the best.

Then in your farming operations let thoroughness be your watchword. Get your teams ready for spring's work. They may need to be conditioned some weeks beforehand, and they will need care while they are being worked. Don't expect your horses to do well if you sleep until breakfast is ready, then "slip" out and toss them their feed, and after breakfast hitch up and drive them into a slough to drink, on the way to the field, to save watering them.

When you begin plowing, have your plow in good condition. If it does not work right, better take a day off and get it repaired. Then lay out your land; turn a straight, deep, even furrow. I have known men who never thought it worth while to do a good, smooth job at plowing, who turned crooked, uneven furrows, and when the plow came out of the ground, just skipped the place and went on. The result was uneven grain, rough ground, and wrecked harvesters. When the ground is plowed it should be carefully prepared for the seed, and in doing this don't forget to use the harrows.

A successful Iowa farmer, asked why he was able to grow so much better crops than his neighbor just across the road, replied: "When I send a man out to the field to harrow, I tell him to harrow the land twice as many times as he thinks it should be harrowed. Then when he has done this I tell him he has harrowed it just half enough."

Harrow the land well, and in the fall the crop will pay you wages for the extra time you spend harrowing it.

The land being prepared, provide yourself with good

seed grain. See that it is free from the seed of noxious weeds, and if there is danger of smut, treat it to a solution of bluestone, or formalin. If the season is inclined to be dry, the seed should be put down to a good depth with a drill. The more adverse the season, the more need for thoroughness in putting the crop in; and the harvest will pay you wages for the extra work, for even a half a crop is better by half than a total failure.

But if in the fall, after the crop has been taken off and the proceeds added up, you find there is not enough to pay your summer's wages, don't become discouraged, don't blame the farm, don't resolve to take your teams away and work on the railroad next year; just say nothing, and haul manure. Try it over again next year, and endeavor to make these partial failures the stepping-stones to success.

The care of implements is another matter that should claim attention. Don't leave your plow or drill just where you happen to get through with them; nor your harrows out in the grass at the end of the field for unsuspecting cattle or horses to walk into and get crippled. The place for implements not in use is under the shed, and if you haven't a shed you cannot earn money faster than by building one, even though it be built of poles and have a sod roof. It will pay you better to do without implements than to do without a shed to put them under. There should also be a convenient shed where you can drive under and leave the wagon when not in use. And when you remove the wagon-box don't set it down beside the fence for sun and rain to warp and blister, and inquisitive calves and colts to paw at and dance jigs in; have a place fixed above ground and under shelter to set it. In short, have suitable places for all your implements, and keep those implements in their respective places. I do not advocate the habit of "pottering around," of always being too busy with endless "odd jobs" to do any substantial work; yet I believe that any reasonable efforts you make to care for what you have will be more



Roan Conqueror (84519).

Champion Shorthorn bull at the Royal Dublin Society's Spring Show, 1905.

profitable than efforts made to acquire more. Every dollar's loss prevented is as good as a dollar gained.

The same care should be taken of the live stock. Get the best to start with, then raise them—don't merely let them grow up. See that they are well fed and well sheltered. Look after them, attend to their wants regularly, and they will pay you wages for all the extra care you give them.

If you are raising pigs they will need special attention. A pig, if not judiciously fed, may easily consume more grain than it will pay for when sold on the market.

And do not despise your garden and "butter and eggs" products. These things may seem insignificant, but with proper attention they do a great deal toward stopping the numerous leaks through which your earnings yearly dwindle away. Indeed, with a little extra care they may be made very important sources of income.

In short, if you are to succeed as a farmer, you must master every detail belonging to your business. If you are to succeed you will need to exercise just as much care and diligence, and possess just as great mental acumen as you would if you were a merchant or a manufacturer.

The man without ability, without energy, without brains, cannot become a successful, up-to-date farmer. If you are lacking in these qualities, and if you are unable to overcome the supineness which is at once the prime cause and invariable attendant of such deficiencies, you had better give up your farm and hire out to someone who possesses them. F. W. HUNT.

Do You Want to Sell Your Home?

THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE" IS THE PLACE FOR YOUR ADVERTISEMENT. SEE RATES UNDER THAT HEADING IN THIS PAPER. ADDRESS: FARMER'S ADVOCATE AND HOME MAGAZINE, WINNIPEG, MAN.

Are Roots Indispensable in a Rotation or to Stock-raising.

A recent lecture of Professor Wrightson's before an English Farmers' Club is quite interesting, owing to some of the remarks the Professor of Agriculture makes about the value of roots, particularly turnips. On this side of the Atlantic we are accustomed to accord to the British agriculturist the palm for high-class agricultural practice, especially in the matter of the use of feeding stuffs, cakes, etc., fertilizers, and the breeding of live stock. The following excerpts give the gist of the lecturer's remarks, which are worthy of thought:

"When root crops are fed on the land they are collectors and distributors of fertility. That they are producers of fertility cannot be maintained.

"The fact that swedes and turnips make their growth during the time when land is richest in nitrates should never be lost sight of. They collect and hold nitrogen until they are fed off, and the nitrates are then liberated for the use of the barley or other corn crops, and no doubt benefit the clover crop; but, according to the Rothamsted rotation experiments, produce no effect upon the wheat in the fourth year.

"Having cultivated roots for a great number of years and watched the cultivation of others, I have come to the conclusion that as a means of cleaning land the root crop is greatly over-estimated. It is inferior in this respect to a bare fallow, and often leaves the land in a very foul state for the next corn crop.

"It has been said that grain crops are not only great users of nitrogen, but great wasters of nitrogen. This statement is based upon the fact that it is only after the grain crop has become independent of soil nitrogen that nitrification becomes active; and if a stubble is left unplowed, or in winter fallow, there is a great waste of nitrates during the winter." [Note.—

This, of course, does not hold good in a climate such as we have in Canada.—Ed.]

"I should not discard roots, but relegate them to a less prominent position. Mangel is a most useful crop in the spring and early summer, and ought to be more widely cultivated. A small area of well-cultivated roots is necessary, but they should be stripped and folded over a much wider area. Swedes should be at least half carted on to neighboring corn stubbles, and folded on them with hay and cake, with a view to bringing the land into corn again. In spite of the low price of corn, I would recommend a larger area of grain crops, or at least of salable crops. Clover is a valuable plant, and hay crops should be grown in preference to so large an area of roots. Hay is an excellent winter food, and at times it is remunerative to sell.

"A good stock of hay is always a valuable asset on any farm, and is much more cheaply produced than roots. Live stock are so important, whether in the form of cows, heifers, sheep, or horses, that they should be retained on all farms. Farmyard manure is unrivalled in its effects upon all crops, on all soils, and in all seasons. But roots are not necessary, except in certain cases, and in very moderate quantities. I have often kept my dairy cows through the winter without giving them a root.

"Roots are not so much indispensable as useful, and they are better fed sparingly under any circumstances."

Lime.

The excellent results produced on some soils by a dressing of lime have always been known. It is an element of plant life, and the recent discoveries connected with the activity of nitrifying soil organisms have helped to throw more light on the reason of its usefulness. It corrects acidity in the soil, warms and opens the soil up to the sun and air, and, as an alkaline base, is essential for the nitrification of the organic matter, as well as being necessary for the transformation of potash salts into carbonate of potash, which is the assimilable form of this ingredient.

As is well known, many soils are naturally so well provided with this element that it would be a useless expense to increase the stock by artificial means; but in other soils it is essential to apply lime in order to grow good crops.

A crop of turnips, tops and bulbs, takes from the soil about 118 lbs. of lime; potatoes, 40 lbs.; red clover, 77 lbs., and all other crops a more or less important quantity.

Lime is applied to the soil direct, and in smaller quantities in fertilizers; thus, bone meal contains about 30 per cent., superphosphate 20 to 25 per cent., basic slag 40 to 45 per cent., wood ashes 30 to 40 per cent., and farmyard manure 1 per cent.

The North Dakota Experiment Station's Work with Clover.

In the spring of 1895 a trial in sowing timothy and clover seed with a grain drill was commenced. An eighty-acre field was sown to wheat, with the drill rows of grain running north and south. The grass seed was then put in with an ordinary shoe-chain grain drill, which was driven east and west, or across the wheat drills. The drill was allowed to run very shallow—an inch and a half or two inches deep—while seeding the grass. To regulate the rate of sowing, common barrel salt was used, and proved very satisfactory. The mixture, as sown, was eight pounds of timothy seed, five pounds of red clover seed, and four pounds of common barrel salt per acre. After a short time the grass plants appeared in the cross drills in such a thrifty growth that the drill rows could be traced by the eye at some distance. The growth of wheat was heavy, yielding over twenty bushels of No. 1 Hard grain per acre, and the stand of grass was excellent. This eighty-acre field produced an average of a ton and a quarter of hay per acre the next season after the clover was seeded.

In 1896 a twenty-acre field was sown with barley and cross-drilled with timothy, red clover and barrel-salt mixture described above. The grass came on well and made an unusually fine stand.

In 1897 timothy and red clover were again put in with a common grain drill, and barley was used as a nurse crop. The grain was cross-drilled after the barley was sown—in the manner described for the previous season. Instead of using salt to mix with the grass seed, coarsely ground barley was substituted. To prevent the wind from blowing the seed away, after it had been thrown out by the force feed and before it dropped into the hose, a wind-break of canvas about eight inches high was placed around the frame of the drill just back of the force feed. The drill did excellent work with the ground barley and grass seed mixture. The change from common barrel salt was experimented upon by reason of a failure of the salt to become damp and stick to the grass seed, as it had done during the previous two seasons. The air had probably been much more moist and humid when the seeding took place during the seasons of 1895 and 1896 than it was in 1897. The plan of seeding clover and a mixture of clover and timothy seed with a grain drill has many advantages over sowing it broadcast, and the trials made at this station indicate that it gives a considerably greater degree of assurance that a "catch" of grass will be secured than the broadcasting method does.

Prof. Shepperd says: "I have carefully inspected the fields of grass and clover upon the station grounds and college fields after each of the past eleven winter seasons, and I have not found a single case of clover or grass plants having been heaved or lifted by frost. Grass, clovers of different sorts, and alfalfa plants, are frequently destroyed by having a shallow coating of ice over them during the winter season. My attention was first attracted to this point by having seen the distinct and clear-cut outlines of dead blue grass and white clover where a skating rink had been located the previous winter. On another occasion a winter road was formed across trial plots of grasses, clovers and alfalfa. The teaming packed the snow into ice the width of the sled tracks, and while the road was abandoned before the snow and ice melted away, the opening of spring showed the medium red, mammoth, alsike and white clovers, together with alfalfa, timothy and red top, dead where the ice had formed, and in prime condition on all other portions of the plots. Bromo grass and the weed quack grass alone withstood the adverse covering of the ice sheet."

THICKNESS OF SOWING; CLOVER MIXED WITH TIMOTHY, VS. SEEDING CLOVER ALONE.

No specific trial has been made with different quantities of seed, but satisfactory stands have been secured by seeding it at the rate of fifteen pounds of clover seed per acre. A mixture of five pounds of red clover seed and eight pounds of timothy, has given a mixture of from a half to three-fourths of timothy plants in the resulting growth, the thickness varying with the season.

A mixture of ten pounds of mammoth clover with four pounds of timothy seed has given an average proportion of more than three-fourths clover in the hay. This trial was made upon a twenty-acre field. A trial covering a period of four years in growing clover alone, compared with a mixed crop of timothy and medium red clover, under similar conditions, gave the following results: Average yield of hay per acre for four years from a mixed crop of timothy and clover, 3,356 pounds; average yield of hay per acre for four years from clover alone, 3,265 pounds; difference, 91 pounds.

From this trial it will be seen that the difference in hay yield from medium red clover and from a mixed crop of clover and timothy is small, and the slight difference shown is in favor

of the mixed crop. Had the second growth of clover been saved for hay, the total yields would have been a much larger showing in favor of pure clover.

Red clover grown in this district seems to fill well, and the first growth bears more seed than I have been accustomed to see it do in Iowa and Illinois. (Manitoba farmers have noted the same with clover grown here, as compared with their experience in Ontario.)

The average yield of a little more than a ton and two-thirds of hay as a crop, can scarcely be considered a discouraging result. I am of the opinion that, where a hay crop is grown for its rotation effect upon grain land in the Red River Valley and similar portion of the State, that a mixed crop of timothy and clover is as economic a production as can be found.

Referring to the breeding of hardy varieties of this valuable legume, Prof. Shepperd says: "The freedom from hairiness of many of the foreign clovers indicates that American breeders can reduce the dustiness of their clover hay by breeding a smooth-stemmed strain."

"The station now has a peck of red clover seed as the crop of 1904, from plants which sprang from an ancestry that has lived upon an open field for ten years."

The Agriculturist says: "The results at this station indicate that alfalfa should be sown with out a nurse crop upon well-prepared land, and at the rate of fifteen pounds of seed per acre. The station has been able to secure good results from seeding it broadcast and covering it by a double harrowing with a peg-tooth harrow. Weeds often spring up heavily during the first season, and they should be cut with a mower occasionally to keep them from smothering the young alfalfa plants and to keep them from ripening seed. In mowing the weeds, set the sickle-bar high enough so that the ground will not be left too bare, and the young alfalfa plants too badly crippled."

In Alberta considerable success has been achieved with alfalfa, and it is to be hoped that more and more seed will be sown each year.

A Hint or Two on Summer-fallowing.

The summer-fallow should be plowed as soon as seeding is finished, or before weeds have advanced far enough to mature seed. One deep, thorough plowing is preferable to two plowings, as the second is apt to leave the ground loose, and to bring weed seeds to the surface too late in the season to get them all germinated and killed. If a hard pan has formed by repeated plowings at the same depth, or if it is desirable to bring up a little subsoil, the summer-fallow plowing is the time to do it. On light, porous soils, a subsoil packer used immediately after the plow, serves to firm the lower portion of the furrow and assist in conserving moisture. If the packer is not required, or the cost of one not warranted, then the harrow should follow the plow without any loss of time, to retain soil moisture. Surface cultivation with harrow, weeder or cultivator should be followed at frequent intervals, as late in the season as necessary to ensure that no weeds mature seeds, and that biennials and perennials are properly kept in check. Where thistles or deep-rooted perennials are numerous, harrows—even disk harrows—are seldom much good, and the duck-foot cultivator, or even a light plowing with the gang plow must be given. Such plants are, through their leaves, enabled to store up food in their roots to produce plants and seeds the following year, and only by keeping leaves from forming are the roots starved and killed.

On light soils, and even on some rich loams, frequent surface cultivation is inadvisable, on account of liability to drift. The fact that a soil drifts is evidence that it is lacking in root fiber or humus, to supply which seeding down to grass is the readiest way. Humus (or decaying vegetable matter) may be compared to a sponge, ready to take up moisture and to retain it; land without humus is in bad mechanical condition, and should be treated to a grass rotation or a dressing of manure.

Summer-fallow for Wild Oats.

A New Reader in Manitoba puts the following: "Can wild oats be killed by ordinary summer-fallowing; that is, by plowing lightly immediately after seeding is finished, and again more deeply before harvest, harrowing and cultivating in the meantime to keep in the moisture? I have heard it said around here that they grow from the root, and cannot be killed in one year."

It all depends on how many oats there are in the ground, and how deeply they have sunk into the soil, whether or not one year's summer-fallowing will rid the land of them. The method outlined is the proper way to proceed, but it may be that a supply of seed will be left below the second plowing, which will be brought to the surface in the future. Wild oats are capable of retaining their vitality a long time when buried deep enough in the earth to be out of the influences of air, heat and moisture. They never propagate from the roots, although they stool out like other grains.

Dairying.

There are Other Places Where Good Cream is Spoiled.

A U. S. contemporary writes as follows:

"Secretary Coburn, of the Kansas Board of Agriculture, calls attention to conditions in that State in connection with what he calls a 'curse of poor butter.'

"Secretary Coburn says that only about 25 per cent. of the 25,854,206 pounds of country-made butter in Kansas during the year ending March 1st, 1904, was of first-class quality, good enough to command 18c a pound. The rest, while sold, found its way from the country grocer to the renovating butter plant, where it has been melted, mixed with sweet milk, and again churned, made into 'butter,' and sold on the open market in direct competition with the comparatively small amount of first-class farm-made butter.

"It is said by men who have for many years been in close touch with butter as a commercial product, that less than 25 per cent. of family or country-made butter is of a really merchantable quality, and that this 25 per cent. commands an average price of 18 cents per pound; also that the remaining 75 per cent., reaching the hands of the reluctant country merchants, finally finds its way to some renovating establishment, at six to eight cents per pound; thence it comes to the consumer at an equal price with decent butter, and the consumer is forced to buy it because of the scarcity of a good dairy product or pay for 'creamery' an advance over the price the creamery man could get in New York or Boston.

"Kansas is not alone. Every family knows the rancid, streaked and flavorless compound of grease that in too many instances is sold as butter. Every housekeeper has sent it back to the store, and after diligent search has been obliged to put up with something quite as bad or go without. Most housewives would agree on a law providing imprisonment for the buttermaker who spoils good cream to produce the lumps of rancid fat too often offered as 'dairy butter.' There are good buttermakers in the country—and there are others."

There is in this country room for dairy education on a thoroughly practical and scientific basis, and the times are ripe for the campaign.

The Loss from Bad Milkers.

A short time ago in this paper an article appeared, advising newcomers to learn how to milk, and the following pertinent advice from an Old Country source is appended, for the practical note it sounds:

"There are two opinions about milkers adhering to or changing cows. Some hold it is best for one person to take to certain cows and milk them all through. Others prefer the hands changing daily, and as the question of milking is always a foremost one, it would be interesting to learn which is really the better way of the two. I do not call either bad, as I know success attends both; but it is possible the one style is a little superior to the other. With milkers thoroughly reliable there need be no hesitation in letting a man, boy or woman adhere to the same cows constantly. The cow and the milker get to know each other in a manner that adds to the amiability of both, and I have more faith in getting a greater quantity of milk from the constant milker than by changing. I am, therefore, in favor of no changing if circumstances warrant this. Milkers, however, are often scarce; all kinds have to be employed, and the object of changing cows is often to wedge a duffer in between expert milkers, and thereby keep the cow right. The objection to a bad milker is that the cow is not milked clean—a high and ruinous road to an early curtailment of supply; and it is thought if the cow is not milked quite dry in the morning by the green or careless hand, that by a careful one milking at night, the udder will be emptied and the derangement of the morning rectified. There is truth in this, and it is consoling to know that every cow is milked quite efficiently once a day; but the change from the expert to the duffer does not work very smoothly, the cow objecting generally—and they do know how to resent muddling. So sensitive are they on such matters that they will often refuse to give all their milk to certain milkers, and in changing this is very apt to occur.

"Those learning to milk must not only be put up with, but encouraged as of coming value, but they should not be expected to go at the speed of old hands. Milking is often done in such a hurry, especially in the morning, with the train-time in view, that all are pushed, and if this is accepted by learners as the correct way to milk, there will be indifferent hands in plenty. If learned thoroughly, not under pressure, but with the full instructions—milking slowly but surely, and, above all, in a cleanly manner—speed will soon be acquired, and it ought to be the last thing to learn. The downright careless milker is a nuisance. If he knows that the cow he is milking in the morning will be done thoroughly by another in the evening it will make him more regardless still. No farmer can be constantly testing his cows after milkers to see if all has been extracted; and milkers who are so indifferent as to make a change of cows constantly necessary should be shunted. They can never be trusted as milkers, and I question if they are much good for anything else on the farm, as a careless hand is no catch."

To Improve the Quality of Gathered Cream.

There are two systems of operating creameries—what is called the whole-milk system, and the gathered-cream system. The whole-milk system is the practice of hauling milk to the creamery and having it separated, while the gathered-cream system includes the hauling of hand-separator cream from the farms. When properly operated, the butter from the whole-milk creamery is unexcelled; still, in Manitoba, where the farms and farmhouse are far apart, the cost of hauling milk will, for some time, prohibit the whole-milk system from coming into general use. The improvement, therefore, in Manitoba's creamery butter must come through the co-operation of the proprietors and patrons of the hand-separator gathered-cream system and the adoption of up-to-date methods. There has, in the past, been a wide difference in the quality of the output from the two systems, so much so that the buttermakers of Minnesota are agitating for two classes in their monthly educational scoring contest. The buttermakers in the gathered-cream plants claim it is unfair to expect them to compete, and have asked to be put in a class by themselves.

Now, the intention of this article is to develop thought along the line of a new system which would, I think, if accepted and pushed, place Manitoba in the advance of older dairy States or Provinces. What we wish in Manitoba is to be strictly up-to-date in the best methods, not accepting some old system which is about to be thrown out elsewhere. The climatic conditions and the grasses favor a high quality of butter, and there is no reason why Manitoba should not be a great dairy Province as well as a banner wheat-growing district.

It has been accepted for years that the gathered-cream system of operating creameries is much more economical, so far as manufacture is concerned, but the inferior quality of butter has held this system in the background. The cost of manufacturing butter on a large scale in a gathered-cream plant is surprisingly small. I am prepared to give facts and figures on this subject, but will not here take the space and time to do so. Now, if we can accept the system of cheap manufacture, and still, by advanced and improved methods, raise the standard of our butter to compete with the world, we have increased greatly the wealth of our Province. Not only that, but we have established an important point which will result in a greater confidence among the farmers and patrons. Where a poor grade of cream is accepted and a high price paid for the same, one cannot blame the patrons much for not taking extra care of the cream. It seems to be hard to enforce a law compelling a patron to deliver sweet cream, and, in fact, many operators do not try. With the whole-milk system it is different; sour milk will not go through a separator, and the buttermaker must return it. Upon this point hinges the difference in quality of butter from the two systems.

Grading the cream, and paying a cent more for the best quality, would affect the patron in a practical way. When a man sees that it means dollars to him to take better care of his cream, he will at once be interested in doing so. The difficulty with this method seems to be that there has been no practical and mechanical method of grading cream. Where it is left to the judgment of the buttermaker, there is always a chance for the patron to feel that he is not being treated fairly; that the buttermaker shows partiality. I believe that cream may be graded mechanically, and greatly improved in general quality by the use of a small alkali tablet, to neutralize the acidity in samples of cream hauled to the creamery. Let the size of the tablet represent the amount of acid you will accept, and when the sourness of acid exceeds this amount, the tablet is not large enough to neutralize it and the acid acts on the indicator (or phenolphthalein), giving the cream a red tinge or color. Place this cream in grade No. 2. The sweet cream would grade No. 1, and patrons would receive one cent a pound more for butter-fat. Both grades are accepted, and each patron would have a double set of composite bottles. At the end of two weeks or a month, depending upon the period of holding samples, the patron would have a certain number of pounds of cream of No. 1 grade testing a certain amount, and in another bottle a sample of his second-grade cream. One of the main objects would be to build up quality, and get all cream into the first grade; then pasteurize and use a heavy commercial starter. The time to pasteurize is just as soon as the cream is received. If shipment is to be made on train to a central plant, there should be a receiving depot at towns where cream is to be placed on train, and it should be pasteurized before being transported.

Pasteurization reduces the acidity of cream to some extent, but does not correct the evil effects due to the growth of undesirable bacteria. For this reason the checking process should take place as soon as possible after separation.

Of course, it is taken for granted that settle-

ment will be based upon the grade of cream and the percentage of butter-fat as shown by the Babcock test.

GEO. P. GROUT.

Parkdale.

Keeping Flies from the Cream.

In a series of answers to the query "How may flies be kept out of creameries?" propounded by the New York Produce Review, the following points were emphasized. Many of them may, with profit, be applied to the farm milk-house, as well as to the regular creamery.

1. Keep everything scrupulously clean, not only in the creamery, but all about it. The drainage all around should be good, and if milk is spilled on the ground outside it should be immediately cleaned with hot water, slacked lime then being sprinkled over the spot.
2. Provide good screen doors and windows. One correspondent recommends double screen doors, with Tanglefoot fly-paper between.
3. Darken the creamery just long enough to drive the flies out by the use of a steam hose or other methods; then raise the shades and shut the screen doors. The room must not be kept dark, or it will become musty.
4. Use Tanglefoot in the creamery; never fly poison. The latter may, however, be placed around out of doors.
5. Keep all cream vats, etc., closely covered.
6. If shade trees be all around the building, there will be much less trouble from flies than if it be hot and unprotected.

A dairy school on wheels, consisting of a special train of five cars, recently made a tour of Kansas, Nebraska and Missouri, to promote the dairy industry. It embraced a complete outfit of dairy goods, apparatus and lecturers. It was equipped by the united efforts of the St. Joseph and Grand Island R. R., the Blue Valley Creamery Co., and the Kansas State Agricultural College, and was visited by thousands of farmers.

Poultry.

Mixing Breeds.

To the Editor "Farmer's Advocate":

One of the commonest mistakes made by poultry-raisers arises from the widespread belief that mixed chickens lay better than pure-bred fowls. This fallacy is the worse because it grows out of a truth. It is true that frequently if you cross two breeds, each of which has been bred with egg production uppermost in the mind of the breeder, and they chance to nick so that the offspring inherits the laying tendency from both parents, the cross will lay more than either breed; but if one breeds from these crosses the pullets produced lack the laying qualities of the first cross. In order to get the desired result, one would have to keep two breeds pure, and raise his layers by a fresh cross each year.

But the most important fact which is overlooked by these believers in mixing is, that it requires more knowledge of breeding to produce prolific crosses than to raise pure stock, for everything depends upon how the breeds that are crossed will nick. It is a well-known fact that when two animals are mated which have been bred in different lines for generations, the offspring receives the characteristics of both parents, but has them mixed up sometimes in a grotesque way. When a very large, well-built stallion is bred to a neat little pony, in the hope of producing a medium-sized horse, very often the colt has his father's large head and his mother's little body, or his father's heavy legs attached to his mother's light body. Again, after two breeds have been breeding uniformly for generations, if they are crossed, the offspring may revert to earlier types, while occasionally two well-bred lines will combine the good qualities of both; in such a case they are said to nick. Among fowls the breeds which will nick are much less numerous than those which will not, and though it is possible to produce a good layer by crossing, it is useless to expect to do it by accident, and none should attempt it without a wide knowledge of breeding poultry. While some crosses lay better than either parent, some do not lay so well as either, and these are the more numerous class.

Very often the cockerels introduced with a flock, to improve the laying by an infusion of new blood, are the sons of poor-laying hens, and must reduce the laying qualities instead of improving them. If one were going into dairying, the first thing he would want to know about his bull would be whether he was from a good milking strain or not, and the first thing one should know about a cock is whether or not he is from a laying strain, if eggs are wanted. The man who understands crossing may profit by it, but the average poultry-raiser will do better with a straight-laying breeds. It is well to remember that some strains of any breed lay much better than others, and if they can be obtained at reasonable prices, cockerels from a bred-to-lay strain, in which the record of each hen is kept, will more than pay for themselves in the eggs of their pul-

lets, besides raising the laying qualities of the flock every year.

Debating this matter is of no use. In this day of science we believe in experiment. Let anyone who raises mixed chickens buy a half dozen hens of a bred-to-lay strain whose eggs he can distinguish—say Wyandottes of a strain known to lay very brown eggs, or Leghorns which lay white ones. Let him keep count of their eggs and see how many the six average, and keep account of all other eggs and see how many the mixed hens average. The man who tries the experiment will have mixed hens to sell in the fall.

W. I. T.

Poultry Notes.

Overfat fowls make poor breeders.

The cement floor is easiest to clean.

All whole grain should be fed in litter to induce exercise.

The sitting hens should occupy quarters entirely separated from the rest of the flock. They need perfect quiet to give best results.

Young chicks should be fed four or five times a day on the start, but are better off if not fed anything until thirty-six or forty-eight hours after they are hatched except coarse sand. Some recommend even waiting a longer time before giving other food to newly-hatched chicks. The yolk of the egg is absorbed by the chick just before hatching, and it should be thoroughly digested before other food is given. A good rule is to let the little fellows get good and hungry before any food is given.

Milk, either sweet or sour, is good for both old and young chicks, but for real young chicks it is best to feed it in the form of cottage cheese or while it is yet sweet. Cottage cheese is valued highly as a feed for young turkeys.

Place the brood coops on dry, well-drained ground, and be sure they are storm proof and rat tight, and at the same time airy and well ventilated. Doors made of inch mesh wire netting are just the things for thorough ventilation and protection from rats and other enemies at night. A little extra care in protecting the chicks pays well.

Kerosene oil applied to roosts, roost supports and nest boxes every two or three weeks during the summer will effectually prevent the red mites or lice from getting started in the flock.

