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AND HOME MAGAZINE

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VOL. XLI.

WINNIPEG, MAN.

JANUARY 17, 1906.

LONDON, ONT.

No. 695

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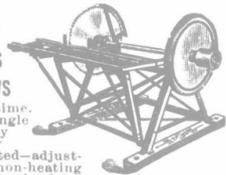
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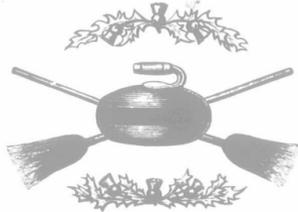
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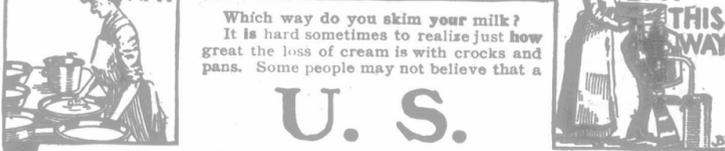
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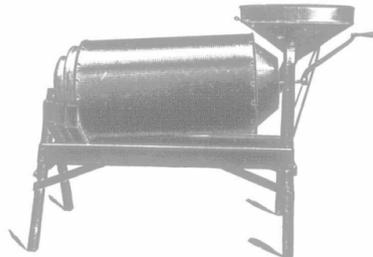
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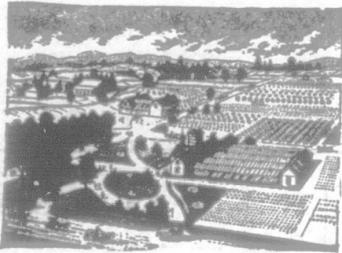
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# FARMER'S ADVOCATE

AND HOME MAGAZINE

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

VOL. XII.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

NO. 695.

WINNIPEG, MAN. JANUARY 17, 1906. LONDON, ONT.

## Editorial.

### A Sample Market is Needed.

About a year ago the Grain-growers, in annual convention, declared, by resolution, for a sample market and order point at Winnipeg, but little has been done since to bring about such a desirable thing. The reason for this inactivity towards securing what was so emphatically declared for, is that the persons charged with the carrying out of the wishes of the convention, after considerable deliberation, apprehended that if the resolution accomplished its end, mixing would result, and the quality of our wheat be impaired, and the reputation of the grain suffer on the British market.

The crop now being marketed, while averaging a high grade, has, on account of smut and weeds, been subject to severe cuts in price. The loss to farmers whose wheat fails to make 1 Nor., going rejected on account of a little smut, is a heavy one, and no discrimination is able to be made under the present system between "slightly smutty" and "smutty" wheat, and the loss will amount from 5 to 10 cents a bushel in nearly all cases. Under the system now followed, the slightly smutted wheat is mixed with the smutted wheat and is impaired thereby, and cannot possibly improve the grain, as it is all classed smutty, the producer standing all the loss; while in the case of the "slightly smutty" sample, such might have been avoided partially if sold on a sample market, as in the case of slightly smutty wheat scouring would fix it up to be all right. During December a very large percentage of wheat—about ten per cent.—came forward smut-tainted, and the loss would probably run as high as 10 cents a bushel to the shipper of the wheat—a loss which, had there been a sample market available, would have been lessened.

The up-to-date treatment of erring members of the human race is not based, fortunately, on the same principle as that in handling rejected wheat. The experts in criminology believe in separating, as it were, the sheep from the goats, and do not believe in cooping the boy who pilfered an apple from a store with the fellow who has been making his living systematically by thieving. It is just as reprehensible to throw wheat very slightly affected into a bin with badly-smutted wheat. The argument that the quality of our wheat would suffer under sample market conditions is, perhaps, all right in theory, although we doubt it; it certainly hits the producer in practice for lack of such a market. It would take some nicety of figuring to make out which was the greater loss—that feared from the deterioration in quality, result of sample markets; or that really felt by the shipper of slightly-smutty wheat. The loss on the latter is felt acutely; the other is problematic. Then, again, it is a question whether the farmers of Canada do reap any benefit, as compared with U. S. farmers, for the higher standard set here to qualify for No. 1 Hard—that is an open question. The Chief Grain Inspector is noted for the severity of his gradings, and we believe he is right in being on the safe side. There are now mills in Winnipeg, or at Keewatin and Kenora, sufficient to warrant the making of Winnipeg an order point and sample market. Such would tend to encourage milling in this country, mean the employment of more labor, and therefore a bigger home market for farm produce, desideratum attained without the putting on of obnoxious customs tariffs, and would also mean a saving on freight of wheat offals, and the use of much of those offals for feed purposes in the West.

### Buying on Credit.

"The Farmer's Advocate" has been prosecuting an enquiry among leading Canadian and American manufacturers in order to ascertain if farmers would not be greatly advantaged by the more general adoption of the cash system in the purchase of manufactured articles. It is a matter of common knowledge that all over the country promissory notes are given for a large proportion of purchases. Probably not more than 20 or 25 per cent. of machines sold at present are paid for in cash, and "cash" means in thirty days, or even with some implement manufacturers within six months, the balance being paid in instalments, with interest, for periods ranging from six to thirty-six months. Is this a good system for the farmer? How did this everlasting credit, credit, credit, come about? Cannot a better plan be reached? With the operations of 1905 practically over, let us do some thinking for the future that will crystallize in action.

As a rule, we are most concerned about the selling end of our business—what shall we get for wheat, cattle, hogs, butter, cheese—and give little heed to what is equally important, viz., our system of buying what is required for the operations and life of the farm. Scarcity of cash in certain years or seasons, a contingency which the settler in new districts must nearly always face, has been largely at the foundation of the credit system, and the scarcity of efficient farm help in increased expenditures for labor-saving apparatus. Farmers in years gone by asked for credit, and our older agricultural communities has induced the manufacturers met the demand, not because they wanted to, but because they had to. We are satisfied that they would much prefer cash or a short-date credit, and are constantly endeavoring to shorten credits. Once the credit habit was acquired, it grew. Human nature is prone to put off the "day of reckoning." Under the persuasive eloquence of the salesman, payment a couple of years hence looks easy. Orders are freely given, and presently the notes begin their inexorable grind. To the manufacturer it must involve a very large amount of expenditure in the credit department for extra office help, postage, stationery to keep track of accounts, notes and collections. Interest, too, has a way of growing day and night, rain or shine. Who is to foot the bills for all this? Somebody must, and we surmise that in the price of the implements, or interest on notes, provision will be made so that the burden of the leakage will ultimately be borne by the purchasing masses, or else the shrinkage between cost of production and returns will be sufficient in time to put the manufacturer out of business if he has not sufficient capital behind him so that virtually he can be his own banker. The money tied up in paper could surely be used to good advantage in the business, reducing the cost and improving the quality of the goods. From an economic standpoint, the credit system does not seem to be sound, and it does appear that the whole trend of modern business methods emphasizes the position that credit is wasteful, and that the cash system is best for all concerned. One manufacturer, referring to what are, perhaps, extreme cases, says: "We have found that customers will often pay the long price on long time, involving an interest of probably ten per cent per annum, while at the same time they have money in the banks at low rates of interest." We are inclined to believe that the man who pays cash should have an advantage of 8 or 9 per cent., although one of the largest concerns in the country assures us that they do not get as large a rate of interest on their notes from farmers as might be inferred, and that the difference between cash and credit

is somewhat less than is commonly supposed. Be that as it may, the effect of buying on long time is obviously costly, placing an undue premium upon capital, and resulting in less care being taken of implements than if they were paid for in cash, but which many do not care to do till they have the opportunity of trying their machinery. The value of that privilege is, however, probably overestimated, as manufacturers guarantee their machines to do satisfactory work, and in these days they cannot afford to insist on farmers keeping machines that will not do so. As a result of our enquiries, we are satisfied that the adoption of the cash system would not only benefit farmers, but manufacturers and intermediary dealers as well, and it is satisfactory to find that, partly because of the improved agricultural conditions of the country, a slightly larger percentage of purchases is being settled for on a cash basis. When farmers come to realize the substantial advantage that it should bring to them, the rate of improvement in that respect will be very much more rapid. In a subsequent article we will go more fully into the reasons in favor of the cash system, as compared with the present credit plan, indicating the workings of the latter and the probabilities of a change coming about.

### Are Canadian Women Superior to Our Men?

A few weeks since we met an American tourist who, finding that he was talking to a newspaper man, promptly delivered himself of an impression he had formed regarding Canada and Canadians. "I was standing a couple of hours this afternoon on the street corner of — (mentioning a leading Canadian city), watching the crowd pass by, and I was struck with the fact that the women were much superior to the men. The ladies were fine, intelligent-looking, stately women that would compare more than favorably with the best in the States. In fact, the only parts I know where they are as good-looking are the New England States, Wisconsin, and the far Northwest. The men, for the most part, were rather ordinary-looking, both physically and mentally. I have been in Canada several times, and have noticed this before. Even when you find a likely-looking man, if you get into conversation with him, you are liable to be disappointed. I attribute this to the fact that you have not been growing very fast; you have been comparatively poor in professional and business opportunities, and a large proportion of the cream of your male population has been drawn away. Canada produces an exceedingly fine class of people, but has not succeeded in keeping her best men at home, consequently you have been, to a large extent, deprived of the quickening influences which result from keen competition with clever, progressive men, hence the clever men you have retained have not developed as with us. Your women have not been attracted from you to anywhere near the same extent, consequently the average of Canadian womanhood is much superior to the average of Canadian manhood."

While it has long been a matter of painful observation to us that, as our friend candidly points out, we have suffered in manifold ways from the automatic process of adverse selection that has been going on for generations, it is cheering to note that the tide now seems to have turned, and instead of Canada losing her best men to the States, most of the restless progressives are now making their way to the new Canada in the West, while others are finding a broadening outlook in the neglected fields at home, and in not a few cases the Dominion is now drawing upon the flower of the agricultural population of the Republic. While the Americans were developing so

# THE FARMER'S ADVOCATE

## AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN MANITOBA  
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2. TERMS OF SUBSCRIPTION.—In Canada, United States, England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00 when not paid in advance. All other countries, 25c.
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much faster than we they were bound to attract from us the progressive element; but now our century has come, and it is certain that we shall not only keep a larger number of our best men at home, but draw from the south as well. Incidentally, the greatest influence in this direction is the advanced and progressive agriculture we are developing. So we may cheerfully look facts in the face and admit the characterization of our self-styled critic without being alarmed thereat.

One thing we could not understand, however, is why he should find such a marked disparity between the standards of the two sexes, seeing that many of our daughters as well as our sons have in the past been allured by the opportunities in Uncle Sam's domain. But though it seemed to us that he was exaggerating considerably, we had enough chivalry to feel glad he had words of such high praise for our sisters, wives and daughters, for, while both sides of parentage count, there is no gainsaying that the mainstay of the nation is the home, presided over as it is by wife and mother. It is encouraging to reflect that, though we have lost some of our people by emigration, so long as we still have such a high standard of wifehood and motherhood we hold the leaven of perpetual virility, and the destiny of the nation will be safe.

### The Bravest Battles.

The bravest battle that ever was fought,  
Shall I tell you where and when?  
On the maps of the world you'll find it not;  
'Twas fought by the mothers of men.  
Nay, not with cannon or battle shot,  
With sword or noble pen;  
Nay, not with eloquent word or thought,  
From the mouths of wonderful men,  
But deep in the walled-up woman's heart—  
Of woman that would not yield,  
But bravely, silently bore her part—  
Lo! there is the battlefield,  
No marshalling troops, no heroic song,  
No banner to cheer our war;  
But, oh these battles! they last so long,  
From babyhood to the grave.

—Joaquin Miller.

## Horses.

### Ancestry of Shires and Clydes.

A writer in the Mark Lane Express says: "There is no need for English and Scottish Clydesdale breeders to fear that they will encounter any serious opposition in foreign lands. South America and other countries will be able to take, and will, indeed, require, our stallions and mares as they have always done, for the tendency in most countries to which our island acts as a stud farm is for our breeds to lose both size and substance and character in a very few generations, unless recourse is frequently had to our native strains. Indeed, it would appear as if the more successful an English or Scottish breed is in a foreign country, the better it is for English or Scotch breeders, and the better market there is for their stock.

"Professor Ridgeway, speaking of the Clydesdale horse, says that he is derived from the same source, and is practically of the same breed as the Shire. I am afraid this will arouse the ire of some of my Scottish friends, but it is, nevertheless, a fact that there is no gainsaying. The history of both breeds show distinctly that their size and power is due in a great measure—if not entirely—to horses imported from Flanders. Nor is this all. In the early years of what I may, perhaps, call the Clydesdale movement, and in the years immediately preceding the formation of the Clydesdale Horse Society, there was a large importation of the heavy type of Shire mares into the valley of the Clyde. Lincolnshire, indeed, was thoroughly exploited by Scottish dealers, and the best customers for weighty mares at the Lincolnshire fairs were Mr. David Riddell and his confederates.

"It is unnecessary to enter into particulars of the facts which led up to the formation of the Select Clydesdale Horse Society of Scotland, a society which was formed some six or seven years after the formation of the Clydesdale Horse Society of Great Britain and Ireland, which latter society was formed in 1877. The late Mr. Lawrence Drew took a leading part in the formation of the society, and Mr. David Riddell and other breeders of eminence gave it hearty support. So far as I know, the society only published two volumes of a studbook—at any rate, that is all I have—and after Mr. Drew's death it languished, and eventually was dissolved.

"At the time it was in being, however, it excited a considerable amount of attention. All writers upheld the contention which has since received the support of Prof. Ridgeway, that the Clydesdale and Shire horse were identical, that they had been developed on different lines, and that the best possible cart horse was the produce of a cross between the two. This being, as they maintained, fully established, they urged an amalgamation of the two societies. It was, however, scarcely likely that this would take place. There were too many conflicting interests, and the two societies had been established too long to admit of any amalgamation. So, though the controversialists had the best of the argument, their efforts had no immediate practical result.

"That they had a practical result, however, will, I think, be admitted by those who remember what the Clydesdale and Shire horses were like twenty years ago. The Clydesdale had the best of legs and feet, but was light on the back, deficient in back ribs, and unless his immediate ancestors contained a large proportion of English blood—which was generally the case in horses that came to the front—he was wanting in size. Nowadays, the Clydesdale has, to a very great extent, lost that weak back and light middle which the critics used to find fault with, whilst the hard, flinty bone, big, well-shaped feet and silky feather are maintained.

"It used to be the boast of the Clydesdale men that sidebones were practically unknown amongst the breed. They were, at any rate, plentiful enough amongst the Shire horses, and in the early days of the Shire Horse Society's shows there were plenty of Northern breeders who scoffed at the coarse feather, rough bone, s'd bones and moderate feet of the Shire. But now we have altered all that. The coarse, curly "hair" has developed into feather of silky texture, the bone is of the flinty texture which is so desirable a quality, the feet are well shaped, with the quality of the horn tough, and a greasy-legged Shire is now as unknown as at one time he was common.

"It is not a little curious, when one comes to think of it, how the two breeds have, as it were, "approached" each other in characteristics during the last twenty years, and how the results, which it was at one time wished to bring about by a mixture of the two breeds, have resulted from judicious breeding on Studbook lines, and judicious management. For there is no doubt that a great deal of the improvement of the Shire horse's feet and legs is due to a more natural treatment of the individual and to the doing away with that system of forcing which, injurious enough to any breed, must have been much more

hurtful to a heavy-carcased and somewhat gross horse like the Shire.

The Select Book of the Select Clydesdale Society of Scotland is now practically an unknown volume, but it is interesting to dip into its pages occasionally. The first directors were Mr. Lawrence Drew, chairman; Mr. David Riddell, Mr. Peter Brown, Bishopston, Renfrewshire; Mr. Thos. Muirhead, Townhill, Dunfermline; Mr. Thomas Brown, Skellyton, Larkhall; Mr. James Smellie, Stravenhouse, Carlisle; and Mr. John White, Nether Craigends, Renfrewshire; and amongst the three hundred and odd members were some of the most eminent breeders in Scotland and the north of England. There can be no doubt that the Society sustained a severe blow by the death of Mr. Lawrence Drew, and had that gentleman lived a few years longer, there is little doubt but what we should have heard more of the Select Clydesdale Society.

"I have pointed out already that the work of improving Clydesdale and Shire horses has been well done, on the lines laid down by their respective breed societies, and it is quite likely that had there been anything approaching the present state of things in existence twenty years ago, we should never have heard of the Select Clydesdale Society. But that society did much good in tracing the history of some of those horses whose names appear in the pedigrees of famous stallions in the Foundation Volume of the Clydesdale Horse Society's Studbook. For instance, there is Tintock, a pure-bred English horse, and was purchased in Cambridgeshire by Mr. Alexander Galbraith, of Croy, Cunningham, Killearn. Tintock travelled the Stratherrick district, and was famous as the sire of good mares. The great stallion, Lord Salisbury 1205, was of a Tintock mare, and other good mares by him, Auchinbroig Darling, the dam of Mr. Martin's Damsel and Diana Vernon, Mr. McNabb's Princess, and that great mare, Keir Fanny.

"Another famous Clydesdale stallion that had an English origin was Lord Lyon, his dam having been purchased in Derbyshire; then, Emperor, a great winner in Scotland and a great sire, was an English horse that was bought in Cambridgeshire by Mr. Andrew Johnston, of Aberdeenshire. His most notable son was probably Lord Clyde, the sire of Old Times, from whom many notable Clydesdales are descended. Another striking instance of an English horse that made a mark in the Clydesdale Studbook, is that of Mr. Robert O. Watson's Champion. He was bred by Mr. Neville Melbourne, Lakehouse, Fillingham, Lincolnshire, and was by Napoleon—Bud by John Bull."

### Information re Percheron Registrations.

At the present time, the only record of Percherons recognized and approved by the U. S. Government is that issued by the Percheron Society of America, although we understand that the Dominion Live-stock Commissioner purposes starting a Canadian record. The Secretary of the above Society kindly sent us samples of the various papers used by them for recording Percherons. The pedigree certificate is an ornate piece of work from the standpoint of print-shop architecture, although a saddle and a bridle suited for a coach horse looks a little incongruous on a draft-horse certificate. Perhaps it is an evidence of atavism, whether of the days of chivalry or the Apache, we are unable to say; suffice that the certificate is large enough to wear as a chest protector. A better ornament would have been a reproduction of some of those magnificent two, four or six-horse teams furnished annually by the breed to the Chicago International. The application form for registry is very good, especially in the matter of showing the breeding of an animal made out for four crosses in the extended form. The Society is a joint-stock company, shares in which cost \$10.00 each.

We quote from Sec. Geo. W. Stubblefield's letter as follows:

"I wish to say this Association took over all records pertaining to the Percheron breed on May 9th, 1904. We do not recognize any certificates issued by S. D. Thompson since that date. In other words, any certificate bearing a number higher than 35,912, with S. D. Thompson's signature, is not recognized by this Association. Any certificate bearing a number lower than that with Thompson's signature, stands recorded in the Percheron book. I enclose you a blank certificate, showing the proper signatures, which all certificates should have which are dated since May 9th, 1904. It would save trouble and time if you would not accept any pedigrees that are without the signatures of H. G. McMillan and Geo. W. Stubblefield (president and secretary, respectively), as we are quite anxious to co-operate with you in anything that will assist to further the Percheron interests in Canada."

The following are the requirements for registration in the Society's book:

First.—Any stallion or mare previously recorded and registered in the Percheron Studbook of France. The original certificate of registration

in said Studbook of France must be submitted and exhibited with the application.