There are many advantages in free range for poultry which are hard to supply to a flock in confinement with the very best possible care. The farm flock has advantages in this respect which many city and village poultry-keepers cannot give their fowls without having trouble with their neighbors.

On many farms where the hens have free access to the hog pens and get too much corn and become too fat to lay one remedy is to build a larger poultry-house and keep more hens to eat the waste grain. The poultry on most farms should not be fed any grain but whole oats, especially when they can get out around the stables and hogpens, because they will then get all the other grains and food they need for variety. Whole oats is the best grain for eggs, and the least fattening of them all.

Thoroughly clean the brood coops and give them a good sprinkling of kerosene oil before putting in the new families this spring. If the coops are sprinkled with kerosene inside every week or two during the summer no red mites will bother them. Prevention in this case is better than cure.—[The Farmer.

Sitting Hens.

When a hen gets to be real broody, she will usually readily accept any nest you may give her with eggs in it. For a while, of course, there will be an inclination in the hen, after leaving the nest for feeding, to return to her old nest, and even where we set a number of hens in a house and yard by themselves, it may be a few days before the hen gets used to her particular nest and thenceforth claims it as her own. We have often had two hens get upon one nest, and have one nest unoccupied. Sometimes a couple of hens will get to fighting over one nest, with disastrous results to some of the eggs in the nest. All this trouble, however, can easily be avoided. The best plan, probably, where the eggs have to be hatched in the natural way, is to have a hatching room that is the very counterpart of the laying room, with the very same nest arrangement, and nests exactly like the laying nests. It will be all the better if the nests are movable nest boxes, which can be taken out of the laying room with the broody hen on it, filled with eggs and placed in the corresponding position in the hatching room. There will be no further trouble. The hen knows her nest, and its position, and when she leaves it to feed, drink, or dust herself, she will promptly return to it when ready, and this without being interfered with by any of the other sitting hens, all of which know their own nests. It hardly needs to be said that there should be an enclosed yard connected with the hatching room, so that the hens may go out into the air and sun, and dust themselves, and that for greater safety each hen should be treated to a sprinkling of bubaeh (California insect powder) several times during their hatching period. A few lice may not do much damage to old fowls, but they are liable to turn apparent success in chicken-raising into dismal failure. Dusting hens thoroughly with insect powder or tobacco-dust seldom fails to give relief.—[Practical Farmer.

Horticulture and Forestry.**Starting Celery Seed.**

Celery is a crop that is to be transplanted. The plants must be started in a seed-bed and there cared for until they are large enough to be transplanted either into a temporary bed or to the field. Celery seed is very small, light, and quite slow to germinate, and for these reasons great precautions are necessary in starting the plants. Methods employed for starting cabbage, onion or tomato seed would, in most cases, fail with celery. Very few other vegetables require such careful and constant attention of the seed-bed.

The seedlings, as they germinate, are delicate, and it takes a few days before they are strong enough to withstand any neglect of the seed-bed. During this time one must not forget to water the little plants regularly, or else the hot sun or drying winds are liable to cause many of the delicate seedlings to die.

The seed-bed should be well prepared. The soil, aside from being light and rich, should be perfectly fine on the surface. The seed should be planted as shallow as possible. Sometimes it is broadcast and thinly covered. While this way may give a good germination, if the seed-bed is properly taken care of, at this station we have had excellent results in the germination by the drill method. The seed is planted quite thick in drills, about 3 to 4 inches apart, and from $\frac{1}{4}$ to $\frac{1}{2}$ inch deep, and then covered very shallowly with the lightest kind of soil. Immediately after the seed is planted the bed is watered. From this time on a careful management of the seed-bed is necessary, remembering that the surface soil must not be allowed to become too dry and hard. To keep the soil from baking, it should be watered at regular intervals. The frequency of the watering of the seed-bed will depend largely on whether it is exposed to our hot suns and drying spring winds. If the seed-bed is open, it is advisable to have it in a place where it can be sprinkled every evening. While the ideal seed-bed is one that is open or unprotected, better results, with less care, can be had when some kind of a covering is used. Boards, straw mats, cloth, gunny sacks and glass can be used to prevent evaporation, and to keep the soil from baking.

Straw mats, cold-frame glazed sashes, gunny sacks and common cotton cloth have been used at the station on the seed-bed. In each case the results in germination have been quite satisfactory, but the stand has been slightly more uniform from the beds covered with the cotton cloth. The beds covered with the glazed sashes usually take more, and more frequent watering is also necessary. It has been found necessary to water such beds every two days, and when the days are very hot and windy, every day. Beds covered with cloth have been watered on an average every three or four days.

In covering the beds with the different materials above mentioned, it is generally better to have the seed-bed made in such a way that there will be a space from three to six inches between the covering and the soil. Beds made in the form of a cold-frame are very satisfactory. If lumber cannot be had, the border on the outside can be raised to the necessary height.

It is advisable in using cloth covers to stretch the cloth over a light frame made from inch lumber. The frames can be made 3x6 feet, or larger. Such cloth-covered frames are easily handled, and when placed over the seed-bed the wind does not move them around. As soon as the seedlings are well started the covering should be removed. If left too long, the plants tend to grow too tall and spindling. When the cloth is simply laid right on top of the ground as the little plants germinate they strike the cloth and bend over to one side, and are liable to grow spindling.

FABIAN GARCIA.

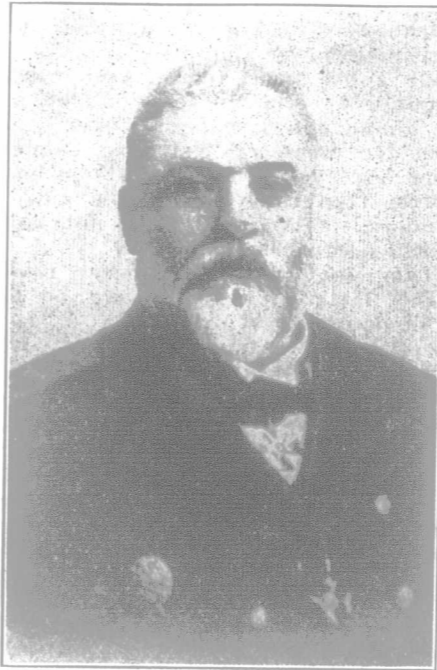
Fair Play for Canadian Nurserymen.

To the Editor "Farmer's Advocate":

Sir,—In your issue of May 10th, in the Horticulture and Forestry department, you note that Mr. Thos. Cunningham, inspector of fruit pests in British Columbia, estimates that half a million of fruit trees are being imported into British Columbia this season, chiefly from Oregon, and you ask the very pertinent question, "Why this nursery stock is not grown in Canada?" Allow me to answer.

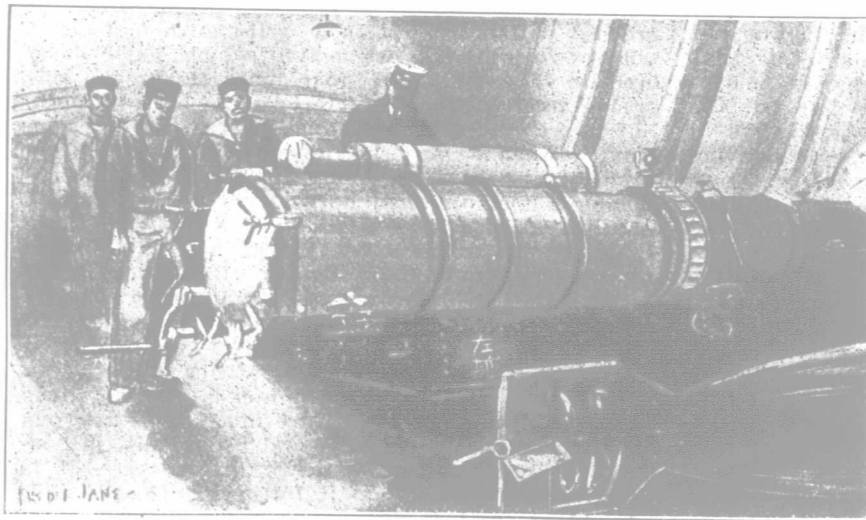
It is grown in Canada to a very considerable extent. A considerable portion of the half million trees were supplied by Ontario nurserymen, but under such difficulties that it was only done to save the stock from being thrown away. I estimate that the nurserymen of Ontario have had a surplus of nearly a quarter of a million of trees this spring, and under any sort of fair play would have been extremely glad to have availed themselves of the extraordinary demand in B. C. for nursery trees; but the legislators of B. C. are determined, apparently, to stop all purchases from Ontario. The B. C. Government have adopted, wisely enough, most stringent regulations as to the importation of nursery stock, to prevent the importation of diseases of any kind—San Jose scale, peach borers, or any other form of disease that can be carried on nursery stock. No one objects to this. No one, I imagine, has any desire to foist on the fruit-growers of B. C. any diseased stock. Let the regulations be as stringent as possible, such regulations would not debar Ontario

stock any more than Oregon stock. Ontario nurseries are as free from disease as are those of Oregon, but the difficulty does not lie in this fact at all. We have the trees and have them free of disease, but we are compelled to ship these trees, most of which are wanted in the Okanagan and other valleys in the Eastern and South-eastern B. C., all the way to the Coast of Vancouver, and then after inspection ship them back again to Eastern and South-eastern B. C., a distance of from 400 to 800 miles at least. Our spring does not open up until about April 1st to April 10th. By the time our trees get to the Pacific Coast and are inspected tree by tree, reboxed and shipped back to the Okanagan country, it is May 15th to June 1st, whereas Oregon



Vice-Admiral Nebogoff.
Commander of Second Baltic Squadron.

nurserymen can ship March 1st, have them inspected and delivered by April 15th. Hence, Oregon nurseries get the bulk of the trade. We have urged, and the fruit-growers of the Okanagan Valley have urged, upon the B. C. Government that in all fairness the inspecting station, if only one is to be provided, should be on the eastern and not on the western border. If any favor is to be given, let it be given to Canadian nurserymen. Let the Oregon nurserymen send their stock to the eastern border of B. C. for inspection, and thus give us some advantage to compensate for our later opening season. Let the Oregon nurserymen take the risk of shipping across the mountains in early April, instead of compelling us to run this risk. But a deaf ear has steadily been turned to us. If we ship we must ship to the coast, pay heavy fees for inspections, and then reship back five hundred miles or more in most cases. This is the reason most of this valuable trade goes to Oregon, and Canadian nurserymen who grew trees for this trade have them on their hands. E. D. SMITH.



Tube for Discharging Torpedoes.

On Japanese Cruiser.

Would Exchange Cuttings.

Mr. Frank J. Field, of the Arrowwood Park Experimental Farm, Brant, Alta., is anxious to receive cuttings of native fruit bushes suitable for hedges, and in return places the farm at the disposal of donors for seed testing. Cuttings also of figs, nut trees, pears, plums, grapes, strawberries, small fruits, and, in fact, all kinds of edible fruits and vegetables would be welcomed.

A Plowing Match.

The Blyth Farmers' Institute will hold their 10th annual plowing match on Friday, June 23rd. Thos. Kneeshaw is the secretary, from whom particulars may be obtained.

Field Notes.

Sixty-three first-year students and forty-two sophomores passed their examinations at the Ontario Agricultural College on the work of 1904-05.

Farmers about Neepawa, Man., are trying an experiment with sugar-beet growing this year, with the object of determining whether or not the district is suitable for the crop.

Prof. F. C. Harrison, Bacteriologist at the Ontario Agricultural College, has accepted a similar position on the staff of the new agricultural college being established by Sir Wm. Macdonald and Prof. J. W. Robertson, at St. Annes, near Montreal. He will make the change on Sept. 30th next.

The Farmer and His Neighbor.

It is not a usual thing for a farmer to get into trouble with his neighbor and have to go to law. It is not, perhaps, so common an occurrence as in the city, yet it happens far too often, and the reason for it lies in the lack of information the ordinary farmer has with respect to what precautions he ought to take so as not to interfere with his neighbor's rights. A farmer has to keep cattle, and sometimes he allows them to run on his neighbor's farm. What relief against such a proceeding has his neighbor? Sometimes through carelessness, perhaps, he leaves a fire burning, and it spreads to his neighbor's farm. Should his neighbor have to pay for the loss he suffers? Sometimes, and, indeed, very often, there is trouble over the boundary line and the boundary fence. I shall endeavor in as short a space as possible to give the law on a few important points, a knowledge of which will, I believe, be very beneficial to the readers of the "Farmer's Advocate."

ESTRAY ANIMALS.

I have said that sometimes the animals of one farmer will wander away onto the land of his neighbor. Where they do wander away and are found by a neighbor to remain on his premises for two weeks he is to notify the clerk of the municipality, describing the animals as nearly as possible, giving age, sex and color, with any distinguishing brand or mark. The clerk keeps a record of all such information, and must give it to anyone making enquiry on payment of twenty-five cents. Anyone refusing to so notify the clerk is liable to a fine.

In addition to these rules there are certain other provisions in force in the Territories. There, if anyone finds an animal estray on his lands and cannot drive it away he must notify the owner through the mail. If he doesn't know the owner, or if the owner fails to come after his property within ten days after being notified, he must send word to the Department, giving all the information he can, and this will be published in the Gazette for two issues, and a copy of the Gazette will be sent to every post office and every post of the Northwest Mounted Police in the Territories.

RUNNING AT LARGE.

There are certain animals which are prohibited from running at large. In Manitoba, stallions of one year or over, and bulls and boars of nine months or over, must not be at large at any time of the year. Rams of four months and over must not be at large from August 1st to April 1st. Apart from the above provisions the municipalities control the running at large of animals, and the farmer should make himself familiar with their by-laws.

With regard to domestic animals, such as horses and oxen, their owners are liable for injuries done by them if they are of a vicious disposition, and knowing that they are, they neglect to guard against their doing damage. This applies also to dogs, except that where a dog has done injury to sheep it is not necessary for the owner of the sheep to prove the owners' knowledge of the propensity of his dog to kill sheep to be entitled to damage. He is entitled to it anyway.

If anyone sees a dog worrying sheep anywhere except upon the land of the owner of the dog, he has the right to kill the dog. Or if a complaint is made in writing within six months after the injury, a justice of the peace or police magistrate may summon the owner of the dog to appear before him, and upon proof of the injury may order the dog to be killed.

In the Territories there is a similar provision regarding the running at large of stallions and bulls, except that the Commissioner of Agriculture may, by notice in the official Gazette, declare that bulls may run at large in any district between the first of July and the thirty-first of December in any year. If there is no such permission, and a stallion or bull is seized, the owner must be promptly notified. This does not apply to herd districts (see hereafter).

By the same ordinance in the Territories it is provided that no action for damages caused by domestic animals can be maintained, nor are they liable to be distrained for causing damage to property unless the

land is surrounded by a lawful fence. The following are lawful fences:

1. Any substantial fence not less than four feet high, if it consists—

(a) Of rails or boards not less than four in number, the lower one not more than eighteen inches from the ground, and each panel not exceeding twelve feet in length.

(b) Of upright posts, boards or palings, not more than six inches apart.

(c) Of barbed wire and a substantial top rail, the wires to be not less than two in number, and the lower one not more than twenty inches from the ground; posts to be not more than sixteen and a half feet apart.

(d) Of three or more barbed wires, the lower one not more than twenty inches from the ground, posts to be not more than sixteen and a half feet apart.

(e) Of not less than three barbed wires, on posts not more than fifty feet apart, the wires being fastened to droppers not less than two inches in width and one inch in thickness, or willow or other poles, not less than one inch in diameter at the small end, or wire dropper, the said droppers or poles being placed at regular intervals, of not more than seven feet apart.

(f) Of two posts spiked together at the top, and resting on the ground in the shape of an A, which shall be joined by a brace firmly nailed near the base, with three rails firmly secured on the one side of the A, the top rail not less than four feet and the bottom rail not less than eighteen inches from the ground, there being also firmly secured on the other side of the A one rail not more than twenty inches from the ground.

(g) Of woven wire secured to posts, and not more than thirty-five feet apart.

2. Any river bank, or other natural boundary, sufficient to keep domestic animals out of any land.

Fences which surround growing crops or crops in process of being harvested must be situated at least eight feet from such crop. If they surround stacks of hay or grain they must be situated not less than ten feet from such stack.

There are special provisions with regard to the pound and herd districts. The main provision dealing with pound districts declare that the proprietor of any land SURROUNDED BY A LAWFUL FENCE may seize and detain any animals found trespassing and drive them to the nearest accessible pound in the district.

In the herd districts the owner of any cultivated land or stacks of grain or hay, or any person having a permit or license to cut hay, or any superintendent, overseer, servant or other person acting for and on behalf of such owner or person may detain any animal which is doing damage upon his land between the fifteenth of May and the thirtieth of October, both days inclusive, and may deliver any animal so detained to the nearest pound, and the owner of the animal cannot obtain it again until he has paid for all damage done and all expenses in connection with the detainer. Bulls and stallions found in herd districts are dealt with in the same way, and not as they are when not in a herd district.

(To be continued.)

Chicago International, 1905.

At a recent meeting of the Board of Directors of the International Live-stock Exposition in Chicago, it was decided to open the 1905 show on December 2nd, on which date the students' judging competitions for the Spoor trophies will take place. A committee was appointed, with Professor Curtiss as chairman, to devise some plan of simplifying the method of making awards, it being the general opinion that marking the papers must be eliminated.

In addition to the money offered in the regular exhibition classifications, the American Aberdeen-Angus Breeders' Association appropriated \$5,500; American Shorthorn Association, \$5,000; Galloway Association, \$1,500; Red Polled, \$1,000, and Polled Durham, \$300. The only change of any consequence in the cattle classification was the decision to admit open heifers to competition in the carload lot division. Messrs. John Clay and A. H. Sanders were appointed a committee to secure the services of a British judge for the individual classes of grade and cross-bred steers, and for individual bullock championships.

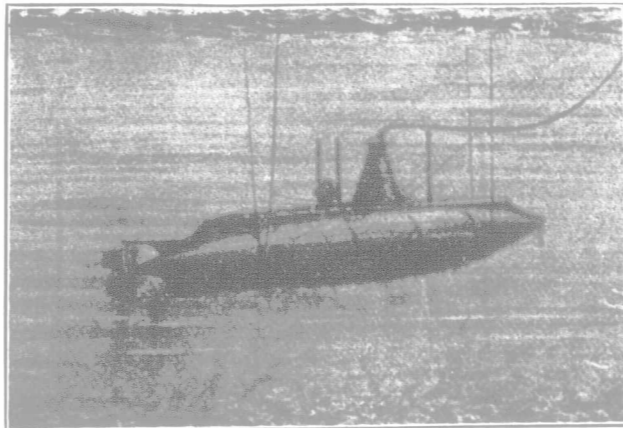
In the horse department special prizes, practically the same as last year, have already been provided by the different associations. The erection of the immense new arena, with seating capacity of 10,000, is practically assured as the future home of the show.

Fat-stock Show at Calgary.

In connection with the show and sale at Calgary, May 15th to 18th, a fat-stock show was held, but not many animals were entered, nor was much interest taken in the event, owing to the attention necessarily required by the sale. The animals were judged on foot, and then in the carcass. With beef cattle, Mr. Geo. Duncan, of Inisfail, won the grand championship on a steer about three years old, which was afterwards placed first in the carcass competition.

At first sight he was not very attractive, being a trifle leggy, and lacking a little in spring of hind ribs, but he was almost perfect in his covering of hair, skin and flesh, with a thick, full-fleshed loin and splendid crops; fine bone and blunt basket, yet well filled behind the elbow, and particularly good in heart girth. There was not a sign of coarseness or patchiness about him; he was ripe for the block and full of quality; a

steer that stood well when looked at from the breeder's, feeder's or consumer's viewpoint. When killed he showed an ideal butcher's carcass, of fine color; even the neck had a covering of fat, yet not too much. The expert butcher who did the carcass judging said he had a very large percentage of rich, red, juicy, lean meat. A hind quarter was cut up—porterhouse, sirloin, round, rump and shank, and the value of them explained by the carcass judge. The steer weighed 1,430 lbs. alive dressed 60.84 p. c.; carcass, 870 lbs., and had been kept growing from a calf.



A Submarine Torpedo Boat.

W. D. Flatt's Clydesdale Sale.

The auction sale at Hamilton, Ont., on May 17th, of 43 Clydesdale fillies, imported by Mr. W. D. Flatt, proved a very successful event, considering that the fillies were quite young and in thin condition, most of them under two years, many of them under one year, only half a dozen three years old, and many looking quite gaunt from the voyage of twenty days, two days of which they were without food, nearly a week on the railway, and just recovering from the distemper, which commonly affects horses on the voyage at this season. Very few, we venture to say, were optimistic enough to predict an average of over \$260 each before the sale commenced, though the high-class quality of the stock was admitted and admired, clean, flat bone, of good size; big, sound feet, and true action being a common characteristic, while the breeding was of the best. There was a very large attendance of farmers, and the acknowledged scarcity of good brood mares in the country was evidenced by the brisk bidding, which continued till the last lot was disposed of. The highest price, \$565, was paid by Mr. John McKenzie, Keyward, Ont., for the beautiful bay filly, Adriana, foaled in July, 1903, sired by Baron's Peer, a son of the noted Baron's Pride. The same buyer paid \$345 for the

yearling, Lilly of Mains, by McKinley. The second highest price, \$500, was paid by McDonald Innis, of Brooksdale, for Jip, a capital bay, coming three in June, sired by Royal Patron, by the famous Prince of Carruchan. The sale was conducted on first-class principles, as are all Mr. Flatt's sales, and the auctioneers, Capt. Robson and Mr. T. Ingram, did excellent work in disposing of the stock. Forty-three fillies sold for \$12,260; average, \$261.37.

Horse Show Arrangements.

Arrangements for the Winnipeg Horse Show have been most carefully prepared. The prize-list makes provision for carriage horses, roadsters, saddle horses, jumpers, ponies, drafters and breeding classes. Gymkhana events and military features are on the programme. As a stimulus to the breeding and fitting of fancy horses, the show will be a powerful force and will do much to popularize the horse in city circles.

The Torpedo and Torpedo Boats.

The torpedo is an essentially modern artifice of war. It was first used at Wei-hai-wei in 1895, suggestively enough by the Japanese, who then sank three Chinese battleships by its use. During the war between the United States and Spain, in 1898, the torpedo was not used, but since then the various nations, in piling up the deadly machinery which seems necessary to their individuality, especially in the old world, have become alive to its value, and now a flotilla of torpedo boats and "destroyers" is considered indispensable to any up-to-date navy.

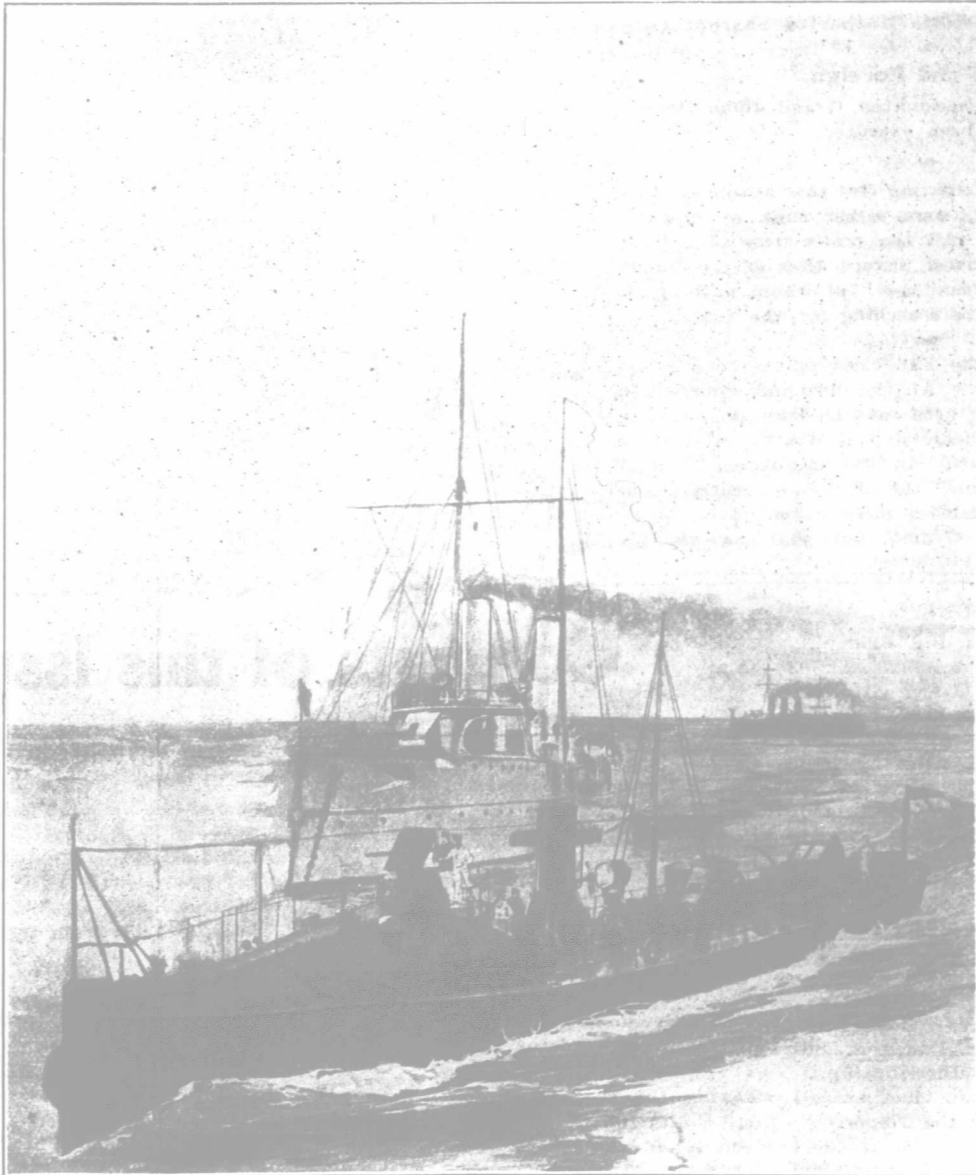
The kind of torpedo used by Japan in the present war is the Whitehead navigable species. It is a long cigar-shaped affair, from 14 to 18 feet in length, and in its passage through the water is said to resemble, somewhat, a sturgeon. The explosive charge, weighing, usually, between 150 and 200 lbs., is contained in a section at the nose of the torpedo, and is exploded by a pin which projects from the end and is driven in as soon as it hits any solid object. The torpedo is driven from the torpedo-boat by compressed air, but when started on its way is self-propelling, and, hence, notwithstanding the resistance of the water, has a considerable range, usually 1,000 yards.

Nearly all large war vessels have a few torpedo tubes, but the boats constructed especially for torpedo service are immeasurably superior for warfare of this nature. In their very diminutiveness lies an element of safety, while for night manoeuvres, or in any action in which lightness and speed are required, they have proved the most effectual medium yet invented, being able to run in, cripple a battleship, and retire in comparative safety, where larger vessels would have found it impossible to act. The so-called "destroyers" have a speed of from 25 to 30 knots an hour.

The newest kind of torpedo-boat is the submarine. This kind has not so great a speed, being capable of only about 11 knots on the surface, and 6 or 8 when

submerged; but in the character of the boats lies their efficiency. The submarine runs on the surface until within a mile or two of the enemy, being even then not at all conspicuous, little being visible but the whale-backed top. During this time it is driven by a gasoline engine. Once within proper distance of the enemy, however, it sinks until partially or wholly submerged, a propelling power of storage batteries and an electric motor now being called into requisition. Thus, like the hidden serpent, it goes on its way until within sufficient range for the discharge of the torpedoes, one of which is sometimes sufficient to sink a vessel. Steering under water is also made easy, by means of a peculiar optical instrument confined in the top of a tub, which projects out of the water, and which, by means of a mirror arrangement, transmits a picture of the outlook above to the observer who sits below.

Upon the whole, the modern torpedo, with its boat, is one of the most deadly and ingenious contrivances



Torpedo Boat.

of war ever invented, and its agency in the coming struggle between Togo and Rojestvensky will be watched with keen interest.

Veterinarians of Western Canada.

A veterinarian in practice in Western Canada, who may be considered almost a native of the Province of Manitoba, as he migrated from Goderich, his natal place, when quite young, is Dr. Will A. Hilliard, a graduate of the Faculty of Comparative Medicine, McGill University. Dr. Hilliard served a pupilage during two summer vacations with Dr. Fred Torrance, in Brandon, and acted as locum tenens at Neepawa for Dr. A. G. Hopkins. In 1902 he spent some time in a large veterinary hospital in New York, and is now engaged in general practice in Minnedosa, Man.

Professor of Dairying for the M. A. C.

We print herewith a halftone of Prof. W. J. Carson, B.S.A., appointed Professor of Dairying in the Manitoba Agricultural College. Prof. Carson is an Ontario, from Russell County, and graduated from the Ontario Agricultural College in 1902, having specialized on dairying. He subsequently did good work as an Instructor in the Eastern Ontario Dairymen's Association, and later accepted the position of Assistant Professor of Dairying at the Wisconsin Experiment Station and Agricultural College, which he leaves to come to Winnipeg. A man of more than ordinary calibre, he has had a very thorough experience in practical dairy work, and has since had exceptional opportunities to develop, under such world-famous experts as Dr. Babcock and Professors Farrington and Woll. He is a sound, capable and earnest-minded man, who thinks well before he speaks, and should prove a tower of strength to the new institution, being just the kind of man that is needed to bring the Western dairy industry to the fore. In selecting him, President Black has made an excellent choice.

heard. . . From the sea comes a rumor that Togo and Rojestvensky have met south of Formosa, and that the Japanese have been defeated. It is also stated that Rojestvensky has died, but neither report has as yet obtained much credit, and the general belief is that the Russian fleet has managed to get out into the Pacific. That Rojestvensky has not, however, the full confidence of the authorities, may be judged from the fact that last week Vice-Admiral Birileff was despatched from St. Petersburg for the Far East, with instructions that, upon arriving at Vladivostok, he is to be subordinate to Linevitch but superior to Rojestvensky. Several divisions of troops were also despatched from Poland, and a fourth Pacific squadron under Rear-Admiral Parenago will set sail from Cronstadt during the last week of May.

is much less than at same time last year, and the general opinion is that wheat back in the country is well cleaned out. Besides this, a large part of the wheat in store, Fort William and Port Arthur, is below the grade of No. 3 northern, the figures being about 3,200,000 bushels of No. 3 northern and above, and about 2,300,000 bushels No. 4 extra, No. 4 wheat, No. 5 wheat, and feed, etc. This draws down the stock of good milling wheat considerably, and where these details are not known the aggregate figures of the stocks are in a great measure misleading.

The feeling generally is very optimistic as regards the crop prospect, and there is a considerable increase in acreage, but to what extent we cannot yet venture an estimate. Prices are: No. 1 northern, 93c. (last year, 87½c.); No. 2 northern, 89½c. (last year, 84½c.); No. 3 northern, 84½c. (last year, 82½c.); No. 4 extra, 76c.; No. 4 wheat, 75c. (last year, 76½c.); No. 5 wheat, 64c.; feed, 60½c. (last year, 57½c.). All prices are for in store, Fort William and Port Arthur.

Alberta is expected to put a large quantity of fall wheat on the market this fall, unless unforeseen circumstances intervene.

COARSE GRAINS AND FEED.

Oats and barley only in fair demand, and stocks reported to be small in farmers' hands.

Millfeeds—Bran, \$14; shorts, \$16 per ton to the trade; oil cake steady, at \$27.

Hay—Fresh baled, \$9; a lot of it inferior, having been through the presser when damp.

DAIRY AND OTHER PRODUCE.

Butter—Creamery, 27c. to 28c. for bricks; dairy grades from 17c. to 20c., the latter for separator bricks.

Eggs—14c. is the jobbers' figure for the fresh article. Cheese—Ontario article quoted at 12c.; Manitobas, 11½c.

Poultry is all imported stuff.

LIVE STOCK.

Cattle—Little change in price from last week, 3½c. to 4c. being the quotation; Some buyers from the East have paid Manitoba farmers better than 4c. at their local towns.

Sheep—Choice stuff, 5½c.; inferiors, 4c. to 5c.

Hogs—Selects bring 5½c., off cars, Winnipeg.

Chicago.

Cattle—Market a little lower; good to prime steers, \$5.60 to \$6.50; poor to medium, \$4.25 to \$5.40; stockers and feeders, \$2.75 to \$5.25. Hogs—Mixed and butchers', \$5.25 to \$5.55; good to choice, heavy, \$5.40 to \$5.52½; rough, heavy, \$5.25 to \$5.35; light, \$5.30 to \$5.52½; bulk of sales, \$5.40 to \$5.50. Sheep—Good to choice wethers, shorn, \$4.60 to \$5.25; fair to choice, mixed, shorn, \$3.50 to \$4.50; native lambs, \$4.50 to \$6.50.

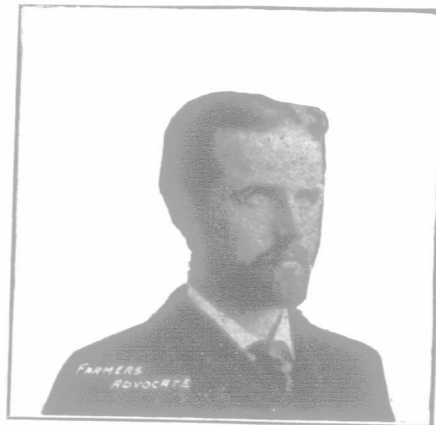
British Cattle Market.

London—Cattle are quoted at 11½c. to 12½c. per pound; refrigerator beef, 9½c. to 9½c. per pound; sheep, 13c. to 14½c. per pound.

Foreign Crop Prospects.

Broomhal's foreign weekly crop summary says, under date of May 23rd:

United Kingdom and France.—Cold winds are checking the growth of wheat, but otherwise conditions are satisfactory. Supplies of home-grown wheat continue very small. Germany—Some rain has fallen, but more is wanted. Supplies of home-grown wheat now small. Russia—The droughty sections have had some rain, but more is needed. Some reports claim the crops are all right, while others contend there has been considerable deterioration. The strike of bargemen at the Sea of Azoff is likely to hinder shipments. Hungary—Crops are now developing satisfactorily, under the influence of the present favorable weather. Spain—Further unfavorable weather has prevailed. Italy—Crop prospects are fair. India—The wheat crop of the United Provinces of Agra and Oudh is officially estimated at 59,100,000 bushels, against 98,320,000 last year.



W. A. Hilliard, D.V.S. (McGill), Minnedosa, Man.



Prof. W. J. Carson, B. S. A.

Events of the World.

Canadian.

The excavation of the tunnel between Detroit, Mich., and Windsor, Ont., will be begun in the near future.

Canada may be honored before long by a visit from the King of Belgium.

Materials for the new Marconi Station have been sent to Sable Island.

The C.P.R. will double-track the line between Fort William and Winnipeg, the work to begin at once.

The C.P.R. has let the contract for the construction of the portion of the Toronto-Sudbury line which lies between Toronto and the Magnetawan River. Roads will also be built through Ontario, from Walkerton to Flesherton, and from Victoria Harbor to Sharbot Lake.

British and Foreign.

Ivan Kalleff, who assassinated Grand Duke Sergius on February 17th, has been executed.

All the boats participating in the autoboat race from Toulon to Algiers, were either sunk or disabled during a heavy storm. All the crews were picked up by destroyers which followed, except that of the Quand-Meme, consisting of seven men, of whom nothing is known. Two cruisers are searching for the vessel.

Every indication in the Far East points to a great battle in the near future. All the sick and wounded in Harbin and vicinity have been sent to Irkutsk, in order to leave the hospitals clear, and sanitary trains have been rushed to the front. In the meantime, General Linevitch is pressing upon the Japanese center, and several preliminary skirmishes have taken place, with varying success. From Oyama, as usual, no word is

Markets.

Winnipeg.

Thompson, Sons & Co. say: Manitoba wheat during the past week has felt in fair measure the strength of the Minneapolis market, and has been influenced by the fluctuations there. The effect has been more activity in our option market, and a disposition on the part of holders of wheat to hold tightly. Dullness and lack of demand in shipping and export trade is still characteristic of these branches, and results in only moderate transactions in cash wheat. It is to be noted, however, that stocks at lake port terminals are now 300,000 bushels less than at same date last year, and the movement from country points

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HOME MAGAZINE

Life, Literature and Education.

Messenger Boy and Millionaire.

Andrew Carnegie's recent gift of \$10,000,000 to provide retiring pensions for professors of colleges, universities and technical schools in Canada, the United States and Newfoundland, has again set people's tongues a-going as to whether it will be possible for the big purse to dwindle down enough to permit the iron-master king to die even moderately, respectably poor. Financiers are almost universally of the opinion that the cannie Scotchman is foxy enough, and that, since his income much more than covers the amount of his yearly donations, he may well talk about getting to the bottom of his pile. At the same time, the enormous total which he has already given away, staggers ordinary comprehension, and the world is not likely to grumble much so long as Mr. Carnegie chooses to divert such workable amounts into channels so ostensibly pro bono publico as those which so far have been the medium of his favors.

Up to the present time he has disposed of close upon \$140,000,000. Of this amount, \$37,500,000 has been expended in libraries, \$59,852,000 in colleges and schools of various kinds, \$5,000,000 for the Heroes' Families' Relief Fund, \$4,000,000 for Employes' Pension Fund, \$1,500,000 for Allied Engineers' Society, \$1,500,000 for the Peace Temple at the Hague, and \$29,000,000 to other benefactions. Besides this, he has given away during the present year, \$500,000 to Maine University; \$125,000 to the Rensselaer Institute, Troy, N. Y.; \$125,000 to Oberlin College; \$150,000 to Syracuse University; \$15,000 to Oberlin students who lost money through the Mrs. Chadwick affair with Oberlin Bank; and \$635,000 in other benefactions.

The Scotchman who is thus enabled to throw money about in this wholesale manner, was born at Dunfermline, Scotland, Nov. 25th, 1837. When eleven years of age he came to the United States with his parents, who settled in Pittsburgh, the spot which was to prove a veritable Alladin's garden to the little Scotch laddie. The jeweled fruit at first, however, only came in the form of various situations, chiefly about the railway stations, as telegraph messenger, operator and clerk to the manager of the Pa. R. R. The big plum, which was to form the nucleus of the big fortune which followed, appeared with the invention of the sleeping car. Mr. Carnegie did not invent this modern luxury, but he was shrewd enough to see its possibilities, and went into partnership with Mr. Woodruff, the actual inventor, in booming the idea. Mr. Woodruff's genius and Mr. Carnegie's financial ability were a good combination, and from this time the money—and other things—came in fast. Mr. Carnegie was soon made president of the Pa. R. R. Shortly

afterwards he speculated in oil wells, and found that not for Rockefeller alone did "oil blessings flow." The oil wells, in fact, yielded him a big fortune—a fortune which enabled him to take hold of the iron and steel business in a way which speedily placed him in the position of iron king of the world.

For some time, however, Mr. Carnegie has been withdrawing gradually from active life in connection with the various manufacturing concerns which occupied so much of his time, and only the other day he gave up the presidency of the Iron and Steel Institute of Great Britain, presenting \$25,000 to the research fund as a parting gift. During the winter he usually resides in New York city, but when May comes he invariably sets sail with his wife and daughter for Scotland, where at his beautiful home at Skibo Castle the family spends four months of each year. For some time Mr. Carnegie has devoted himself to literary work, and has published several books—"Triumphant Democracy," "An Ameri-



Mr. Andrew Carnegie.

The millionaire who is trying hard not to die rich.

can Four-in-Hand," "Wealth," and "Round the World." Mr. Carnegie has never said, as has been reported so often, that he considers it a disgrace to die rich. What he has said, and still affirms, is that the man who dies, "leaving behind him millions of wealth which he might have administered during life, will pass away unwept, unhonored and unsung. . . . Of such as these, the verdict will then be, 'The man who dies thus rich, dies disgraced.'" This disgrace Mr. Carnegie is evidently trying to evade, and whether he can succeed in materially reducing his fortune remains to be seen. His closest friends at least maintain that he will yet die, "if he lives long enough," a comparatively poor man, but he has still \$300,000,000 left.

"Back to the Land."

The "Farmer's Advocate and Home Magazine" for May 10th contained a short sketch of the literary work of Mr. William Wilfrid Campbell. We may be pardoned for reproducing the following acknowledgment written by the poet from his Ottawa home:

"I thank you for the kind appreciation in the "Farmer's Advocate and Home Magazine" of my verse. Frankly, I like it very much. A sincere opinion which is not hypercritical, of literature, is not too common nowadays. I see that you speak of the mission of Mr. Rider Haggard to America, and I like the whole trend of your article. I love nature and the country, and believe that the greatest cure for many of our modern ills and problems which beset us, would be a return to the land. I wish that we could rouse our people to the necessity of this, if our country is to be worthy of the best ideals in the past. What we want is the simpler, sturdier, manlier life which can only be lived by a rural population. A paper like yours can do a great good. I have more faith in the farmer, in the long run, than any other class, if he only remains a thinker and tries to read and desire culture. You can do much in this direction if you can only get the coming generation of farmers—men and women—into the idea that there can be the truest refinement, culture and intelligence on the farm. What we want on the Canadian farm is a greater sense of beauty, comfort and homely pleasure, such as rural England knew in the old days. I thank you again, and wish you success, because I think your class of readers is the most important class the country contains. Yours sincerely,

W. WILFRED CAMPBELL.
We reproduce below the opening and closing stanzas of a poem written by Mr. Campbell last year, entitled "Back to the Land," which puts in verse what Mr. Rider Haggard so vigorously puts in prose:

"Back to the land, yea, back to the land;
Back to the spaces wide sky-panned;
Back to the opens glad and sweet,
From the moil and toil of the crowded street,
Back to the life by mountain and lea,
As nature intended it should be.
"Back to the gardens of God wide given,
The life of the open under heaven,
Where woman is woman and man is man,
Not fearful to love, to hope and to plan,
The oldest, the wisest, the truest life,
Is the lore of the sickle and pruning knife,
And the kingliest king is he who sows,
And lives on the wealth that his own ground grows.

"I sing the song of the countryside,
Of the glad vast spaces, open and wide,
Where every acre, from prairie to hills,
Will give of its joy to the hand that tills.
Yea, scatter your homes! To each man give
Room to breathe, be happy and live;
Room for freedom, beauty of life;
Room to conquer or die in the strife;
Room to be woman; room to be man;
Not demons and thieves and apes in a den.
Not frayed-out, impotent fags of a race,
Dead to the burdens all earth must face;
Where the day is day and the night is night,
And the fight with nature the only fight,
Where body and heart and brain can grow
To the wisdom and joy a man should know;
Room to live; to strive and to die,
Out in the open, under the sky,
Owning no master, answering no call,
But the voice of the mystery round about all."

The "Divinity that Shapes Our End."

How many times we come to a crisis in life when some obstacle confronts us which we think will be a terrible calamity, and will perhaps ruin us if we cannot avoid it. We fear that our ambition will be thwarted, or that our lives, perhaps, will be wrecked. The dread of the shock which we think will overwhelm us, as we come nearer and nearer to it, without any possibility of averting it, is something frightful. Many a time in the writer's life has he come to such a point—when it seemed as if all was lost—and yet something beyond his control has straightened out the tangle, solved the puzzle which seemed insoluble; the storm which threatened shipwreck has passed over, the sun has come out again, and everything has become tranquil and serene once more. If we look ahead, the troubles seem thick and threatening; but when we get there, we usually find a clear path, plenty of room, pleasant faces, and people to help us in case of need. When we look back over our lives, how few accidents have really happened to us. Many have threatened, but, somehow, things have come out right in spite of us, so that we have wasted our vitality, we have grown old and wrinkled and bent, and have shortened our youth anticipating troubles and worrying about calamities which never were to happen. Why should we thus needlessly throw away happiness and usefulness? It seems strange that when we know perfectly well that we are dependent for every breath we draw upon a Divine Power which is constantly providing for us and protecting us, we do not learn to trust it with absolute confidence and resignation. There is only one thing for us to do, and that is to do our level best right where we are, every day of our lives; to use our best judgment, and then to trust the rest to that Power which holds the forces of the universe in His hand, and which does all things well.—[O. S. Marden, in "Success."

Lift Up Thine Eyes.

A little while, and ye shall not see ME: and again, a little while, and ye shall see ME, because I go to the Father.—S. John xvi. : 16.

Touch ME not; for I am not yet ascended to My Father.—S. John xx. : 17.

"Alleluia! not as orphans
Are we left in sorrow now;
Alleluia! He is near us,
Faith believes, nor questions how:
Though the cloud from sight received Him,
When the forty days were o'er,
Shall our hearts forget His promise,
'I am with you evermore?'"

Christians of many differing opinions unite in celebrating our Lord's Birth, Death and Resurrection; how is it then that our churches are nearly empty on that other great day—forty days after Easter—which has for so many hundreds of years been set apart to commemorate His Ascension? Is it because people fancy that the crowning triumph of the Man Christ Jesus was of little consequence, or is it because they don't really believe His strange saying: "It is expedient for you that I go away?"

The disciples might well have felt that His going away would leave them "orphaned." How could they rejoice in the promise that "another Comforter" would be sent when their hearts cried out for the Master they knew and loved? But it is often true even with earthly friends that they are really nearer to us—nearer in the mysterious, invisible soul-union which is the reality of friendship—when their bodily presence is removed from sight. Although the disciples watched their Lord as He left them, the great parting promise could not be broken: "Lo, I am with you always, even unto the end of the world. Amen." Though vanished from their bodily sight He would faithfully keep the tender promise: "I will not leave you comfortless; I will come to you." The promise of "another" Comforter was only a pledge of additional help. I can't help thinking that Zechariah foreshadows this twofold strengthening in his mysteriously beautiful parable about the seven-branched candlestick, which is perpetually supplied with oil from two olive trees, "which through the two golden pipes empty the golden oil out of themselves." The angel said to him, "These are the two Anointed Ones, that stand by the Lord of the whole earth." If the seven candlesticks are the seven churches, surely the inexhaustible supply of oil can only be obtained from God, Who pours grace continually into the souls of men through the Holy Spirit and the Man Who is His "FELLOW"—and ours. Certainly the church has not been left "orphaned." St. Augustine put into words a great truth when he declared that Christ so came into the world as never to leave the Father, and so went unto the Father as never to leave the world.

If you will look closely at the texts given above you will see that they each contain a grand Christian paradox. "Ye shall see Me," the Master says, "because I go to the Father," as though men could not really see Him while His bodily presence was, like a veil, hiding His Person. The second text seems to imply that only after the Ascension could loving hearts really "touch" Him. In many other ways the Ascension was "expedient," but I don't intend to dwell on those to-day; my object being rather to awaken in you a vivid realization of the glorious possibility of walking joyfully through life with our eyes ever on our Master's face, and His hand closely clasping ours. How the thought makes one's heart beat! To see always the face we love best, to be thrilled through and through with the touch of His hand! Think what it means to be clothed always with "S. Patrick's Coat of Mail":

"Christ as a Light
Illumine and guide me!
Christ as a Shield, o'ershadow and cover me!
Christ be under me! Christ be over me!
Christ be beside me
On left hand and right!
Christ be before me, behind me, about me!
Christ be this day within and without me!"



How could that be continually possible without the Ascension? We should then have been compelled to travel long miles to see Him, instead of simply having to lift up our eyes; we could hardly have got near enough to touch His garment, much less to clasp His hand, for the multitude would throng Him. Then even S. John could not always have leaned on His breast, as anyone whom Jesus loves may do now. Even in earthly friendship what we really want to see and touch is the soul rather than the body. If love were dead what possible satisfaction could there be in such an outward sign as the clasp of a hand or the sight of a face? It would give pain, not joy.

But the disciples who watched the Ascension might well think that the old saying had been literally fulfilled: "Knowest thou that the Lord will take away thy Master from thy head to-day?" Of what use was it to lift up their eyes, when they had watched Him go farther and farther away until a cloud hid Him from their straining sight? He ascended—where? "Into heaven," we say. But where is heaven? We stand on the earth, point into the sky above and say, "it is up there!" Yes, but at night, when our earth has turned round, if we still point into the sky and say that heaven is "there," we are declaring that it is in exactly the opposite direction. According to our ideas of space, the heaven to which we lift up our eyes is as far off from the heaven of an Australian

realities which lie above it, not in space, but in altitude of being? The 'everlasting doors' were 'lifted up,' and the proto-martyr was vouchsafed a glimpse into a world of unearthly splendour close to him, and saw his Divine Master standing to receive His brave and loyal servant."

It is not "telescopic" but spiritual vision that we need. Those who love God can find Him everywhere. What is nothing but a "common bush" to one is seen by another to be burning with Divine fire. The bush is the same, but the sight is different. Our Lord's counsel to one who lacks this spiritual sight is: "Anoint thine eyes with eye-salve, that thou mayest see."

Wherever in space the heaven may be into which His bodily presence ascended visibly, and from which He shall visibly come again on the Last Great Day, at least we know that He is most truly and vitally with us still. In a very real sense we cannot see any person with our bodily eyes, for personality is and must be invisible. When an earthly friend passes through the gate of death we never dream that to see and touch the lifeless body is to see and touch him. These outward things are indeed "dead" unless they are sacramental; unless, through the outward, visible sign, our souls can come into living touch with the invisible and spiritual personality which can never be really reached by our senses. If the touch of one hand be absolutely meaningless to you, while the touch of another may have power to thrill you through and through, is it because of the difference in the actual flesh which your hand may be touching, or is the difference in the personality which only your spirit can touch? If the fantastic stories of souls stepping out of one body and inhabiting another could be carried into actual effect, we should soon find that the soul, far more than the body, was the person we had known; just as a person is the same though his body may be altered beyond recognition by time or some disfiguring accident. We may not be responsible for the outside, but we are for the inside—that is, for the real man. One person may, without effort on his own part, be as strong as Samson; while another may be a helpless cripple all his days on the earth. That is outside; but the real man inside may, in the first case, be weak and self-indulgent, and, in the second case, may have grown strong and beautiful through years of brave endurance. Wealth, physical strength and beauty, social position, etc., do not belong to the people to whom they are lent for a time. They may be taken away even in this life, they certainly must be left behind at death; but treasure laid up in heaven, spiritual strength, beauty and rank really belong to the soul, and neither accident nor death can take them away. The more closely we look into these things the more plainly we see that the invisible is the real substance, while the visible is only a shadow or picture of it. Let us then set our hearts and fix our eyes steadily on realities rather than on shadows. Christ is the Ladder linking earth with heaven through the Ascension, as He linked heaven with earth through the Incarnation. Although the law of gravitation may keep our bodies low on the earth, He will keep us company here, and although His Body has ascended to the heavens, we may "in heart as"



Joan of Arc, Hearing the Spirit Voices.

as the east is from the west. And yet the disciples beheld their Lord "taken up," and S. Stephen "looked up" when he said, "I see the heavens opened, and the Son of Man standing on the right hand of God." MacColl's words on this point are very striking:

"Where were the heavens into which the dying martyr gazed? Millions of miles away, beyond the starry firmament? Were his bodily eyes miraculously endowed with a telescopic power of traversing in a moment the planetary spaces and looking into a world of supersensuous glories behind them? Is it not plain, on the contrary, that his real self, his spiritual nature, with faculties intensified by the near approach of dissolution, was enabled to see through the integuments of the natural life into the world of unseen

mind thither ascend, and with Him continually dwell." Surely that glorious stair was not placed in position only for the use of the angels. Just "because" our Lord has gone to the Father we may see and touch Him all the time.

Do I repeat myself enough to grow tiresome, in these quiet talks? How can one help telling over and over again such a glorious message? I don't want to tell you anything new, I only want to remind you at every possible opportunity of the reality and gladness of our living unity with God through Christ. The inspiring "Sursum Corda!"—the "Lift up your hearts!"—rings down through the ages; how instinctive is the glad response—"We lift them up unto the Lord!"—that is continually rising from multitudes which only God can number.

"Run the straight race through God's good grace,
Lift up thine eyes, and seek His Face.

Faint not nor fear, His Arms are near,
He changeth not, and thou art dear."

HOPE.

Joan of Arc, Hearing the Spirit Voices.

Given to her, fond of solitude, holding somewhat aloof from the maidens of the village, though beloved by them all, Joan of Arc, the peasant girl of Domremi, on the banks of the Meuse, listened, as she tended her sheep upon the pastures, to the spirit voices which told her that to her it was to be given to be the deliverer of her native land, and thus she mused:

"I can deliver France! Yea, I must save the country! God is in me; I speak not, I think not, feel not of myself; and whither He shall send me I must go; and whatso He commands, that I must speak; and whatso is His will, that I must do; and I must put away all fear of men, lest He in wrath confound me."

Joan had been surrounded by mysticism from her birth. Tradition has it that the birds came down at her call, and that while she tended her flocks no wolf would come near to molest them. The very grass and flowers would sing to her, and the stars above would flash their messages into her listening ears. What wonder, then, to a mind so attuned, the shadows and imperfect forms of tree or shrub, as revealed by darkening twilight or cloud-draped moon, should take the shape of angel messengers, bidding her go on or come, in tones which must be obeyed. The girl heard the voices in the bells of the church, in the reveries of her youth, in the fountain, in the sighing of the winds, and in the rustling of the leaves—"Jeanne, Jeanne, go into France! I, Michael, the Archangel, bid you go and succor the Dauphin, for by you he shall recover his kingdom."

History gives us the sequel; tells us of that march at the head of ten thousand men to the relief of Orleans; of her brief triumphs, her later capture, her final martyrdom, and her most cruel death in 1431. On the spot where she died, in the market-place of Orleans, a statue stands to the memory of the gallant Joan, the Maid of Orleans.

H. A. B.

Clean springs and woodwork of beds carefully, going over joints and ends of slats and every crevice with corrosive sublimate, by way of guarding against possible dust creatures.

Pausing uncertainly before a desk in the life insurance office, the Hibernian visitor said to the clerk: "O! want to tek out a pawkey?"

"Life, fire or marine?" drawled the dejected clerk with infinite sarcasm.

"All three, o'ra thinkin'," retorted the applicant. "O'ra goin' for a stoker in the navy."

Jimmyson's Forgetery.

By Ralph Wilbur.

Now, his real name was James; but, as his mother called him "Jimmy," and his father called him "son," why, everyone else called him "Jimmyson" for short.

"Goodness me!" he said. "Where could I have left my cap? Mama! Nora! Mike! Everybody! Have you seen my cap?" And he rushed here and there, upstairs and down, in the barn and out, looked under the sofa, behind the hat-rack and every place he could possibly think of where a wandering cap, which was never very particular about what it did, could hide.

He had just finished his luncheon and was anxious to get back where he had left his fishing pole and line under a shady tree on the bank of a merry chattering little brook, that made more fuss in the world than many a deeper stream that could turn a water mill or float a boat; but that's the way with some people, too, sometimes.

"Oh, never mind, I don't care!" he finally said as he scurried away, looking back a moment to see his mother, Nora and Mike standing on the lawn and smiling very broadly as he waved his hand to them. "What in the world are they laughing at?" he wondered.

It was certainly a lovely day for fishing, so he settled himself comfortably with his back against a tree, threw his hook and line in the water and waited and waited for a bite.

After a long time he thought he would pull up his hook and look at it. When he did so, he exclaimed, "Goodness! I forgot to put on a worm!" After laughing to himself and at himself for having what Nora called "the best forgetery of any boy in the country," he baited the hook, cast it out into the brook and settled himself for a long and patient wait, as all good anglers learn to do.

The day was certainly a perfect one for fishing, but that doesn't say for catching fish; for on a day like that, at a time and place like that, it would have been a very stupid fish indeed that wouldn't have wriggled himself into a nice cool spot among the roots under an overhanging bank and taken several times "forty winks" while thinking about the foolishness of people who forget to bait their hooks.

No wonder that Jimmyson learned back and closed his eyes while the tip of his pole slowly dropped into the water, as he listened to the catbird singing a gurgling little song to his mate as she sat on her eggs in their nest in the crotch of an alder bush, and old grandfather turtle crept slowly up the bank for a little bask in the sun, to limber up his stiff old bones a little.

"Well, well, here he comes again," said the turtle.

"Who?" asked Jimmyson. "Oh, Old-Man-Who-Forgot-to-Remember. Here he is now," answered the turtle as Mr. Rabbit came timidly through the bushes, peering here and there and muttering, "My-my-my—what could I have done with it? I must have left it behind."

"Is it the same thing you left before?" asked the turtle in a very peculiar tone, as he winked at Jimmyson.

At this the rabbit jumped in the air and exclaimed, "My, how you startled me! That's it, thank you. I left it before the door of my house. Thank you, thank you very much." And he scurried away through the bushes so fast that it hardly seemed he had been there.

"What was it he lost!" asked Jimmyson.

"Blest if I know, and I don't think he does himself," chuckled the turtle. "You see, it's this way: He's a March hare, and he's hare-brained. He's so accustomed to forgetting things that he isn't happy unless he thinks he's lost something. Why, ten to one, by this time he's forgotten what he's running for."