Second.—Any stallion or mare whose sire and dam are both recorded and registered in said American Percheron Studbook. A competent affidavit of the breeder, showing all required facts and conditions, must be first presented.

Third.—Any stallion or mare bred in France and enfolded in America, whose sire and dam are both recorded in the Percheron Studbook of France. The card of service, supported by the affidavit of the French breeder, must be presented with all applications in such case.

**IDENTIFICATION.**

A description of each animal presented for registration, showing its color, marks, appearance, peculiarities, and any other matter aiding in its identification, shall be contained within the application and recorded within the registration, and in the certificate issued for the same.

A very commendable rule is that an affidavit made before a notary public must be furnished before a duplicate certificate will be issued.

**Bitting Horses.**

The value of a horse, and the comfort and safety with which he can be driven or ridden, depends greatly upon his "mouth"; or, in other words, the manner in which he responds to the tension of the lines or reins upon the bit. In order that both horse and driver may be comfortable, he (the horse) should not be afraid of the bit, but should bear gently upon it, at the same time must not pull hard or fight it. A horse's "mouth" depends largely upon his early education, or the manner in which he has been taught to respond to pressure upon the bit. The too common practice of allowing a colt to run unbitted until he has reached the age at which he is to be put to work, and then, without any previous preparation, putting a bit into his mouth, putting him to work or to drive, is responsible for the large percentage of poor-mouthed horses, some of which have apparently such tender mouths that they cannot bear any reasonable pressure upon the bit, but are continuously "letting go" of it, salivating, throwing their heads up in the air, and distributing the saliva over the driver or rider, and acting generally in an irritated manner if pressure be put upon the reins. Others, again, pay little attention to reasonable pressure on the bit, but appear to want absolutely no pressure or extreme pressure. They will probably walk fairly well with a loose rein, but so soon as asked to trot will lug or pull upon the bit to such an extent as to make the application of the necessary restraint both uncomfortable and tiresome for the driver. There are many other undesirable habits which horses acquire from want of reasonable and rational attention to "bitting." Horses should be "educated," not "broken" to the bit. In fact, the distinction between the two words should always be borne in mind by those handling young horses. The angles of a horse's mouth are very sensitive, being highly supplied with nerves and clothed with very fine, delicate tissue. The object in "bitting" should be to retain the sensibility to touch, and teach the animal to respond readily and promptly to moderate, or, we might say, slight pressure.

There are a great many patterns of bits, many of which are so severe that they should not be used under any circumstances. The average horse, if properly bitted, does not require a severe bit, but is safe and pleasant to drive with an ordinary jointed or straight one. The use of severe bits irritates the mouth to such an extent that he becomes excited, and will pull harder than on an easy one. This more or less constant irritation excites inflammation, with a consequent effusion which has a tendency to become organized, the parts become thickened and indurated, or calloused, and lose their sensibility to the touch on account of the abnormal coverings formed over the nerves, and the horse becomes a confirmed puller, and is often unsafe to drive unless with a very severe bit. Of course there are some horses so utterly void of brains, or so full of congenital cussedness, that, notwithstanding all care, will never have good mouths, but, fortunately, they are comparatively few.

There are many methods of "bitting" horses, but I think any reasonable man will admit that the process should be somewhat gradual. The writer approves of the following plan. It requires time and some trouble, but we think it is time and trouble well spent, as things done in a hurry are seldom well done. The bitting process may be begun at an early age—the first winter of a colt's life is a good time—but be it delayed or neglected until he has reached a greater age the process should be the same. A light bridle—say a common riding bridle—with an ordinary snaffle bit (Fig. 1) should be put on, and left on while

the colt is in a box stall, paddock or yard, once or twice daily, until he becomes accustomed to the bit in his mouth, and ceases fighting it. A bit called a "breaking snaffle" (Fig. 2), with a tag in the center, which hangs down over the tongue, is sometimes used for this purpose, but I have found that it irritates the colt more than the plain snaffle, hence I prefer the latter.

When the colt has become accustomed to the bit, as he will soon do, and will drink and even eat with it in his mouth, slight tension should be applied, in order to teach him to yield to the



Fig. 3.

restraint of the bit. This tension can be best applied by the use of a "dumb jockey" (Fig. 3), which should be put on for a few hours once or twice daily in stall or paddock. The bearing reins should be gradually shortened as increased tension is required, until he holds his head in the position we desire. A portion at each end of each rein is elastic, and when the colt stretches out his head the elasticity allows the reins to lengthen, but when he ceases stretching it will fetch the nose back to the desired position.

After he has worn this a few times he may be taken out, with a long rein attached, and lounded. The cut shows a horse with lounding rein attached to the nose band. A dumb jockey can be improvised by placing a surcingle around the colt; a buckle should be attached to it on each side, about three or four inches from the center, and a strap extend from each buckle to the bit ring. It is much better if a portion of each rein be elastic. This elasticity can be supplied with a spiral wire spring or a foot or two of round rubber, or a small rubber hose. The reins, as with the jockey, are gradually shortened as required. This practice, in whatever way the tension is applied, has the effect of causing the patient to yield to restraint without altering the tissue of the mouth, and we find that horses that are "bitted" somewhat after this fashion usually have "good mouths." Of course it is quite possible to spoil a horse's mouth, even if he has had the desirable education. Care in the selection of bits should not cease when the animal is actually put to work either in harness or saddle.

We consider the ordinary jointed bit (Fig. 4), or the ordinary straight bit (Fig. 5), either of which may be covered with leather, or rubber if



Fig. 4.



Fig. 5.

desired, is the proper kind of a bit to drive on the road or team horse.

When a horse has acquired the habit of pulling, either from bad management or other causes, the idea then should be to use a bit with which the driver is able to control him, and one which at the same time will not irritate and worry him. That is, one that is not severe unless heavy pressure is put upon it. For this purpose we think the ordinary double-ringed bit (Fig. 6) the best.

The cheek pieces of the bridle are buckled into the inner rings, and the lines into the outer. In some cases it is necessary to have a noseband

from one inner ring over the nose to the other, but this is seldom necessary. With this bit the horse will be perfectly comfortable, until he commences to pull, and then the bit slipping through the inner rings causes pressure upon the mouth, and unless he be a very bad one he will cease pulling.

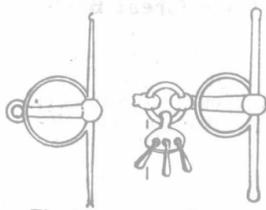


Fig. 1.

Fig. 2.

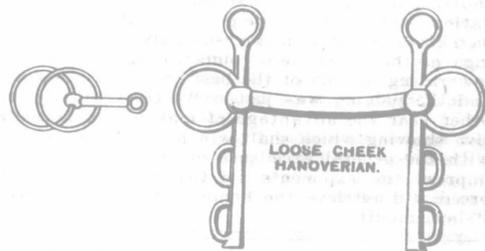


Fig. 6.

Fig. 7.

Another bit which is humane, and gives good satisfaction with pullers, is the Liverpool or the Hanoverian bit (Fig. 7). These bits are made in many styles, some with solid and some with loose cheeks, but they all work upon the same principle, and the different styles differ principally in degree and appearances.

The cheek pieces of the bridle are buckled into the holes on the upper end of the cheek pieces, and a curb chain runs from a hook in said hole on one side, under the lower jaw to a hook in the hole on the other side. The lines are buckled in the lower or second hole of the cheek pieces. The tension applied depends upon the tightness of the chain, and upon the leverage given to the lines, which is regulated by their point of attachment to the bit. If bits of this nature are worn simply for appearances, the chain can be left slack and the lines buckled into the bit rings, and then the action on the mouth is simply that of an ordinary straight or jointed bit, as these bits are made in both patterns. This form of bit with slight curb is often used on heavy-harness horses, especially on those that do not arch the neck nicely, as the curb has a tendency to cause the

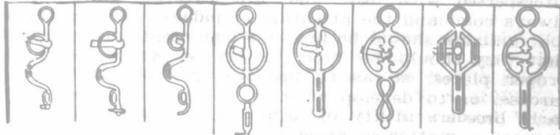


Fig. 8.

horse to hold his nose slightly towards the breast, and thereby arch his neck, and at the same time the amount of curb used does not distress him.

For riding purposes, the common snaffle, such as we recommended for the first lesson in bitting, is the proper thing. It is good form to use two bits, the second one being a curb, on the same principle as the Liverpool bit, but there is no bit ring, and the cheek pieces may be long or short, as the rider desires. The good horseman usually applies little tension on this bit, but guides his horse principally by the snaffle, the curb being worn largely for appearance, but can be promptly used in case of necessity. The plain-ringed snaffle is sometimes used, but the rings should be large, in order to prevent a side-puller from pulling them into the mouth, which accident is prevented by the bars on the barred snaffle.



Fig. 9.

The principal idea to be borne in mind in the selection of a bit is to select one that will not irritate the mouth, and at the same time one with which the driver or rider will have control of his horse, should he be one that is liable to pull, but the ordinary horse that has been well "bitted" is safe with an ordinary straight or jointed bit. "WHIP."

**Better Showing of Clydesdale Geldings is Needed.**

The failure of the exponents of Clydesdales to make a winning show of geldings at the recent International in Chicago, is cause for much regret, and doubtless seriously affected the popularity of the breed. True, Nelson Morris & Co. showed their team of six, but they had so little fitting that they stood little chance against the well-cared-for greys, and the latter had been considerably strengthened by additions of animals of broader, flatter bone than characterizes the pure-bred Percheron. The Clydesdale breed is very much in the same position, relative to the draft-horse industry, that the Shorthorn breed is to

beef production. The Shorthorn, from all appearances, is still the most popular beef-breeding animal, and in the breeding classes makes, by all odds, the most uniform and excellent show, yet a Shorthorn steer has persistently failed in recent years to land the grand championship. And it is just so with the Clydesdale. For the best in draft horses that we have, for utility, and for a show of all qualities that go to constitute foundation stock for breeding purposes, the Clydesdale is easily first in any show-ring, yet the geldings of the breed were compelled to take a very low rating at one of the best shows in the world, and the judging was just. We trust that by another year the advantage of making a representative showing which shall win prizes commensurate with the general excellence of the breed, shall so impress the exponents of Clydesdales that the breed will retrieve the honors which slipped from it last month.

## Stock.

### How to Increase Lean Meat.

Lean meat is muscle, and cannot be increased by any system of feeding, writes Mr. John Wrightson in the Agricultural Gazette. It is a desideratum that carcasses should be full of lean meat, and it is important to study how this can be secured, as it no doubt can be. There is one point which must be kept in mind, namely, that, although the absolute muscle cannot be increased, it can be so interlarded with fat, distributed between the bundles of muscular fibres as to be greatly enlarged in volume and weight. In this sense lean meat can be increased and rendered more palatable and digestible. Muscle, or lean, appears to be a matter of breeding rather than of fattening, and no doubt is affected by exercise, as in the case of wild animals. Patchy fat cattle are never admired by butchers. They lay on fat in lumps which destroy the symmetry of the carcass, and often leave gaps or hollows which want filling up. Firm handling, and a level, well-proportioned carcass, free from gaudiness, indicates fat well interspersed with lean, and are features which always command the attention of judges. To say that animals should be bred for lean meat, means that they should be bred to lay on fat in the proper places, so as to produce an economical carcass, or to develop what was termed by the early breeders utility of form. Like milk, this is more a matter of breed than of feeding, but, like milk, it depends a good deal upon feeding and management, as well as breeding. A young growing animal is more likely to increase in muscle than an adult animal, and hence the preference for young steers. Neither should exercise be forgotten. Pigs which are allowed to roam freely during their growth always develop hams abounding in lean meat; whereas closely-confined pigs yield hams which are often a mass of fat, with very little lean. Similarly, Welsh and other mountain sheep, and Down sheep, are full of lean meat, while the lowland breeds are disposed to accumulate fat in undue proportion on the loins and back. This may be said to be a matter of breed, but it is also a matter of activity. It may be lost by long-continued breeding under conditions which encourage indolence. Just as truly as exercise and freedom encourage muscle in horses, so must it with young cattle, and a natural free life and plenty of wholesome food, no doubt, encourage the formation and full development of lean flesh. On the other hand, confinement and fattening from birth must lead to atrophy of the muscles, fatty degeneration of the tissues, and an accumulation of fat instead of lean.

Animals should be bred for lean meat—that is, for the disposition to lay on fat in the right places—and this is within the powers of breeders, as it is indicated by the touch or handling. Nitrogenous foods are called flesh-formers, and starchy or farinaceous foods are called fat-formers. For an adult animal flesh-formers are less necessary than for growing animals, because in youth the muscles are still growing. An adult animal uses nitrogenous or flesh-formers for producing fat, as his flesh is already formed, and all he requires of nitrogenous food is sufficient to repair the waste of the system. Thus he can find enough of it in barley meal, which, although farinaceous, contains a fair proportion of the nitrogenous element. Bearing in mind the fixed and anatomical character of muscle, it is difficult to see how any system of feeding can greatly alter it. Also, remembering the accidental, trivial and unorganized character of fat, it is easy to see how it can be encouraged at will, so that, as Sir John Lubbock long ago stated, fattening is actually the accumulation of fat in the animal body. It would be evidently erroneous to say that it is the accumulation of lean in the animal body, and it cannot be. We may, therefore, give up the idea that any special dietary can materially increase the amount of lean meat in an animal.

### The Four Great Beef Breeds.

IV.

SHORTHORNS.—Continued.

Favorite (252), a light roan bull, born in 1793, died in 1809, the greatest of old-time sires, and the most potent in improving the breed, has been described as "a large, massive bull, of good constitution, with a fine, bold eye, remarkably good loins, and long, level quarters. His shoulder-points stood wide, and were somewhat coarse, protruding into the neck; his horns were long and strong. Coates, the first editor of the herdbook, called him 'low in the back.' Waistell said he was a grand beast, with a good coat, and as good a handler as ever was felt." He was sired by Bolingbroke (86), called by Coates the best bull he ever saw, and the dam of Favorite (252) was Phoenix, daughter of Lady Maynard, by Fol-

cident, and was slaughtered soon after, his flesh, tallow and hide weighing a total of 2,620 pounds, at the age of eleven years, and after eight weeks of painful lameness.

"The White Heifer that Travelled," born in 1806, and reared by Robert Colling, was another of the get of Favorite (252). She was twinned with a bull, and failing to breed, was also placed on exhibition, her live weight being given as 2,300 pounds, and her dead weight 1,820 pounds. Her portrait shows her to have been very heavy in the front quarters, considerably lighter behind, and quite patchy on the rumps, but of great size and substance.

### THE KETTON AND BARMPTON SALES.

The dispersion sale, in 1810, of the Ketton herd of Charles Colling, occurred at a time of extraordinary agricultural prosperity, and the sale, which was well advertised, marked an era in Shorthorn history, twenty-nine cows and heifers selling for an average of £140 4s. 7d., or \$715 each, and eighteen bulls and bull calves for an average of £169 8s. (\$845). Three-fourths of the cattle were got by Favorite (252) and his son Comet (155), and a large proportion of the females were in calf to Comet, who sold for 1,000 guineas (\$5,000). The highest-priced female was one of his daughters; Lily, a white three-year-old, sold for 410 guineas. Comet was the great attraction of the sale, and his close breeding, being by Favorite (252), dam by Favorite (252), out of Favorite's (252) dam, it is said, did not detract from his value or appearance. He was a light roan, with red neck, and it was admitted by eminent breeders that he was the best bull they ever saw. He was purchased by a syndicate of four breeders.

Robert Colling, of Barmpton, in 1815, made a partial sale of his stock, at which 61 head of cattle sold for an average of £128 14s. 9d., the top price being 621 guineas for the bull Lancaster (360). While the Shorthorn history of this early period deals mainly with the work of the Colling brothers, there were many other breeders of the same period that were doing intelligent work in improving the breed. "Whether the Collings really earned the right to be called the first great improvers of the modern Shorthorn, or whether they gained their fame mainly by reason of the novelty of their methods and their superior enterprise as advertisers, the fact remains that more pedigrees in the English and American herdbooks trace to the Colling herds than to any other dozen herds of the same period combined," and their superior judgment and skill as breeders was generally acknowledged and admitted by contemporary breeders of their day.

### Outlook for Sheep Industry.

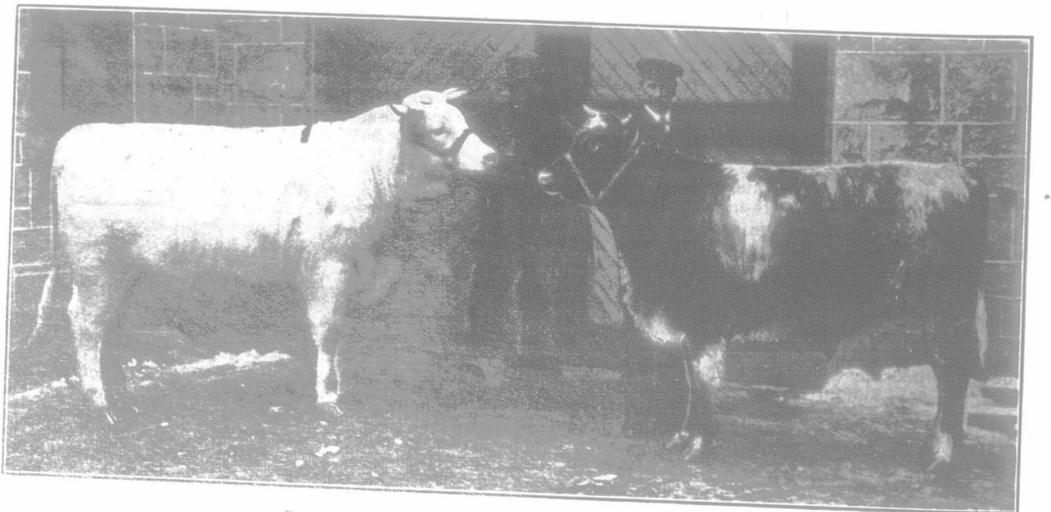
A decline in the world's supply of sheep has been going on for a quarter of a century. Statisticians have been preparing figures regarding the number of sheep in various countries, which, in nearly every case show a falling off in recent years. That this decline can be suddenly arrested is not at all probable. It must naturally take time to restock. The demand for mutton and lamb is growing in this country, and will offset any tendency towards an oversupply for some time. Therefore, in spite of the pessimistic view taken by those who think it is high time to get out of the sheep business, we consider it a good time to stay with it. To those who intend to make a start in the sheep business, we would say: Begin on a good foundation, and stick to it through thick and thin. The sheep industry, like every other, has its ups and downs, but every "up" is higher than the previous one, and no "down" goes as deep as the one that went before. With very few exceptions, sheepmen have made money this year, the extensive flockmasters



Charles and Robert Colling.

gambe (263), a white bull with a few red spots. It was in the breeding of Phoenix that the Bakewell system of inbreeding was first tried, and Favorite, having a double infusion of the blood of Foljambe and of Lady Maynard, represented the first fruits of the application of that system in Shorthorn breeding. So nearly did Favorite meet with Mr. Colling's views that he began with this bull a most extraordinary course of inbreeding, using the bull for years indiscriminately upon his own offspring, often to the third, and in one or two instances to the fifth and sixth generations. His get were the most celebrated Shorthorns of their day, and his descendants constitute a large percentage of the foundation stock upon which the herdbook record stands. He was bred back to his own dam, the produce being the heifer, Young Phoenix, who was then bred to her own sire, and the issue of that doubly incestuous breeding was the famous bull Comet (155), the first bull to sell for \$5,000.