"That must be very unfortunate," said Jimmyson.

"Sometimes yes, sometimes no," said the turtle. "For instance, the other day he thought he was hungry, so he rushed to the store, got some oatmeal, rushed back, put the pan on the stove and sat down and waited a long time for it to cook. Then he remembered he had forgotten to light the fire; so he lit it. Then he remembered he had forgotten salt, so he rushed toward the store to get some. When he was halfway there he got interested in a game of leapfrog, for-



got what he went for, and when he got home it was after dark. He was very tired, the fire was out; so he forgot he was hungry and went sound asleep."

"I don't see what good that did him," said Jimmyson. "Why, you see," answered the turtle, "the next morning he found he had forgotten to put the oatmeal in the pan; so he was one dinner ahead."

"Oh, I see," said Jimmyson; "but he didn't have the dinner!" "Not at that time," was the reply; "but as he had forgotten that he wanted it, why, he was one dinner ahead."

Jimmyson didn't quite agree with this, but he was too polite to say so, so he asked, "Do you know anything else?"

"Lots of things," was the answer; "only I have to be started before I can tell any."

"What makes the big river so low this summer?" asked Jimmyson.

"That's easy," was the reply. "You see, its mouth is so far from its head that its arms can't reach it to feed it."

"I didn't mean it for a riddle," said Jimmyson.

"Speaking of riddles," said the turtle, "can you guess this one?"

"What is it the rich man wants,
The poor man has,
The honest man steals,
The dumb man says,
The idle man does,
The barren ground grows,
Wild talk amounts to,
And a poor fool knows?"

"Please say that over again," said Jimmyson. And Mr. Turtle repeated it very slowly.

After puzzling for awhile, Jimmyson was obliged to say, "I give it up."

"The answer is 'Nothing,'" said the turtle, and there was a sound in his throat something like a gurgle, a giggle and a chuckle, all mixed up.

"That's good!" laughed Jimmyson. "I'll catch Nora on that. Hello, Who's this?"

"Hush!" whispered the turtle. "It's the rattle-brained rabbit again. He's



Peter's Disgrace.

learning a piece to speak at a picnic. Listen!"

The rabbit gravely stepped up on a rock, and, after practicing bowing awhile, recited in what he meant to be his very best company tones:

"The old man said to his son one time,
In a sort of a kind of a way,
'I think I'll get a Thing-gum-bob,
And try it on you some day.'

"And the son replied, after careful thought,
'What's-his-name has 'em for sale;
Or no, perhaps, it's the other man—
My memory's beginning to fail.'

"Quite true," said his father. "I noticed one day,
Or perhaps 'twas another time,
That the thing you thought you were
going to say
With the thing you said wouldn't
rhyme!"

"I remember it, too," the youth replied. "'Twas when I fell into the well. No, 'twas the time the what-you-may-call-it
On my toe from the anvil fell.'

"That's true," said his father. "You hopped to the house. I rubbed on some—bother it all— That stuff, I've really forgotten its name, From the box on the shelf in the hall."

"That's so," said the son. "Then you hitched the horse To the cart. No, the other rig, And went to the doctor. He told you how To bind on that—thing-a-ma-jig."

"You're right," said his father. "This goes to show How happy we both should be That while others can't think what's t'other from which, We each have a good memory."

As he finished and bowed gravely, Jimmyson felt a tug on his line and grabbed his pole. As he did so he caught a glimpse of Mr. Turtle slipping off the tip of it into the water; also of a little cottontail disappearing in the bushes.

"Goodness!" he exclaimed, as he pulled up the line and looked at the bare hook. "I wonder if I had a bite! I wonder if I've been asleep and dreamed all this!" And as he scratched his head to collect his thoughts his fingers touched his cap on the back of it among the curls.

"Ha, ha, ha," he laughed. "No wonder Mama and Nora and Mike laughed when I was rushing around looking for my cap!" And all the way home he couldn't help wondering if the turtle and the rabbit had been making fun of him or he had just had a funny dream.

Peter's Disgrace.

"Oh, shame upon you, Peter! What have you been about?"— The mother spoke in sorrow, The puppies raised a shout Of "Peter, naughty Peter,

Oh, won't you catch it now!

For mother's jolly angry,— There's sure to be a row." What could poor Peter answer?

His face like ink appears, While from his eyes slow dropping

Come blinding, scalding tears.

The pot of paint was standing

Right there, outside the door,

It really was too tempting,—

But now he's feeling sore. His eyes are smarting

sadly,

His conscience tells him true

That mischief ends in sorrow,—

No wonder he looks "blue," For stains are not so easy

To wash off as he thought, And long he'll bear the token

Of what his sin has wrought.

COUSIN DOROTHY.

Dr. William Oster, of Johns Hopkins and Oxford, tells this story: An old darky quack, well-known in a certain section of the South, was passing the house of a planter whose wife was reported to be dangerously ill. Stopping at the gate, he called to one of the hands:

"I say, Rastus, how's the missus?" "Well," replied Rastus, "the doctah done say this mawnin' dat she convalescent."

"Humph! Dat ain't nothin' chile," said the old quack, with an air of superior wisdom. "Why, I've done cured convalescence in twenty-foah hours!"

The Second Mrs. Jim.

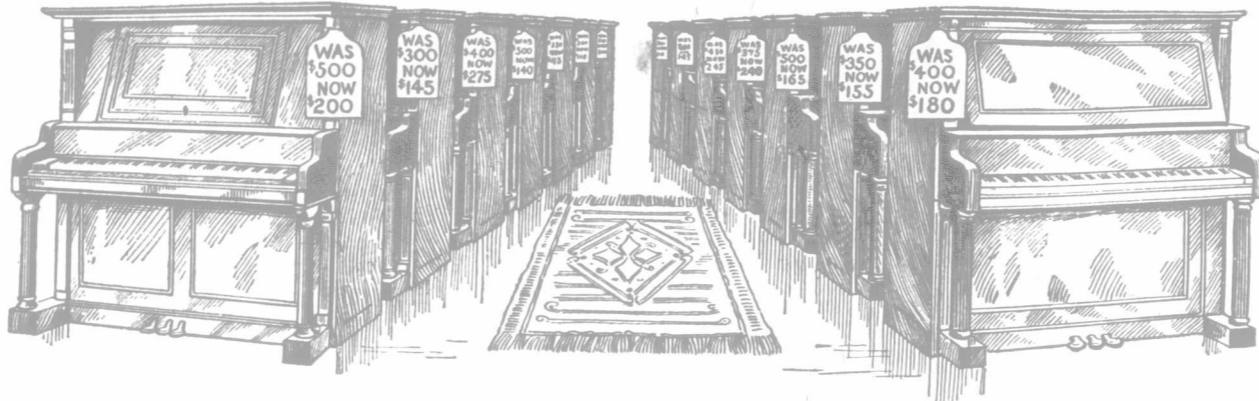
(Continued.)

III.

The next episode in the story of the Second Mrs. Jim is headed "Desperate Remedies," and it deals with the original methods she adopted to cure Jimmie of smoking, or, to use her own words, "To let him break himself of it as quick as he could." By the smell upon his clothes she knew he had begun with a very mild quality of tobacco, the scent of which he greatly hoped had never betrayed his secret. Mrs. Jim never "let on" that to her it was no secret at all, but just allowed the lad, who seemed already to have a very real regard for her, to find her groaning and moaning with an imaginary ear-ache: "There I set, and moaned. Just only one thing would relieve me. Sweet 'ile? No, I wanted t'bacco smoke blown into my ear. Jim couldn't stand the stuff. The hired man was out. If I only had a pipe! But, no, I can't blow into my own ear, can I? Pretty soon I see Jimmie trying to screw up courage to say something. At last it came, 'I got a pipe, but I ain't got no smokin'.' 'Well,' says I, 'you skip out into the woodshed and you'll find a bag of t'bacco hanging on the rafters. I brought it along for sleep dip.' In a minute the boy comes back with the bag and a corn-cob pipe he had once surreptitiously brought from the hired man. There wasn't nothing mild about that stuff out there in the woodshed. It smelled like burnin' rubber, and old boots, and shooin' horses. I wrapped my head up tight, except just one ear, so's I couldn't smell the awful stuff, an' Jimmie started out bravely, but I wasn't relieved until I see the boy was gettin' all he could stand and just a little more. Then I came round pretty quick, and flew round and got supper, an' called 'em in; but Jimmie didn't come. 'What was the matter?' you say. Oh, I knew what was the matter, and started out to find him. I found him in the barn, doubled up on a pile of sacks. He didn't have strength enough to tell me to go away; but I knew he wanted to. . . . It wasn't dark yet, and I knew by his looks that carache wasn't the only thing that t'bacco had cured. I never saw such a looking boy with those copper-colored freckles on a kind o' olive-green background. Jimmie never suspected me, but I heard him telling the new hired man the other day that he guessed that if his pa could get along all his life without smoking, he could too, and he guessed his pa was just as good as anybody's pa, smoke or no smoke. And then I knew he'd broke himself.

Frankie was cured of that and other habits by methods almost as heroic, but as Mrs. Jim remarked, "Desperit diseases need desperit remedies," and her treatment was probably far more effectual than that proposed by Jim, who had said, "I'll thrash it out of 'em. Just let me catch 'em using the stuff. I'll fix 'em, etc., etc." Mrs. Jim's last words of wisdom, regarding her more diplomatic system of training, are worth quoting: "Habits is like horses. Them that others breaks for you ain't half as well broke as them you break for yourself."

Under the heading of "A Cure for Strikes," we get some racy bits as wise boy-management. As a preparation for a promised good time out camping, the lads learn many a housekeeping art—how to cook, how to bake, how to wash dishes, and even to scrub. "The cook's always boss on a campin' trip," says wise Mrs. Jim. "When a boy's off the track," she explained, "it's mostly 'cause his folks didn't care enough, or hadn't gumption enough to keep him lookin' forward to somethin' all the time. It's easy enough to drive a hungry cow behind a wagon-load of feed if she don't get a chance to catch up, only you've got to look out that somebody else



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Karn	A Dainty Cottage Style Upright, in mahogany case, in English design, with handsome marquetry panels, bronze trimmings, etc. Manufacturer's price, \$250. Sale price.....	\$178
Dominion	Upright Piano, walnut case, three pedals, overstrung scale, full iron frame, mandolin attachment, very little used. Manufacturer's price, \$250. Sale Price.....	\$189
Newcombe	Very Handsome 7 1/2 Octave Upright Piano, cabinet grand size, fancy burl walnut polished panels, hand carved in relief, three pedals, etc. Manufacturer's price, \$375. Sale price.....	\$210
Karn	7 1/2 Octave Upright Piano, walnut case, with full length music desk. Boston fall board, Wessell, Nickel and Gross action, an excellent bargain. Manufacturer's price, \$375. Sale price.....	\$225
Mendelssohn	7 1/2 Octave Upright Piano, mahogany case, full length music desk, third or practice pedal, ivory and ebony keys. Manufacturer's price, \$340. Sale Price.....	\$238
Gerhard Heintzman	7 1/2 Octave Upright Piano, in handsome walnut case, with full length plain panels and music desk, ivory and ebony keys, etc., height 4 feet 6 inches. Manufacturer's Price, \$375. Sale Price.....	\$254
Nordheimer	7 1/2 Octave Upright Piano, in dark mahogany, with full length music desk, three pedals, ivory and ebony keys, in fine order. Manufacturer's Price, \$375. Sale Price.....	\$259
Gerhard Heintzman	7 1/2 Octave Boudoir Grand Upright Piano, walnut case, full length music desk, three pedals, ivory and ebony keys, etc.; very little used. Manufacturer's Price, \$400. Sale Price.....	\$274
Mendelssohn	7 1/2 Octave Cabinet Grand Piano, in very handsome walnut case, a new piano, but a special instrument in different design of case from regular stock. Manufacturer's Price, \$375. Sale Price.....	\$285
Gerhard Heintzman	7 1/2 Octave Upright Piano, in walnut case, full length panels carved in relief, Boston fall board, three pedals, etc.; just like new. Manufacturer's Price, \$425. Sale Price.....	\$293
Gerhard Heintzman	7 1/2 Octave Upright Piano, large cabinet grand size, new design, contains every patent contained in any piano of this make, used less than six months. Manufacturer's Price, \$500. Sale Price.....	\$325
Knabe	A 7 1/2 Octave Cabinet Grand Piano by this celebrated maker, used by us for concert purposes and now offered at about half-price, after being polished and adjusted. "A Peerless Knabe." Manufacturer's Price, \$675. Sale Price.....	\$365

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don't give her the feed you ought to give her yourself."

Perhaps the crowning reward came to the stepmother when, on his 15th birthday, Jimmie finds the old store-room cleared out, and fitted up boy-fashion with books, pictures and tools, and "the rifle he had been teasin' for so long," a liberty hall for himself and friends. She hears the door open at the head of the stairs and Jimmie's voice saying: "Just look round, fellers; I'll be back in a minute," and then—"The boy comes in with his eyes shinin', and all he can say is 'Oh, mother,' but he flings his arms around my neck, an' pulls my head down and kisses me right on the lips, an' I felt more'n paid for all the trouble I'd taken." And surely we may concede that she had certainly earned it.

But we have not quite done yet with the sayings and doings of the second Mrs. Jim. We must still devote to her another column of our Home Magazine. H. A. B.

(To be continued.)

Domestic Economy.

CHILDREN'S TEETH.

It is a very common impression that the milk teeth of children need no dentist's attention, and that the sooner they decay and fall out, the sooner there will be room left for the permanent teeth to grow in; but this is a popular error, for the second or permanent teeth owe their character in some measure to the condition of the first set, and any defect, either in shape, position or texture on the part of a milk tooth, is apt to be reflected in the corresponding second tooth. Therefore, when a milk tooth becomes decayed, it should be cleansed and stopped by a dentist, and if the teeth are protruding or malformed, the use of a frame or of other means, by which the first teeth can be trained in the way they should go, will lead to the eventual possession of more even and regular and sounder teeth.

Even in respectable and otherwise particular families it is not uncommon to find the children are excused the ordeal of brushing the teeth until the second set have arrived. This neglect is most pernicious and quite unpardonable. As soon as a child can wash his own hands and face, he should be taught to brush his teeth, and before that time they should be regularly cleansed for him. Every child should be taught as soon as possible to rinse out the mouth after every meal, for there is no more certain cause for decay than the decomposition of particles of food lodged between the teeth, which even brushing without the act of rinsing the mouth will not always remove.

The principal cause of decay has already been indicated—namely, the decomposition of food particles between the teeth, which gives rise to the formation of acids which penetrate and corrode the dental enamel.

Next comes the question of foods. All hot foods are injurious to the teeth, for they are apt to crack the enamel, just as hot water will crack a glass, and, once cracked, the enamel is sure to decay. Children's food should be given as nearly as possible at blood heat or slightly less; never above that temperature. Cold fluids, taken with or immediately after hot foods, are also apt to crack the dental enamel; indeed, any sudden change of temperature is bad for the teeth.

Sweet foods and rich dishes lead to decay more quickly than plain and frugal fare, and animal foods are generally more hurtful in this respect than vegetable ailments. Medicines also are sometimes to blame for premature loss of teeth. Those containing iron, mercury, or any acid, should be given in the shape of pills, or within capsules, when possible, or if they are necessarily fluid, they should be taken through a glass medicine tube.

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



I have just been thinking that, now that the spring house-cleaning is over, some of you will have come into possession of valuable "ideas" during the operation. You will have arranged your rooms to your liking; you will have learned a few things by mistakes which you have made; or you will have formulated plans to be carried out during the fall season of overhauling. So many people now, you know, do their papering, etc., when the dust of summer is a thing of the past, and there is need of installing new and cheery things to counteract the effect of the dreary winter. So, I have thought that a new subject for discussion, bearing on the question of house-furnishings, might be interesting, instructive, and opportune. Our subject, then, will be, "My Ideal Dining-room and Sitting-room." Tell the kind of paper, curtains, carpet and furniture you would use, adding, if possible, the probable cost of each. Pay particular attention to the "color scheme," and give a few hints as to arrangement. Last of all, make your letters as short as you can, keeping them, of course, interesting and easy in style; I am well aware that a mere catalogue of details can be neither. Now, I know every woman loves to plan ideal apartments, so will hope for a number of letters on this subject that will be interesting and helpful to us all. Address, DAME DURDEN, "Farmer's Advocate" office, Winnipeg, Man.

System.

Dear Dame Durden,—Housekeeping, homemaking, is one of my dearest delights, and after years I enjoy it more and more. I always try to do everything so orderly and well that I have as little waste as possible. In this way I get time to read and play, when, in the old days, before I put thought into my work, I was a slave to it, driven instead of driving.

I love home work, and I love to teach girls. The trouble with so many of our girls is that they have never been taught, and they either want to do things well, but don't know how, or don't care, because housework is "so poky," etc. If we can teach them to "mix work with brains," and to take pride in it, we will develop a class of wonderfully happy, successful women, who will love home better than a clerk's place behind a counter.

We Western women have great issues in our hands. Our brave men may raise wheat and stock, but never at their best, only as they go forth from ideal homes. Our lives are so rich in opportunity; in the chance to control environment, if we can but realize it. You see, I am an enthusiast on these lines—indeed I am. I like your department; it is good. I've known a few others, so I imagine I am something of a judge. Of course you need the co-operation and sympathy of the women you are trying to reach—for your work is something above and beyond the drawing of your pay. The pay is important, but to help others we always need to be helped. None of us stand alone.

One of my greatest helps in housekeeping is to be systematic. I've found that a place for everything, and a time for each task, is the rule that helps me more than any other to drive my work, rather than to be driven by it.

In the winter, after the holidays are over, I begin on my bedding. Every quilt is put in repair, new comforters tied, and all the piecing done. By doing some every year I keep my supply up. After the heavy bedding come the sheets, pillow covers, and table linen. Sheets are turned, common pillow slips made from the ends of old ones, and the new

ones that will be needed for the year are all made and laid away. I've often found a willing "masculine" hand to run the sewing machine on a stormy winter day, and that is a great help.

After the bedding come the muslin underwear, summer skirts, shirts, etc.; then in March the wash dresses are made for the summer. A seamstress for a while at this time is often a great saving; by having her one gets all these things done and ready before the heavy spring work comes, when the days are longer, and there are more men to cook for, and the garden and poultry need attention.

In June and July I pack the extra eggs and butter for winter. Prices are lowest then, and the quality of butter best, and the fruit season not being on then there is more time. I've packed, sometimes, as many as one hundred dozen eggs, even buying many from my neighbors, and these eggs not only help us over the winter, but often the neighbors come and buy them back at a profit.

The care of a home and its business management is a beautiful work in life, and the more skilfully and sensibly we see to it the more lovely it becomes. By loving our work, and trying to see how nicely and profitably we can regulate our affairs, we can gain a greater success; and we all love success. We spell it with a big S every time. We can only control a home well, with all its complex interests, as we learn self control. One of the first steps in self control is to form regular habits of work, so that we are not fretted by the work dragging. It is better to avoid the drag and consequent fretting, substituting something better. Assa. C. D.

Recipes from Juanita.

Sponge Cake.—Break two eggs into a measuring cup; fill up with sweet cream; add a pinch of salt; make into a batter with one cup white sugar and one and a half cups of flour, into which has been sifted two teaspoons baking powder. Flavor with lemon extract.

Fig Pudding.—Half a pound suet; one pound chopped figs; half a pound bread crumbs; half a pound of sugar; one cup of flour; half a teaspoonful baking powder; one nutmeg; one egg; milk, enough to moisten.

Flake Pastry.—Half cup of lard; half a cup of butter; half a tablespoonful of lemon juice; one cup of flour, and water enough to mix. Roll from you.

Re Butter-worker.

Sometimes when the butter is very firm the legs of the butter-worker will spread so that the cross pieces below will drop out. To prevent this I have four small hooks and eyes, an eye screwed into each leg, and near center of front cross piece between legs. The hooks are screwed into cross pieces near the ends, and by hooking these the legs can move very little. I have tried the same plan on the slats of a bed when they begin to drop out; a hook in each end of slat, an eye in each side of bed holds them secure. DESIRE-TO-HELP.

For Dandelion Time.

Dandelion Cordial.—Take 1 gal. dandelion flowers and 1 gal. water. Let steep three days, then strain. Add 3 lbs. sugar, 3 sliced lemons, and 3 sliced oranges, and boil. Take off, and when lukewarm add half a yeast cake. Let ferment, then bottle and keep in a cool place. It should be ready in a month. For using, put one tablespoonful of the cordial to each glass of cold water.

Pour chlorides down pipes, or, perhaps better still, caustic soda, which cuts the accumulated grease.

After cleaning, get rid of heavy hangings, and see that white curtains are spick and span.

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drop-head sewing machine, handsome oak woodwork, for \$17.50; a better machine, same pattern, guaranteed for 20 years, sells for \$21.50; machines with ball bearings and extra fine woodwork, cost a little more, but only about half what others charge. Our sewing machine catalogue, fully explaining our different styles, free. Write for it. **Windsor Supply Co., Windsor, Ont.**

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THE LEAVENWORTH CASE

By A. K. Green.

CHAPTER XXVIII.—Continued.

I concluded not to waste my resources, so kneeling down in the darkness, I groped for the board, and found it to be loose. Wrenching at it with all my strength I tore it free; then lighting my match looked into the hole thus made. Something, I could not tell what, stone or box, met my eye, but while I reached for it the match flew out of my hand. I dived down deep into the hole and in another moment had the object of my curiosity in my hands. It was the box.

Satisfied at this result of my efforts, I turned to depart, my one wish now being to arrive home before Mrs. Belden.

Regaining the highway, I started at a brisk pace. For some little distance I kept it up. But suddenly at a turn in the road I came unexpectedly upon Mrs. Belden standing in the middle of the path, looking back. Somewhat disconcerted, I hastened swiftly by her, expecting of course that she would make some effort to stop me. But she let me pass without a word. Indeed, I doubt now if she even saw or heard me. Astonished at this treatment, I looked back, when I saw what it was that enchaind her to the spot. The barn behind us was on fire!

Instantly I realized that it was the work of my hands; I had dropped a half-extinguished match, and it had fallen upon some inflammable substance.

I paused, in my turn, and stood staring. Higher and higher the red flames mounted, brighter and brighter glowed the clouds above, the stream beneath; and in the fascination of watching it all, I forgot Mrs. Belden. But a short, agitated gasp from her soon recalled her presence to mind, and drawing nearer, I heard her exclaim, like a person speaking in a dream, "Well, I didn't mean to do it"; then lower, and with a certain satisfaction, "but it's all right anyway; the thing is lost now for good, and Mary will be satisfied without anyone being to blame."

I did not linger to hear more. The first thing I did upon my arrival at the house was to assure myself that no evil effects had followed my inconsiderate desertion of it to the mercies of the tramp she had taken in; the next to retire to my room and take a peep at the box. I found it to be a neat, tin coffer, fastened with a lock. Satisfied from its weight that it contained nothing heavier than the papers of which Mrs. Belden had spoken, I hid it under the bed and returned to the sitting-room. I had barely taken a seat and lifted a book when Mrs. Belden came in.

"Well!" cried she, taking off her bonnet and revealing a face much flushed with exercise but greatly relieved in expression; "this is a night! It lightens, and there is a fire somewhere down the street, and altogether it is perfectly dreadful out. I hope you have not been lonesome," continued she, with a keen look at my face. "I had an errand to attend to, but didn't expect to stay long."

I returned some nonchalant reply, and she hastened from the room to fasten up the house.

I waited, but she did not come back; fearful perhaps of betraying herself, she had retired to her own apartment, leaving me to take care of myself as best I might. As soon, then, as the storm was over, I myself went to bed, and after several ineffectual efforts, succeeded in getting asleep.

CHAPTER XXIX.

The Missing Witness

"Mr. Raymond!"
 The voice was low and searching, it reached me in my dreams. Morning had begun to break, and by its light I saw standing in the open door leading into the dining-room, the forlorn figure of the tramp who had been admitted into the house the night before. Angry and perplexed, I was about to bid her begone, when to my great surprise, she pulled out a red handkerchief from her pocket, and I recognized Q.

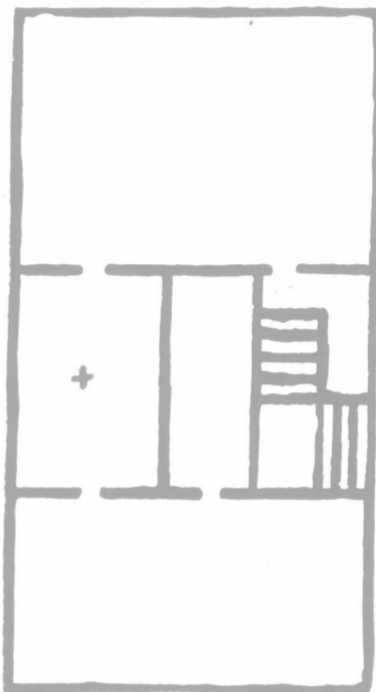
"Read that," said he, hastily advancing and putting a slip of paper into my hand. And without another word or

look left the room, closing the door behind him.

I took it to the window, and, by the rapidly increasing light, succeeded in making out the rudely scrawled lines as follows:

"She is here; I have seen her; in the room marked with a cross in the accompanying plan. Wait till eight o'clock, then go up. I will contrive some means of getting Mrs. B— out of the house."

Sketched below this was the following plan of the upper floor.



Hannah, then, was in the small back room over the dining-room. Greatly relieved, and yet at the same time much moved at the near prospect of being brought face to face with the one who, there was every reason to believe, was acquainted with the dreadful secret involved in the Leavenworth murder, I lay down once more and endeavored to catch another hour's rest. But I soon gave up the effort in despair, and contented myself with listening to the sounds of awakening life which now began to make themselves heard.

As Q had closed the door after him, I could only faintly hear Mrs. Belden when she came downstairs. But the short, surprised exclamation which she uttered upon reaching the kitchen and finding the tramp gone and the back door wide open, came plainly enough to my ears. As she came into the room adjoining mine, I could hear her murmur to herself:

"Poor thing! she has lived so long in the fields she finds it unnatural to be cooped up in the house all night."

Slowly the minutes passed, eight o'clock struck, when just as the last vibration ceased, there came a loud knock at the back door, and a little boy burst into the kitchen crying at the top of his voice: "Oh, Mrs. Belden, papa's got a fit, do come!"

I hastened toward the kitchen, meeting Mrs. Belden's anxious face in the doorway.

"A poor wood-shopper down the street has fallen in a fit," she said, "and they have sent for me. Will you please watch over the house while I am gone?"

And without waiting for my reply, she caught up a shawl, and followed the urchin out into the street.

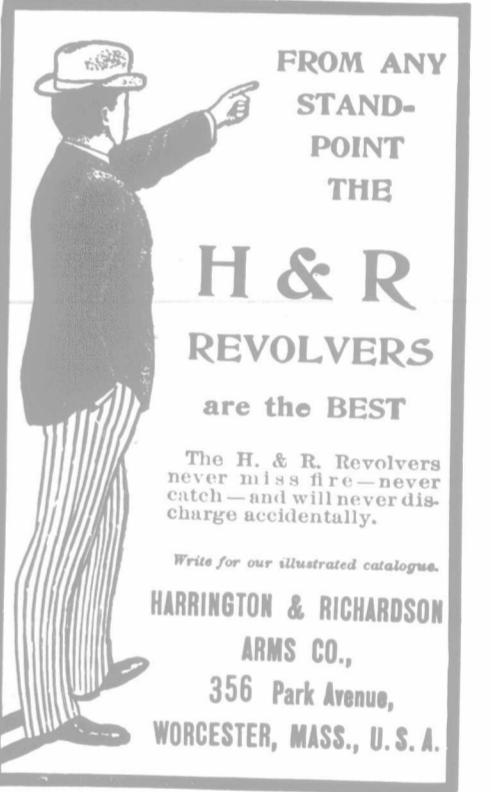
To leave the kitchen, go up those stairs and confront that girl, seemed for the moment beyond my power. And yet I was conscious of eagerly longing to know the worst, and of utter thankfulness for Eleanor's sake that all had come around so easily. Once on the stair, I found myself relieved from the especial dread which had overwhelmed me, and possessed instead of a sort of combative curiosity that led me to throw open the door at the top, with a certain fierceness new to my nature.

(To be continued.)

An old-fashioned hop poultice, used for all sorts of pain, is made by a Canadian doctor as follows: Put a handful of dried hops into one cup of water, and let it boil until the water is reduced to half a cup, then stir in enough Indian meal to thicken. Apply very hot.



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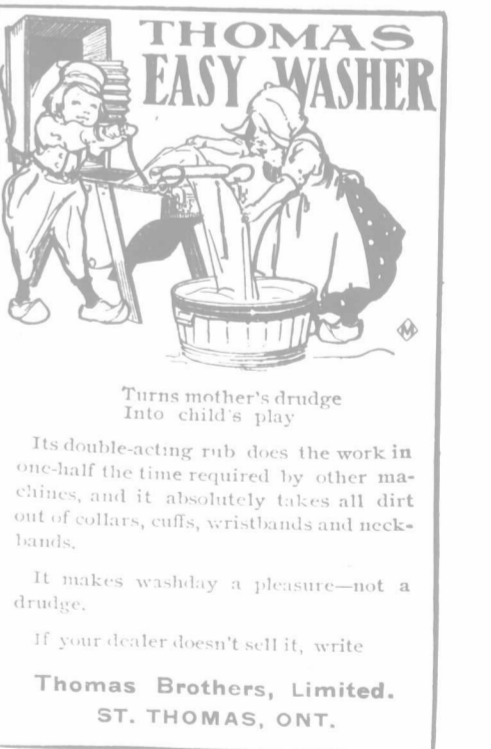


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As a sample of what I have to offer, look at these:
320 acres first-class land, 2 miles from Regina, capital of the Territories, well improved, new house cost \$2,700. Price, only \$30 per acre; terms very easy.
640 acres, 3 1/2 miles from Oak Lake, Man., good buildings, 580 acres cultivated, all fenced and cross fenced, black loam land, clay subsoil. Price, \$10,500; terms easy. Will sell crop of 400 acres at cost of seeding if sale is made soon.

3 sections prairie land, splendid quality, near Davidson, Assa, at \$6 per acre, easy terms. For further particulars address,

W. N. REID, P.O. Box 371, Regina, Assa.

Kill the Vermin on Your Stock

FREE

I want every stock owner to know for himself the wonderful properties of my stock vermicide, insecticide and disinfectant, and will send you *absolutely free*

A GALLON CAN OF CHLORO-NAPHTHOLEUM DIP ALL CHARGES PREPAID

if you will simply ask me for it and tell me the number and kind of stock you own. It is *Absolutely Harmless* to Man or Beast, yet its action in ridding stock of all pests and in curing Parasitic and germ diseases (mange, etc.) is simply marvelous. Use the large sample freely and thoroughly for 30 days—note how *like magic* it works and how quickly your stock improves in health, spirits and appearance. Then if you are pleased send me \$1.50 for the gallon. If it doesn't please you in *every way*—doesn't do *more* than you expect—just tell me—your word is sufficient—and I will write you where to send what is left at *my expense*.

You Can't Afford to Delay—every moment you wait is costing you money—for if your animals are continually uneasy or in agony from insects, parasitic or from germ diseases, their feed does them little or no good, and that *costs money*—and besides, your stock is never in condition. Write me *today*, before it slips your mind.

One of Many
WHEATLAND, Wyo., April 14, '05.
West Disinfecting Co.,
New York City.
Gentlemen—I send you herewith \$1.50, as per agreement, for the Chloro-Naphtholeum Dip. I have only used part of it, and in every instance where I have applied it its effect was also likely instantaneous in the destruction of lice and mange on horses and cattle, and leaves them in a very different condition than before it was applied. The hair brushes out smooth and silky, and if it could not be duplicated it would be worth any kind of a price to stockmen anywhere.
(Signed) L. E. ULTER.

E. TAUSSIG, Pres. West Disinfecting Co., 14 E. 59th St. NEW YORK, N.Y.



Galt Steel Siding

LASTS A LIFE TIME

Applicable to Dwelling Houses, Stores, Factories, Warehouses—in fact, every kind of building. There is no limit to its use as an outside covering. It very materially enhances the appearance of any structure at the minimum of cost.

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

The Classic Kids will gladly furnish details.

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

PATLY STOCK FARM

KILDONAN, MANITOBA.

Having sold my farm, must sell at once all my prize stock, consisting of **GLYDESDALES, THOROUGHBREDS and HACKNEYS, SHORTHORNS, GOLDEN WYANDOTTES, INDIAN RUNNER DUCKS, etc.**

Among the Clydesdales is the imported 3-year-old stallion Cadet, one of the best ever imported; six young brood mares are prizewinners and two champions, the pick of Colonel Holloway's great stud, two of them in foal to last year's Winnipeg champion, Baron William (imp.).

Thorough bred stallion Experience, brood mare Nora Howard and two fillies out of her. A 4-year-old in training, by Davidson, and a 2-year-old, by Hard Lines.

HACKNEYS—4 choice young mares with foals at side, matched pairs and single drivers. SHORTHORNS—16, headed by August Archer, brother to the great Ceremonious Archer, champion of America; 6 yearling heifers and two bulls.

End of St. Ry., ST. JOHN'S, WINNIPEG.

J. A. MITCHELL.

THE MANITOBA WINDMILL AND PUMP COMPANY, Brandon, have prepared a catalogue of their wares, in which is contained some most useful information upon pumps and windmills, besides a list of tanks, tools, grinders, etc. This catalogue will be sent free on application, and the general information one can get from it will repay its perusal.

Take your carpets and even your oil-cloths up once a year.

CIDER MAKING

Can be made profitable if the right kind of machinery is used. **WE MAKE THE RIGHT KIND.**

Send for catalogue. **BOOMER & BOSCHERT Press Co., 368 West Water St., Syracuse, N. Y.**

WHEN WRITING TO ADVERTISERS Please Mention "Advocate"

Toronto Horse Market.

The local horse market displayed strong recuperative powers during last week, and has reflected considerable improvement since the last report, both in point of activity and prices, and dealers say the demand is so vigorous that they look for trade to continue further into the summer than is usually the case. Drivers and good carriage horses are probably the most active at the moment, but there is also a splendid demand for heavy workers. A large attendance of outside buyers has been one of the features of the week's trade. A couple of Americans are now touring the Province looking for saddle cobs and carriage horses, while a number of Montreal buyers have also been here, looking for horses for the home market and for export.

The present range of prices in this market, according to Burns & Ship-

pard, is:

Single roadsters, 15 to 16 hands\$150 to \$175
Single cobs and carriage horses, 15 to 16.1 hands	165 to 225
Matched pairs and carriage horses, 15 to 16.1 hands	350 to 500
Delivery horses, 1,100 to 1,200 lbs.	165 to 190
General-purpose and express horses, 1,200 to 1,350 pounds	125 to 200
Draft horses, 1,350 to 1,750 pounds	180 to 240
Serviceable second-hand workers	60 to 90
Serviceable second-hand drivers	70 to 85

GOSSIP.

The Glen Park Herd of Shorthorns, property of Mr. W. Doherty, Clinton, Ontario, the well-known organ manufacturer of that place, whose advertisement runs in this paper, consists of representatives of such good Scotch families as Kinellar Wimples, Jilts, Minas and Rosedales, Killblean Beautys, Cruickshank Duchess of Gloster, Nonpareils and Matchless and Marr Stamfords and Roan Ladys. The young things are sired by such bulls as Imp. Scottish Peer =46424=, and Broadhooks Golden Fame (imp.). Two young bulls for sale 12 and 20 months old, red and roan respectively, are by Broadhooks Golden Fame, from dams of the Matchless and Stamford tribes, with top-crosses of such noted sires as Village Squire, Young Abbotshburn and Imp. Royal Sailor.

At an auction sale on May 11th of 49 head of imported Guernsey cattle, property of E. T. Price, Broad Axe, Pa., and average price of \$302 was realized, one cow selling for \$1,125, another for \$1,025, and 10 others at \$400 to \$860 each.

QUESTIONS AND ANSWERS. Miscellaneous.

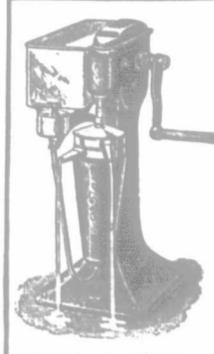
CATTLE ON MEADOW

I am living on a homestead in Central Alberta (Ponoka). I have been bothered by my neighbors' cattle ever since I came here. I have got my pasture and fields fenced, but not hay meadow. Can I compel my neighbors to keep them off? Some say this is a free ranching country, others not.

Ans.—Consult your municipal authorities as to whether or not there is a herd by-law in your district; if not, your neighbors' cattle may range.

Sharple's Tubular SEPARATORS

THE ONLY CONVENIENT KIND



No other occupies so little space, sits so firmly, has waist low can, enclosed self-oiling gears, light bowl without inside parts. Tubulars hold present world's record for clean skimming and perfect cream. Write for Catalog M-188.

Canadian Transfer Points: Winnipeg, Toronto, Quebec, St. John, N. B., Calgary, Alberta, Address: **The Sharple's Co., P. M. Sharple's, West Chester, Pa., Chicago, Ill.**

EGGS FOR HATCHING



From our acclimatized utility breeds of Mammoth Bronze Turkeys, \$2 for 8; Imperial Pekin Ducks, \$1 for 10, \$2 per 100; Toulouse Geese, \$2 for 6; Hero egg strain "Barred Plymouth Rocks, \$2 for 15, \$3 for 30, \$7.50 per 100; Buff Orpingtons, \$2 for 13. All eggs carefully packed and guaranteed to arrive in good order. Our 24-page Catalogue, giving full description, mailed free. At the great Dominion Exhibition our turkeys took 1st, 2nd old, 1st, 2nd young; also 1st Toulouse geese, young; 1st, 2nd young and 1st old Pekin ducks. Our Plymouth Rocks and Buff Orpingtons won more prizes than any other exhibit. We carry utility breeds only, and fill all orders from eggs from the same flocks we use in our own incubators. We carry a full line of necessary poultry supplies, and have had over 20 years' experience in poultry-raising in Manitoba and can start you right. Address all correspondence

MAW & SONS' POULTRY FARM Winnipeg, Manitoba.

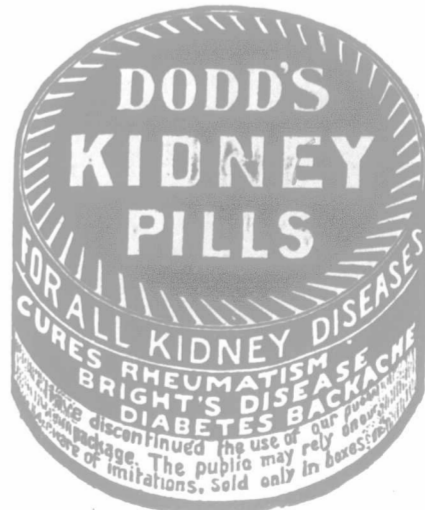


SUPPLIES FOR BEE-KEEPERS

The best hives for a cold climate. Write Aply Dept., Buchanan Nursery Co., St. Charles, Man.

Our Catalogue of hardy apples, cranberries, small fruits, trees, shrubs, flowers, etc. sent free. Write for it.

It isn't much use for us to speculate about whence we come, whither we go. We are here. That is the one sure thing. For the most part of our work seems to be laid out for us. To dig into it cheerfully and earnestly—that will give us the most pleasure that we shall get out of life, and it is likely to fit us pretty well for whatever is to follow.—[Live-stock World.]



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



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

TERMS—One cent 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 25 cents.

BEEWAX WANTED—Will pay 30 cents a pound for good clean beeswax here. James Durcan, Emerson, Man.

CHOICE Timothy Seed—Fancy, re-cleaned, no weeds; \$2.40 per bushel, including bags, f.o.b. Dominion City. B. Brewster, Green Ridge, Man.

CABBAGE Plants for Sale—Early and late cabbage plants at 50c. per 100; tomato, 1c. each, or 90c. per 100; cauliflower, 1c. each, \$1 per 100; all carefully packed. Menlove & Thickens, Virden, Man.

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

FOR SALE—Large English Berkshire pigs, six weeks old, with pedigree, at \$5 each, f.o.b. High River. T. E. Bowman, High River, Alta.

FOR information about the rich Dauphin country write the Dauphin Land Co., Dauphin, Man., for list of improved and unimproved farms. H. P. Nicholson, manager.

FOR snaps in improved and unimproved farms on the Gilbert Plains, apply to Farrer & Nichol, real estate agents, Gilbert Plains.

I AM prepared to pay cash for suitable improved property and farm lands. If you desire a quick sale for your lands or business, write me to-day. C. E. Henry, Gould Hotel, Winnipeg.

IMPROVED and UNIMPROVED FARMS for sale in Grand View district, Man. Lists upon application to Benj. C. Nevill, Real Estate Agent, m

LAND for sale in the noted Wolsley District, containing some of the best wheat land in the Territories. Address, J. F. Middlemiss, Wolsley, Assa.

ONE HUNDRED AND SIXTY ACRES, five miles from Swan River. Black sandy loam, sixty acres broken, log buildings. Price nineteen hundred. E. J. Darroch, Swan River.

WANTED at once—Salesman in Manitoba and the N.W.T. to represent "Canada's Greatest Nurseries." Biggest assortment of hardy fruits, ornamental and shade trees. Recommended by Experimental Stations at Brandon and Indian Head. Big inducements to energetic men. Pay weekly. Special new outfit, designed for Western men, free. Spring can was now starting. Write now for terms. Stone & Wellington, Toronto.

THRASHING OUTFITS FOR SALE

A number of rebuilt portable and traction engines; also separators, all in first-class running order. We have practically all sizes and can supply complete outfits, or separate machines, as desired. Low prices and terms to suit.

The John Abell Engine & Machine Works Co.
P.O. Box 481. (Limited) Winnipeg, Man.



Condensed advertisements will be inserted under this heading at one cent 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.

BARRED Plymouth Rock eggs for sale, from pens headed by pure E. B. Thorpeon males, \$1.50 per setting, \$5 per 100. Mrs. Jaa. T. McFee, Jr. Headingley, Man.

EGGS. Preserve summer eggs for winter prices by the wet storage method. Easy, cheap, reliable. Price \$1.00. D. D. F. Thompson, Calgary.

EGGS for hatching from Golden Wyandottes, Indian Games and Barred Plymouth Rocks, \$2 for 15. One pair of Pekin Ducks for sale, Write S. Ling, 128 River Ave., Winnipeg.

THERE'S money in eggs—Get to know how to preserve them and make money. Full particulars for 50c. Apply, Stewart, 89 Dagmar street, Winnipeg.

WHITE Wyandotte Eggs for hatching at one dollar per thirteen, after May 1st. Also a few breeders for sale at one dollar each. Order at once. Thos. Lund, Stonewall, Man.



Barred Plymouth Rocks, Silver-spangled Hamburgs and Pearl Guineas.

Eggs, \$2 a setting. Breeding stock a matter of correspondence.

THOMAS BROS., Crossfield, Alberta.

An Interesting Talk on Tuberculosis.

Tuberculosis in Animals, and Its Relation to the Disease in Man, formed the subject of an interesting address at Glenmore, recently, delivered by Mr. J. Lynch, M.R.C.V.S. Having pointed out that the disease is one to which all domesticated animals are subject, the lecturer went on to say that cattle suffer most from tuberculosis; it is believed that 30 per cent. of the cows in Ireland are attacked with it. The disease is very rare in sheep, thanks to the natural conditions under which they live in the open air. Pigs, on the other hand, are more often attacked, but in the horse consumption is not often met with. The disease in fowls generally takes the form of an epidemic, sweeping away whole flocks. Tuberculosis is a contagious disease—that is to say, it can be transmitted. It is caused by a parasite which is unfortunately one of the hardest to kill. The conditions it likes best are: First, a certain temperature, which is the heat of the animal body; second, a certain food, which is the living body of animals. These are the conditions it requires in order to do well and propagate its kind. The conditions unfavorable to its existence are far more important. First, sunlight; the direct sunlight destroys the consumptive microbe in three days. Second, daylight with the direct rays shaded off kills it in from seven to eighteen days. Third, heat; a temperature of 180 kills it in about twenty minutes. Fourth, cold; cold has not a very destructive action on this parasite, it can live for three weeks at a temperature 30 degrees below freezing point. Fifth, salt; diseased meat, if well salted, is non-infective after sixteen days.

There are other causes of consumption called accessory causes; these are the causes which lessen the resisting power of the animal to an attack of the microbe. They are as follows:

1. Heredity. Consumption is an hereditary disease; the tendency to consumption can be transmitted from parent to offspring. The offspring of consumptive parents are more likely to contract the disease than those of healthy parents, but they are more exposed to infection, and, consequently, suffer more.

2. Close houses, with bad ventilation. Where a large number of animals are confined in a small space, combined with bad ventilation, this has a very weakening effect on the system.

3. Housing animals in a dark place has a similar effect. The following experiment will show the value of plenty of daylight: Rabbits were taken, and all were injected with the same number of consumptive microbes; six were allowed to enjoy open-air hatches, and six placed in a dark room; the six placed in the dark died within three weeks, while none of the others died within two months.

Heavy milkers are more disposed to the disease than those not producing much milk. The breeds which suffer most are the great milking breeds, viz., the Jersey, Guernsey, and Alderney. Other accessory causes are breeding from animals too young, breeding from animals closely related, bringing affected animals into the herd, feeding calves and pigs on the milk of diseased cows.

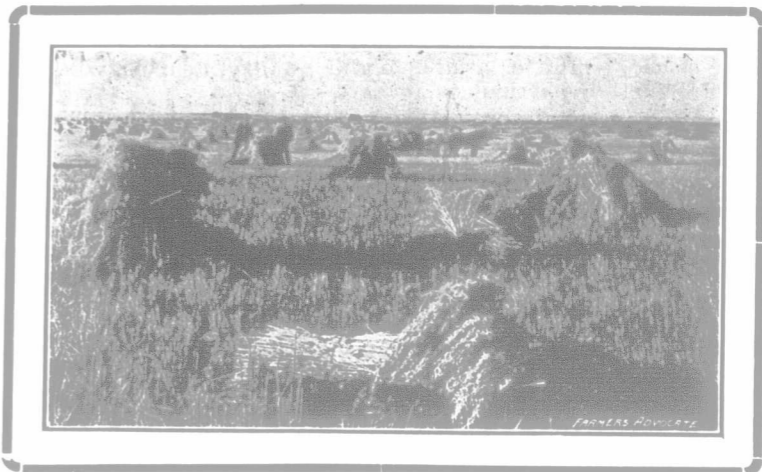
The parts of the body affected with consumption are the lungs in about 90 per cent. of cases, the liver, stomach, bowels, the glands all over the body, more commonly those of the throat, the bones and joints, the udder, and the covering of the brain.

An animal may be affected without showing any symptoms; there are no symptoms shown in more than half the cases. Those are commonly gradual wasting, staring coat, breathing quickened and often accompanied by a grunt; a short cough is noticed occasionally; this becomes more frequent and longer as the disease progresses. There may be abscesses about the throat or shoulder; the milk is pale blue in color and often contains clots. The eye soon becomes sunken, the animal wastes rapidly, ceases to feed, and soon dies.

There is a special test known as tuberculin, which, if injected into a healthy animal, produces no change, while if injected into a diseased animal it causes a

Winter Wheat

ONE CROP PAYS FOR THE LAND



The winter just past was considered a very severe one, but not a single field of **Winter Wheat** in the **Calgary District** suffered damage from freezing. Average yield for the last three years over 30 bushels per acre. According to the Government reports, no other district in Western Canada shows as high a general average yield of all kinds of grains as the **Calgary District**. Write for our booklet, showing 100,000 acres of winter wheat lands near Calgary. Cheap now. Worth \$50 per acre in a few years.

Mild Climate, Pure Water,
Sure Crops and Cheap Fuel.

CALGARY COLONIZATION COMPANY, Ltd.

Calgary, Alberta, Canada.



Have Restored Thousands of
Canadian Women to
Health and Strength.

There is no need for so many women to suffer pain and weakness, nervousness, sleeplessness, anemia, faint and dizzy spells and the numerous troubles which render the life of woman a round of sickness and suffering.

Young girls budding into womanhood, who suffer with pains and headaches, and whose face is pale and the blood watery, will find **Milburn's Heart and Nerve Pills** help them greatly during this period.

Women at the change of life, who are nervous, subject to hot flushes, feeling of pins and needles, palpitation of the heart, etc., are tired over the trying time of their life by the use of this wonderful remedy.

It has a wonderful effect on a woman's system, makes pains and aches vanish, brings color to the pale cheek and sparkle to the eye.

They build up the system, renew lost vitality, improve the appetite, make rich, red blood and dispel that weak, tired, listless, no-ambition feeling.

50c. PER BOX, OR 3 FOR \$1.25
ALL DEALERS.

The T. Milburn Co., Limited, Toronto, Ont.

ADVERTISE IN THE ADVOCATE.

rise of temperature. This test is very delicate, and can only be used by skilled hands.

It is now almost universally believed that the microbe that causes consumption in animals is the same as that which causes consumption in man. The microbe that causes consumption in man differs in some respects from that found in cattle, and that found in birds differs from either, but they can all be made after artificial treatment to assume common characteristics.

The following experiment performed by the late Professor NoCARD will help to elucidate this point, he took some of the microbes from man and placed them in capsules, and inserted the capsules into the abdominal cavity of fowl; they were allowed to remain for three or four months, and then passed on to other fowl, and so on for four successive generations. At the end of this time the microbes were taken out of the capsules and injected into healthy fowl, and they produced the disease in the latter just as the ordinary fowl microbe. Whereas, if the microbes were taken from man and injected directly into fowl, they would not produce consumption of the latter.

The extinction of the disease is a matter of more importance to the State than to farmers; nevertheless, it is the farmer's interest to take every precaution for the eradication of this dreaded disease, and those which he can carry out are as follows: Get all suspicious animals fattened and sold off; have your herd tested with tuberculin, and get rid of all the animals that react to the test. Any new animals introduced into the herd must be tested before being allowed to mix with the others.

RECORD FLAX SHIPMENT.—The steamer, W. D. Mathews, cleared from Fort William recently with the largest cargo of flaxseed ever shipped from that port, being loaded with nearly 200,000 bushels, valued at \$250,000.00. The cargo was shipped by Thompson, Sons & Co., of Winnipeg, for account of the Albert Dickinson Company, Chicago, the largest independent flax handlers in the United States.

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



No Cash to Pay Until Fall, 1905.

MAY & JUNE

are the Best Months to Make Money Raising Chickens

Chicks hatched then grow more rapidly and require less care than at any time of year, and the knack of running the business successfully is acquired under the most favorable circumstances.

One good May or June hatching will bring out a brood of chicks that sell about October 1st for enough to pay for an Incubator and another batch can then be started that will get the chicks out in time for the Christmas market. The next batch will be ready for the March and April market, "broilers" commanding the very highest market prices.

A good Incubator is the foundation of real success in poultry raising, bringing the whole matter from guess-work to certainty. We furnish you with a

Chatham Incubator

on easy terms. No cash to pay until November, 1905. By that time it should have paid for itself.

Nothing else raised on a farm pays like this, and the beauty of it all is that the women folks or children can easily attend to the very small amount of work there is to be done. Half an hour or so a day is all the time required.

Getting the right Incubator is pretty nearly the whole thing. The Chatham is the safest and surest Incubator made. It does the trick; 100 per cent. hatches every time if the eggs are fertile. Rather than go into details of construction here, we will print a few out of many hundreds of testimonials:

Brighton, Ont., April 15th, 1905.
The Manson Campbell Co.,
Chatham, Ont.

Dear Sir,—I told you when I received my Incubator and Brooder that I would let you know what success I had with my first hatch. When the Incubator arrived I went and got eggs to put in it, and as I was anxious to get it started I took all the eggs I could from the party, and he had only enough so I could not pick them over. There were some small ones and some long and narrow, and as I afterwards found out he was keeping twenty-seven hens with one cockrel, so they did not look very good on the start. I put fifty-six eggs into the Incubator and followed the instructions closely, and I got fifty chicks, two having died in the shell, which I think is first-class. They are all strong and lively. I am sorry I did not order the 100 size instead of the 50. I have it now filled with sixty white Wyandott eggs I wish you could

tell me where I could get a good poultry paper, something that would suit a beginner.
Yours truly,
E. H. BARAGER,
Brighton, Ont.

Box 234,
Brighton, Ont.
P.S.—I would rather attend to an Incubator than one hen now. There is some satisfaction in knowing that if you look after them you will get chicks.

Valens, Ont., April 15th, 1905.
The Manson Campbell Co.,
Chatham, Ont.

Dear Sir,—The incubator that we purchased from you on the 18th Jan. last is certainly a dandy. Out of a No. 2 incubator with 83 fertile eggs I got 76 chickens, and they are all strong and healthy. I used 1 1/2 gallons of oil. I think there is no better incubator in the world.

Yours truly,
MRS. JOHN ROBSON,
Valens P.O., Ont.



MANSON CAMPBELL.

We have similar letters from every State in the United States, and every Province in the Dominion.

Every Incubator we put out is the best kind of advertising we do, for it sells many others for us by its never-failing results.

The Chatham is built on honor, and its construction and workmanship are as perfect as an experience of fifty years and ample capital can make them.

The Chatham was the first Incubator made that was good enough to admit of its makers taking chances that it would make its cost for the poultryman before it was paid for.

Don't imagine for a moment that it is any longer possible to make big poultry profits by setting hens. As hatchers hens are as out of date as stone hatchets.

If these erratic, uncertain birds are kept busy egg-laying instead of wasting their time setting, the poultryman will pocket a good many extra dollars in profit.

If you want to get full particulars on the subject and learn all the details of successful Incubator hatching and profitable poultry raising send to-day for our superbly printed book, "How to Make Money Out of Chicks." It's FREE.

Send for it now.

FREE BOOK.
A Complete Guide to Poultry Profits.

THE MANSON CAMPBELL CO., Limited
Dept. 2 CHATHAM, ONT.

Distributing Warehouses at Montreal, Que., Brandon, Man., Calgary, Alta., New Westminster, B.C., and Halifax, N.S.
Factories at CHATHAM, ONT., and DETROIT, MICH.

Also Manufacturers of the famous CHATHAM FANNING MILLS AND CHATHAM FARM SCALES.

The Auto and the Horse.

The United States Consul Mahin at Nottingham, England, says in his last consular report:

The old-time report that the railways would seal the fate of the horse was changed so that automobiles were to displace that animal when the motors began to be used in this country. Horses, however, are now dearer than before the coming of the automobile, especially carriage horses, the kind that one would expect would be most affected.

The fact seems to be that the automobiles have created a new school of travel. Many people who use them did not keep horses, and the people using them who did keep horses—wealthy country families, for instance—still retain their horses for emergencies. In point of fact, it is believed that the automobiles

will affect only the railways in their receipts from passenger fares.

The use of motor omnibuses, vans, etc., which has begun in this country, and is likely to become general, will displace many horses; but well informed persons express the belief that the displaced horses will be absorbed by the increasing number in use in other lines of business. It would seem that the natural increase would supply the later demand, but this is denied. It is stated that nearly all the horses needed could once be bought in this country, but that English farmers have generally ceased breeding them, and even the importation has declined. A large buyer of horses says on this subject: "Lately we have had to go to America, and it has now become no easy thing to buy horses there. The Americans are to-day paying almost as much for their horses as we used to pay for them when shipped across

here. American dealers, of course, are not going to pay the cost of shipment when they can get good prices at home."

T. P. Grout & Son, Parkdale, Man., have imported a Standard-bred, Chauncey Onward, by Onward, out of Minnie Wren, a granddaughter of C. M. Clay Jr. and Almont 33. Chauncey Onward was bred by R. P. Pepper, of Frankfort, Ky., is a bay horse, 38532, A. T. R. Mr. Grout informs us that this horse has the size and substance to hand to his offspring, and should have a sire of heavy-harness horses. The horse is enrolled under the Manitoba Lien Act.

"Why are sheep not like people?"
"Because the best sheep are always the best dressers."

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

BREEDERS' DIRECTORY.

Breeder's name, post-office address, class of stock kept, will be inserted under this heading at \$3.00 per line per year. No card to be less than two lines or exceed three lines.

A. D. McDONALD, Napinka, Man.—Breeder of Shorthorns, Yorkshires and Berkshires. Young pigs for sale.

A. D. GAMLEY, Brandon, Man.—Breeder of Leicester sheep and Roadster horses. Stock for sale.

BRYAN BROS., Craik, Assa. Breeders of White Rocks and White Wyandottes. Eggs from winners, \$3 per setting of 15.