The first calf got by Favorite was dropped by "The Duchess Cow," and the second was a bull that was afterwards castrated, and became famous as "The Durham Ox" (a roan, like his sire) who was prepared for exhibition. His dam was a grade cow, probably not highly bred, as her color was black. This steer was fed up to his greatest flesh-taking capacity, until, at nearly five years old, he had attained a reputed weight of 3,024 pounds, when he was purchased to be exhibited and carried throughout the country in a large van, making his owners much money, owing to the crowds coming to see him at an admission fee. After five weeks travelling, he changed hands at the price of £250 (\$1,250), and it is said, could have been sold a few months later for \$10,000, which was refused. He was travelled for six years, when he met with an ac-



Royal Hero 2nd and Victor's Favourite.

First-prize yearling Shorthorn steer and first-prize grade steer under one year. Ontario Winter Fair, Guelph, 1895. Bred and exhibited by Israel Groff, Alma, Ont.

his flesh, 20 pounds, light weeks born in another twinned also placed given as 0 pounds. very heavy er behind, great size ALES. e Ketton me of ex- the sale, era in d heifers or \$745 s for an urchs of and his n of the sold for iced fe- a white met was is close y Favor- is said, nce. He was ad- the best y a syn-

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of the West being especially fortunate. Those who have been in the sheep business for any considerable time, who have seen the day when they could not part with their sheep as a gift, and were obliged to sell wool at less than one-third of its present value, are most deserving of congratulation. This unprecedented period of prosperity has awakened a world-wide interest in sheep, and has helped to break down the barriers of prejudice which have prevented them from being estimated at their proper value. Among farmers a new life has been infused into the sheep husbandry. The high price of wool, the increased demand for mutton, and the value of sheep as a soil restorer, have convinced these tillers of the soil that the sheep is the most profitable of farm animals. From every section of the country, especially from the corn-belt region, come reports of an all-devouring demand for breeding ewes. Anything which could be considered capable of bearing a lamb has been placed at a premium. It must be admitted that a good deal of stuff which should have been fed off has gone to swell the number of small flocks which have been started this season. The wisdom of this policy is questionable, but we have no desire to dissuade those who can afford to make the experiment, though it were to be wished that the desire to increase the number of sheep were less persistent than the efforts made to improve the quality. The demand for long-wool lambs has been a feature of this year's Western lamb trade. The desire to produce a dual-purpose sheep is doubtless a strong factor to be reckoned with in explaining this demand. Many flockmasters have expressed a wish to produce early lambs, and choose medium-wool rams for this purpose, while others are on the lookout for Cotswolds, Lincolns or Oxfords, as a means of improving the size and frame of the finer-fleeced types.—(Shepherd's Bulletin.

**Breed as a Factor in Feeding Animals.**

By Prof. G. E. Day.

Nearly every farmer who feeds stock has his favorite breeds, and is firmly convinced that certain breeds are more profitable to feed than others. While there is little doubt that some breeds of stock are better adapted to certain conditions of climate, systems of management and environment than others, it is a significant fact that when different breeds of flesh-producing animals have been fed side by side under the same conditions, no constant difference in favor of any one breed has been discovered, so far as ability to make economical gains is concerned. Even in such extreme cases as where steers possessing considerable dairy blood have been fed in comparison with steers of the purely beef breeds, no marked advantage in economy of gains on the part of the beef breeds has been found to exist. Such a statement seems almost incredible, yet investigators have never been able to show that cattle of the beef breeds produce flesh more cheaply than those of other breeds. It is only when it comes to marketing the cattle that the difference between the different classes becomes apparent, the beef breeds producing much superior beef, and consequently selling for a much higher price per pound.

Comparisons of the breeds of sheep have not been very fully worked out, but, so far as they have gone, the indications are that the same rule practically holds true.

In swine, experiments with breeds have been conducted by the Ontario Agricultural College. At this institution six breeds of swine were compared as to the cost of producing 100 pounds gain live weight, and the table which follows shows the standing of the breeds with regard to economy of production in each experiment:

- Breeds arranged in order of economy of production.
- 1st Exp.—1, Berkshire; 2, Tamworth; 3, Poland China; 4, Duroc-Jersey; 5, Chester White; 6, Yorkshire.
  - 2nd Exp.—1, Berkshire; 2, Tamworth; 3, Poland China; 4, Chester White; 5, Yorkshire; 6, Duroc-Jersey.
  - 3rd Exp.—1, Yorkshire; 2, Berkshire; 3, Duroc-Jersey; 4, Tamworth; 5, Chester White; 6, Poland China.
  - 4th Exp.—1, Berkshire; 2, Tamworth; 3, Yorkshire; 4, Chester White; 5, Duroc-Jersey; 6, Poland China.
  - 5th Exp.—1, Berkshire; 2, Yorkshire; 3, Duroc-Jersey; 4, Chester White; 5, Tamworth; 6, Poland China.

If we considered only the Ontario experiments, we would come to the conclusion that the Berkshires, Yorkshires and Tamworths had scored a decided advantage; but when we refer to the Iowa Experiment Station's tables, in similar experiments, we find the Duroc-Jersey and the Yorkshire taking a leading place, while the Tamworth and Berkshire occupy a much less prominent position.

If there is anything in the breed to which swine belong which influences their ability to turn food into flesh, how is it that some one breed did not maintain

a position at or near the top of the list throughout these experiments? There is only one logical answer to this question, and that is, breed is not a factor in influencing the economy of production. Further, there is only one way of accounting for the variations which occurred in each experiment, and that is on the ground of the individuality of the animals. There is little doubt, therefore, that animals possessing good constitution and quality will make economical use of their food, no matter what breed they may belong to.

When it comes to the question of marketing, we find that, as in the case of cattle, there is a marked variation in the kind of meat furnished by some breeds as compared with others. The carcasses from swine used in the Ontario experiment were sent to the slaughter-house and critically compared by experts, and the following tables show the breeds arranged in order of their suitability for the manufacture of bacon for the English market:

- Breeds arranged in order of suitability for the manufacture of Wiltshire sides.
- 1st Exp.—1, Yorkshire; 2, Tamworth; 3, Berkshire; 4, Duroc-Jersey; 5, Poland China; 6, Chester White.
  - 2nd Exp.—1, Yorkshire; 2, Tamworth; 3, Berkshire; 4, Chester White; 5, Duroc-Jersey; 6, Poland China.
  - 3rd Exp.—1, Yorkshire; 2, Tamworth; 3, Berkshire; 4, Poland China; 5, Chester White; 6, Duroc-Jersey.
  - 4th Exp.—1, Yorkshire; 2, Tamworth; 3, Berkshire; 4, Chester White; 5, Duroc-Jersey; 6, Poland China.
  - 5th Exp.—1, Yorkshire; 2, Berkshire; 3, Chester White; 4, Tamworth; 5, Duroc-Jersey; 6, Poland China.
  - 6th Exp.—1, Yorkshire; 2, Tamworth; 3, Berkshire; 4, Duroc-Jersey; 5, Poland China; 6, Chester White.

A mere glance shows that there is much more constancy about these tables than about the preceding ones. The Yorkshires and Tamworths hold their place at the top of the list in each of these tables, except one, where the Tamworths were placed as low as fourth place. The Chester Whites, Duroc-Jerseys and Poland Chinas appear at the bottom of the list in nearly every case, being essentially fat-producing breeds, and suitable for the production of the type of hog popular in the United States, but entirely unsuitable for supplying the markets to which Canadian packers cater. The Berkshire, it will be noted, holds a sort of intermediate place between the bacon and fat type. Though unsuitable on the whole for making the best Wiltshire sides, at the same time it comes nearer to meeting the requirements of the packer than the three American breeds.

**How Breed Society's Grants Should be Distributed.**

To the Editor "The Farmer's Advocate":

Sir,—In reply to your query as to my opinion regarding the grants of the Shorthorn Association's money to fairs, etc.: My idea is that a simple distribution of the money equally amongst the different Provinces is not what should prevail, else I would be opposed to the possibility of a surplus of any extent, and reduce the fees, etc., to a mere working basis, and thus extend to each individual breeder the utmost personal direct benefit from an equal distribution of the prosperity of the Association.

But on the other hand, I believe the present fees, etc., for registering are very reasonable, and that an accumulation of a fund is desirable in order to advertise the breed as much as possible. And I believe that can be best accomplished by offering prizes at important exhibitions, such as Winnipeg, Toronto, and other Shorthorn centers, that will bring out an unusual display, that will attract as much notice as possible to the breed, and make as good comparison as possible with rival breeds.

I cannot see the desirability of collecting a surplus, to simply distribute it again pro rata, or on that principle.

If it can be shown that a very large grant is likely to be a very considerably benefit to the breed if given in Victoria, Calgary, Halifax, Toronto or Winnipeg, then I think that is where it should go, regardless of the amount of the funds contributed by any of the Provinces in which those cities are located.

A. W. SMITH.

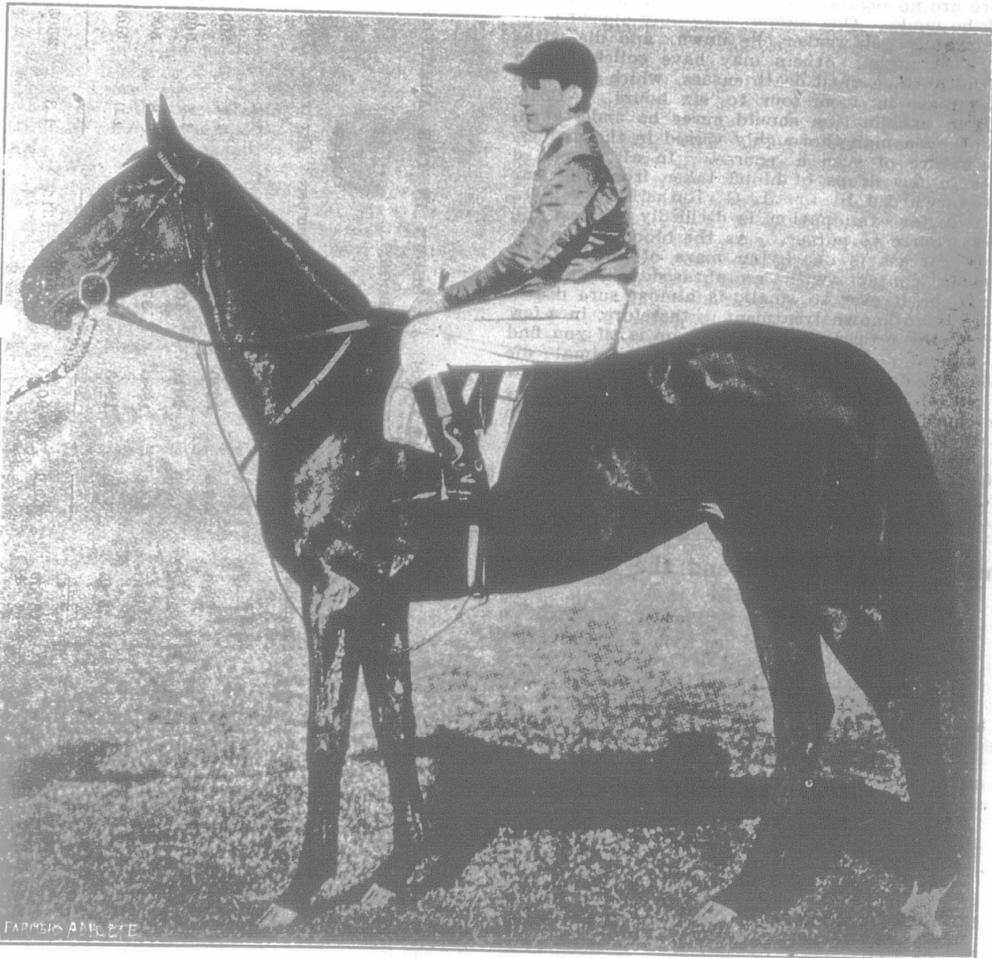
**It "Makes Good."**

One year ago I started farming for myself, and found I was in need of a good adviser. I happened to get a sample copy of "The Farmer's Advocate," and it did not take me long to see that that was the paper I was in need of. It has proven itself to be worth many times over the subscription price. I strongly advise every farmer to have it in his home.

J. HARTLEY SHANNON.

I like your paper very much indeed, and think it is constantly improving. I do not know of a general farm paper that is its equal. I can show it with pride to my friends here.

V. A. HOOPER.  
University of Arkansas, U.S.A., Agricultural Experiment Station, Dairy Department.



**Hammerkop, by Gallinule-Concession**

Winner of the 1905 great English classic race, Cesarewitch stakes.

**Anthrax.**

Owing to the frequent outbreaks of anthrax in different parts of the country, and the danger to human life through contact with the germ-laden blood during the skinning of the carcass, a few words of explanation regarding the nature of the disease, and the extreme danger of, in any way, touching the carcass of an animal dying of this disease will, we believe, be appreciated by the readers of the "Farmer's Advocate."

Anthrax is an infectious disease caused by a specific bacterium, the Bacillus anthracis, which is a microscopic organism. In form it is cylindrical, or rod-like, measuring 1-5000 to 1-2500 of an inch in length, and 1-25000 of an inch in diameter. Like all bacteria, they have the power of indefinite multiplication. In the bodies of infected animals they produce death by rapidly increasing in numbers and producing substances that poison and destroy the vitality and life-producing power of the blood. They increase in numbers by becoming elongated, then dividing in two, each new organism continuing the same process indefinitely. Outside the body, however, they multiply in a different way, as they are then under conditions unfavorable to growth. Oval bodies appear within the rods; these are called spores; these spores will remain alive and capable of germination after years of drying. They also resist heat to a remarkable degree, and nothing short of boiling will destroy them. They thrive best in soils subject to floods and inundations, particularly loose humus soils and those containing lime, marl, clay, and in peaty, swampy soils, although no kind or condition of soil is exempt. In the Alps, 8,000 feet above the sea level, anthrax exists. It is a disease of world-wide distribution. A wet spring, followed by a dry, hot spell, is particularly favorable to the multiplication of the spores. The great source of the virus is found in and around the graves of the animals that have died of the disease. As the spores are practically non-destructible, except by extreme heat, they live, multiply, and are capable of producing the disease years after the animal was buried. Some claim that thirty, forty, and even fifty years, is not long enough to effectually destroy them, hence the oft-times mysterious outbreaks of this terrible disease. Therefore, under no circumstances should the carcass of an animal dying with this disease, or the carcass of an animal found dead in the field or stable, be either skinned or buried; burning is the only safe way of disposing of them. All domesticated animals are subject to the disease. It is also communicable to man by contact with the blood, as in the act of skinning the carcass. It runs its course very rapidly; an animal all right at night is found dead in the morning. There are no regular symptoms by which diagnosis may be made. One animal may only appear dull, and rapidly get weaker, lie down, and die without a struggle; others may have colicky pains which continue until death ensues, which generally takes place in from four to six hours. Post-mortem examination should never be undertaken, except by a man thoroughly versed in the dangerous nature of such a course. In all suspected cases, a few drops of blood taken from the ear and forwarded to Dr. J. G. Rutherford, V.D.G., Ottawa, for examination, is decidedly the best and safest course to pursue. As the blood of an anthrax carcass is one living mass of bacilli, one drop in contact with an abraded spot on the hands, be it ever so small, is almost sure death. There is no known treatment; therefore, in a few words, the proper course to pursue is, if you find an animal dead, or if you have an animal die suddenly, don't touch it, much less skin it. Draw it out on a stone boat to some suitable place and burn it, and burn anything that has been in contact. If the carcass was in the stable thoroughly scrub all contact places with lye and disinfect, and any place the carcass has lain on the ground should be thickly covered with fresh lime.

H. VANZANT.

**Prolificacy of Ewes and the Breeds of Sheep.**

By Prof. C. S. Plumb.

The value of breeding stock is materially affected by the character of its reproductive capacity. Some breeds of farm animals are notoriously more fecund and prolific than others. The female that will not produce, other things being equal, is not worth as much in the stockyards as the castrated male, while if an active breeder, she may have a very great relative value.

Sheep are, perhaps, no more or less fecund than are other classes of stock, but they vary in much greater degree in reproductive capacity of prolificacy than horses or cattle. Under ordinary conditions the ewe gives birth to one lamb, frequently she has twins, occasionally triplets, and very rarely more.

Twins are, as a rule, desirable, to provide for ewes that have lost single lambs, for each ewe that is put to the ram should wean a lamb. Twin lambs will usually not thrive individually if nursing the same dam, as will the single lamb

on one ewe. Nevertheless, most breeders desire ewes that will drop twin lambs. This is expressed by the old English couplet, given by Youatt:

"Ewes, yearly by twinning, rich masters do make,  
The lambs of such twinners for breeders go take."

Live-stock literature shows numerous examples of prolific ewes, some of which may be briefly referred to here as illustrating the capacity of animals of this class to reproduce.

The Gentleman's Magazine for March, 1750, states that, "Last week a ewe belonging to Mr. Kitter yeaned five lambs; she also brought five lambs last year, and four the year before; i. e., fourteen lambs in three years, and not a weak or deformed one in the whole number."

The Agricultural Magazine for April, 1804, contains the following: "Mr. Meadows, of Salcey Forest, Northamptonshire, has a ewe which brought him three lambs in 1802, four in 1803, four in 1804, and four in 1805, being fifteen lambs in four years." Among the newspaper clippings [American Sheep Breeder, 1903] in my file, I find the following remarkable example of a prolific ewe, the property of Mr. A. F. Filley, Fairbury, Illinois: "More than a dozen years ago a son of Mr. Jas. Harrington, who is Mr. Filley's neighbor, was presented with a Cotswold ewe which within the next eleven years presented him with thirty lambs, in the following order: Five pair of twins, four broods of triplets, and two broods of quartettes. The males of this remarkable ewe's issue were disposed of and the females kept until the ewe flock numbered 80 head, all of which were dispersed by sale except 13 of the best ewes, which at the next lambing gave their owners 13 pairs of twins, every one of which was raised to maturity. Mr. Filley challenges American and English shepherds to produce the record of a ewe equalling this ewe in fecundity."

The above furnish interesting testimony of reproductive capacity of individual ewes, without emphasis being laid to breed inheritance of fecundity. It is, however, well known that some breeds are more prolific than others. The Dorset, an old English breed, for many years has been classed as very prolific. It is customary for most breeds of sheep to produce lambs but once a year, but the Dorset and Tunis, especially, are well known to breed to lamb twice a year if desired. Early in the last century this feature of the Dorset was a public comment, and at that time it did not meet with approval. However, since the early lamb has become a factor in our markets, the value of the Dorset and Tunis to lamb twice a year has become apparent.

Volume.	Year.	Singles.		Twins.		Triplets.		Total.
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
V.	1890	1925	64.1	1044	38.8	31	1.1	3000
VII.	1892	2820	56.4	2120	42.5	60	1.1	5000
VIII.	1893	2902	58.0	2016	40.3	82	1.6	5000
X.	1895	3030	60.6	1880	37.6	90	1.8	5000
XII.	1899	2982	59.2	1993	39.7	52	1.0	5087
Total		13659	59.2	9058	39.2	315	1.8	28087

Among other numerous breeds of sheep, some are more prolific than others. During the past ten years much more attention has been directed to the Shropshire than to any other English breed in the United States, and Shropshires are now the most common of any of our middle-wool breeds; in fact they far outnumber other pure-breeds of this class. The Shropshire has a num-

ber of desirable qualities, one of which is that it is generally conceded to be a prolific sort. We have, however, had no facts at hand to furnish evidence on this special point. It is now a custom among sheep-breeding associations to require persons applying for certificates of registry for the flockbook to specify whether the lamb to be registered was a single lamb, twin, or triplet. The statement of the certificate then becomes incorporated in the flockbook.