C. W. TAYLOR, Dominion City.—Barred Plymouth Rocks, Buff Cochins, Black-headed Red Game, White Cochins.

C. O'BRIEN, Dominion City. Buff Orpingtons, Scotch Deer Hounds, Russian Wolf Hounds.

D. HYSOP & SON, Killarney, Man., Landauer Farm, Shorthorns and Percherons.

E. D. BROWN, Boissevain.—Silver Wyandottes. Eggs, \$3 per setting.

E. ELTON & WATT, breeders of pure blood Hereford and Shorthorn cattle. Choice young bulls now for sale. Cloverdale Farm, 3 miles northeast of Birds' Hill, Springfield Township, Man.

E. T. GRIFFITHS, Moose Jaw, Assa.—Breeder of Clydesdales and Shorthorns. Stock for sale.

GORRELL BROS., Pilot Mound, Man.—Shorthorns. Stock of both sexes for sale.

H. W. HODKINSON, Neepawa, Man. Barred Rocks, Winners.

HENRY NICHOL, Fairview Farm, Brandon, Man. Breeder of Clydesdale horses and Shorthorns etc.

J. W. MARTEN, Gotham, Wis., U. S. A.—Importer and breeder of Red Polled cattle.

J. G. WASHINGTON, Nings, Shorthorns and Clydesdales. Four choice young bulls. One stallion two years. Good one.

JOHN GIBSON, Underhill, Man.—Breeder of Shorthorns and Tamworths. Stock for sale.

J. MANSFIELD, Rosebank Farm, Brandon, Man., Breeder of Shorthorns. Young stock for sale, both sexes.

JOHN WISHART, Portage la Prairie, Man.—Breeder of Clydesdales and Hackney horses. Young and breeding stock of both sexes for sale.

J. H. REID, Moosomin, Assa.—Breeder of Herefords. Young bulls for sale.

J. M. MACFARLANE, Moose Jaw, Assa.—Breeder of Clydesdale horses.

J. CHILDREN & SONS, Okotoks, Alta.—Duroc Jersey swine, either sex, for sale.

JAS. TOUGH, Lake View Farm, Edmonton, breeder of Hereford cattle.

L. LAKE & BELSON, Grenfell, Assa.—Breeders of Polled-Angus cattle. Young bulls for sale.

L. E. THOMPSON, Deloraine, Man.—Breeder of Clydesdales, Shorthorns, Jacks and Jennets. O. I. C. swine and P. B. Rocks.

PLUM CREEK STOCK FARM.—J. H. Kinnear & Son, Souris, Man. Breeders of Shorthorns. Stock for sale.

R. A. COX, breeder and importer.—Shorthorns, Berkshires and B. P. Rocks. Beresford, Man. Stock for sale.

R. A. & J. A. WATT, Salem P.O., Ont., and telegraph office.—Breeders of Shorthorns and Clydesdales. Imported and Canadian-bred females; also a pair of bull calves.

RIVEREDGE FARM.—Shorthorn cattle, Deerhounds, B. Rocks, B. B. R. Games. A. A. Titus, Napinka, Man.

REGINA STOCK FARM.—Ayrshires and Yorkshires for sale. J. C. Pope, Regina, Assa.

ROBT. SINTON, Regina, Assa.—Breeder and importer of Herefords. Stock, both sexes, for sale.

R. P. STANLEY, Moosomin, Assa.—Breeder of Percherons and Hackneys. Stallions of both breeds for sale.

SHORTHORNS and Clydesdales. Wm. Chalmers, Smithfield Stock Farm, Brandon, Phone at residence.

SHORTHORNS of the fashionable families. John Kennedy, Swan River, Man. (C. N. R.), 1 1/2 miles from town.

THE "GOULD FARM," Burton, North Dakota, U. S. A., breeders of Red Polled cattle, the dual-purpose breed of America.

TRAYNOR BROS., Regina, Assa.—Clydesdales. Stallions for sale.

THOS. ELLIOTT, Regina, Assa.—Breeder of Herefords.

THOS. DALE, Portage la Prairie, Man.—Breeder of Shorthorns and Berkshires. Young and breeding stock of both sexes for sale.

W. M. LAUGHLAND, Hartney, Man.—Breeder of Shorthorns, Berkshires and B. P. Rocks.

WALTER CLIFFORD, Austin, Man., breeder of Polled Angus Cattle; 1/2 mile from station.

W. M. DAVIDSON, Lyonshall, breeder of pure-bred Shorthorns. Young stock of good quality for sale.

W. S. LISTER, Middle Church (Nr. Winnipeg), Marchmont Herd Scotch Shorthorns. Bulls all ages from imported stock. Telephone 1004B.

YOUNG Shorthorns for sale. Prices reasonable. Apply to Stewart Bros. & Co., Pilot Mound, Man.

FREE UNTIL CURED



No man need be weak, no man need suffer from the loss of that vitality which makes life worth living. He can be made strong, magnetic, forceful and light-hearted, confident of his power both in business and society; free from spells of despondency, nervousness, lassitude and brain wanderings. I have a certain cure for Nervous Debility, Varicocele, Rheumatism, Lamé Back, Stomach, Liver and Kidney Complaints, in my world-famed Dr. Sanden Electric Belt with Electric Suspensory, and I will give it absolutely free until a cure is effected. How can I do this? For two reasons: I have the certain knowledge that my Belt will cure, and I have confidence enough in mankind to wait for my money until I prove it. This is what every doctor should do, but I am the only one who has a remedy that will stand such a crucial test. For 40 years I have been curing thousands every year, and have made a tremendous success doing business on this basis. **NOT ONE PENNY IN ADVANCE OR ON DEPOSIT**, and if I fail it costs you nothing whatever. All I ask is that you pay me the usual price of the Belt when cured—in some cases not over \$5 00. I will leave you to be the judge, and will take your word for results, or for cash I will give full wholesale discount. Forty years' continuous success has brought forth many imitators. Beware of them. You can try the original, the standard of the world, free until cured, then pay for it. Call or send for one to-day, also my two illustrated books giving full information free, sealed, by mail.

DR. C. T. SANDEN

140 Yonge Street, - TORONTO, ONT.

Office hours, 9 to 6; Saturdays, until 9 p.m.

If You Have a Farm for Sale

Or Want a Situation, put an Advertisement in our WANT AND FOR SALE COLUMN. Our Want Ads. Always Bring the Best Results.

The William Weld Co., Limited, Winnipeg, Man.

QUESTIONS AND ANSWERS Miscellaneous.

HIRED MAN'S RIGHTS.

1. A lives with B for eight months for so much. Can A claim any nights in a week after his work is done up?
2. Can B stop A from going away every other Sunday, so long as his work is done?
3. What other holidays can he claim in the Territories? H. H.

Ans.—We do not think there is any means to prevent a man going away in the evenings, but the hired man should not waste too much of his time and his strength, which, strictly speaking, belongs to his employer. We frequently have the spectacle of a man going through his work mechanically through the day, then spending the greater part of the night in recreations of a very questionable character. In such case, the employer has every right to remonstrate. Legally, every Sunday belongs to the employer, but, generally, it is mutually agreed that the hired man may have every second Sunday to himself. Other holidays in the Territories are: New Year's Day, Ash Wednesday, Good Friday, Easter Monday, Christmas Day, Dominion Day, Labor Day, birthday of reigning sovereign, Arbor Day, and any other day that may be proclaimed a general holiday for planting trees or general thanksgiving.

WRITE FOR INFORMATION.

The season is drawing near for the shipping of beef cattle from Manitoba and the N.-W. Territories, and we beg to state that we are open to receive consignments during the coming season.

We are in a position to say that we can give a much better service the coming season than last, as last year was our first venture in this line. We have made improvements for the handling of live stock this season, and by strict and personal attention to every detail and by curtailing every possible item of expense, we expect to build up a much larger trade.

We take this opportunity to thank our numerous patrons of last year, and trust we will be able to receive your support the coming year. We are in receipt of many letters of endorsement from our consignees, which are very encouraging to us.

We ask all who intend consigning to us this year to get out your cattle as early as possible, as the markets cannot consume the numbers that have previously been shipped in the later months of the fall.

Write us at any time for information, as to markets and shipping, and we will furnish the same promptly.

Yours respectfully,
H. A. MULLINS & CO.

Lump Jaw

Save the animal—save your herd—cure every case of Lump Jaw. The disease is fatal in time, and it spreads. Only one way to cure it—use Fleming's Lump Jaw Cure

No trouble—rub it on. No risk—your money back if it ever fails. Used for seven years by nearly all the big stockmen. Free illustrated book on Lump Jaw and other diseases and blemishes of cattle and horses. Write for it today.

FLEMING BROS., Chemists,
46 Front Street, West, Toronto, Can.

RUPTURE

Sufferers will rejoice to learn that Medical Science has at last triumphed in producing a positive Cure for this agonizing and dangerous ailment. The results are astonishing the Medical Profession as well as all Ruptured. Cases that have defied human ingenuity have yielded in a short time. No operation, pain, danger, or time from work to be



CURED. One of the remarkable cures performed is that of Conductor W. H. Greaves, Medicine Hat, N.W.T., whose portrait here appears. He was ruptured 5 years. To further introduce this wonderful cure Dr. W. S. Rice, 2½ East Queen Street (Block 286) Toronto, Ont., the Discoverer, will send a Trial, also his book "Can Rupture be Cured?" Write to-day—Sure—Now.

FREE

31a

Special Notice To Farmers

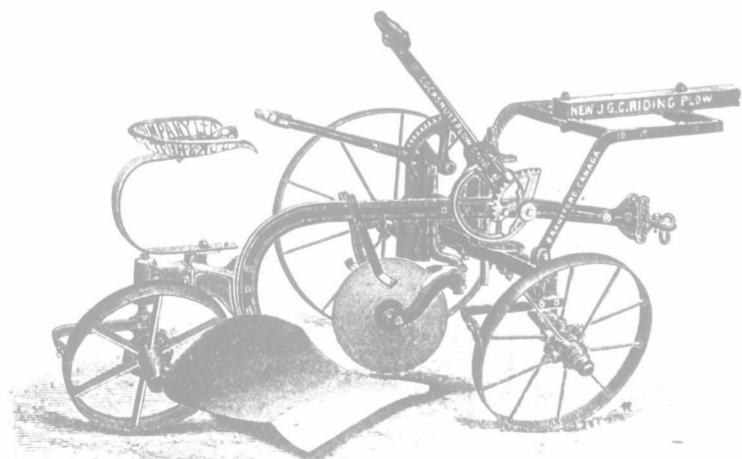
Our big Wire Factory is now under way manufacturing Fencing. Write direct to us and we will help you.

Munro Wire Works
Limited, - Winnipeg, Man.

STAMMERERS

We treat the cause, not simply the habit, and therefore produce natural speech. Write for particulars. THE DR. ARNOTT INSTITUTE, BERLIN, ONT.

Cockshutt Plows



Cockshutt Plow Co., Ltd.

Factory: Brantford.

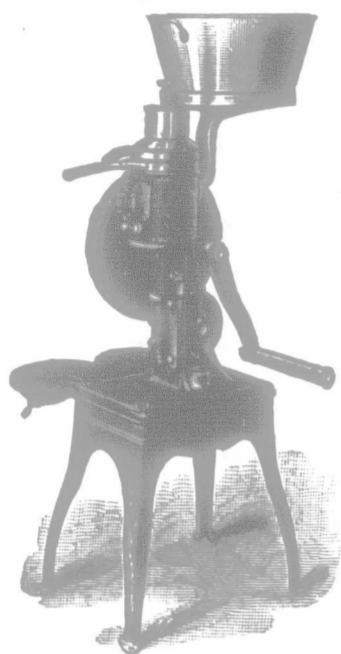
WINNIPEG.

ARE ALL HIGH-GRADE

The accompanying cut represents our 1905 Improved J.G.C. Sulky. This plow needs no introduction to the farmers of the Northwest, as it has been in the market for many years and is being used at the present time by thousands of satisfied customers. It is strong and easy to operate, and as a breaker in hard, rough land has no equal. For this season we have substituted a heavy double bar axle, strong steel wheels, the land wheel being much higher than on the old plow, which makes the plow run steadier and easier. We have also altered both levers, and they are very convenient and easy to handle.

The J.G.C. can be adjusted to cut 14, 16 or 18 inches. Catalogue describing our full line of Gangs and Sulkies furnished on application.

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



DE LAVAL SEPARATORS

The Kind the Creamerymen Use.

There are only two kinds of Cream Separators :
The DE LAVAL and others.
Those who "know" buy the DE LAVAL.
A few buy "others" and separator experience at the same time.

The condensed bought-and-paid-for experience of all the most advanced dairymen is told in three words :

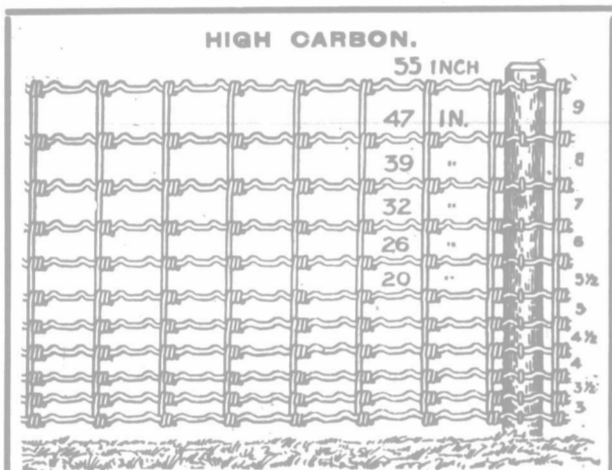
BUY THE DE LAVAL

Then why make costly experiments which can only bring you to the same conclusion?
Our catalogue explains fully DE LAVAL superiority.
Send for it to-day.

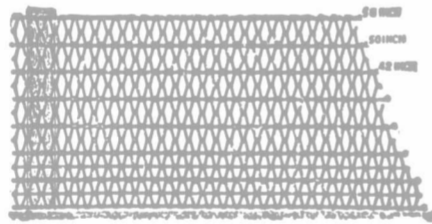
The De Laval Separator Co., 248 McDermot Ave.,
WINNIPEG, MAN.
Montreal Toronto New York Chicago Philadelphia San Francisco

GALVANIZED STEEL WOVEN WIRE FENCE

After all is said and done, more of Our Fences are in use than all other makes of Wire Fences combined. Our Sales double every year.



American Field and Hog Fence.



Ellwood Field and Lawn Fence.

IF YOUR DEALERS DO NOT HANDLE OUR FENCES, WRITE TO US.

The Canadian Steel & Wire Co., Ltd.
WINNIPEG, Man. HAMILTON, Ont.

We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge, Weighs more per rod, has greater tensile strength than any other Fence on the market

Steel Roofing and Siding, \$2.00 per 100 Sq. Ft.

Painted red on both sides. Most durable and economical covering for Roofing or Siding, for Residences, Houses, Barns, Elevators, Stores, Churches, Poultry Houses, Cribs, etc. Easier to lay and will last longer than any other covering. Cheaper than wood shingles or slate. No experience necessary. A hammer and snips are the only tools required. It is semi-hardened high grade steel. Brick or Stone Siding at \$2.00 per 100 Square Feet. Pedlar's Patent Steel Shingles at \$2.50 per 100 Square Feet. Also Corrugated Iron, Painted or Galvanized, in sheets 96 inches long. Beaded and Embossed Ceilings. V-Crimped Roofing. 2000 designs of Roofing, Siding and Ceilings in all grades. Thousands of buildings through the Dominion covered with our Sheet Metal Goods making them

FIRE, WATER AND LIGHTNING PROOF.

Send in your order for as many squares (10 x 10 feet) as you require to cover your new or old building. The very best roofing for this climate. We can supply Eave Trough, all sizes, Corrugated or Plain Round, Conductor Pipes, Shoes, Elbows, Spikes, Tubes. All goods shipped day after order is received. We are the largest concern of the kind under the British flag. Established 1861. Capital Invested \$150,000.00.

PEDLAR PEOPLE, OSHAWA, ONTARIO, CANADA.

Eastern Warehouse—767 Craig St., Montreal, Quebec.



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GOSSIP.

As Dan was on his way from the depot he pulled the strap to stop the car. The bell rung at both ends.

"What did you ring both ends for?" asked the infuriated conductor.

"Cause I want both ends to stop while I get off."

The third series of sales of colonial wool held in London, England, progresses satisfactorily. The improvement in all classes of wool noted at the opening continues, and in some cases values have increased. The sensational feature of the market, say Messrs. Jacomb, Son & Co., has been the animated and excited biddings of American buyers for the medium and finer cross-bred wools, which, in many cases, are 25 to 30 per cent. over March prices, coarser growths being 10 per cent. dearer.—[Live-stock Journal.]

An Englishman was asking for information about the state of education in an Irish county.

"Can they all read and write?"

"Troth they can, every mother's son of them."

"Have you no ignoramuses among you?"

"Niver a one."

"Do you know the meaning of the word ignoramus?"

"I do."

"What is it?"

"A shtranger like yerself."

Mr. F. Miller shipped from Liverpool, May 6th, for the Argentine, no less than 350 fine Lincoln rams and young ewes, selected from the prizewinning flocks of Messrs. H. Dudding, R. & W. Wright, Casswell, Webb, Dickinson, Drakes, Marris, and Taylor Sharpe. With this shipment Mr. Miller also despatched five very good Shorthorn bulls and five heifers. It was his intention to have shipped another half score of Shorthorns, but space was not available owing to the extensive business between Great Britain and the Argentine at present prevailing.

The doctor's telephone rang.

"Hello!" he said, applying the phone to his ear, relates the Chicago Tribune.

"Hello! Is that Dr. Kewrum?"

"Yes."

"This is Mrs. Ollerzill. Oh, doctor, I have such a tickling in my throat. I just can't endure it. I wish you'd come over as quick as you can and see what is the cause of it."

"The old hypochondriac!" he muttered. "There is nothing on earth the matter with her, but I suppose I'll have to go, as usual. Madam," he continued, raising his voice, "what did you have for dinner?"

"Chicken potpie."

"All right. I'll be there in a few minutes."

When he visited his patient a quarter of an hour later he found her coughing and wheezing and apparently in great pain.

"No relief yet, madam?" he asked.

"Not a (cough) bit, doctor! It's (cough) getting worse (cough) every (cough) minute!"

"Well," he said, opening his case and taking out a small steel instrument with a long handle, "we'll soon remove the cause. People are often troubled in this way after eating chicken potpie. May I ask you to suspend your coughing for a moment and open your mouth?"

"Will it hurt, doctor?"

"Not a particle. Now close your eyes, please."

She complied, and he inserted the instrument.

"I see what it is, madam. Hold still. There—that's all."

"Is it over, doctor?"

"Yes; you may open your eyes."

"Did you find anything?"

"I should say I did. Do you see this?"

Hereupon he showed her a chicken feather, which appeared to be in a remarkable state of preservation, everything considered.

"Is the tickling all gone, madam?"

"Yes, it's all gone, doctor. I don't feel it a bit now. I just happened to think, though, that I've made a mistake. It was roast pork. Oh, dear! I can feel it coming on (cough, cough) again!"

Then the doctor's patience gave way.

"Confound it, madam!" he exclaimed.

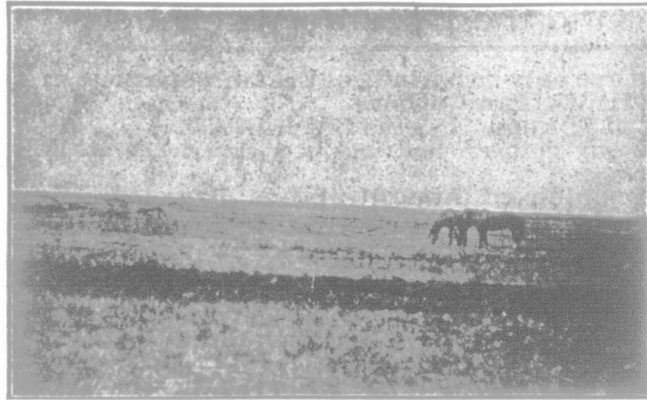
"Why didn't you say so earlier? If you'd told me that at first I would have extracted a bristle!"

LAST MOUNTAIN VALLEY

Steamboat service now in operation.

Railway service to Strassburg by July.

WRITE FOR FREE BOOKS, MAPS, etc.



"OPENING OUT NEW FARM."

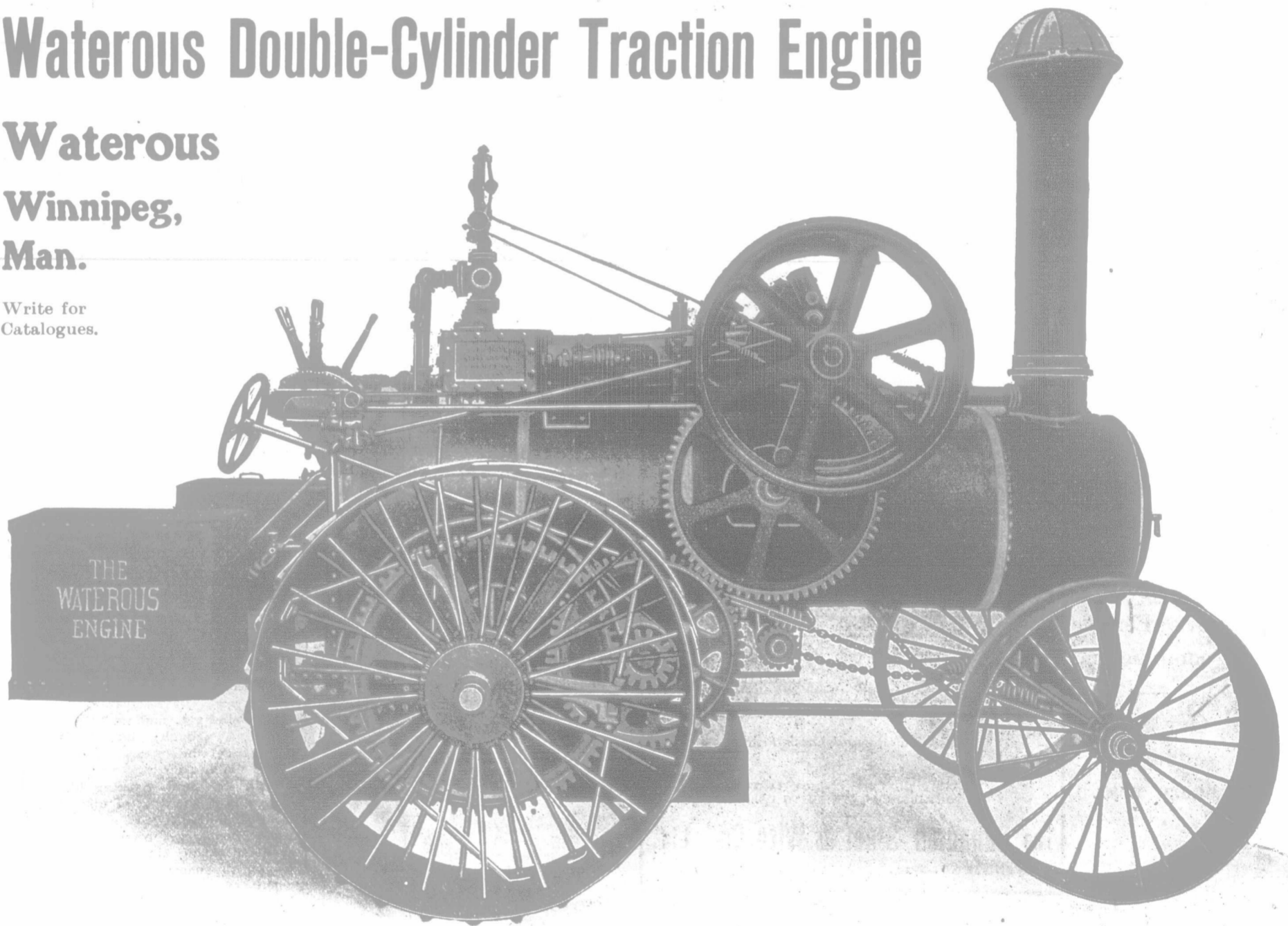
The finest Wheat Land in North-east Assiniboia. "A section is a fortune." Average crops for five years, 25 bushels per acre.

WM. PEARSON & CO.
WINNIPEG, MAN.

Waterous Double-Cylinder Traction Engine

**Waterous
Winnipeg,
Man.**

Write for Catalogues.



CARNEFAC STOCK FOOD

IS RECOMMENDED FOR CALVES

Little Henry—"Is it true, pa, that sheep have four stomachs?"
Pa—"Yes, my son."
Little Henry—"What a terrible time they must have when they get the stomach ache."

Why are great writers, when they die, like little Bo-peep's sheep? Because they leave their tales behind them.

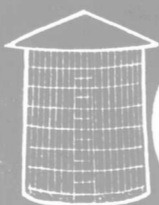
NEED A NEW ROOF?

For old or new buildings of any kind use

PAROID ROOFING

The roof with quality and durability built. You'll be surprised at its low cost and long life. Any one can apply it. Unsurpassed so far. Don't take an imitation, get the genuine. Send for Free Sample and look on "Building Economy."

F. W. Bird & Son, Makers (originators of the complete roofing bit—feature in every roll.)
Hamilton, Ontario, Canada. Established in U. S. 1817.



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BRITAIN'S BEST BLISTER



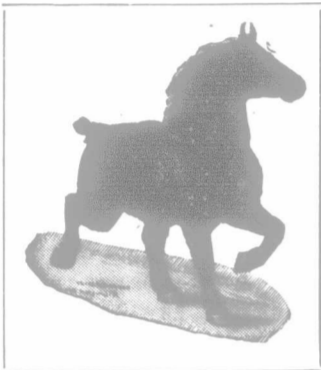
It takes time, trouble, knowledge and special chemical apparatus to produce

STEVENS' OINTMENT

as used in the Royal Stables. It is the result of a lifetime's knowledge among lame horses saved up and given to you in concentrated form for use on your lame or disfigured horse. It will surely cure Splint, Spavin, Curb, Ringbone, and all enlargements in horses and cattle. Price 75c. small, \$1.50 large box. A little goes a long way. Get a box now. If your local chemist cannot supply you, write direct to

Martin, Bole & Wynne, Winnipeg, Man. Western Agents.

America's Leading Horse Importers



At the Great St. Louis World's Fair were awarded the "PREMIER CHAMPIONSHIP" of Percheron Horses:

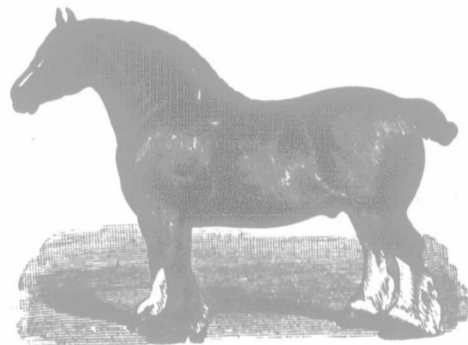
Summary of Winnings:

2 Grand Champions	3 Bronze Medals
2 Reserve Grand Champions	58 First Prizes
5 Champions	39 Second Prizes
6 Reserve Champions	18 Third Prizes
15 Gold Medals	7 Fourth Prizes
9 Silver Medals	6 Fifth Prizes
171 Total Prizes, - Value \$9,272.00	

McLAUGHLIN BROS.,

St. Paul, Minn. Columbus, Ohio. Kansas City, Mo.

JOHN CHAMBERS & SONS



Holdenby, Northampton, Eng.

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

SHIRE HORSE

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

Canadian buyers visiting England are invited to call and see what we have to show them and obtain their stallions and mares direct from the men that breed them.

No fancy prices, and all delivered free Liverpool landing stage. Correspondence invited. Station—Althorp Park, L. & N.W. Ry.

ALEX. GALBRAITH & SON

Brandon, Manitoba.

After a most successful season of sales we still have on hand a selection of strictly high-class

PERCHERON SUFFOLK COLTS

And to close out will sacrifice on price. If in need of a stallion, write at once.

JAMES SMITH, MANAGER. BRANDON, MAN.

Seldom See \$100 Reward

a big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Stifle, Knee or Throat.

ABSORBINE

will clean them off without laying the horse up. No blister, no hair gone. \$2.00 per bottle, delivered. Book 10-B free. ABSORBINE, JR., for mankind, \$1.00 Bottle. Removes Soft Bunches, Cures Varicose Veins, Allays Pain. Genuine mfd, only by

W.F. Young, P.D.F., 46 Monmouth St., Springfield, Mass. Canadian Agents, Lyman, Sons & Co., Montreal.

Look at This Before You Buy

10,000 acres of the choicest prairie lands close to the rising town of Leavings, on the C. P. R., twenty miles from Macleod. Cheaper than the cheapest. For particulars write

W. McLEOD, - Calgary, Alta.

for a case of disease in horses that Tuttle's Elixir will not cure, if we recommend it to do so. It is the only remedy that stops pain at once and cures quickly and permanently distemper, founder, pneumonia, and many other horse ailments.

For Race Horses

it prevents stiffness, colds, cures sprains, locates and cures lameness, and as a body wash keeps the circulation in good condition under hard driving.

Tuttle's Hoof and Healing Ointment cures all hoof diseases. Tuttle's White Star is the best healer known. Our 100-page book "Veterinary Experience" free.

Tuttle's Elixir Co. 66 Beverly St. Boston, Mass. Beware of so-called Elixirs. Tuttle's only is genuine. Avoid all others; they are only temporary relief.

LYMAN, KNOX & SON, AGENTS, Montreal and Toronto, Canada.

D. FRASER & SONS

EMERSON, MAN., Breeders and importers of Clydesdale horses, Shorthorn cattle, Southdown sheep; Yorkshire, Berkshire, Tamworth and Poland-China pigs.

QUESTIONS AND ANSWERS. Veterinary.

ECZEMA.

About a month ago, our calves, fed on skim milk and porridge made of ground wheat and oil cake, began losing the hair off the front of hind legs. At first the denuded skin was inflamed and then turned a bluish color.

L. R. F.

Ans.—This is eczema. Cease giving ground wheat, and dress the parts three times daily with carbolic acid, 1 part; sweet oil, 25 parts.

V.

CHOREA.

Six-months-old dog whines, froths at mouth, loses use of hind legs, bites at legs and paws, shakes, etc. I had an older dog last winter that had a discharge from nostrils, mouth and eyes, and lost the use of his legs, A. J. M.

Ans.—The old dog had distemper, and, no doubt, the young one also suffered, and the present trouble is a nervous condition called chorea, which frequently results as a sequel. It is very hard to treat, and often treatment is not successful. Give him 5 grains bromide of potassium three times daily, and feed on bread, milk and porridge.

V.

TUBERCULOSIS.

1. Give symptoms of tuberculosis in cattle.

2. Will an affected animal thrive?
3. Are the milk and butter healthful?
4. Is the beef healthful?
5. Have a pair of pregnant heifers which I wish to keep for breeding purposes and raise their own calves. Should I milk them by hand the first season?

W. T.

Ans.—1. Tuberculosis is a most insidious disease, and an animal may be extensively diseased without showing the least physical symptoms. The only diagnostic medium where clinical symptoms are not shown, is the tuberculin test. There are few cases in which the most expert diagnostician can be certain without the test. Any organ may be diseased, and, of course, the symptoms will not be shown until the disease has reached that stage in which the functions of the organ are interfered with, and then will depend upon the organ or organs involved. When the respiratory organs are involved there is often a dry short cough, gradually increasing in frequency. When the digestive organs or their accessories are involved there is usually irregular appetite and digestion. If the genital organs are involved in the female, there is usually irregular or perpetual oestrus and failure to breed, etc., etc. Hence, it is not possible for any person, much less a non-professional man, attempting to diagnose, except in far-advanced cases, without the tuberculin test.

2. He will thrive until the vital functions of the organ attacked are interfered with, which, in many cases, is a long time.

3. Opinions differ on this subject, but it is generally admitted that it is not safe, especially for young or delicate persons, to use them.

4. This is also a disputed point, but if only one organ was involved, and it not sufficiently to interfere with the general health of the animal and the meat be well cooked, it is considered safe.

5. Allow the calves to suck. It is good practice to train heifers to the habits you wish them to follow through life.

V.

"I don't suppose you know what it is to be exposed to temptation every moment of your working day, as I am."
"I'm not so sure about that. What's your occupation?"
"I am a bank cashier."
"Shake! I'm a berry picker."

A flashily-dressed negro walked into the West Sixty-eighth Street police station the other night and asked sergeant Thomson if he could have a detective.

"What do you want a detective for?" asked the sergeant.

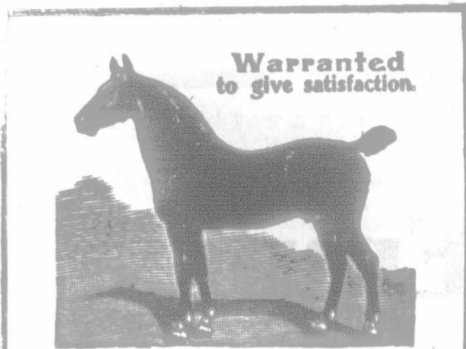
"Well, boss, mah wife done run away with another man and Ah thinks she wants me."

"You'll have to go to a private detective for that, we can't help you."

"How much will one of them cost me?"

"About \$5 a day, and he'll take at least two days."

"H'm; two days at \$5 a day! Ah guess Ah'll let her go, boss."



Warranted to give satisfaction.

GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circular, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

FOR SALE

The gem of the Rocky Mountains, a pure white

PERCHERON HORSE

Foaled in the foothills, weighing 1500 lbs. when in condition. This horse has a mane 7 feet 3 inches in length and an immense tail, which makes him one of the most valuable show horses on earth. In consequence of business engagements I am offering this wonderful moneymaker at a bargain. Address:

JAMES WILSON, Sunny Slope, Alta.

FOR SALE: The Clydesdale Stallion FITZPATRICK 3951.

Four years old bay; face, one forehead both hind feet white. He is a sure foal-getter, beautifully put up, showy, of good disposition and broken to harness. Communicate with

WM. MARTIN, or J. W. IRWIN, Box 15, 811 Union Bank, WINNIPEG, MAN. EMERSON, MAN.

KELWOOD STUD FARM

Importers and breeders of Thoroughbreds. Also Buff Orpingtons and Game fowls.

THE STALLIONS:

"Kelston" Imp. "Abbeywood" at stud. Fee, Thoroughbred, mares, \$25 to insure. Mares from a distance kept at \$2 per month.

DALE & PULFORD, South Qu'Appelle, Assa.

SCARCLIFFE FARM HEREFORDS

YOUNG BULLS FOR SALE.

WRITE AT ONCE FOR PRICES.

BING & WILSON, GLENELLA, MAN.

Prices Reasonable. Terms Easy Correspondence Solicited.

P. F. HUNTLEY, Breeder of Registered HEREFORDS

P. O. box 154, Lacombe, Alta., N.W.T. Inspection of herd invited. Farm two miles east of town.

Poplar Grove HEREFORDS

A carload of the right kind of bulls and females will be sold by auction at Calgary, on May 19th, just after Annual Spring Sale by The Alberta Stock-yards Co.

J. E. Marples, Deleau, Man.

JOHN T. PARKER, Box 11, Lethbriggs, Alta. BREEDER OF

Alberta Herefords

PRICES RIGHT. TERMS EASY.

Make More Milk Money.

If you knew a way by which you could double your profits from your milch cows and at the same time save yourself a lot of hard work, you'd want to adopt it at once. Well the

Empire Cream Separator



will do that thing for you. We want to show you how and why. It's the simplest separator made; has few parts; nothing to get out of order; turns easily; skims perfectly; is easily cleaned; is absolutely safe; lasts longer; gives better satisfaction and makes more money for you than any other—all because it is so well and so simply built. No separator has ever made such a record in popularity and sales—because every man who buys it is satisfied. May our agent call and show you how it works? Don't buy a separator until you have investigated the Empire.

SEND FOR CATALOGUE. Let us send you our new Catalogue. Ask for book No. 12. Empire Cream Separator Co. of Canada, Ltd., Toronto, Ont. Ontario Wind Engine & Pump Co., Winnipeg, Manitoba.

The House You Live In will want renovating as usual this season. CHURCH'S COLD WATER

ALABASTINE

on the walls will produce finer effects, and make you feel better satisfied with the work and with yourself than anything else that can be used.

ALABASTINE is a cement coating that hardens with age. Kalsomine preparations, under whatever name or claims, are only temporary, always rubbing and scaling off. Wallpaper, with its mouldy paste on the back, and arsenical poisonous coloring and finish on the face, impregnate the air of a room with disease germs. The walls of hospitals are never papered—the reason is obvious. Sanitarians endorse ALABASTINE. Hardware and Paint Dealers everywhere sell it.

Packages only. Our "Alabastine Decorators' Aid" sent free. The Alabastine Co. Limited, Paris, Ont.



\$4.75 WATCH \$4.75

Our offer for gold-plated open-face or hunting lady's or gent's watch still holds good. Movements and case guaranteed. For the next two weeks we are also offering a HEART-SHAPED LOCKET with raised horse head through horseshoe of Rhinestones. Locket is gold-filled, guaranteed for five years. Only 75 cents. Chains, Guards, Fobs, Chatelaines, etc. Best value in the West. Liberal commission to agents.

THE NORTH WEST WATCH SPECIALTY CO., Box 345, 639 Elgin Ave., Winnipeg.

Special Notice to Our Readers.

When writing any advertiser in this issue kindly state plainly that you saw Ad. in the

FARMER'S ADVOCATE AND HOME MAGAZINE

FARM BOOKS.

The farmer's home without an Agricultural Library is lacking in one of the chief aids to pleasure and success. We have gone over first-class works on agricultural subjects, and selected the best. See below for prices and how to obtain them.

LIVE STOCK.
 Veterinary Elements.—A. G. Hopkins, B. Agr., D. V. M. \$1.50. A practical farm live-stock doctor book.
 The Study of Breeds (Cattle, Sheep and Swine).—Prof. Shaw. 400 pages, 60 engravings. \$1.50.
 Horse Breeding.—Sanders. 422 pages. \$1.50.
 Horse Breeding.—Capt. Hayes. \$5.00. Far and away the best on this subject.—[The Field].
 Points of the Horse (3rd edition).—Capt. Hayes. \$10.00.
 Light Horses—Breeds and Management. (Vinton series.) 226 pages. \$1.00.
 Heavy Horses—Breeds and Management. (Vinton series.) 219 pages. \$1.00.
 Cattle—Breeds and Management. (Vinton series.) 270 pages. \$1.00.
 Sheep—Breeds and Management. (Vinton series.) 232 pages. \$1.00.
 Pigs—Breeds and Management.—Sanders Spencer. 175 pages. \$1.00.

Feeds and Feeding.—Henry. 600 pages. \$2.00.
 Live-Stock Almanac. Handsomely bound. 75 cents. Paper cover, 40 cents.
 Live-Stock Judging.—Craig. \$2.00. The only work on this subject.
GENERAL AGRICULTURE.
 Agriculture.—C. C. James. 200 pages. 30 cents.
 Chemistry of the Farm.—Warrington. 183 pages. \$1.00.
 Farmyard Manure.—Aikman. 65 pages. 50 cents.
 Successful Farming.—Rennie. 300 pages. \$1.50, postpaid.
 Agricultural Botany.—Percival. \$2.00. A very useful book for student farmers.
 Soiling Crops and the Silo.—Shaw. 366 pages. \$1.50.
 Fertility of the Land.—Roberts. 415 pages. \$1.25.
 Physics of Agriculture.—King. 604 pages. \$1.75.

Prize List Calgary Show.

Hereford bulls, three years old and over—1, King of Cedar, owned by P. F. Huntley, Lacombe; 2, Frosty Night, R. Sinton, Regina; 3, Beau Silvan, R. Sinton; 4, Monitor, R. Sinton; 5, Bonny Brae Heiod, O. Palmer, Lacombe.

Herefords, between 1 and 2 years old—1, Chief, P. F. Huntley; 2, Bonny Brae Hesiod 16, Oswald Palmer; 3, Bonnie Brae Hesiod 13, O. Palmer; 4, Cousin Jonathan, R. Sinton; 5, Gibraltar, R. Sinton.

The championship for the best Hereford bred in the Territories was won by Bonny Brae Hesiod 16.

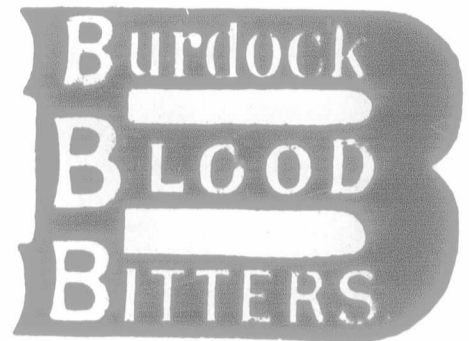
Hereford cows—1, Plane of Red Deer, Mossom Boyd Company, of Prince Albert; 2, Witch Hazel, same owners; 3, Ruth, John Ross, of Medicine Hat; 4, Constance, John Ross.

Aberdeen-Angus bulls, any age—1, Poplar Bluffs Prince, John Morton, Lacombe; 2, King of the West, J. Capon, Blackfalds; 3, Red Deer Sampson, John Morton; 4, Red Deer Ranger, J. Morton. Galloway bulls, any age—1, Mayor Hope, Thos. McMillan, Lineham; 2, Challenger of Hope, T. McMillan; 3, Prairie Jan, H. N. Perry, Cardston; 4, Prairie Maj, H. N. Perry.

Shorthorn bulls three years old and over—1, Alberta Prince, D. Sinclair, Innisfail; 2, Monarch of Grand View, H. J. Scott, Innisfail; 3, Duke of Idylwyld, H. Talbot, Lacombe; 4, Royal McGregor, P. Talbot & Son, Lacombe; 5, Alberta's Hope, C. W. Peterson. Shorthorn bulls, two years—1, Craftsman, J. & W. Sharp, Lacombe; 2, Dundonald, J. & W. Sharp; 3, Lord Montrose, J. L. Walters, Lacombe; 4, Commodore, A. S. Blackwood, De Winton; 5, Trout Creek Marquis, John Ramsay, Priddis. Shorthorn bulls, 18 months and under 2 years—1, Claverhouse, J. & W. Sharp; 2, Crimson Laddie, A. F. McGill, Lacombe; 3, McGregor, T. Talbot, Lacombe; 4, Talisman, H. C. Watson, Oxbow; 5, The Bruce, J. L. Walters. Shorthorn yearlings—1, Spruce Vale Hero, H. McPherson, Calgary; 2, Damby David, J. & W. Sharp; 3, Birch Nut, C. W. Peterson, Calgary; 4, Mabel's Heir, H. Talbot; 5, Coulee Lad, F. B. Watson, Lacombe.

Best Shorthorn bull, bred in the Territories—1, Monarch of Grand View, H. J. Scott. Best Shorthorn bull—Alberta Prince, D. Sinclair. Shorthorn cows, 3 years and over—1, Melba, P. M. Bredt, Regina; 2, Romance, Canadian Land and Ranch Company; 3, Nectarine, same owners; 4, Baroness Algaal, Wm. Beresford, Calgary. Shorthorn cows, 2 years—1, Silver Sea, Canadian Land and Ranch Company; 2, Whisper, same owners. Shorthorn yearlings—1, Venita, J. & W. Sharp, Lacombe; 2, Cornal, J. & W. Sharp; 3, Loyally's Rose, John Ramsay, Priddis.

It was a little boy in an American Sunday school who, in reply to his teacher's question, "Who was the first man?" answered "George Washington," and, upon being informed that it was Adam, exclaimed: "Oh, well, if you are speaking of foreigners, perhaps he was!"



Turns Bad Blood into Rich Red Blood.

No other remedy possesses such perfect cleansing, healing and purifying properties.

Externally, heals Sores, Ulcers, Abscesses, and all Eruptions.

Internally, restores the Stomach, Liver, Bowels and Blood to healthy action. If your appetite is poor, your energy gone, your ambition lost, B.B.B. will restore you to the full enjoyment of happy vigorous life.

Farmers, why not improve your stock by buying a

RED POLLED BULL?

The best for beef and butter. We have some good ones for sale, and the price is right.

H. V. CLENDENNING, Bradwardine, Man.

For Sale: 12 Head Aberdeen-Angus

BULLS—Registered—From one to two years old. Well-bred stock; raised in the north. No fancy prices. Will also sell few cows and heifers.

NATHAN UPHAM, GRAFTON, N. D.

Stock four miles south of Drayton, on the N. P. R. L., sixty miles from Winnipeg.

TERRA NOVA STOCK FARM

HERD OF ABERDEEN-ANGUS CATTLE.

All the best families represented. Some fine young bulls for sale from both imported and home-bred cows. Prices reasonable. S. Martin, Rounthwaite, Man.

HIGH PARK GALLOWAYS

At present I am offering for sale several bulls from 6 to 20 months old, and a few heifers from 1 to 3 years old, prizewinners and bred from prizewinning stock. Will sell at right prices, and satisfaction guaranteed. Robt. Shaw, Brantford, Ont. 4th & P. O. Box 294.

Shorthorn Bulls, Heifers and Heifer Calves for Sale.

The get of Sir Colin Campbell (imp.)—28878—and General—30899—. Cows all ages, in calf or calf at foot. Seventy head to choose from. Three Clydesdale Stallions two and three years old. Also mares and fillies, Leicester sheep, both sexes. Stock always on hand. Geo. Rankin & Sons, Hamiota, Man.

Drumrossie Shorthorns—"Drumrossie Chief" = 29832 = and "Orange Chief" = 29866 = at head of herd. Young things for sale at all times. J. & W. SHARP, Lacombe, Alta.

HOW TO OBTAIN THESE BOOKS.—We will furnish present subscribers any of the above books for cash or as a premium to those obtaining new yearly subscribers to the "Farmer's Advocate" according to the following scale:

Books valued at 50c. and under for 1 new subscriber.
 Books valued over \$1.00 and up to \$1.50 for 3 new subscribers.
 Books valued over \$2.00 and up to \$2.50 for 5 new subscribers.
 Books valued at \$4.00, 8 new subscribers.
 Books valued over 50c. and up to \$1.00 for 2 new subscribers.
 Books valued over \$1.50 and up to \$2.00 for 4 new subscribers.
 Books valued at \$2.75 for 6 new subscribers.
 Books valued at \$6.00 for 12 new subscribers.

We can furnish above books at regular retail price, which is given opposite title of book. By studying above list, any farmer can choose a select list of books suited to his needs, and for a small outlay in cash, or effort in obtaining new subscribers for the "Farmer's Advocate," secure the nucleus of a useful library.

THE WM. WELD CO., LIMITED, Winnipeg, Man.

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

GOSSIP

THE TIME TO SELL.

When my father was a backwoods lad, says a writer in an exchange, he and his brothers made a trap for wild turkeys. It was a rail pen in the woods, with a door on one side that would fall when a string was pulled. From this door he laid a trail of corn out along a game-frequented path, and corn was placed inside the trap. Then the boys stationed themselves to watch. Fortune favoring them, soon came a pair of old turkeys and fourteen nearly grown young ones, and, finding the corn, started eagerly upon the trail, picking it grain by grain. They reached the pen, some went in and the boys' hopes rose. More went in; all was tense excitement behind the blind. All the young were in; then the mother of the brood entered. "Pull the string, William," whispered the brothers. "Wait till the old gobbler goes in," he replied. "Pull the string," they insisted. "Wait, I say; we want them all." Out came the old hen. "Pull, pull," "Wait till she goes back in." Out came two young turkeys. "Pull the string, William," was the demand, despairingly. "Wait till they go back, I tell you." More came out. Finally the string was pulled. One runty youngster was imprisoned, the rest flew away.

Afterward when William was a man he was offered 11c. per pound for his live hogs. He wanted 12c., and held them—only to peddle out the dressed meat, home-cured, at 11c. A neighbor of William was offered \$1.35 for his wheat. He decided to hold for the inevitable \$1.50, and sold instead for 93c.

The writer, having several cars of fat lambs to sell, was offered \$7 per cwt. for them. He wanted a little more money than that to make his accounts look just right and declined the offer. He has the lambs yet, waiting in hopes the old hen may go back!

The moral? Only the rich can afford to scoop the whole pile. The poor should be content with the old hen and her fourteen young ones.

TRADE NOTE.

THE CRESCENT CREAMERY CO.—An attractive little booklet has been issued by the Crescent Creamery Co., Winnipeg, Man. Across the top of the front cover appear the words: "There's cream in it for the Crescent," and across the bottom, "There's money in it for the farmers." The center of the page is taken up with an attractive cut of a milk can, properly addressed to the company. In the fourteen pages of the brochure is very carefully outlined the system under which this well-known firm operates. The Crescent buys cream from any make of separator, although preferring to have it as thick as it can be skimmed without losing any fat in the skimmed milk. A new up-to-date outfit of pasteurization machinery is being installed in the Crescent plant in order that the best quality of butter may be turned out. This shows that the firm is willing to do its utmost in every respect in order that perfection may be attained. Besides containing a large amount of information regarding the creamery business in general, the booklet gives complete shipping instructions and terms of payment as follows:

"If you wish to ship us your cream, and have cans of your own, you have but to fill and deliver to the nearest railroad station, addressed to the Crescent Creamery Company, Winnipeg. We receive it here and pay the express charges on it, charging same up when making returns. Should you not have a can, drop us a card, and we will send one out by first train, giving you the use of the can free for the first month to let you see if you are satisfied before asking you to pay for them. We sell them at actual cost. Our method of payment is as follows: The cream delivered during the first two weeks in the month is paid for on the 16th to 17th of the same month; the cream delivered during the last two weeks is paid for on or about the 2nd of the following month, so by this you are receiving practically cash for your cream. Should a farmer desire his money before the above dates he has but to drop us a note and a cheque will be sent out to him at once for the amount due."

Page Metal Gates—Good—Cheap

Page Gates have the best quality of steel frames, and are put together in a superior way. The filling is galvanized steel wire, and this filling is so fine in mesh that chickens or smallest pigs cannot get through. They have double steel braces, each having a strength of 3,500 lbs. Hinges and latch are of the best known design.

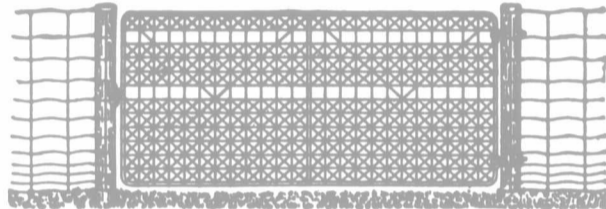
These are some of the reasons why Page Gates are the best.

We are now supplying these gates at only a little more than you would pay for hinges and latch at a store to make your own gate. **THINK OF IT**—A complete Walk Gate all metal, everlasting, ornamental, perfect, for \$3.00 (see price list), or a large Farm Gate for \$6.50. At these prices you should show good business sense by using our gates everywhere on the farm that gates are needed. To prove what we say, look at the following prices, at which we or our local dealer can supply you.

Price List of Single Gates.

Actual Height of Gate	Width of Gate, including Hinges and Latch, being exact distance posts should be set apart.										
	3 Ft.	3½ Ft.	4 Ft.	4½ Ft.	5 Ft.	6 Ft.	7 Ft.	8 Ft.	10 Ft.	12 Ft.	14 Ft.
36 inches.....	\$ 2 50	\$ 2 75	\$ 3 00	\$ 3 25	\$ 3 50	\$ 4 00	\$ 4 50	\$ 5 00	\$ 6 00	\$ 7 00	\$ 8 00
42 inches.....	2 75	3 00	3 25	3 50	3 75	4 00	4 50	5 00	6 00	7 00	8 00
48 inches.....	3 00	3 25	3 50	3 75	4 00	4 50	5 00	6 00	7 00	8 00	8 50
57 inches.....	3 50	3 75	4 00	4 25	4 50	5 00	5 50	6 00	7 00	8 00	8 50

The * indicates that we manufacture but do not keep in stock. Prices of odd sizes made as ordered at 75 cents above a proportionate price. Price of double gates same as that of two singles. Scroll Tops 20c per running foot extra.



NOTE.—All Page Gates and Fences are now painted WHITE. We have adopted this as a distinguishing mark for our goods. Remember, get WHITE Fence and Gates, and you will have PAGE Fences and Gates—the best.

THE PAGE WIRE FENCE CO. LIMITED
WALKERVILLE, ONT.

BRANCHES: MONTREAL TORONTO ST. JOHN WINNIPEG

"Page Fences Wear Best."



Varicocele—Hydrocele
Cured to Stay Cured in 5 Days.

No Cutting or Pain. Guaranteed Cure or Money Refunded.

VARIICOELE Under my treatment this disease is permanently cured. Pain ceases, stagnant blood is driven from the dilated veins, soreness vanishes, every indication of Varicocele is cured to stay cured.

HYDROCELE My treatment for Hydrocele and its complications are obtainable only at my hands. I cure Hydrocele and its complications without pain, without knife, without detention from business, cured to stay cured under bank guarantee.

I cure to stay cured, Blood Poison, Kidney, Bladder and Prostatic diseases, Nervous Debility, Stricture, and allied diseases of men. Remember, others treat these diseases, I cure them and give a Legal Guarantee to cure you or refund your money. My charge for a permanent cure will be reasonable and no more than you will be willing to pay for benefits conferred. My Home Treatment is Successful.

Correspondence Confidential Write me your condition fully and you will receive in plain envelope a scientific and honest opinion of your case, Free of Charge. My books and lectures mailed FREE on application.
H. J. TILLOTSON, M. D., 255 Tillotson Building, 84 Dearborn Street, CHICAGO.

Forest Home Farm.

CLYDESDALES, SHORTHORNS
YORKSHIRES and B. P. ROCKS.

Bulls—four reds and one roan, first-class stuff by Manitoba Chief—2004—and Golden Standard—3486—, and out of thick, heavy cows, Imp. and Scotch-topped. Females, all ages, for sale. Forest Home is headquarters for Yorkshires. Our Winnipeg winnings in the last ten years have been greater than that of any other three herds combined. Boars for sale, ready for service. Orders for spring pigs taken. Prices of cattle and pigs out to suit times.
Roland, C. N. E., Carman, C. F. E.,
Pomeroy P. O.

ANDREW GRAHAM, Prop.

BARGAINS IN SHORTHORNS

Nobleman (Imp.), a Winnipeg winner, of Nonpareil breeding, and Pilgrim (Imp.), a massive, smooth, red bull; also Nonpareil Prince, a straight Nonpareil two-year-old, winner of first at Winnipeg, 1904, and Fairview Prince, same age, another winner this year, along with

FIFTEEN YOUNGER BULLS

fit for service, is JOHN G. BARRON'S present offering for sale. Mr. Barron is crowded for room, so will dispose of heifers and cows at rock-bottom prices.

JOHN G. BARRON, CARBERRY, O.P.R., FAIRVIEW SIDING, O.N.R.

AFTER CALVING

Get the cow into a strong and healthy condition again by giving

ST. JOHN'S CONDITION POWDERS

night and morning for a few weeks. They only cost you 25c. a package.

SOLD BY ALL DEALERS.

THE MARTIN, BOLE & WYNNE CO., Sole Proprietors, Winnipeg, Man.

TO SECURE THE BEST RESULTS

Place an Ad. in the Farmer's Advocate

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

Scotch Shorthorns

Herd headed by Royal Macgregor, an excellent stock bull and prize-winner of note. Young stock of both sexes for sale.

P. TALBOT & SONS, - Lacombe, Alta.

THORNDALE STOCK FARM.

SHORTHORN herd numbers 160, headed by Challenge—3042—and Royal Sailor—3701—, sixteen yearling bulls for sale, and a lot of younger ones; also females of all ages.
T. W. ROBSON, Manitou, Man.

Sittyton Stock Farm

SCOTCH SHORTHORNS

Members of this herd won the two grand championships as Regina Fat-stock Show, 1905; also diploma herd 1903 and 1904.

FOR SALE—Twenty young cows and heifers in calf to Sittyton Hero 7th, my great show and stock bull.

GEO. KINNON, Cottonwood, Assa.

Grandview Herd.

Scotch Shorthorns. Herd headed by Crimson Chief—24057—and Trout Creek Favorite. Stock for sale at all times. Correspondence solicited.

JAS. WILSON, Innisfail, Alberta, Farm 3 miles south of town.



It meets all requirements.

REX FLINTKOTE ROOFING

A post card will bring you samples and full information.

"Look for the Boy on Every Roll."

We are **PROUD** of Rex Flintkote.

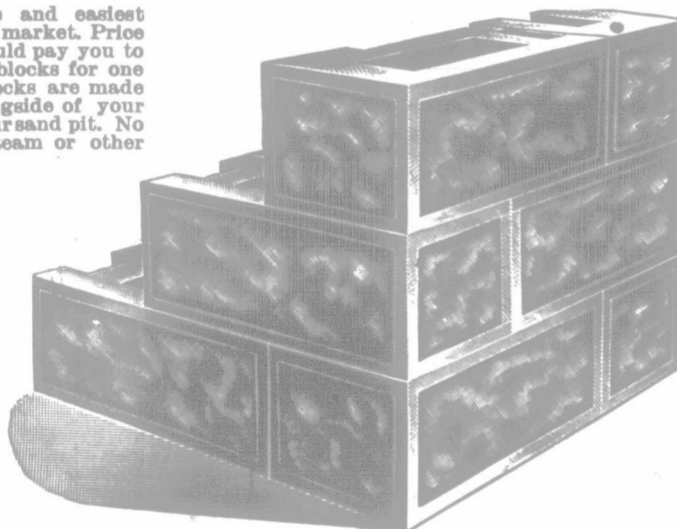
Mackenzie Bros.,
WINNIPEG, MAN.