In the study of the principles of breeding, the writer, among other methods, has made use of flockbooks as laboratory material, and has required his students to compute, under his supervision, the relative numbers of singles, twins, etc., consecutively recorded in some of the flockbooks. As the American Shropshire Association Flockbooks contain far more sheep registered than does any other breed, the volumes issued by this Association have been the subject of special investigation. The foregoing table, involving over 23,000 sheep, so far as my knowledge goes, is the first of its kind that has been brought together. It is submitted here to furnish evidence bearing on the prolificacy of the Shropshire as a breed. While these figures are not given as absolutely accurate, in the author's opinion they give extremely interesting evidence. There may be slight mathematical errors in the extensive work of the students, and undoubtedly some persons registering may have neglected to specify on the subject of singles, twins or triplets, especially in the earlier volumes; nevertheless it is believed that none of the possible errors seriously affect the percentages involved.

This table indicates that of 23,000 pure-bred Shropshire sheep, fifty-nine per cent. of them were single lambs, and thirty-nine per cent. twins, while one per cent. were triplets. This record, as already stated, is not infallible, but it expresses at least some definite information bearing on the prolificacy of this breed of sheep. It is interesting to note that for a term of nine years there seems to be no material change in the percentage of number of lambs at birth. Whether the Shropshire is becoming more or less prolific as a breed is open to question.

The writer has made a study somewhat similar to the above of some other flockbooks, but not to a sufficient extent to justify using the records here. One volume of the Dorset flockbook was studied, but as the results showed an inferior prolificacy to the Shropshire, it was felt that the records did not specify the degree of prolificacy with much care.

While connected with the Indiana Agricultural Exp. Station, the writer had under his supervision a small flock of Rambouillet sheep. Covering a period of four years, forty-three ewe records showed that 41.8 per cent. of the lambs were singles, 51.1 per cent. twins, and 7 per cent. triplets. This shows a somewhat greater prolificacy than occurred with the Shropshire.

This subject is one that will no doubt receive more attention in future, for so long as ewes reproduce up to a maximum where it is not at the expense of the breed in vitality, it is distinctly in the interest of profitable breeding.

**Naming Farms and Live Stock.**

The suggestion made in the last issue re naming live stock, and that the herdbook association could afford to refuse duplicate names, is not altogether new. The Shorthorn Society of Great Britain and Ireland has in operation the idea mentioned, reference to which is made in Vol. 51 (Coates), under the heading:

"The Council, having considered the question of adopting a register of prefixes and affixes, and being of opinion that such a register, giving breeders the exclusive use of a distinctive geographical or 'made' name, thus identifying the animals with the herds to which they belong, and preventing the duplication of names, would be of advantage to, and appreciated by breeders, have adopted such a register. Names may be registered subject to the approval of the editing committee for a fee of 10s."

The various breed associations—Clydesdale, Shorthorn and others—might adopt the above scheme and charge a small fee for registering. The Act, with respect to live-stock records, might be amended to give these associations such power, which would operate much in the same way as a copyright, for which the fee is \$1.00.

The uneasiness existent in regard to the precautionary measures which are being taken by the French and German Governments in strengthening the Franco-German frontier and the military in general, would seem to indicate that the tension consequent upon the Moroccan controversy has by no means died out. It may or may not be significant that the French army has been brought to a state of efficiency seldom equalled in the history of the Republic, and that Germany has just issued an order to firms in Germany, Belgium, Holland, Switzerland and Italy, for the construction of 20,000 freight cars suitable for troop transportation. The cost of the cars will aggregate \$50,000,000.

THE FARM.

TO SUBSCRIBERS AND READERS

Do not under any circumstances pay money to JAMES COWAN. He has no authority to collect money or take subscriptions for this paper. Has been operating recently Gilbert Plains and Neepawa.

FARMER'S ADVOCATE, Winnipeg.

A More Optimistic Balance Sheet for a 320-acre Farm.

To the Editor "The Farmer's Advocate":

I have been much interested in reading the article entitled, "Does Exclusive Grain Farming Pay?" in your issue of December 20th. If the statement referred to is correct, then the prospects of the grain-grower are gloomy indeed. But is such really the case? Perhaps a little friendly criticism may help to solve this question.

It is evident that the author of that article is quite capable of making a clear financial statement and balance sheet, and it is to be regretted that this is not more generally practiced by farmers, instead of guessing that this and assuming that that branch of the business pays or does not pay. But while the writer has undoubtedly an intimate knowledge of his subject, it certainly appears to me that he has endeavored to produce as pessimistic a statement as possible, without at the same time laying himself open to a charge of being glaringly incorrect. To begin with, the farm (320 acres) is valued at \$7,000.00, upon which amount interest is charged at 7½%. It is not stated whether this amount represents the purchase price, or whether the land was homesteaded by the present owner; but as a possible inconsistency and inaccuracy in the method of computation, it may be pointed out that if the latter was the case, the sum of \$7,000.00 represents a profit made since taking up the land, a proportionate portion of which should go to the credit of the year which the statement represents; and if the principle of charging interest is correct (which is open to question), then the greater the increase in value of the farm, the greater would be the apparent loss. For instance, if the land had increased in value to \$14,000.00 instead of \$7,000.00, and to make the illustration more clear, supposing half of the increase to have been made in the year covered by the statement, instead of showing a gain on capital account of \$7,000.00, which would actually be the case, there would be a further loss, in addition to that already shown, of \$525.00, for interest on increase of capital account.

Again, is it right to charge interest at all, and is not 7½% too high? Suppose the owner sells his farm for \$7,000.00, and invests the proceeds, is he sure of securing that rate with safe securities? Of course, in a sense it is immaterial whether interest is or is not charged, provided the facts be known, but in this case I think the profits should be considered to be (\$710.00, amount charged for interest) greater than allowed in statement. Even had the farm in question been purchased for \$7,000.00, it would mean that the profit shown on statement, of \$14.00, had been made after deducting charge for interest, but it would be generally

conceded that so far as these items are concerned a profit had been made of \$724.00.

If this statement purports to be compiled on the same principle as is usually followed by business men, then the charge of \$715.00 for house expenses has no right to appear there, and it would place the farm at a great disadvantage in making a comparison with the results of other businesses.

Suppose, for instance, the owner and manager of this farm is comparing notes with the manager of a business concern drawing a salary of, say, \$2,000.00. Does the latter first deduct the cost of his private house expenses, which we will call \$1,800.00, and then say his business gives him an annual profit of \$200.00? We do not think so; neither does the merchant. It would certainly be correct to charge up the living of the help employed in working the farm proper, but that, estimated at \$2.75 per head per week, would only amount to \$167.00, a further overcharge against the profit and loss account of \$548.00. Then, again, does not 15% for depreciation appear to be pretty steep. If charged annually against the original cost, in less than seven years the first cost would be wiped off, meaning that in that case stock and implements would only last that time, while the writer of this has had binders in use for ten years, a wagon 27 years, horse hay-rake 23 years, still in use.

In the farm credits with the exception of the item for potatoes, which is put at 15c. per bushel, and is, I think, too low, Mr. Benson has been liberal enough; in fact, \$13.00 per acre for wheat is, I imagine, above the average for a term of years. To sum up, in my opinion the charge for interest is and should be considered part of the profits; the item of \$715.00 for living expenses should be reduced to \$167.00, and 10% for depreciation would, I feel confident, cover the annual loss, in which case the balance sheet would read like this:

Balance at credit of profit and loss account,	
per original statement, .....	\$ 14 00
Add amount charged for interest .....	710 00
Add amount overcharged for living expenses .....	548 00
Add amount overcharged for depreciation.....	100 00
Correct profits from farm .....	\$1,372 00

Hoping that there will be a general response, Mr. Editor, to your request for criticisms on this important subject. "SUBSCRIBER."

Weed Distribution and Herd Laws.

To the Editor "The Farmer's Advocate":

I have seen in late issues of our best of farmers' papers, "The Farmer's Advocate," what a great interest is taken by the Grain-growers' Association with regard to foul weeds on farms, but I have failed to observe any comment upon what I consider one of the worst and I believe the worst source of distribution of said foul seeds in the Territories, and that is the allowing of horses, colts and cattle to run at large, picking up ball mustard seed here, French weed seed in another place, and travelling on, and in time dropping those seeds to take root and grow, should the following season be favorable. A little more than a week since I was crossing the prairie on foot, and ahead of me were a hundred or more rancher's horses. As they had just come off a weedy oat stubble, I kicked over some of their droppings, and, judge of my surprise—and yet, no surprise—to find wild mustard seed. I had, in a number of instances previously, last season found ball mustard growing on the virgin prairie sod. I certainly would like to know how a farmer is to keep his farm clean without a herd law for the whole year. S. SELDEN CASEY. Milestone, Sask.

What it Cost to Produce Wheat.

The Review of Reviews publishes the following results of carefully-gathered statistics at the farms by the Dept. of Agriculture in Minnesota.

COST OF PRODUCING WHEAT IN NORTHWESTERN MINNESOTA.

	Man—hours.	Horse—hours.	Total cost.	Cost per acre.
Seed Value .....	857.38		(1,092.7 bush.)	\$748.50
Cleaning seed .....	723.55	165		20.625
Plowing .....	495.82	1,207		445.25
Dragging .....	845.33	516		191.025
Seeding .....	857.38	535		220.175
Weeding .....	412.00	199		41.300
Harvesting .....	825.60	604		271.700
Amount of twine .....	749.04		(1,205 lbs.)	138.580
Shocking .....	825.60	600		75.000
Stacking .....	606.93	980		198.625
Stack Threshing .....				1.150
Machinery, cost .....				.376
Land Rental .....				1.800
Total .....				\$6.637

A report on the "cost of producing wheat," as compiled from a number of farms in the great wheat district of Minnesota. Labor is charged at the actual rates of wages for hired farm laborers; that is, at the cost to the farmer in cash and in cost of keep. Horse labor is charged on the basis of the "cost of keep" of working farm horses. This cost of keep includes feed, labor, cost of care, depreciation, etc., and in most cases amounts to about \$100 per year per horse.

The Crow Nuisance.

To the Editor "The Farmer's Advocate":

In any newly-settled country where climatic changes and alterations in physical features are a direct result of man's actions, there is a corresponding evolution of change among the wild creatures peculiar to that country. This results to such an extent that in many instances the laws of nature, which have heretofore maintained the correct balance both in the animal and the vegetable kingdom, are partially or wholly lost, and different species show a marked and abnormal increase or decrease as the new conditions favor or retard them. We have had many examples of this in our new Western country, and, though sad to relate, through our influence, the decrease has been so rapid among many species that, in a comparatively short period, we have seen many of our most beautiful animals and birds brought to the verge of extinction.

Before the surmounting influence of settlement the buffalo has vanished, and others of our big game animals show fair promise of following in his wake. The beaver no longer frequents our waterways, and other fur-bearing animals annually become scarcer. The wild pigeon, whose immense flocks many of us recall in our younger days, has dwindled to the smallest scattering, or is probably extinct, and many others of our native birds are following fast upon his trail.

But the increase in the numbers of a few species has been almost as noteworthy, and Nature seems to have chosen for this group many individuals who can neither claim usefulness nor beauty, compared with most of those which threaten soon to disappear. The most conspicuous bird in this latter group is the crow, and, with everything in his favor, he has flourished and increased to such an extent as to have become an overwhelming nuisance.

No doubt the crow was plentiful before the settlement of this country, but his lot was not then so easy, nor were the conditions under which he lived so conducive to his welfare as at the present day. Many small animals and birds of prey which are scarce to-day existed then in large numbers, to prey upon the eggs and young, and it is natural to believe that the crows were often put to sore straits for food; and so, Nature in this way kept them where they belonged. But man, in his coming, has been their benefactor. He has never molested them to any extent—in fact, he has caused an immense decrease in their natural enemies—and around the grain fields and settlements he has provided a constant and various supply of food which is always at the disposal of these black rascals. If any good at all can be accredited to the crow, it is his gift as a scavenger, for he can at least save the farmer the trouble of burying his dead animals; but if he did not exist, the coyote would most gladly shoulder his responsibility in this capacity.

As a grain destroyer, the crow can be placed in the first rank. Not only does he attack the grain in the stooks, but I have seen large numbers of them feeding in the standing grain, and fairly trampling it down in several spots in one field.

In the fall, when all the crops are reaching maturity, the crows flock up in large colonies, spending the whole day pillaging throughout the fields for anything eatable, and flying in the evening in a long line of flight to some chosen roosting ground. Then it is that some idea can be gained of the immense numbers of these birds which are daily scattered over the surrounding country. The evening flight will often last two or three hours, and consists of one steady stream of birds throughout its length.

There are probably few districts in the Province where one of these rookeries is not known, and each rookery comprises, in most cases, thousands of birds. But it is in the spring and early summer that the crow commits deeds beside which his dingy coat pales. Then it is that he takes upon himself the dual role of chief and murderer, and attacks without mercy the nests of other birds, helpless to defend their own, and sweeps away with his ill-gotten gains to nourish his undeserving young. One of the chief sufferers at this season is the prairie chicken, and not a small factor in the decrease in the number of the latter birds is the robbing of their young and eggs by the crow. Considering the countless numbers of crows which daily search the fields, it is a wonder that any of the chicken broods and eggs escape; and, if these are to receive protection at our hands, the sooner we lay plans against the whole crow family, the sooner we will attain our end.

The question arises, how are we to cope with this crow nuisance, and what are the best means to adopt to reduce his ranks to comparatively harmless numbers?

In the first place, I think every encouragement should be given to those who carry guns to avail themselves of every opportunity to "fix" Mr. Crow, and where rookeries exist, a great deal of sport as well as good can be derived from shooting them as they come to roost in the evenings; but the one and only means which will result effectually, is the imposition of a bounty per

head on the birds, and this might also be made to include the eggs. We have had a bounty on gophers, and the wolf bounty still exists, and there is no reason why the crow should not receive his full share of attention, for he commits crimes, in comparison to which the misdeeds of others are insignificant.

There is no doubt that were those living in the rural districts to take the matter up, they would receive the support of the Government in contending with a nuisance which annually grows more and more serious.

J. P. TURNER.

### Valuable Experience and Hints on Clover-growing.

This clover-growing competition which "The Farmer's Advocate" has started, is something I had never thought of coming up when I started to sow clover in Manitoba. I believe it is a proposition that will be of great interest to this country hereafter. I have been watching "The Farmer's Advocate" for items in regard to clover-growing, but have not seen any articles, only where they have been tried in very small patches of land which has been fitted the year before with some kind of planting crop. I want to say a little about my experience in raising red clover in this country, hoping it may be of some advantage to your readers.

I have had just as good success in raising red clover in Manitoba, as far as I have tried it, as I ever had in Ontario, for I have lost many a crop there by the plant heaving out the first winter. I came to this country in the spring of 1902 to try farming, and I brought my timothy seed with me. In it there was some red clover seed which I found came up and stood the winter here as well as it did in Ontario; so I made up my mind that it would grow here as well as there. In the spring of 1904 I sent to Ontario for some red clover seed, which I sowed in the same way as I did in the East—that is, by mixing one peck of clover with two pecks of timothy; that would be fifteen pounds of clover to twenty-four pounds of timothy. Then, I sowed about ten pounds of the mixed seed to the acre, which I find is fairly thick enough. This I sowed with a broadcast-seeder attachment to the drill. The one I have sows the seed in front of the drills, so that the drills and chains worked the seed well into the land, but not too deep. I sowed it at the same time as I sowed the wheat, which was not later than the 10th of May. I also harrowed it once, about three days from seeding, which I think is very important, as it kills a great many fine weeds that would be a great hindrance to the grass seed when it is very young.

I sowed about ten acres in that way on the open field, where it had no protection whatever more than the wheat stubble that was only left an average length. I cut the hay crop on this piece of land on the 13th and 14th of July, which turned out a good two tons to the acre, and was about one-half clover. I found that at that time the clover had formed quite a lot of seed in the head. I was surprised in about two weeks to see the progress that the second crop was making right in the very hottest weather of the year, for I did not calculate on a second crop, more than a little pasture, but it came on so well that those who heard about it would drive for miles to see it. In about two months I found that it was filling with seed as well if not better than I ever had it in Ontario. Of course, I was at a loss to know how I would get the seed threshed out, as there were no clover hullers in this country, for anyone that knows anything about threshing clover knows that it is almost impossible to get the hull off it. I had heard of some that had threshed it in Ontario with the common grain threshing machine—that is, by closing in the cylinder at the back, all but about eight inches on the opposite side from the elevator, and within an inch or two of the teeth, then feed the clover in on the same side as the elevator, so that the straw will have to work its way across the cylinder in order to get out. By that means the hulls are fairly well threshed off the seeds. It should be threshed in cold weather, as it hulls much easier then. I cut the second crop about the twentieth of October and stacked it up after letting it get thoroughly dry, and then threshed it in the way I have mentioned above, which gave me good satisfaction. I had of the ten acres twenty-five bushels of as choice seed as I ever saw in Ontario. This is the first clover seed that has been threshed in Manitoba, to my knowledge; if not, let me know who threshed the first.

I would advise those who are intending to seed any clover or timothy next year, especially those with land that is full of wild oats, as well as other weed seeds, I always found that wheat was the best nurse crop to seed down with, because it generally stands up the best and not so apt to lodge as either oats or barley, and, also, is sown at an earlier date, which is of great importance most of the seasons. I find that if I plow the ground in the spring that I want to seed down, it seems to leave it in so loose a state that if it is not a wet summer, the young seed, after they

germinate, wither away and die in the summer, or immediately after the nurse crop is removed. If I have a very dirty piece of land, I always prefer to have the dirt partly under control before I seed it down. I would either sow it to barley or summer-fallow it the year previous to seeding it down, and that will enrich the ground, which is very essential towards getting a good catch in clover and timothy. It also gives you a good chance to have it fall plowed and ready for wheat the following spring, which is, I believe, the best nurse crop for timothy and clover. I would not advise anyone to sow timothy or clover mixed in with the grain, as the small seed sows out faster than the grain, therefore it seeds in the drills too deep to germinate properly, as well as too thick at the first and too thin at the last of each bag, which will give the weeds a great chance to grow the next season. It would well pay anyone who has ten to twenty acres to seed a year to have a broadcast seeder attachment to the drill, then the wind will not make scarcely any difference to seeding perfectly, which is very important. If we do not sow the seed even on the ground, how can we expect an even crop? I would advise any one that may have a crop of clover next year, if they would like to try for seed, to cut the first crop between the 25th of June and the 1st of July, to give the seed crop a good chance to mature before the early frosts.

JOS. A. RUSSELL.

### About Smut Treatment.

Will you kindly advise, for the benefit of new subscribers as well as old, what amount of bluestone, also of formalin, to use to the bushel to prevent or kill smut. I have asked many, but can get no satisfactory answer to the following: Where smut was on the wheat this year, would there be smut on wheat sown on same ground next season, providing the seed wheat next spring was thoroughly bluestoned or formalined? Would there be any danger of smut from the shelling of this season?