Dunn's Hollow Concrete Block Machine

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

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

Write for particulars to Dept. N. om



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

June 4  **1905**

RAILWAY

Will resume their Through High-Class

DAILY PASSENGER TRAIN SERVICE

BETWEEN **Winnipeg and Port Arthur**

JUNE 4. STEAMSHIP EXPRESS

WILL BE PLACED IN SERVICE. A magnificent new train—comfortable, attractive equipment—consisting of **CANADIAN NORTHERN FIRST-CLASS SLEEPERS, COACHES OF LATEST DESIGN, EXCELLENT DINING-CAR SERVICE.**

CONNECTIONS AT PORT ARTHUR with steamers of the Northern Navigation Co., Canadian Pacific Line, Booth Line, and Canadian Pacific Railway TO and FROM all points in the EAST.

Detailed schedule will be announced shortly.

BERKSHIRES Imported and Canadian-bred
H. M. VANDERLIP, Cainsville
on T. H. & B. and B. & G. division of Grand Trunk. Telephone and telegraph, Cainsville, Ont.

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

Lost, Strayed or Stolen.

Below is to be found a list of impounded, lost and stray stock in Western Canada. In addition to notices otherwise received, it includes the official list of such animals reported to the Manitoba and N.-W. T. Governments.

This department, not heretofore published in these columns, is for the benefit of paid-up subscribers to the Farmer's Advocate, each of whom is entitled to one free insertion of a notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

LOST.

BALGONIE, Assa.—Since April 5th, 1905, bay mare colt, about a year and ten months old, small white star on forehead, and an old rope round neck, was hobbled when left home; little white above hoofs of hind legs. Finder, notifying the owner, will receive suitable reward. V. Krauss.

LOON CREEK, Assa.—Near Last Mountain Valley, since last November, gray mare, aged, indistinctly branded RUI on left thigh, likely to have sucking colt at side; brown horse colt, three years old, branded RUI on left thigh; bay mare colt, three years old, white underneath, white feet, unbranded; dark horse colt, not haltered, no brand. Frank Workman (28-26-20 w 2).

DALESBORO, Assa.—Since April 23, 1905, large white horse, weight 1,500 lbs., halter on. Math. Fraser (6-3-3 w 2).

PILOT BUTTE, Assa.—Since evening of May 4, 1905, bay broncho mare, 900 pounds, five years old, had harness and halter on when lost. \$10 reward. Finder notify P. M. Bredt, Regina.

Regina.—About the 20th March, 1905, from Mr. Laird's Farm, three miles north, one bay horse, two years old, white stripe on forehead, long mane and winter coat on, hind feet white, unbranded; dark blue mare, two years old, last seen in good condition. Finder will receive reward. Andrias Worobetz, Jones St., Regina.

ESTRAY.

FAIRLIGHT, Assa.—Since about the end of July, 1904, bright bay horse about four years old, short white stripe down face, unbranded. John Marshall (34-11-31 w 2).

MUENSTER, Sask.—Bay mare, eight years old, star on face and off hind foot white, branded PS on right shoulder, and B, with bar over, on left hind leg. T. M. Motion.

PLAINVIEW, Assa.—Mare, undescribed, indistinctly branded heart, with bar over, and SP underneath. (S is reversed), on front of left shoulder. August Johnson (28-24-7 w 2).

OSLER, Sask.—Since April 17, 1905, brown gelding, four to five years old, hind feet white, unbranded; brown gelding, eight to nine years old, front right foot white, left hind foot white, branded lazy HO, monogram, on left shoulder, collar sores on both shoulders. Jacob D. Frieson (19-40-4 w 3).

KAMSACK, Assa.—On Southwind's Kisickonse's Indian Reserve, one light red and white heifer, two years old, unbranded. H. A. Carruthers, Indian Agent.

DISLEY, Assa.—Red-and-white spotted cow, aged, no brands or marks. X. C. A. Browning (36-26-23 w 2).

SUMMERBERRY, Assa.—Brown horse, about five years old, about 1,400 pounds, white stripe down face, left hind foot white. James Crozier (30-17-8 w 2).

ELLERSLIE, Alta.—Red-and-white spotted steer, yearling, unbranded. Ralph Weir.

SOURIS PLAIN, Alta.—Brown gelding, ten or twelve years old, hind feet white, white stripe down forehead, branded H, in side square, on the front of the left shoulder. Jacob Schütz.

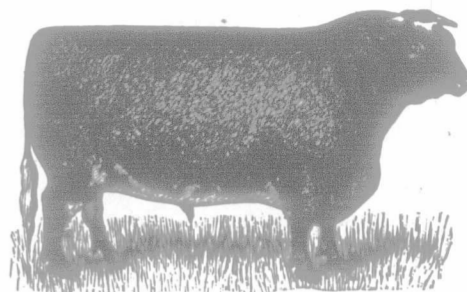
LEDUC, Alta.—Since September last, bay mare, fifteen years old, unbranded, sway back, no other marks. Julius Sommers (12-50-26 w 4).

DRINKWATER, Assa.—Light bay mare, five or six years old, white stripe down face, no brands. Charles Rask (N. E. 23-14-25 w 2).

HALBRITE, Assa.—Since April 19, 1905, two bay mares, one with white stripe down face, weight 1,100 pounds, branded HL, manogram, on right shoulder, foaled about end of April; the other with white on left hind foot, weight 1,000 pounds, halter on, branded 3Z on right shoulder, last fall's colt with her, black. William Blount (22-8-11 w 2).

CRANK, Assa.—Sorrel broncho mare

(Continued on next page.)



Arthur Johnston GREENWOOD, ONT.

Offers the following:

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

SHORTHORNS

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

CATALOGUE.

H. O'GILL & SON, O'GILL, ONT.
JOHN CLANCY, Manager. om

MAPLE SHADE SHORTHORNS



Nine young bulls fit for service. Showing the finest Cruickshank breeding.

Good Size, Quality, Flesh and Bone.

Inspection invited. Catalogues on application. om

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

T. DOUGLAS & SONS, Strathroy, Ontario.

SHORTHORNS and GLYDESDALES

Present offerings: 12 young bulls of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. stallion and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from town. om

PINE GROVE STOCK FARM
ROOKLAND, ONTARIO, CANADA.

Breeders of choice

SCOTCH SHORTHORNS and SHROPSHIRE.

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

MAPLE LODGE STOCK FARM

1864.

Eight very choice young bulls, of the best breeding and from first-class milking cows. A few handsome heifers also for sale, and a few Leicester, om

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

7 Shorthorn Bulls

Choice Scotch-bred ones, for sale at moderate prices. For particulars, apply to

J. & W. RUSSELL, Richmond Hill, Ont.

Yonge St. trolley car from Union Station, Toronto, passes the farm. om

BARREN COW CURE

makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from

L. F. SELLECK, Morrisburg, Ont.

SHORTHORNS for sale IMPORTED AND BRED.

Cows, Heifers and young bulls. Finest quality Scotch breeding. Prices low.

W. DOHERTY, Glen Park Farm, Clinton, Ont.

FOR BEST VACCINATION AGAINST

BLACKLEG

Use Only the Vaccine Made by the Discoverers, namely,

"PASTEUR"

"BLACKLEGINE" is the best and most convenient.

Pasteur Vaccine Co., Ltd., Chicago, New York, San Francisco

It's Easy To Wash



With the special stiff bristled brush which comes with each machine it takes about four minutes to wash the four simple parts that make up the bowl of the

U. S. CREAM SEPARATOR

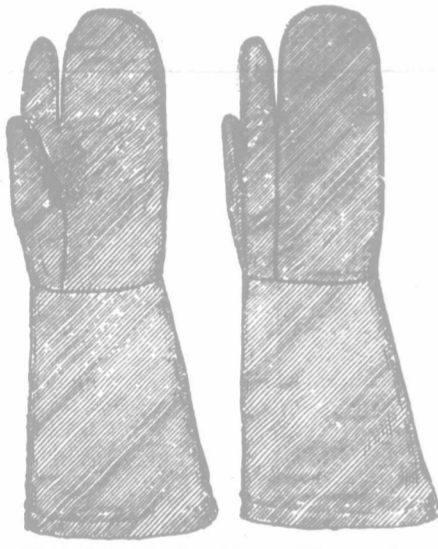
That's a big saving in time and labor over washing crocks and pans or the complicated bowls of other separators. The cleaning of the separator bowl is an important item, as it affects very materially the quality of the cream. Cream that has been run through an imperfectly cleaned separator does not bring the highest price, and cannot be made into the best butter. All the highest scores on dairy butter at the St. Louis World's Fair were won by butter made from cream skimmed by a U. S. Separator. "Better butter" is only one of its many advantages. Our free booklet tells them all fully. Write for one to-day.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

To ensure prompt deliveries and to save freight charges for our Canadian customers, we ship from our warehouses at Montreal, Sherbrooke, Hamilton, Winnipeg, Calgary and Vancouver. NO DELAY.

ADDRESS ALL LETTERS TO BELLOWS FALLS, VT.

PRICES THAT BRING BUSINESS



Muleskin Feeder Glove, 75c. a pair.

Every thrasher and farmer requires these gloves. We will send a well-made, complete suit (overalls and coat) for \$1.50. This suit is made from White Bros. triple twist, double filled,

heavy-weight blue denim. They are double stitched with two-needle machine, are reinforced at points of greatest strain, and have patent riveted buttons. Sizes, 30 to 42 inch waist.

We also sell muleskin feeding gloves, one-finger pattern, well-sewed and durable, 75c. per pair. Buckskin, \$1 per pair.

Tank Pump Outfit, consisting of Barnes or Meyers pump, 20 ft. 2-inch wire-lined hose (N. Y. Belting & Packing Co.'s make) and 10 ft. of 1-inch discharge hose, for \$15.75. We sent out nearly 500 lengths of this wire-lined hose last season, and did not receive a single complaint. Complete set of rasps for Monitor Jr. Clover Huller, \$15.00; three-inch four-tone chime whistle, \$6.50; round bottom steel wagon tank, supported by steel frame, 10-barrel size, \$27.50; 12-barrel size, \$32.50; flat-bottom steel tanks very much less.

We also sell hundreds of books to thrashers and engineers. We sell more of the "Young Engineer's Guides" than any other book. Other books: "Power Catechism," postpaid, 90c; "Farm Engines and How to Run Them," postpaid, 90c; "Rough and Tumble Engineering," postpaid, \$1; "The Practical Gas Engineer," postpaid, \$1. We also sell books on Carpentry, Blacksmithing, etc.

We also offer particularly good values in our Veteran Drive Belts. The 6-inch Veteran has 27 rows of stitches, while other makes have but 23 rows. The 7-inch Veteran has 31 rows of stitches, other makes have but 27 rows. The 8-inch Veteran has 36 rows of stitches, other makes have but 31 rows. The Veteran belts are also considerably heavier and stronger, and have the further advantage that they remain soft and pliable in cold weather. The filler compound used in them is a secret composition, and does not harden in cold weather, thus making the Veteran canvas belt as pliable as a rubber belt in winter.

If you need a drive belt this season, write us at once, and we will make you a price on a Veteran, delivered at your town, which will surprise you. If you require any other goods, such as a suit of overalls, a canvas cover, etc., we can include them in the same shipment, and will prepay the freight. Our 1905 catalogue, containing 100 pages, will soon be out. Send for it.

THE WINDSOR SUPPLY CO., WINDSOR, ONT.

ADVERTISE IN THE ADVOCATE

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

Lost, Strayed or Stolen—Cont.

and light buggy and harness, animal branded on right hip HS, monogram, and on left hip z, bar under. C. Langseth (S. E. 16-22-29 w 2). Hustler.

ESTEVAN, Assa.—Since April 1, 1905, bay mare, four years old. S. Owan Keating (12-5-7 w 2).

HALBRITE, Assa.—Dark bay broncho mare, brand resembling & on left shoulder, white stripe down face. Mrs. Maria Johnson (14-6-12 w 2).

MACLEOD, Alta.—White pony, aged, branded 11 on right thigh, spavin on both legs. Walter Jackson.

GRAYTON, Assa.—Since about April 26, 1905, bay gelding, white face, right hind foot white, heavy mane and fore-top, branded CB, monogram, on right hind flank, indistinct brand on left shoulder; two-year-old filly, white face, hind feet white, left front foot white, both animals have leather halters on. Frank W. Fisher (N. W. 10-12-7 w 2).

MONTMARE, Assa.—Since about April 13, 1905, sorrel mare, about four years old, about 1,200 pounds, no visible brand, had new halter on, had sore front left foot, hind feet white. Clemes Seitz (4-13-11 w 2).

REDVERS, Assa.—Brown pony mare, in foal, branded C S on right hip, small E on left hip, white stripe down face, left hind foot white. R. Chambers (28-9-31 w 1).

ESTEVAN, Assa.—April 1, 1905, bay stallion, about two years old, white hind feet. S. Owan Keating (12-5-7 w 2).

Since April 24, 1905, red-roan stallion, two years old, branded 1 1 1 on left shoulder; bay stallion, one year old, white face. Wm. Douglas (S. W. 12-37-28 w 4).

HAZELWOOD, Assa.—Since April 27, 1905, roan bull, one year old. James Gordon (2-11-5 w 2).

DUBUC, Assa.—Since fall of 1904, bay stallion, two years old, white spot on forehead. E. Gustafsson (6-19-3 w 2).

ROMFORD, Assa.—Since April 23, 1905, black stallion colt, two years old, white star on forehead, left hind foot white. R. C. Riddell (16-3-14 w 2).

COLERIDGE, Assa.—Dark brown stallion, white spot on forehead, about 1,100 pounds, branded reversed inverted J, J L on left shoulder. Daniel Newman (N. E. 22-11-5 w 4).

CARSTAIRS, Alta.—Five dollars reward. One bay mare, branded hanging T on shoulder, weight about 800 lbs. Any information of the whereabouts will be paid the above reward. Benjamin Rosenberger.

ESTRAY.

ELM CREEK, Man.—Sorrel filly, two years old; sorrel filly, one year old, with white strip on face; dark iron-gray filly, one year old, clipped on back. Jas. Kennedy.

IMPOUNDED.

WAPPELLA, Assa.—Bay stallion, about three years old, white face, white muzzle, hind legs white, nigh front leg white, tail mixed with gray. S. Shaw (S. W. 28-14-1 w 2).

A well-known Judge fell down a flight of stairs, recording his passage by a bump on every step until he reached the bottom. A servant ran to his assistance, and, raising him up, said "I hope your Honor is not hurt?" "No," said the Judge, sternly, "my honor is not hurt, but my head is."

QUESTIONS AND ANSWERS. Miscellaneous.

RAISING TWO FOALS.

When a mare is bringing up two colts, do you consider it advisable to supplement the amount of nourishment she can give them with a regular ration of cow's milk? W. H. R.

B. C. Ans.—A mare performing such heavy maternal duties needs to be well fed, and for that purpose nothing will be found better for her than plenty of good grass or clover and say a pailful, twice a day, of equal parts bran and crushed oats, some of which the foals should be encouraged to take, and it will be all the better for them if such is made to the consistency of an ordinary bran mash with milk instead of water.

Bone Spavin

Know it by the lump and the hump—a hard, bony growth on the inner side of the hock joint, usually low down and a little forward of the center of the leg—a quick hitch with the sound leg, and a stiff movement of the lame leg, bearing the weight on the toe, most noticeable in starting.

New cases, old and bad cases, the very worst cases, cases where firing has failed, are cured by

Fleming's Spavin and Ringbone Paste
Guaranteed to cure the lameness for good—may or may not take off the lump. Easily used by anybody, and a single 45-minute application usually does the work—occasionally two required. Write for Free Horse Book before ordering. It gives all the particulars, and tells you what to do for other kinds of blemishes.

FLEMING BROS., Chemists, 46 Front Street, West, Toronto, Can.

Spring Grove Stock Farm SHORTHORN CATTLE & LINCOLN SHEEP.



First herd prize and sweepstakes, Toronto Exhibition, 3 years in succession. Herd headed by the imported Dublin-bred bull, *Bony Morning*, and *White Bull Ramden*. Present crop of calves sired by Imp. Prince Sunbeam, 1st Toronto, 1903. High-class Shorthorns of all ages for sale.

Also prize-winning Lincolns. Apply

T. E. ROBSON, ILBERTON, ONT.

SHORTHORNS FOR SALE.
Three bulls about 10 months old, two roans and one red; 5 one-year-old heifers; 6 heifer calves, all sired by Imp. Diamond Jubilee. Also a few choice cows carrying calves or with calves at foot. For prices, apply to **FITZGERALD BROS., Mt. St. Louis P. O., Clenvale Stn., Hillsdale Telegraph Office.**

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

Nether Lea Ayrshires—Young stock of either sex, from deep-milking families, for sale. Two choicely-bred imp. bulls at head of herd. Correspondence and inspection invited. **T. D. McCALLUM, Danville, Que.**

Tredinnock AYRSHIRES

4 imported bulls from the best milking strains in Scotland head the herd of 75 head. Winnings for 1903 at Toronto and Ottawa; The gold medal and 4 first-prize herds; 38 prizes in all—18 firsts, 6 seconds, 5 thirds, 9 fourths. In the Pan-American milk test, the 2 first Ayrshires were from this herd. Quality, size, milk and tests is our aim. Young bulls and heifers for sale. Price and particulars, apply to **JAS. BODEN, Manager, St. Anne de Bellevue, P. Q. G. T. R. and C. P. R. stations on the farm, 22 miles west of Montreal.**

W. W. CHAPMAN,

Secretary of the National Sheep Breeders' Association.
Secretary of the Kent or Romney Marsh Sheep Breeders' Association,
and late Secretary of the Southdown Sheep Society.
Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.
Address: **NOWBRAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.**
Cables—Sheepcote, London.

MOUNT FARM BERKSHIRES

CHOICE-BRED STOCK now for sale; PAIRS SUPPLIED NOT AKIN. Inspection requested, and correspondence invited and promptly answered.
O. G. BULSTRODE, Mount Farm, QU'APPELLE, ASSA.

YORKSHIRES

We are now able to ship young stock, six weeks and two months old, out of imported and Canadian-bred sows, at prices that should appeal to you, if you want to get some well-bred young stuff. We can supply pairs or trios, not akin. Write us for prices.
WALTER JAMES & SONS, Rossier, Manitoba

Advertise in the Advocate

MAKE A
FREE TEST
OF
International Sheep Dip
THE
BEST AND CHEAPEST

CURE FOR
Mange, Scab, Bot Flies, Lice, Canker, Foot Rot, Grease, Ring Worm,
Ulcers, Sores, Sore Udders, Scales, Bites, Stings, Fleas, Scald Blight,
Maggots, etc., and prevents Hog Cholera and Contagious Abortion.

As a Sheep Owner you will be Interested in this

For a number of years we have realized the immense field for a good sheep dip, and, to be exact, three years ago we started experimenting with a view of producing a dip that would not only cure the various parasitic diseases of sheep, but in addition to this would, at the same time, act as a tonic to the skin, stimulating the roots of the wool to renewed activity, and thus produce a heavier growth of the fleece. We have at last succeeded beyond our expectations. Time after time just as we felt that we had mastered our project we would discover some undesirable feature which would necessitate that laying aside of our dip and a new start was made. But we profited by our mistakes, as one must, for no man can spend three years on one line of work and not profit by his mistakes. Those same mistakes cost us money, and we consider they are worth all they cost. They taught us what not to do, and when one has learned all the things he must not do it is a comparatively easy matter to get results.

Knowing "International Sheep Dip" as we do assures us that there is a splendid future for it in the Dip field.

We can tell you what "International Sheep Dip" is and what it will do. But—"International Sheep Dip" can tell its own story much more eloquently for, after all, results speak loudest.

Some reasons why it is best—

- It is a 20th century product and we have profited by the mistakes of others.
- It gives an absolutely perfect solution with water.
- It is positively non-poisonous.
- It kills all external parasites.
- It soothes and heals the irritated and sore skin.
- It stimulates the roots or follicles of the wool, increases the yield, and therefore not only gives a heavier growth but gives a fibre of a finer quality—that can be readily seen by the increased brilliancy and transparent lustre at the root of the wool.
- It is the most economical dip on the market.
- Last, but not least

Here our faith is not demonstrated. Just fill in the blank at the bottom of this sheet and we will ship you enough "International Sheep Dip" to dip the entire flock.

If it cures the diseases and you are entirely satisfied, pay us. If not, we don't want a cent and will credit your account in full. We believe in the sheepman and we believe in "International Sheep Dip." This will explain why we make such an offer. When you dip your sheep you expect results, and unless you get them you should not pay for an unsatisfactory article.

Such a proposition as ours could not be made on any but an article of undoubted merit. We know that International will do all we say in the majority of cases. Should it fail in your hands we cheerfully cancel your account. We can do no more. May we hear from you! We have a paid-in capital of \$2,000,000 which should guarantee our good faith.

SPECIAL OFFER

Fill out and Return this Blank

International Stock Food Co., Toronto, Can.

Please ship me.....gallons of International Sheep Dip at your special price of \$1.25 per gallon or \$1.00 per gallon if my order calls for over 25 gallons; for which I promise to pay in 90 days, providing its use is satisfactory.

SPECIAL AGREEMENT

If International Sheep Dip is not satisfactory I can return to you freight prepaid the balance I have on hand and receive credit in full of my account.

YOU ARE ALSO TO SHIP ME EXTRA AND FREE FOR FREIGHT

Enough of your other preparations to cover the cost of freight from Toronto to my shipping point.

Fill in this Stock or Land Statement or give Bank or Dealer Reference.

I give the following STOCK STATEMENT or LAND STATEMENT or BANK REFERENCE for the purpose of having you ship me the above goods.

I ownSHEEP,Cattle,Horses,
.....Hogs. I own a.....acre farm. I rent a.....acre farm.

Thousands of Stockmen give us Bank Reference. If you give Bank Reference, or Refer to your Dealer, use this line.....

Sign your Name on this line.....

P.O. Address.....Co.....Province.....

Ship to.....Care.....Ry.
Give railway shipping point on this line if your town is not on railway. Name railway on which your town or shipping point is located.

THIS OFFER MAY NOT APPEAR AGAIN
DON'T DELAY--SEND TO-DAY

GOSSEP

The farmer of to-day is a great mechanic, compared with his predecessor of ten, twenty, or thirty years ago. His latest successful ventures in the mechanical line are with gasoline engines, for such purposes as cutting wood and feed, pumping water, and the hundred and one duties that call for power on an up-to-date farm. In purchasing farm power the best is none too good, and the Stickney line of goods handled by the Ontario Wind Engine and Pump Co., Toronto, Ont., and Winnipeg, Man., is well worthy of more than passing inspection when a purchase is to be made.

McLaughlin Bros., the importers of horses on a mammoth scale, write us as follows: "Our last importation received on April 4th was one of the finest lot of stallions ever brought to this country and is just about exhausted. We are, however, in receipt of a cablegram this day from Mr. James McLaughlin advising us that he leaves London to-day on the Minnehaha with our second importation this year. These horses are due to arrive in New York on Monday the 15th. Mr. McLaughlin informs us that we will find this lot to consist of equally as fine stallions as our last. We are finding it very hard to buy the right kind of horses for our rapidly-increasing trade. We import nothing but the best, and for this reason we are enjoying to-day a trade in good stallions second to none. It has always been our rule that the best are none too good for the enterprising farmers and breeders of America, and this fact is one of the reasons that gives us the confidence of the farmers and breeders of this country to-day."

AN APPRECIATION OF CORN.

The cleanest, brightest and most beautiful grain that grows is Indian corn. It is beautiful as the plants show in fresh green rows on the mellow soil during the warm showery days of early summer; corn is beautiful when the heavy growth of dark green leaves, glossy in their vigor, are rustling in the breeze and the sicken tassels are bursting from the swelling cobs which enrich the stalks and the curious blossoms on the top are dropping the pollen on the silk to fertilize the forming grain; most beautiful of all are the ripe and yellow cobs that load the field with abundance of the best of food in quantities four or five times as great as any other grain will produce. It is a mistake to think that Indian corn will not grow in Manitoba. Corn will ripen wherever wheat will mature. During the twenty-five years we have been in the country we have raised corn in small quantities nearly every season, and never had a failure. The Sioux Indians on the reserve at the mouth of Bird-tail River raise abundance of excellent corn every season, and have the very best seed, a small yellow variety. Indian corn does not exhaust the ground, it does not encourage a growth of weeds, very little machinery is required in the cultivation, and a large quantity of corn is produced on a small portion of ground. It is not because corn will not grow in Manitoba that the planting is neglected, it is because farmers would rather drive horses than handle a hoe! Corn need not be raised for export in Manitoba, but a few hundred bushels of the beautiful yellow grain is a good thing to have; it is good for the horses, the calves, the hens, the turkeys and the hogs, and when a few bags of corn have been made into meal it can be prepared in many ways as human food of the very best description. A corn field will not wear out like a wheat field, and if it did the ground could be easily enriched, for a small quantity of land will produce a large yield of grain.—[Hartney Star.]

[Note: It is something to flatter the farmers about that they do not in these days seem to use the hoe. Horses and machines have largely absorbed the need for it. Corn, to be properly grown, requires considerable machinery to secure proper cultivation. It is not so easy as largely as yet on a part of the field, but hard to obtain variety that will mature early enough.—Ed.]

Antiseptic and Healing.

THERE ARE SCORES OF WAYS IN WHICH EVERY FAMILY FINDS USE FOR

Dr. Chase's Ointment

Dr. Chase's Ointment is so pure and clean, so remarkably soothing and healing and leaves the skin so soft, smooth and clear that it becomes a pleasure to use it.

Though best known because of its extraordinary control of the most torturing itching skin diseases, such as eczema, salt rheum, psoriasis and tetter, it should not be forgotten that Dr. Chase's Ointment will not injure the most delicate skin, but is in reality a skin beautifier of great value.

Dr. Chase's Ointment is used with splendid results as a cure for:

- Chilblains and frostbites.
- Chapped hands and face.
- Sore and inflamed eyelids.
- Poisoned skin.
- Scald head and baby eczema.
- Sore feet and toes.
- Pimples and blackheads.
- Rough, red skin.
- Hives and insect bites.
- Barber's itch.
- Scalds and burns.
- Itching peculiar to women.
- Ringworm and pinworms.
- Old sores and bed sores.

Especially where there are small children scarcely a week passes in which Dr. Chase's Ointment would not prove useful.

By noting the cures reported from time to time in this paper, you will find that Dr. Chase's Ointment is one of the greatest healing preparations known to science, frequently curing eczema and psoriasis when all other means have failed.

Sixty cents a box, at all dealers, or Edmanson, Bates & Co., Toronto.

A well-known suburbanite who had been greatly troubled by the depredations of a neighbor's goat was driven to desperation one day when he learned that the animal had consumed a favorite red flannel golf coat of his. Determined on the goat's destruction, he employed an unscrupulous small boy who lived in the neighborhood to secure him to the railroad track just before the daily express was due. Some days afterward a friend inquired with interest if the goat had been effectually disposed of.

"Not on your life," was the disgusted answer; "that goat has a charmed life. He coughed up that red golf coat of mine and flagged the train."

RAINY RIVER MAN HAD TROUBLES

Till Dodd's Kidney Pills Cured His Kidneys.

Then His Rheumatism and Other Pains Vanished Once and for All—His Case Only One of Many.

BARWICK, Ont., May 29.—(Special).—That Dodd's Kidney Pills will cure Rheumatism, or any other disease resulting from disordered Kidneys, is the experience of many of the settlers in this Rainy River country. The case of William John Dixon, of this place, is a fair sample of the work the great Canadian Kidney Remedy is doing.

"I had Rheumatism so bad I had to use a stick to walk. I had pains in my back and right hip, and I had no comfort in sleeping.

"I could no more than dress or undress myself for nearly two months, and I was for nearly three weeks I could not lace my right shoe.

"My brother advised me to try Dodd's Kidney Pills and I did so. After taking three boxes I could walk around and lace up my shoes and do my work. Six boxes cured me completely."

Dodd's Kidney Pills are the one sure cure for sick Kidneys. Sick Kidneys are the cause of nine-tenths of the ills the human family suffers from.