S. S. C.

Ans.—We have frequently noticed people speak of the amount of bluestone required for a given number of bushels of grain, and have pointed out that the efficiency of bluestoning depends not upon the amount purchased for a certain amount of grain, but upon the strength of the solution through which the grain is passed, and upon the thoroughness with which every particle of every kernel is covered with the solution. For instance, a man should buy as much bluestone to treat 30 bushels as for 50. The first essential is to get a solution of certain strength, then put the wheat through this solution, and whether or not it is all used will matter little. The amount of the solution made up will depend upon the method of applying it, and upon the amount of wheat to be treated, but there should always be the same relative amounts of bluestone and water. When the wheat is to be dipped into the solution in coarse sacks, at least one-half barrel is required; or, if the wheat is placed in a vessel and the solution poured over it, as much should be made up to start with. The most satisfactory strength of a solution is made by dissolving one pound of good fresh bluestone in ten gallons of water, and so long as the wheat is well soaked in this solution, it can be used as long as it lasts, no matter whether five or twenty bushels is put through it. With formalin, use a pound of formalin (forty per cent. formaldehyde) in forty gallons of water, or an ounce to each three and a half gallons. With this solution it is best to spread the grain out on the floor and sprinkle it at about the rate of a gallon a bushel, shovelling it over several times. Then put it into a pile, cover with a blanket, and leave for about twelve hours, but not so long that it will get hot. If bagged up, be sure the bags are clean of smut spores. To clean the bags, turn them inside out, dust well, and hang in the open a day or so.

Theoretically, treated wheat is immune from smut, but there is nearly always some peculiar circumstance which interferes with the thoroughness of the best of work, and, in a field where smut was prevalent last season there is a greater chance of it developing next harvest, but so much depends upon whether or not the weather conditions are favorable that one can never be certain. The bluestone or formalin on the kernel is supposed to poison the smut plant when its spore may have been washed clean of its protective coat, and the smut plant would thus enter the young wheat plant and grow uninterrupted.

### December Gradings Teach a Stern Lesson.

The published report of inspections of grain at Winnipeg for December show conclusively that the quality of our staple cereal crop needs to be greatly improved: 6,317 cars were inspected, of which 16 went I Hard. Twenty-five per cent. of the wheat inspected during December went rejected.

Smut and wild oats are the two main factors causing such an appalling deterioration in crop quality. The breeding of the wheat, the season,

the kind of land, and method of harvesting and threshing on which the crop is grown, are generally accepted as factors influencing the grade of wheat grown, as to whether it shall be high or low grade, and, as such, are only partially under the growers' control. With smut and weeds, each representing other forms of interloping plant life, the remedy—exclusion of the undesirable immigrants—is entirely in the farmers' hands. Hear what the "Seed Special" men have to say on this subject, and begin to plan for grain pickling and other methods of ridding the farms of these iniquitous and remorseless tax collectors.

## Dairying.

### Management of Dairy Heifers.

Early breeding is a most effectual means of developing the inherent milking capacity of dairy cattle, in order to obtain the fullest possible development of the milk-yielding qualities of heifers which are intended for dairy purposes, it is necessary to breed from them at a comparatively early age. In a young heifer, says a writer in the Live-stock Journal, the organs connected with the secretion of milk are in an undeveloped and plastic condition, and their development is, therefore, greatly promoted by bringing the milk-secreting function into early play through the heifer being put in calf. Late breeding is certainly a mistake in the case of dairy cattle, as the milk-producing apparatus does not attain its full development in a heifer that is put to the bull comparatively late.

The fact of carrying a calf, of course, entails a very considerable drain upon the system of an immature heifer. In order that they may meet this drain, and at the same time make satisfactory and proper growth, immature in-calf heifers require plenty of nourishing food. Good feeding must always accompany early breeding, if the growth of the heifers is not to be checked. This is a most important matter to bear in mind. Early breeding is sometimes objected to on the ground that it tends to stunt the growth and development of immature heifers, but this objection does not hold good if they are supplied with a sufficiency of nourishing food throughout the time that they are in calf. When the heifers are badly kept and do not obtain a sufficient supply of nourishing food, then the fact of their being bred at a comparatively early age decidedly operates as a check to their development, and stunts their growth. But if the heifers are kept well, early breeding does not interfere with their growth to any appreciable extent.

It is most important that young heifers should be in a sufficiently forward condition when they are put to the bull. A backward heifer should not be bred from at an early age; in her case, pregnancy is pretty certain to have a stunting effect, and may spoil her for good. Some discretion must certainly be exercised by the breeder in deciding when to put a young heifer to the bull, and in coming to a decision on this matter, the heifer's development and condition require to be taken into consideration. If a young heifer is insufficiently developed and backward in condition, she should be given more time to make growth and to come on before she is put to the bull. In order that young dairy stock may be in a sufficiently forward condition to allow of its being bred from at an early age, the breeder must keep his heifer calves and yearling cattle growing and thriving all the time by doing them well. Young dairy stock must not, of course, be forced along in its growth by high feeding. A forcing diet of rich food is bound to spoil the future usefulness of growing dairy stock, and must therefore be strictly avoided. The food must be nourishing and adequate in quantity, but nothing more. The young dairy stock must never be allowed to become at all fat or too fleshy in condition, that being detrimental to the development of the milk-producing qualities.

In order to ensure a good supply of milk from a heifer coming into profit, she must be liberally fed right up to the time of calving, without, of course, letting her get fat. As the occurrence of milk fever need not be apprehended in the case of calving heifers, there is no reason to keep them on short commons before they calve, as is generally done in the case of older dairy cows. It is of much importance to stimulate the flow of milk as much as possible in young cows during their first lactation period, as the more milk they yield then, the more does the milk-producing apparatus develop. The first lactation period of young cows usually tends to be rather short, but it is highly advisable to keep them in milk as long as possible—within reason, of course—as this helps to develop the milk-yielding capacity to a considerable extent. Even when the flow of milk has subsided so greatly that it seems hardly worth while to continue to milk the young cow, the milking operation should be continued, so that the secretion of milk may be stimulated to the utmost. It is a bad plan to allow young dairy cows to dry off too early, not only during the first lactation period, but also during the second,

and perhaps the third one. An early drying off of a young dairy cow adversely affects her future milk-producing capacity. It is very often found that when the first lactation period of a young cow is very short, her lactation periods later on also prove to be rather short. Hence much importance attaches to this matter of prolonging first lactation period as much as is practicable.

Considering the great drain imposed upon the in-calf heifer, owing to her having to carry a calf whilst she is still immature, it is not advisable to put her to the bull again after calving quite as soon as is done in the case of older cows. In her case, the space of time intervening between the arrival of the first and of the second calf should be somewhat longer than the average time, so as to give her time to recuperate.

**A Modern Creamery.**

One of the most substantial, convenient and well-equipped creameries in Canada is that built in the town of Petrolia, Ont., in 1902 by J. E. Armstrong, M. P., and William English, under the firm name of the Lambton Creamery Co. The Company has since been incorporated, others becoming associated with them in the business, among whom are G. M. Carey and N. McPhail, the present manager and maker.

The creamery was established as a milk-gathering one, and in addition to the central plant, two skimming stations were built, one at Osborne, about nine miles to the west and north, and one at Wanstead, about the same distance north-east. By this arrangement an area of about twenty miles by fifteen was covered.

Hand separators have since been extensively introduced, and the Company have established several cream-gathering routes in territory not within reach of the skimming stations. On these cream is gathered each alternate day during the summer, but at the date of our visit (Nov. 6), all but one driver were collecting twice a week. The collected and factory-separated cream are made up separately, and the price obtained per pound for butter from each is the same. The patrons haul their milk and cream, and the butter is manufactured for three cents a pound. Some butter and cream are disposed of locally, as well as all the buttermilk, but nearly the entire output is sold for export. During the last two seasons the butter has, at the request of the buyers, been packed in Danish kiels, which fact is the best possible evidence of its quality, for inferior goods are not wanted in that package. Everything about the premises evidences the skillful, cleanly, painstaking maker, and we understand the district creamery instructor, Mr. Fred Dean, reports that whenever visited things are found ship-shape. The result is a good product, top prices, and, we believe, satisfied patrons and expanding business.

Each patron's milk is tested with the Composite Babcock Test; the pounds of butter-fat delivered by each are calculated, and the aggregate returns for butter, cream and buttermilk divided pro rata according to the pounds of fat delivered by the respective patrons, who are paid monthly by check.

Following are the prices the patrons were paid each month for the ten months of this year: January, 22 cents per pound, butter-fat; February, 26 cents; March, 24 cents; April, 24 cents; May, 18 cents; June, 18½ cents; July, 20 cents; August, 22½ cents; September, 22½ cents; October, 22½ cents.

**BUILDING AND EQUIPMENT.**

The building is a brick veneer erected upon a cement-concrete foundation, and floored throughout with cement. It is 101 feet long by 40 feet wide, with an annex 12 ft. by 28 ft., on the west side, which contains the refrigerator plant. The general layout is indicated by the accompanying half-tone, and details of the construction will appear from the subjoined description, which we print in full, partly to convey an idea of the exact construction of this factory, but more particularly to serve as a working model for those who may be wishing to draw up specifications, but are not just clear how to go about it.

In the front, or north end of the building, a small office and a testing room are located on the west side, the east part being used as a receiving room. Here the milk is delivered, weighed, and each patron's amount marked down. On a separate book is figured 85 per cent. of the weight of his whole milk; this represents the amount of skim milk he is to receive.

The milk is run from the platform into the receiving vat, then through a 6000-pound-per-hour Reid's pasteurizer at a temperature of not less than 165 degrees F., thence into the cooling vat, in which the temperature is lowered to 140 degrees. On a second floor, 42 inches lower, at the back of the same apartment, are two Alpha separators, capacity 3,000 pounds per hour each. On this floor, also, is located a 16-horse-power engine which supplies all the power used in the factory, steam being supplied by boilers located in a separate building some distance in the rear of the creamery building. A small skim-milk pump elevates the skim milk to a vat in the second

story, from which it is weighed out to the patrons. This, by the way, is the only pumping done in the factory, all the whole milk and cream being conducted through open pipes by gravitation, rendering all parts of these pipes accessible and easily cleaned.

The cream runs from separators to vats in the next room, the floor of which is 25 inches lower. Here are two double cream vats, with a combined capacity of 4,800 pounds, and a small, well-insulated tank for holding iced water. Each pair of vats is in a bath of water cooled in summer with brine pipes from the refrigerating plant. Some ice is also used at night to hold the temperature down till the plant starts next day. At this season, however, the water is cool enough without ice or brine being used. The cream in the vats is cooled to 70 degrees F. and a culture added which is made from pasteurized skim milk.

When ready to churn it is run into the churn in the next apartment, the floor of which is 62 inches lower than the preceding one. The cream is churned at 48 to 50 degrees F., in a Success combined churn and worker. Not once this summer has the churning temperature been so high as 52. Salting is done at the rate of one-half ounce per pound for export, and three-quarters ounce for domestic consumption. Enough color is used in winter to impart a June tint.

When made, the butter is packed in kiels and put into storage rooms immediately back of the churning and making rooms. This storage department has been divided into three rooms, so that different temperatures might, if necessary, be maintained in each. The insulation as at first constructed was found not to be sufficient, and one of the apartments has been fitted up with an extra lining of 1 inch hard maple, and between this and the original wall one inch of mineral wool. It is now possible to control the temperature of this room satisfactorily. Next year the adjoining room will be similarly fitted up. The cold storage plant in the annex is of the direct expansion type, manufactured in Carbondale, Pa., known as the Carbondale system of refrigeration.

The cost of this creamery was as follows:

Land .....	\$ 500 00
Buildings .....	4,500 00
Machinery .....	3,000 00
Cold storage .....	4,000 00
Two skimming stations .....	5,000 00
	\$17,000 00

While the cost of plant and equipment is pretty steep, the capacity is large and the facilities excellent, lightening the work and making possible a fine product. It must always be remembered, too, that first cost which saves in running expenses is economical in the end. The cold-storage plant cost in wages and material \$260.00 for season of less than six months. This does not include extra fuel used, which would amount to a considerable sum. It would therefore be seen that this would be impracticable except where large quantities are handled. And the same result could, perhaps, be as well accomplished in a smaller plant by an ice-chamber system such as we described in connection with the Harrietsville cheese factory, especially so where butter is held only for short periods. Besides making creamery butter, the Company handles large quantities of dairy butter and eggs, for which the cold storage is used.

**SPECIFICATIONS FOR THE PETROLIA CREAMERY.**

Below is a copy of the specifications followed. In them are references to numerous blue prints, for which we have not space, but the form may be of some service as a guide:

Excavation.—Excavate one foot larger than size, and

net depth shown on plan; also for footings as shown, and after concrete is dry lay outside tile and cover 4 inches with coarse gravel (to be furnished), then fill to grade line with clay; also fill inside of rooms to height for concrete floor with wet clay, and well ram.

Concrete.—Build all walls to height as per plan of concrete, eight to one, of clean gravel and Portland cement; all floors of concrete to be four inches thick, lower three inches, eight to one, and top inch, two to one, to be laid with a gradual fall to A for drainage; steps of concrete to be two to one, as above.

Brickwork.—Veneer with white brick all outside walls and rear walls of main building, brick to be carried up to top of fire wall (see detail). Brickwork of engine house, nine-inch walls, struck both sides, blind bond; all windows and doors to have nine-inch arches (two tier rowlocks); engine-house walls to be eight feet high.

Plaster.—Plaster all walls on ground floor from floor to ceiling (of wood), two coats, hard finish, excepting cold-storage rooms (which will be of wood). Care must be taken of concrete floors, which must be kept clean after plastering is done.

Carpenter Work.—All studding to be two by four, excepting partitions marked "B," which must be two by six. Double plates and sills. Plates of outside walls to be two by ten.

Floor joist in office and testing room to be two by ten, bridged once in length. Roof joist in rear building to be two by twelve. All two-foot centers to be bridged as above.

Rafters of main building to be two by four in two length, spliced on four-by-six purlins, supported and braced on six-by-six posts above iron columns. Collar beams two by four, twice tied to rafters. Ceiling joist of rear building to be two by four as per detail. Ceiling joist in churn room, two by six.

Line all outside walls and rear wall of main part; deck and pitched roof also inside of cold-storage rooms, with matched hemlock sheathing (see detail of cold storage).

Cover all ceilings in both buildings, also wall and partitions of cold storage, with ½ narrow matched pine, to be beaded.

Lay white pine floor in office and testing room, and finish with casing, band mould and base; all other openings plain casings.

All doors and windows to be sizes marked on plan. Erect stairs where marked, of wood, of two-inch dressed plank, with rails complete. Also put rail of pine from stair at testing across to main stair.

Loft over main part to have 1½ maple or pine floor, and matched partition around stair well with door; also two windows in rear wall same as front elevation; no other finish in loft.

Cornice on main part of fourteen-inch plantia, seven-inch fascia and five-inch bed mould.

Main roof to be covered with B. C. red cedar shingles, hip and ridge poles to complete.

Cover all fire walls with galvanized iron, as per detail.

Roof of rear building to be three-ply ready roofing, flashed, coated and sanded in first-class manner.

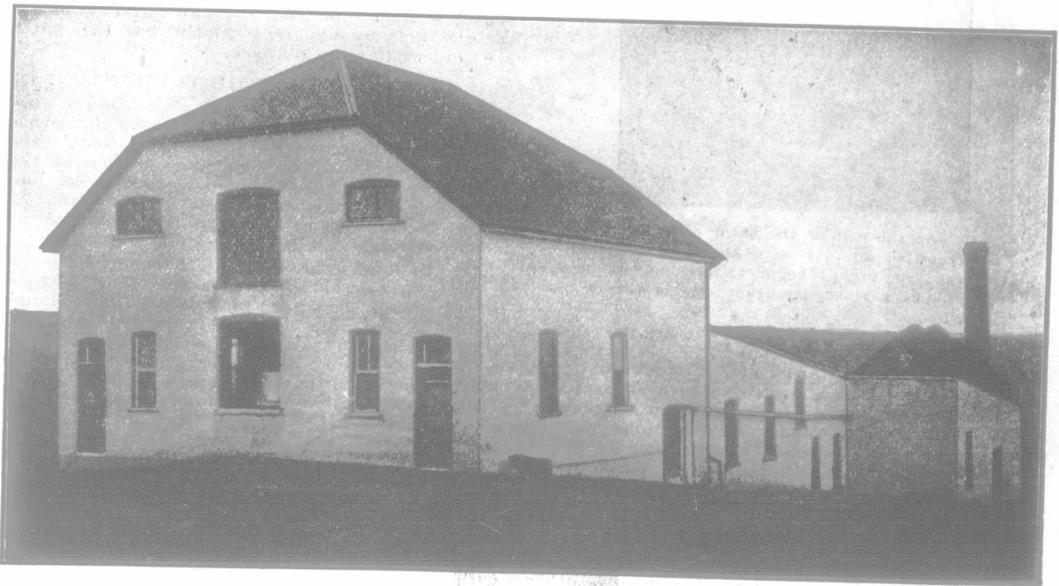
Erect hoods of wood over windows of cold storage, so that sun cannot strike glass flashed to brickwork; also on windows of churn and cream rooms.

Paint all exposed woodwork three coats of zinc paint, of colors to suit, excepting loft over main part.

Lay four-inch agricultural tile around outside of building. Highest part to be at bottom of footings. Also six-inch glazed tile where shown, connected with inlets marked A in plans, to be trapped. See plans of drains.

The intention of these specifications and plans (two sheets) are for a complete building. The proprietors reserve the right of furnishing the brick, sand and gravel.

The work all to be completed by the.....  
Signature.....



A Modern Creamery.

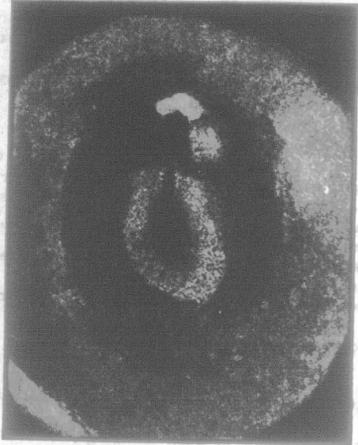
## Poultry.

### The Chicken in the Egg.

By E. T. Brown, University College, Reading, Eng.;  
Illustrated by photographs by Mr. C. E. Hearnson.

There is nothing more wonderful in Nature than the common, everyday egg, yet few regard it in any other light than that of food or for the reproduction of the species. I think, however, for several reasons, an egg can claim to be one of the wonders of Nature.

First, there is the truly marvellous strength of an egg. Considering the elements of which it is composed, it is one of the strongest things in

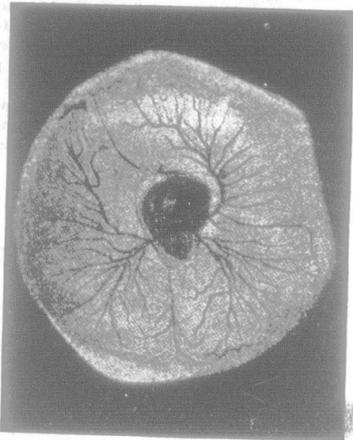


1. The egg at the end of twenty-four hours, showing the dark speck which will ultimately form part of the head of the chicken.

the world. I have known a man so strong that he could tear an ordinary pack of playing cards in twain with his hands—a wonderful feat of strength—yet when he placed an egg longitudinally between his hands, one end in each palm, and exerted all his strength, he was unable to break it, even though he placed his hands between his knees in order to obtain more pressure.

This is all the more surprising when it is remembered that the shell of an egg is perforated all over by a multitude of minute holes in order to allow the air to enter and sustain the chicken within during the stages of development.

Then there is the mystery of life within the shell—a mystery that has defied the investigations of scientists and naturalists since time immemorial, and still defies them. There is, moreover, the determination of species, of breed, of color,



2. At the end of the third day the yolk is permeated all over with blood vessels and several new organs begin to develop, which makes this a most important day in the incubation.

and of sex. What forces are at work to determine these wonders, no one can even suggest.

Two eggs are identically similar in appearance and in all respects, and yet from one a pure white bird will be hatched, whilst from the other a bird containing all the colors of the rainbow in its plumage; from one a Minorca, from the other a Leghorn; from one a cockerel, from the other a pullet. There must be very grave differences to produce such diverse results, but what they are no one knows. There are, it is true, a whole host of theories. But like many other theories, they utterly fail when put into practice.

In a new-laid egg the germ of life is quite

invisible to the naked eye, but it is situated within the vitelline membrane, which encloses the yolk. The yolk resembles a thickened horseshoe in shape, the lighter-colored part, that, figuratively speaking, within the shoe, being composed of a lighter material, named the utricle, and it is at the mouth of this utricle that the germinative vesicle is situated.

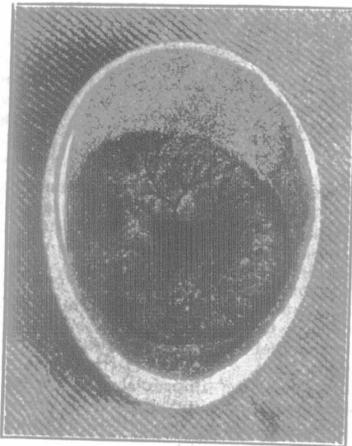
#### POPULAR ERRORS.

The yolk is held in position by two pieces of thickened albumen, termed the chalazæ, terminating in the white, which act as buffers, keeping the yolk in position. These are the pieces removed when beating an egg; many people think they have something to do with the germ of life, but this is not the case. Were these absent the germ would continually float to the top. Owing, however, to the presence of the chalazæ, the germ is held in place, but is always uppermost, and therefore nearest to the heat in incubation, whether natural or artificial, as the lower part of the yolk is of denser material, and naturally sinks to the bottom.

A very common idea among many people is that the chicken is formed from the yolk. This is quite wrong, as it is the albuminous matter, the so-called white, that contains the materials for the formation and growth of the chicken, the only use of the yolk being to supply nutriment to the embryo during the different stages of development.

Immediately an egg comes into contact with heat of a sufficient temperature the germ is started into activity, and should this heat be maintained, a chicken should make its appearance at the end of from nineteen to twenty-one days. At the end of eighteen hours' incubation a distinct speck can be seen towards the top end, which will ultimately form part of the head.

It is possible with a powerful light to see this dark speck through the shell, and after a certain



3. The egg at the fourth day, when limbs commence to make their appearance.

amount of experience one can tell at this stage whether the egg is fertile or whether it does not possess the germ of life. Should the shell of the egg be exceedingly thin, and the lamp a powerful one, some blood-vessels can be distinguished, but a good deal of practice is necessary for this.

When another six hours have elapsed (Fig. 1) a change is noticeable, the speck having increased in size and become more prominent. When the egg has been submitted to heat for forty hours there is no very apparent change, but the parts are somewhat more distinct.

#### IMPORTANCE OF THE THIRD DAY.

By the end of the third day (Fig. 2) the yolk is permeated all over with blood-vessels, practically extending throughout the entire contents. The third day is the most important, owing to the fact that several new organs begin to develop. Special care should be taken during the first 72 hours' incubation, as these are undoubtedly the most critical.

By the fourth day (Fig. 3) the embryo has increased considerably, accompanied by a corresponding decrease in white. The limbs commence to make their appearance, some of which are easily traced. Upon either the fourth or fifth day a duct is formed, which in the case of the female ultimately becomes the oviduct, but as the male has no use for such an organ it almost immediately disappears in him. It is not until this time that the future sex of the bird can be told, as up to the present the development for male and female is identically the same.

The allantois, in reality a temporary blood-vessel, is formed on the fourth day, its purpose being to supply the blood with sufficient oxygen.

On the fifth day the head can be distinguished, with exceptionally prominent eyes, and there is a still further increase in size. The limbs can now be discerned quite plainly, though the wings and

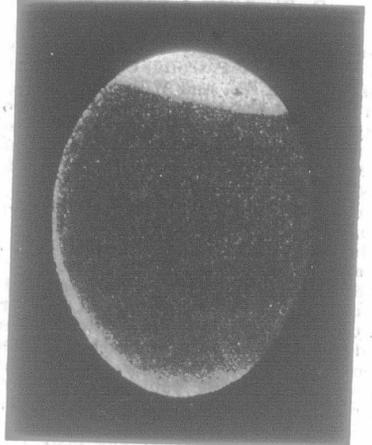
the legs appear the same. Traces of the knee and elbow can be seen at this stage.

With the close of the sixth day there are still further changes. It is at this stage that the specialization of the bird becomes apparent. The body is now formed, but the head and eyes remain enormously out of proportion. The white has now disappeared, its place having been taken by a thick brown liquid.

The seventh day marks the appearance of the liver and kidneys, and by this time the body is practically complete, though out of proportion, and exceedingly small.

On the eighth day the beak becomes visible, not as we know it, but quite soft and pliable.

When an egg has been incubated for seven days



4. At the seventh day a dark speck can be seen towards the broad end, from which blood vessels radiate. Observe the transparent air space.

it is customary to test it, in order to see whether it contains the germ of life, and whether that germ is developing in a proper manner. The operation of testing is an exceedingly simple one. The egg is placed before a lighted candle or lamp in a dark room, and so held that the line of light passes through the egg. In a fertile egg a dark speck can be observed towards the broad end, from which blood-vessels radiate throughout the entire contents (Fig. 4).

#### THE VALUE OF TESTING.

It is most advantageous thus to test an egg, as at the end of seven days, should it prove unfertile, it can be used for cooking purposes. Moreover, it is useless occupying space in an incubator with an egg that cannot hatch, when its place might well be taken by one that is fertile.

If the egg be again examined on the fourteenth day, a considerable change is noticeable. Owing



5. On the nineteenth day the chicken commences to breathe for the first time by means of its lungs, and if the egg be held to the ear a tapping sound caused by respiration may be heard.

to the development of the chicken within it is now quite opaque, save a very small portion at the pointed end. Of course, the air space, the white part of the broad end, is transparent, and it remains so throughout the entire period. The air space in a new-laid egg is quite small, but it gradually increases in size as the egg becomes older, until at the end of the sixteenth day it occupies about one-sixth of the contents of the space within the shell. The increase in size is due to the evaporation of the liquid portion, which is always going on through the holes in the shell already referred to.

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By the ninth day the feathers commence to show themselves, but are contained in sacs which remain closed until the chicken has made its exit from the shell. The increase in size from the seventh day can easily be observed, also the large amount of space occupied by the yolk sac.

On the eleventh day the limbs have assumed their proper form, and upon the legs traces of scales are discernible.

The most noticeable feature of the twelfth day is that heat commences to be given off, owing to the fact that the blood-vessels are beginning to perform their work in a proper manner. After the eleventh or twelfth day there is much less danger of the chicken dying, as it is now practically a fully-formed bird. By the thirteenth day the nails assume their form, though three more days will pass before they become, together with the beak, quite hard.

When the egg has been incubated for fifteen days the chicken is perfect, differing only in point of size from one fully developed. Its form is now exceedingly visible, and the manner in which it is packed within the shell can be easily observed. The head is towards the broad end—the air space—and when this is not the case we get what is termed false presentation, and the probability is that the chicken will die in its efforts to free itself.

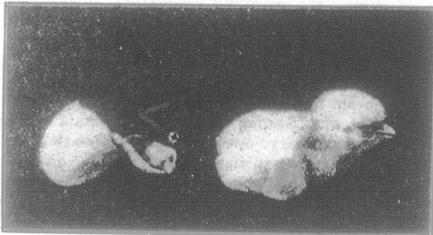
**BREATHING BEGINS.**

Assuming the chicken is to make its exit on the twenty-first day, on the nineteenth (Fig. 5)—that is two days previously—the allantois is snapped, and the chicken commences to breathe for the first time by means of its lungs. At this stage, if an egg be held up to the ear, a tapping noise may be distinctly heard, and it is frequently imagined that this is caused by the chicken attempting to pierce the shell. This, however, is not the case. It is merely respiratory, and produced during the expiration of the breath.

On the twenty-first day Nature has so far completed her task that, should the incubation have been successful, a fully-formed, well-developed chicken will be the result. Immediately prior

to hatching, the remainder of the yolk sac—the part not already absorbed—is drawn up in the chicken's body, and thenceforth forms part of the intestines. It contains sufficient nutriment for the first twenty-four hours to thirty-six hours after hatching, and this explains why it is a mistake to feed chickens during the first day to day and a half after their exit from the shell.

When the chicken is ready to issue, the beak is turned towards the air space, which is pierced, and in a clean hatch this piercing continues right round the egg. When the circle is almost com-



6. On the twenty-first day the chicken pierces the shell right round at the air space, and when the circle is complete frees itself from its temporary prison.

plete the chicken is able to free itself from its temporary prison. The beak is at first covered with a hard scale, but this drops off in the course of a day or two.

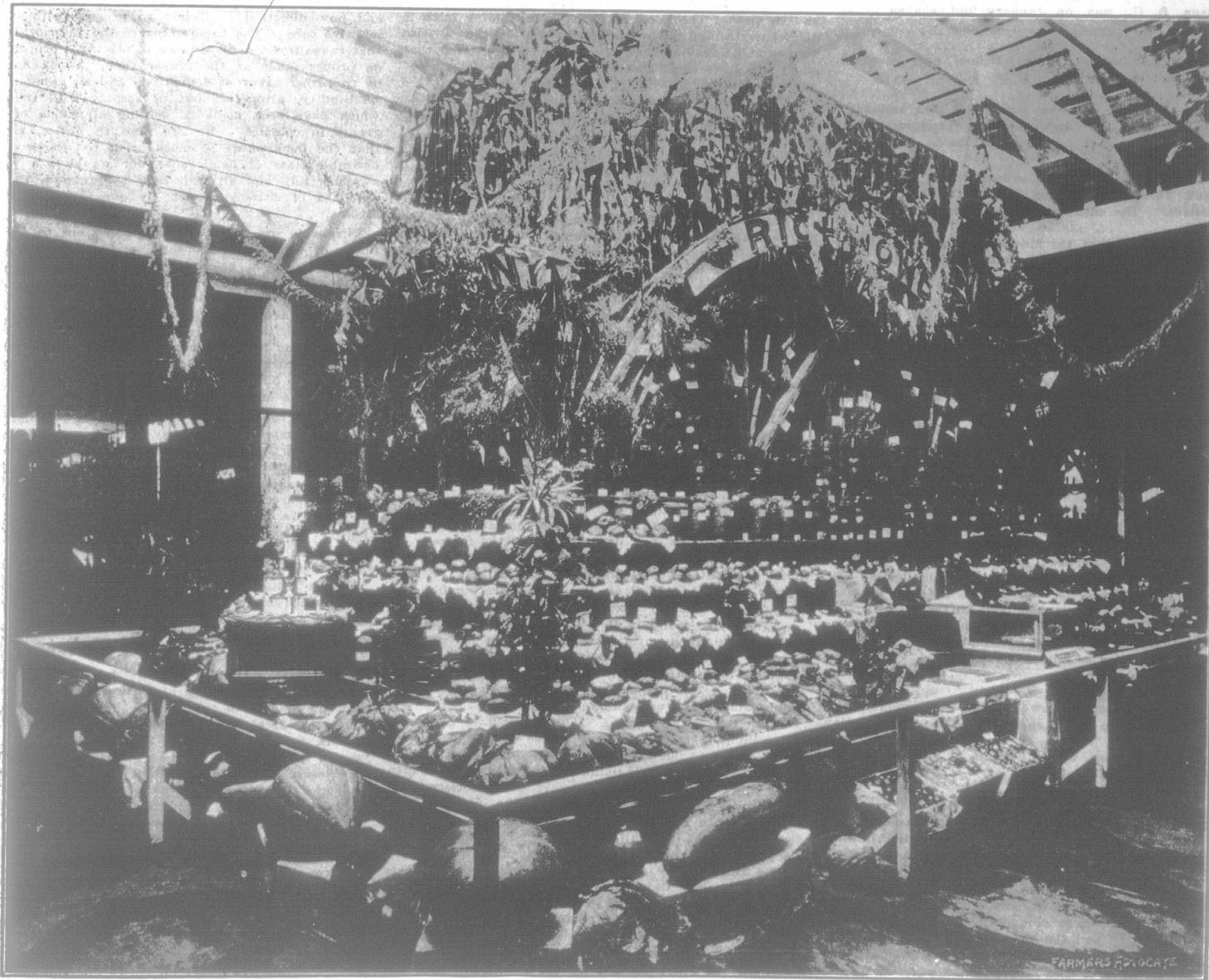
There is a custom in many parts of the country of tearing this away and forcing it down the chicken's throat, the idea being that a bird so treated can never have the gapes. This is arrant nonsense, and, more than this, it is gross cruelty, especially considering the fact that it will come off of its own accord in the course of a few days.—[The Country-side.

**Poultry Show at Virden.**

The Manitoba Poultry Association will hold its annual exhibition at Virden, Man., on February 5th to 10th. The old school building has been secured for the purpose, and every convenience for making a good display is assured. In the majority of breeds provision is made for five awards, the first prize being \$3.00, and the second \$2.00. An additional grant has been secured from the Provincial Government which will considerably augment the funds available for prizes. Jas. Rothnie, Virden, is the secretary of the Association, and to him applications for entry should be made.

**The Dust Bath.**

In the summer time it is a common sight to see hens wallowing in the dust. A dirty habit it seems at first, till we learn that this is the way nature has taught the hen to fight lice. As she is deprived of the dust in the road in the winter, the cold months are the period in which she suffers most from annoying parasites. An insect breathes, not through mouth or nostrils as larger animals do, but through the pores in the surface of its body. Sprinkle fine dust on a potato bug, and if you have never tried it before, you will be surprised to see it writhe about till it falls to the ground, where it struggles for a short time and then dies, smothered to death, or gets its breathing pores open. This is what happens to the lice on a hen's body while she is wallowing about in the dust. In the winter, a dust bath should be provided for her. This is a very easy matter; a large, flat box, not very high, filled with half dust and half ashes, serves very well. Coal ashes are better than wood ashes, as wood ashes are likely to bleach the legs of yellow-legged fowls. If the building has a dirt floor, a wide board set up on edge across one corner, or entirely across one end, serves very well. It is well to add fine dust and ashes to the dirt of the floor, as dust—not dirt—is what the hens are after. When they get well used to the dust bath which has been provided, it is well to add insect powder. This may seem like a lot of needless bother,



**A Creditable District Exhibit.**

Richmond takes second place in hot competition at Dominion Exhibition, 1905. Score in October 25th issue.

but the hens will pay abundantly for the little time it takes, as a hen free from the annoyance of lice lays much better and enjoys much better health. Lice spread diseases from one fowl to another. If the henhouse is too poor to properly house hens for winter laying, or one cannot take the time to feed for eggs in winter, he makes a mistake by not giving the hens a chance against the lice because they are not laying. If they are troubled by these enemies all winter they will not lay early in the spring when eggs are still high; they will hatch their chicks later, the eggs will be less fertile, and the chicks more likely to die. A dust bath is a little trouble which pays well.

W. I. T.

## Horticulture and Forestry.

### Shipping Strawberries.

To the Editor "The Farmer's Advocate":

Dear Sir,—A writer on small fruits in Alberta, signing "Alar," in a late number of your paper says: "The greatest drawback to strawberry-raising here is the almost impossibility of procuring fresh plants. If one sends to an Eastern or Manitoba nursery for them, the plants not only cost nearly their weight in coin, but are woefully dried up when they get here."

This is rather misleading to your readers. We had a number of letters from Alberta last spring, reading something like the following: "Plants arrived in fine condition," and there were no complaints of arriving dried up, so that "Alar's" experience is not the rule. As for "costing their weight in coin," he probably means iron coin. All the strawberry plants that any ordinary person would care to handle can be secured, delivered free of express charges in Alberta for a couple of dollars.

BUCHANAN NURSERY CO.

St. Charles, Man.

## Events of the World.

### Canadian.

Nelson, B. C., was, on January 2nd, shaken by an earthquake, which lasted for ten seconds.

St. Paul's Industrial (Indian) School, near Winnipeg, has been destroyed by fire. Loss, \$30,000.

Premier Tweedie, of New Brunswick, has announced at St. John that the Legislature will introduce a compulsory Education Act in the near future.

The G. T. R. has placed orders, chiefly with Montreal and Toronto firms, for the building of 81 new locomotives. The entire cost will exceed \$1,000,000.

It is expected that the Macdonald Institute, in connection with the Agricultural College, at Guelph, Ont., will become affiliated with the University of Toronto in the near future.

Mr. Joseph Phillips, President of the York County Loan and Savings Co., was arrested at Toronto, charged with conspiracy to defraud the public, by false statements published and returns to Government. The arrest was the result of the report just made of the Government investigation.

### British and Foreign.

It is announced that Russian Premier Witte will resign after the meeting of the Duma in April.

Hon. Edward Blake has again accepted the nomination as Nationalist candidate for South Longford.

A terrible earthquake has been reported from Nicaragua, where the volcano San Diego is in eruption.

A London, Eng., firm has been entrusted with the preparation of mourning decorations and the erection of a mortuary on board the battleship which is to convey the body of the late Hon. Raymond Prefontaine from France to Canada.

The Government of New Zealand has appointed a representative who will endeavor to induce Canadian manufacturers to exhibit at the New Zealand International Exhibition, which will be opened at Christchurch, N. Z., next spring.

Revolutionary riots have been reported from the Irkutsk district, Eastern Siberia, during the past week. Affairs are complicated by the fact that the Russian Government has been without communication with General Cizevitch for almost five weeks.

Mr. Walter Wellman, a newspaper correspondent of Washington, has been commissioned by the Chicago Record Herald to find the North Pole, by using an airship, which is to be constructed and navigated by Santos-Dumont, of Paris. Continuous reports of the trip will be made by wireless telegraphy and submarine cables. The airship will, it is calculated, be completed by the end of April, and the expedition will set out in July, or August.

## Field Notes.

Saskatchewan pure-bred cattle breeders are to hold a sale next spring, under the auspices of the Cattle-breeders' Association of that Province.

### In Defence of Immigration Policy.

To the Editor "The Farmer's Advocate":

On your editorial page of December 27th appears an article, "Immigration Records Too High," concerning which I desire to place certain information before your many interested readers.

Considering the manifold operations of the Immigration Branch of the Public Service, extending, so far as this office is concerned, from the Great Lakes to the Pacific Coast, employing several hundred permanent and temporary officers all over the West, very little advantage has been taken of the well-known liberality which characterizes the leading Western journals, willing to admit replies to any misstatements appearing therein. But your editorial being "widespread," I beg the courtesy of space for this communication, not with the idea of defending the work and methods of the Immigration Branch—for that is perfectly safe in the hands of the Minister of the Interior—but to point out wherein such an editorial is misleading and likely to hamper the continuation of Canadian progress.

It is correct that "each year efforts are made to exceed the records of the year previous," but the Department realizes more than a great many of the public, THAT PROPER PLACING OF PROPER PEOPLE ON PROPER LAND AT THE PROPER TIME is at least of equal importance to the duty of inducing them to come, and only by highly organized efforts can this immense work be carried out with so few discouragements as our records will show. This organization enables us to relieve one part of Canada when another part is in need of certain classes, yet is it not true—no matter who may talk of possible quarter millions—that the Department seek quantity rather than quality.

Our direct and complete means of communication throughout the West enables us to know fairly well how many new people of various classes can be absorbed by and assimilated with the Canadian nationality, and under express directions from the Minister greater discrimination has been used from year to year with this end in view. The Department have an abiding faith in the strength and ultimate domination of the British tongue and Canadian institutions, and feel satisfied that none who have come into Canada can successfully resist such absorption.

It is generally supposed that the Galician is the least desirable type of immigrant, although this supposition is open to question. But as this class seems to be the text of your editorial, the references herein will be confined to them, although the records and information concerning all other classes are freely open to you at any time.

The last report presented to Parliament at Ottawa shows that during the year ending 30th June, 1904, the actual total number of immigrants arriving in Canada was 130,331, of which 50,374 were British, 45,229 Americans, and of the balance only 7,727 were Galicians; in other words, five per cent. of the total immigration represents the class mentioned, as against eighty per cent. English speaking. If these figures call down condemnation, what would your readers think of the following, taken from the official reports of the United States for the same year?

Italians .....	193,296
Russians (Hebrews, etc.).....	145,141
Austrians (Galicians, etc.).....	177,156
Total all classes .....	812,800

Of which ONLY TEN PER CENT. WERE ENGLISH-SPEAKING.

Nearly all Italians, Russians and Austrians going to the States concentrate in and about the larger cities in the Eastern States, and do not go onto the farms. Of the total immigration for that year, the North Atlantic division of States (Manufacturers and Mines) received 68 per cent. of all arrivals, while the Western division (Agricultural States) received only 4 per cent.

Again, you complain that "our immigration agents are working in all parts of Europe." The Government have no officers on the continent, save in France and Belgium, but you claim it a national humiliation "for emissaries of our Government to go begging for immigrants among the unfortunate classes."

Your marked inference, "This is a land of homes for millions, yet the foreigners in the north end of Winnipeg prefer to herd in numbers ranging from ten to forty in each house," is unfair to them, unless you also state the published fact that a religious society was housing 46 English-speaking men at 10c. a night in a cellar beneath a Main Street store, within a stone's-throw of the City Hall, until the city health officers discovered it and summarily closed it up.

No new country on the globe to-day is getting better people than Canada, and none is more discriminative, except it be Australia, which appears to have lost its grip on natural development, owing to its radical anti-immigration laws, which keep her vacant lands a desolate waste. And the general tone of your editorial can fairly be met by the recent statement in the Montreal Star: "Australia is going in for a more vigorous immigration policy. It has become tired of leaving the field to Canada and depending upon the lure of its gold deposits. This is the most sincere compli-

ment which our immigration efforts have ever received, and a pointed hint to us to improve them."

The records will show the continuous effort of the Department to improve these methods, and they welcome any fair criticism upon the question, but your article will be used by newspapers and anti-Canadian agencies in the States to deter intending desirable American farmers from coming; and this is exactly how a "home" magazine makes ammunition for the "foreigner." Your readers will understand and readily recognize that the coming of the American farmer has had a great deal to do with enhancing the value of our land and the general progress.

J. OBED SMITH,

Immigration Commissioner, Winnipeg.

[Ed. Note.—It will be noticed that Mr. Smith ignores the statement that a large immigration is not a criterion of a country's prosperity, and implies that any restriction of immigration will hamper the continuation of Canadian progress. Our contention is that the forced assimilation of foreign population by English-speaking peoples tends to lower the average standards of education, of living, of morality, and of industrial efficiency. Our protest is against this forced process of assimilation, which Mr. Smith is pleased to see taking place, and the proof that we are not succeeding any too well is to be found in our police-court records, where fully 75% of the convictions are of the class commonly called "foreigners." As illustrating the lax moral sense of these people, Magistrate Daly recently severely reprimanded a woman who had trumped up a charge of assault, and stated that the frequency of such blackmail was a most lamentable reflection upon the foreign population. Nor can these people be Canadianized as readily as others, for the reason of their greater difference to other races in general conduct, and to the fact that a large proportion of those emigrating are women and children, which all tends to keep them more and more segregated from other elements of the population. We are told, however, that the Immigration Department has its finger upon the national pulse, and is throwing into the hopper of national life no more nor no less of the class of emigrants we objected to than "can be absorbed and assimilated by the Canadian nationality." The constant diagnosis of national symptoms, we are told, is performed by the Minister of the Interior, who now, it seems, has discovered that in the performance of his sociological alchemy, he has added too much and too indiscriminately of the baser metal, and now directs his officials to proceed with greater selective care. The Department of the Interior tells us that it realizes the importance of placing "proper people on proper lands at the proper time," which seems to us to rather savor of dogmatism and an assumption of infallibility, altogether out of keeping with the errors which have been made in herding all kinds of immigrants in colonies. We are glad to notice, however, that the Department is endeavoring to secure a more desirable class of immigrants, for we have a welcome awaiting any and all who tend to preserve the high standard of citizenship set by our fathers and forefathers.

Probably one of the greatest objections to the large influx of Southern Europeans, and one of which we omitted to speak before, is the low general state of health of such people. In the 1904 report of the Department of the Interior, the ratio of immigrants detained at Canadian ports on account of disease is as follows: British, one in every 1,325; Italians, one in 40; Russians and Russian Jews, one in 11.6; Syrians and allied races, one in 3.4 persons, or an average of one in every 52, by which it will be seen how the health of the whole nation is endangered.

To say that Canada is receiving a more desirable class of immigrants than any other country, or that a great proportion of the Southern Europeans live no more unsanitary lives in our cities than do a few English-speaking people, does not prove that the policy of the Department is perfect, or that it cannot be improved. We cannot afford to compare our methods with those of other Governments, but should rather take as a standard our knowledge of sanitary laws, of industrial economics, and of sociology.

Great Britain has now in force an Alien Act; something which had been badly needed, owing to the ingress of a low-grade immigration into London.]

### Canada's Liquor and Tobacco Consumption.

Excise returns issued at Ottawa on January 2nd show the amount of spirituous liquors consumed in Canada in the fiscal year just ended to have been 3,112,813 gallons, as contrasted with 3,481,287 in the preceding year—a decrease of 368,444 gallons. In malt liquors an increase of 3,004,035 gallons is shown. Among the smokers, tobacco, cigarettes and cigars have held high the returns showing a total of 8,115,904½ pounds tobacco, 6,708,800 cigarettes, and 93,094,295 cigars sold during the year; these figures being an increase respectively over the preceding year of 401,199½ pounds tobacco, 4,522,309 cigarettes, and 5,739,266 cigars.

### Land Sales.

It is stated that during the month of December, 52,218 acres of land were sold by the land department of the C. P. R., the average price paid being \$5.41 per acre. During the year the entire amount sold by the department aggregated 732,332 acres. During the month of December also, the sales of the Canada and North-west Land Co. amounted to 11,100 acres, the company's sales for the year being 141,860 acres.

Alberta Farmers' Association.

The farmers of Northern Alberta feel that there is need of an organization which would unite every farmer in the Province in one strong organization.

- (1) To forward the interests of the producers of grain and live stock in every honorable and legitimate way. (2) To hold meetings for the discussion of subjects pertaining to the production of grain and live stock, and the best means of marketing the same.

The association is not a political organization, nor does it purpose endorsing the policy of any political party, or the candidature of any politician.

It provides for branch associations in every district, and a central governing body, made up of delegates from the various local organizations.

The Salvation Army Will Supply Farm Laborers!

Adjutant Aylward, of the Citadel, Rupert St., Winnipeg, advises us that the Army's big emigration idea will be working the coming spring.

The Tariff Question in Alberta.

"I think that had the people of the Medicine Hat district been consulted the memorial presented to the Tariff Commission by the Board of Trade of that city would have been of a very different tenor to what it was."

The above is an expression of opinion from W. T. Finlay, Minister of Agriculture in the new Government of Alberta, on the action of the Board of Trade in his own town of Medicine Hat on the tariff question.

If the farmers of this country possessed the financial backing and organization of the manufacturers, and were as emphatic in enforcing their claims, they would raise such a storm on this tariff question that the Commissioners would return at once to their homes, and protection would be dead and gone forever.

Things to Remember.

- Manitoba Poultry Show, Virden.....Feb. 5-10 Dairy School (M. A. C.) open at Winnipeg.....Feb. 6 Manitoba Dairy Association, Winnipeg.....Feb. 13-14 Manitoba Horticultural Convention, Winnipeg.....Feb. 14-15 Manitoba Live-stock Conventions, Brandon.....Feb. 27-Mar. 1 Manitoba Live-Stock Association's annual at Brandon.....Feb. 27-Mar. 1 Manitoba Grain-growers.....March 1 and 2 Manitoba Grain-growers' Convention, Brandon.....Mar. 1-2

SEED FAIRS.

- The Agricultural Limited.....See Time Card Gilbert Plains.....Jan. 23 Swan River.....Jan. 25 Dauphin.....Jan. 27 Carberry.....Feb. 1 Virden.....Feb. 7 Morden.....Feb. 9 Portage la Prairie.....Feb. 20 Hamiota.....Feb. 23 Didsbury Seed Fair.....Wednesday, Feb. 7th Olds Seed Fair.....Thursday, Feb. 8th Innisfail Seed Fair.....Friday, Feb. 9th Red Deer Seed Fair.....Wednesday, Feb. 14th Magrath Seed Fair.....Monday, Feb. 19th Raymond Seed Fair.....Tuesday, Feb. 20th Lethbridge Seed Fair.....Thursday and Friday, Feb. 22nd and 23rd

RENEW YOUR SUBSCRIPTION AT ONCE, AND AVOID MISSING INTERESTING NUMBERS.

Not in the Big Combination.

In a recent newspaper interview dealing with floating rumors, Hon. Melvin Jones, President of the Massey-Harris Company, declared: "We have not had, nor ever will have, any connection with the International Harvester Company, or any other implement company in the United States or elsewhere."

A Manitoba Farm Supplies Seed for the United States.

A Brandon contemporary reports that Henry Nichol, of Fairview Farm, Brandon, shipped a car of Red Fife wheat and a car of Banner oats to Northrup, King & Co., the big Minneapolis seedsmen.

Renew! Renew! Renew! Have you forgotten to renew?

Markets.

Winnipeg.

Thompson, Sons & Co. say: In the absence of any general information which would lead conclusively to the prospect of narrowing supplies in the near or more distant future, we are forced to the conviction that prices at present are upheld and advanced by speculative manipulation on the part of large operators, chiefly Armour & Co.

COARSE GRAINS AND FEED.

- Millfeed—Bran, per ton, \$14; shorts, \$15. Chopped Feeds—Oats, and barley, \$21; barley, \$18; oats, \$25. Oats—No. 1 white, 32c.; No. 2 white, 31c.; feed oats, 30c. Barley—Malting barley, 33c.; No. 3, 33c.; No. 4, 34c. Flax—\$1.08. Hay—Per ton, cars on track, Winnipeg, \$5.50 to \$6; loose loads, \$5 to \$6. Vegetables—Potatoes, farmers' loads, per bush., 60c.; carrots, per bushel, 60c.; beets, per bushel, 50c.; turnips, per bushel, 55c.; parsnips, per bushel, \$1.50; onions, per bushel, \$1.80. Butter—Creamery—Manitoba creamery bricks, Winnipeg, 29c.; creamery, in boxes, 25c. Dairy—Tubs, choicest, 21c. to 22c.; second grade, round lots, 18c. to 20c. Cheese—Manitoba, 13c.; Ontarios, 14c. Eggs—Fresh gathered, Winnipeg, 26c. to 27c.; pickled eggs, 24c. Meats—Beef, per lb., 5c.; mutton, per lb., 11c.; lamb, per lb., 12c.; dressed hogs, packers pay for 125 to 200 lbs., 7c. Poultry—Turkeys, per lb., 17c.; geese, per lb., 14c.; ducks, per lb., 14c.; chickens (spring), 14c.; fowl (drawn), 12c. Live Stock—Butchers' cattle, weighed off cars, Winnipeg, 2c. to 3c.; hogs, weighed off cars, Winnipeg, 150 to 250, 6c.; do, 250 to 300, 5c.; lambs, 5c.; sheep, 5c.

Toronto.

Export Cattle—Choice are quoted at \$4.60 to \$5, good to medium at \$4 to \$4.50, others at \$3.75 to \$4, bulls at \$3.50 to \$4, and cows at \$2.75 to \$3.50. Butchers' Cattle—Picked lots, \$4.10 to \$4.50; good to choice, \$3.75 to \$4; fair to good, \$3 to \$3.50; common, \$2.50 to \$3; cows, \$2 to \$2.75; bulls, \$1.75 to \$2.25, and canners, \$1.75 to \$2.50. Stockers and Feeders—Short-keep feeders are quoted at \$3.60 to \$4, good feeders at \$3.40 to \$3.65, medium at \$2.50 to \$3.50, bulls at \$2 to \$2.75, good stockers run at \$2.80 to \$3.50, rough to common at \$2 to \$2.70, and bulls at \$1.75 to \$2.50. Milch Cows—\$30 to \$60 each. Calves—\$2 to \$12 each, and 3c. to 6c. per pound. Sheep and Lambs—Export sheep are quoted at \$4.25 to \$4.50 per cwt. for export ewes, \$3.25 to \$3.75 for bucks, and \$3.50 to \$3.75 for culls. Lambs, \$6.25 to \$6.40 for ewes and wethers, and \$6 to \$6.25 for mixed and culls. Hogs—Quotations are \$6.35 for selects and \$6 for lights and fats. Horses—The average prices obtained during the week in the sale-rings follow: Single roadsters, 15 to 16 hands, \$125 to \$160; single cobs and carriage horses, 15 to 16.1 hands, \$125 to \$170; matched pairs and carriage horses, 15 to 16.1 hands, \$300 to \$400; delivery horses, 1,100 to 1,200 lbs., \$125 to \$175; general-purpose and expressers, 1,200 to 1,350 lbs., \$125 to \$175; drafters, 1,350 to 1,750 lbs., \$140 to \$180; serviceable second-hand workers and drivers, \$50 to \$80.

Chicago.

Cattle—Common to prime steers, \$3.25 to \$6.25; cows, \$3 to \$4.40; heifers, \$2.25 to \$5; bulls, \$2 to \$4.10; calves, \$3 to \$8; stockers and feeders, \$2.40 to \$4.25. Hogs—Choice to prime heavy, \$5.40 to \$5.45; medium to good heavy, \$5.35 to \$5.40; butchers' weights, \$5.35 to \$5.42; good to choice heavy, mixed, \$4.35 to \$5.40; packing, \$5.20 to \$5.37; Sheep—\$4 to \$6.25; yearlings, \$6 to \$7; lambs, \$7.50 to \$8.

Montreal.

Trade dull. Beef cattle, 3c. to 4c. per lb.; old cows, 2c. per lb.; young veal calves, \$2.50 to \$5 each. Sheep, 4c.; lambs, 6c. to 6c. per lb. Fat hogs, 6c. to 7c. per lb.



## Life, Literature and Education.

### F. A. and H. J. L. S.

In our last issue appeared an announcement which, we trust, proved of more than ordinary interest to our readers, viz., the forming of a gigantic literary society in connection with our paper, the discussions and debates thereof to be carried on by our readers, and to form a leading feature of our Life, Literature and Education page. Now, having taken this thing in hand, at the earnest solicitation of several of our readers, and, needless to say, with much pleasure upon our own part, we are minded to make it an out-and-out success, and this we can do only with the whole-hearted co-operation of our readers. We want this society to be a veritable mind and wit polisher to those who take part, and a source of information and recreation to those who merely read; and we want you, our readers, to supply the material, rub and be rubbed, good-naturedly, of course, and so help us to keep things moving. The more mechanical part of the work, which must be done here in the office, we shoulder cheerfully. We wish to render to our readers the best services in our power.

Have you read the conditions, as offered in our last issue? Possibly not—if you are a new subscriber. Then here it is, in a nutshell: If you wish to become a member of this—which must become the most extended Literary Society in the West—and so provide yourself with a mental stimulus which, perhaps, you cannot easily lay hold upon in the place where you live, all you have to do is to write us, requesting that your name be enrolled as a member. That alone will entitle you to write us upon any topic that may be presented, or to offer any suggestion that may occur to you for the improvement of the society.

The first topic—and, by the way, a paper on this topic may accompany your application—is: "Which do you consider the most important event in the year 1905, in (a), your Province; (b), in Canada; (c), in Great Britain; (d), in the United States; (e), in the world? Give reasons for your answers. Keep your essay within a limit of 500 words, and written on one side of the paper only. Prizes of books (standard books, of course) will be given, not as an emolument, but as a slight token of our gratitude to those who may help in establishing and maintaining the Society.

Write us immediately how you like the idea of the Society, will you not? And remember that all contributions upon the first topic must reach us not later than January 27. The prizewinning essays will, of course, be published. Remember, contributors to the "F. A. and H. J. L. S." must not be under 16 years of age.

### Literary Society: Mock Parliament.

Mr. J. R. V. asks for a few subjects for debate, suitable for discussion in a Literary Society, also for some hints regarding the conducting of a Mock Parliament. . . . In regard to the first question, we refer Mr. J. R. V., with much pleasure, to our issue of Dec. 20, which contains an excellent list of subjects. Concerning the Mock Parliament, the following hints may be of use:

It will be necessary at first to choose leaders, government and opposition; members who shall stand (for convenience) for fictitious constituencies; a speaker, who enters into none of the debates before the house, but whose duties are to preserve order, put motions, and decide on all questions of order; and a clerk, whose place it is to enter in his journal all motions read or proposed by the speaker. The clerk in Parliament, it may be noted in passing, takes no notice of members' speeches, these being attended to by the Hansard reporter, who records all the proceedings of the House. . . .

In some Mock Parliaments, a full Cabinet or Ministry is also chosen.

In Parliament, due notice must be given of any motion which is to be brought forward. We quote from Bourinot:

"All motions shall be in writing and seconded, before being debated or put from the chair.

"No motion is regularly before the House until it has been . . . proposed from the chair, when it becomes a question. A question may be debated, amended, superseded, resolved in the affirmative, or passed in the negative, as the House may decide.

"When a debate on a question is closed. . . the speaker proceeds to put the question. . . That is to say the speaker says, 'Is the House ready for the question?' The sense of the House being unequivocally in favor of closing the debate, and no member rising to speak, the speaker again reads the motion.

"In the House of Commons, the speaker says, 'Those who are in favor of the motion (or amendment) will please to rise.' The clerk has before him a list of all the names printed alphabetically, and places a mark against each name as it is called. The assistant clerk calls out the name of each member as he stands up."

The names of those opposed are similarly taken. The clerk counts

up the votes on each side, and declares them, and the speaker says: "The motion is resolved in the affirmative," or "passed in the negative," as the case may be. In case of an amendment, it will be remembered that any member has the right to move such without giving notice. Again, to quote from Bourinot: "When it is proposed to amend a motion, the question is put to the House in this way: The speaker will first state the original motion, (Mr. A moves, seconded by Mr. B that), etc. Then he will proceed to give the amendment: 'To this, Mr. C moves in amendment, seconded by Mr. D, that, etc.' The speaker will put the amendment directly in the first place to the House: 'Is it the pleasure of the House to adopt the amendment?' If the amendment be negatived, a debate may ensue, and an amendment may be proposed, "That the main motion, as amended, be further amended, etc." In this case, the speaker will submit the three motions in the reverse of the order in which they are made, and take the vote of the House on the last amendment first.

There are, however, innumerable rules and regulations governing the procedure of Parliament, for which we have no space here, and which are yet essential to the carrying on of a Mock Parliament; hence we would strongly advise all those who purpose organizing such a debating society to procure a copy of Bourinot's "Procedure of Public Meetings," or, better, of his "Parliamentary Procedure," at the earliest opportunity.

Probably some of our readers have had experience in a well-conducted literary society, and would give us concisely their method of successfully conducting Mock Parliament.

### Partnerships.

A young man comes to the period of life when his fancy turns rationally to thoughts of love. I say "rationally" to indicate that the calf variety is not being considered just now. This young man is well grown, of good habits, of sound mind and body, and of reasonably good appearance. He has found a young lady who is in every way a good mate for him, and he thinks of marriage. The thought of marriage brings with it the thought of home, and of his ability to provide a home. The young man finds that he has no money of his own. The sweetheart is in the same financial situation. Very often neither the young man's parents nor the parents of the young lady are financially able to give the young people a start. Under such circumstances, no one need wonder if the young people conclude to remain unmarried. And so, in many cases, the question of to marry or not to marry is a question of finances.

In view of this, I submit the following suggestion to our farmer friends. It is worth thinking about, at least:

As soon as a son or a daughter is capable of appreciating what is being done, let the child be made a partner in the financial welfare of the home. At first the child's share may be very small, but it should be large enough to engage his hearty interest. It must be a genuine part-

nership, not a side-line interest, into which the child enters. What he does must be of such a nature as he sees will affect the financial returns of the firm, such as an increase in the butter or egg yield, or additional neatness and convenience of the farm or its furnishings. The judicious mother will readily suggest ways and means of taking her daughter into partnership. As years pass, and as the capacity of the child grows, his share in the partnership will be increased, till, finally, the family will, in all matters of profit and loss, share and share alike. The result will be better work, because of deeper interest in the home; the boys and girls will, in many instances, stay at home, and resources in the farm, undreamt of heretofore, will be developed. Further, the old people will not have to "move out" as the young people come in. Besides, when a young man wants to marry he will have his own earnings, and a deal of good experience to boot, wherewith to start life on his own responsibility. C. J.

### Flaw-seeing Eyes.

Lowell speaks of "flaw-seeing eyes like needle points." They travel over a piece of cloth with preternatural sharpness to discover its hidden defects; they travel over people in the same way. People on the lookout for flaws find so many that they are always sure that they are in everything, and if they do not succeed in detecting them at first sight in any instance, they go over and over it, like a hound thrown off the track. It is too bad to have such a vision, for it makes the possessors unhappy and others uncomfortable.

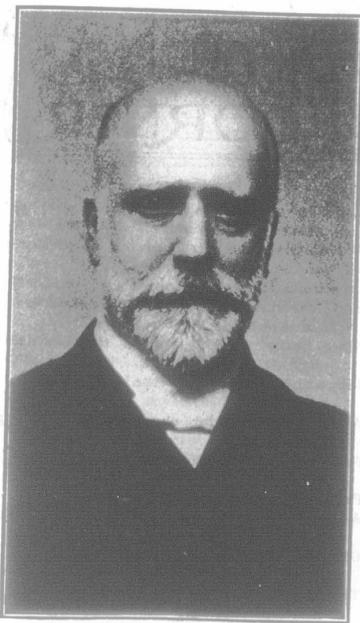
We say that it is pitiful to have such imperfection-seeing vision, but those who have it do not think so. They congratulate themselves upon being smarter than other people. Others may be imposed upon, but they—never! So with their needle-sight they go pricking into things and people, not realizing to how many good persons they are making themselves disagreeable before they find one scamp. But they so gloat over discovering him! Their chuckling over their shrewdness, however, is no compensation for their loss. They cannot enjoy a superb painting because they are endeavoring to detect some defect. After hearing a solo you will hear them speaking more of a slight break than of the really fine rendition of the song. And so it is with everything else, their pleasure is spoiled by the foibles, weaknesses, faults, flaws they behold in all things and in everybody—but themselves. There their flaw-seeing eyes are blind.

It is exceedingly uncomfortable to live in the same house with a flaw-seeing individual. However much one may strive to do the right thing, and however well he may succeed, those penetrating eyes see some unforgivable shortcoming. Under such inspection the temptation to give up altogether is very strong, and many yield to it. Wherefore, guard against "flaw-seeing eyes, like needle points."—[Ex.]

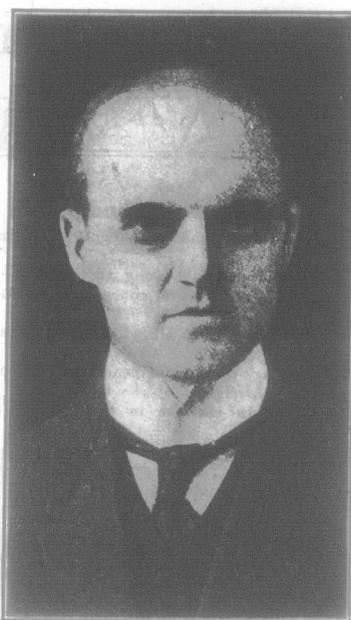
**A New Moody and Sankey.**

The pessimistic complaint that the world is growing every year more material, more indifferent to religious things, would seem to meet disapproval, in Canada, at least, in the reception given in all of our towns and cities to any man who comes with an earnest message and marked with the stamp that rings no counterfeit; and that the ministry of Messrs. Torrey and Alexander, the evangelists who have just visited Canada, following their great tour in the Antipodes and in England, is well standing the fire of the "white light" that beats, in these matter-of-fact days, no less upon the pulpit than upon the throne, may be judged from the crowded houses which have marked the progress of these noted men.

In the lives of both these men the influence of a godly home training is strikingly exemplified. Dr. Torrey was born at Hoboken, N. J., on the 28th of January, 1856, the son of a New York banker. In early life he was filled with the ambition to become a great lawyer; but, like our own Dr. Grenfell of the Labrador, and many others who have heard the especial "call," he met a power sufficient to turn the whole tenor of his life at a Moody and Sankey meeting. Afterwards he became pastor of a small Congregational church in Garrettsville, Ohio, and, after a short time spent in study in Germany, assumed the pastorate of



Rev. R. A. Torrey, D. D.



Mr. C. M. Alexander.

charges in Minneapolis and Chicago, in each case choosing a small church which he might build up, in preference to accepting a position of much greater emolument.

In 1893 he assisted Moody in the great World's Fair campaign, and, for a time, when Moody was taken sick in Kansas City, carried on the work himself. In 1898, accompanied

by Mr. Alexander, he set out on a world-wide tour, in which meetings were conducted in Australia, Tasmania, New Zealand, India and Great Britain, with such success that 100,000 persons have professed conversion as a result.

Charles McCallon Alexander is 38 years of age, and was born in Tennessee, the son of poor but intensely religious and intensely musical parents. This musical talent was fully inherited by the boy, who started the singing in Sunday School when only nine years of age, and, at fifteen, became fired with an ambition to organize a great choir, an object towards which, for some years, all his energies were directed.

His first step was to attend a college of music. Later he became Director of Music in the same institution, but, with the resolution of devoting his life to sacred song, he gave up this work to start out with John Kittrell, the Quaker blacksmith-evangelist, in a tour of the South. He also took part in Moody's campaign, and at different times found himself in charge of just such choirs as had figured in his boyhood dreams. Mr. Alexander has been with Dr. Torrey throughout his world tour, and has become especially noted through his "Glory Song," which has already gone before him like a herald across the continent. Upon these men, it would seem, has strikingly fallen the mantle of their noted predecessors, Moody and Sankey.

**GLENGARRY SCHOOL DAYS.**

A STORY OF EARLY DAYS IN GLEN GARRY.

By Ralph Connor—Rev. C. W. Gordon.

CHAPTER VI.—Continued.

How Thomas could have brought this disgrace upon him, he could not imagine. If it had been William John, who, with all his good nature, had a temper brittle enough, he would not have been surprised. And then the minister's sermon, of which he had spoken in such open and enthusiastic approval, how it condemned him for his neglect of duty towards his family, and held up his authority over his household to scorn. It was a terrible blow to his pride.

"It's the Lord's judgment upon me," he said to himself as he tramped his way through the woods. "It is the curse of Eli that is hanging over me and mine." And with many vows he resolved that, at all costs, he would do his duty in this crisis and bring Thomas to a sense of his sins.

It was in this spirit that he met his family at the supper-table, after their return from the Gaelic service.

"What is this I hear about you, Thomas?" he began, as Thomas came in and took his place at the table. "What is this I hear about you, sir?" he repeated, making an effort to maintain a calm and judicial tone.

Thomas remained silent, partly because he usually found speech difficult, but chiefly because he dreaded his father's wrath.

"What is this that has become the talk of the countryside and the disgrace of my name?" continued the father in deepening tones.

"Not very great disgrace, surely," said Billy Jack, hoping to turn his father's anger.

"Be you silent, sir!" commanded the old man, sternly. "I will ask your opinion when I require it. You and others beside you in this house need to learn your places."

Billy Jack made no reply, fearing to make matters worse, though he found it hard not to resent this taunt, which he knew well was flung at his mother.

"I wonder at you, Thomas, after such a sermon as you. I wonder you are able to sit there unconcerned at this table. I wonder you are not hiding your head in shame and confusion." The old man was lashing himself into a white rage, while Thomas sat looking stolidly before him, his slow tongue finding no words of defense. And indeed, he had little thought of defending himself. He

was conscious of an acute self-condemnation, and yet, struggling through his slow-moving mind there was a feeling that in some sense he could not define, there was justification for what he had done.

"It is not often that Thomas has grieved you," ventured the mother timidly, for, with all her courage, she feared her husband when he was in this mood.

"Woman, be silent!" blazed forth the old man, as if he had been waiting for her words. "It is not for you to excuse his wickedness. You are too fond of that work, and your children are reaping the fruits of it."

Billy Jack looked up quickly as if to answer, but his mother turned her face full upon him and commanded him with steady eyes, giving herself, no sign of emotion except for a slight tightening of the lips and a touch of color in her face.

"Your children have well learned their lesson of rebellion and deceit," continued her husband, allowing his passion a free rein. "But I vow unto the Lord I will put an end to it now, whatever. And I will give you to remember, sir," turning to Thomas, "to the end of your days, this occasion. And now, hence from this table. Let me not see your face till the Sabbath is past, and then, if the Lord spares me, I shall deal with you."

Thomas hesitated a moment as if he had not quite taken in his father's words, then, leaving his supper untouched, he rose slowly, and without a word climbed the ladder to the loft. The mother followed him a moment with her eyes, and then once more turning to Billy Jack, held him with her calm, steady gaze. Her immediate fear was for her eldest son. Thomas, she knew, would in the meantime simply suffer what might be his lot, but for many a day she had lived in terror of an outbreak between her eldest son and her husband. Again Billy Jack caught her look, and commanded himself to silence.

"The fire is low, William John," she said, in a quiet voice. Billy Jack rose, and from the wood-box behind the stove, replenished the fire, reading perfectly his mother's mind, and

resolving at all costs to do her will.

At the taking of the books that night, the prayer, which was spoken in a tone of awful and almost inaudible solemnity, was for the most part an exaltation of the majesty and righteousness of the government of God, and a lamentation over the wickedness and rebellion of mankind. And Billy Jack thought it was no good augury that it closed with a petition for grace to maintain the honor of that government, and to uphold that righteous majesty in all the relations of life. It was a woeful evening to them all, and as soon as possible the household went miserably to bed.

Before going to her room the mother slipped up quietly to the loft and found Thomas lying in his bunk dressed and awake. He was still puzzling out his ethical problem. His conscience clearly condemned him for his fight with the master, and yet, somehow he could not regret having stood up for Jimmie and taken his punishment. He expected no mercy at his father's hands next morning. The punishment, he knew, would be cruel enough, but it was not the pain that Thomas was dreading; he was dimly struggling with the sense of outrage, for ever since the moment he had stood up and uttered his challenge to the master, he had felt himself to be different. That moment now seemed to belong to the distant years when he was a boy, and now he could not imagine himself submitting to a flogging from any man, and it seemed to him strange and almost impossible that even his father should lift his hand to him.

"You are not sleeping, Thomas," said his mother, going up to his bunk.

"No, mother."

"And you have had no supper at all?"

"I don't want any, mother."

The mother sat silent beside him for a time, and then said, quietly,

"You did not tell me, Thomas."

"No, mother, I didn't like."

"It would have been better that your father should have heard this

from—I mean, should have heard it at home. And—you might have told me, Thomas."

"Yes, mother, I wish now I had. But, indeed, I can't understand how it happened. I don't feel as if it was me at all." And then Thomas told his mother all the tale, finishing his story with the words, "And I couldn't help it, mother, at all."

The mother remained silent for a little, and then, with a little tremor in her voice, she replied: "No, Thomas, I know you couldn't help it, and I—here her voice quite broke—"I am not ashamed of you."

"Are you not, mother?" said Thomas, sitting up suddenly in great surprise. "Then I don't care. I couldn't make it out well."

"Never you mind, Thomas, it will be well," and she leaned over him and kissed him. Thomas felt her face wet with tears, and his stolid reserve broke down.

"Oh, mother, mother, I don't care now," he cried, his breath coming in great sobs. "I don't care at all." And he put his arms round his mother, clinging to her as if he had been a child.

"I know, laddie, I know," whispered his mother. "Never you fear, never fear." And then, as to herself, she added, "Thank the Lord you are not a coward, whatever."

Thomas found himself again without words, but he held his mother fast, his big body shaking with his sobs.

"And, Thomas," she continued, after a pause, "your father—we must just be patient." All her life long this had been her straggle. "And—and—he is a good man." Her tears were now flowing fast, and her voice had quite lost its calm.

Thomas was alarmed and distressed. He had never in all his life seen his mother weep, and rarely had heard his voice break.

"Don't, mother," he said, growing suddenly quite himself. "Don't you mind, mother. It'll be all right, and I'm not afraid."

"Yes," she said, rising and regaining her self-control, "it will be all right, Thomas. You go to sleep." And there were such evident reserves of strength behind her voice that Thomas lay down, certain that all would be well. His mother had never failed him.

(To be continued.)

### Bishop of Oxford's Riddle.

A BRIGHT GAME FOR WINTER EVENINGS.

1. I have a trunk?
2. It has two lids?
3. It has two caps?
4. Two musical instruments?
5. Two poetic measures?
6. A score of articles carpenters cannot do without?
7. A couple of good fish?
8. A great number of small shell-fish?
9. Two lofty trees?
10. Two spring flowers?
11. Two playful domestic animals?
12. A great number of small wild animals?
13. A fine stag?
14. A number of whips without handles?
15. Some weapons of warfare?
16. A number of weather-cocks?
17. An entrance to a hotel?
18. Two students?
19. At a political meeting, on a division of votes?
20. A number of Spanish grandees?
21. A big wooden box?
22. Two fine churches?
23. Product of camphor tree?
24. A piece of English money?
25. An article used by artists?
26. A boat used in racing?
27. Used for crossing a river?
28. Pair of blades without handles?
29. Twelfth letter of the alphabet, finished with bows?
30. Instruments used in church?
31. Fastenings for the whole?

#### ANSWERS TO ABOVE.

1. The body.
2. Eyelids.
3. Kneecaps.
4. Drums of the ears.
5. Feet.
6. Nails.
7. Soles.
8. Muscles.
9. Palms.
10. Two lips (tulips).
11. Calves.
12. Hairs (hares).
13. Heart (hart).
14. Lashes.
15. Arms.
16. Vans (vanes).
17. In-step.
18. Pupils.
19. Eyes and nose.
20. Tendons.
21. Chest.
22. Temples.
23. Gum.
24. Crown.
25. Palate.
26. Skull.
27. Bridge.
28. Shoulder blades.
29. Elbows.
30. Organs.
31. Cords.

### Where Babies are not Washed.

A traveller from Russia says that Russian babies in Siberia are not very attractive. And when he tells us one of the reasons, we do not wonder at his thinking so.

He says that one day he noticed in one of the houses a curious bundle on a shelf; another hung from a peg in the wall, and a third hung by a rope from the rafters; the one in the swinging bundle was the youngest.

The traveller looked over at the little baby, and found it so dirty that he exclaimed in disgust: "Why do you not wash it?"

The mother looked horror-stricken and ejaculated: "Wash it? Wash the baby? Why, it would kill it!"

What a happy country Russia must be for some boys! They never hear "Wash your face and hands," nor "Have you brushed your hair?" But, O, how they would look!— [Lutheran Observer.

I received the knife, reading-glass and microscope for obtaining two new subscribers to your most valuable farm journal. They were all far above my expectation, both in quality and finish. I will try to send more subscribers.

THOS. WATSON.

Springvale, Dec. 25th, 1905.



### The Four Sunbeams.

Four little sunbeams came earthward one day,  
Shining and dancing along their way,  
Resolved that their course should be blest.  
"Let us try," they all whispered, "some kindness to do,  
Not seeking our own pleasures all the day through,  
Then meet in the eve in the west."



Progressive Farmers.

One sunbeam ran in a low cottage door  
And played "hide and seek" with a child on the floor,

Till baby laughed loud in his glee,  
And chased with delight his strange playmate so bright,

The little hands grasping in vain for the light  
That ever before him would flee.

One crept to a couch where an invalid lay  
And brought him a dream of the sweet summer day,

Its bird song and beauty and bloom,  
Till pain was forgotten and weary unrest,  
And in fancy he roamed through the scenes he loved best,  
Far from the dim, darkened room.

And one, where a little blind girl sat alone,  
Not sharing the mirth of her playfellows, shone  
On hands that were folded and pale,  
And kissed the poor eyes that had never known sight,  
That never would gaze on the beautiful light  
Till angels had lifted the veil.

At last, when the shadows of evening were falling,  
And the sun, their great father, his children was calling,  
Four sunbeams sped into the west.  
All said, "We have found that in seeking the pleasure  
Of others we fill to the full our own measure,"  
Then softly they sank to their rest.

### The Paper Dolly's Petition.

Come hither, little maiden fair,  
Don't look so sad and melancholy!  
If you have any change to spare,  
Pray buy me for your Paper Dolly.

My name is Mary, Mary Hill;  
But call me May or Moll or Molly,  
Or even Polly, if you will,—  
But buy me for your Paper Dolly!

Kitties will scratch and tea-sets break,  
And jackstraws, they are naught but folly;  
But how much comfort you might take  
In cutting clothes for Paper Dolly!

When winter flings his snows about,  
And nothing's green but pine or holly,  
And girls are kept from going out,  
How nice to have a Paper Dolly!

But when the summer skies are fair,  
And summer birds are blithe and jolly,  
And summer flowers are everywhere,  
O, don't forget poor Paper Dolly!

Your money is all gone, you say?  
Don't look so sad and melancholy,  
But go ask grandma; she will pay;  
Then I shall be your Paper Dolly.

### Young Canucks.

All our young Canucks greet eagerly  
A splendid fall of snow.  
Their warm coats and caps are donned  
With glee,  
Then out of doors they go.

'Tis little they care for the "zero" mark,



Young Canucks.

One stole to the heart of a girl that was sad  
And loved and caressed her until she was glad  
And lifted her white face again,  
For love brings content to the lowliest lot,

And finds something sweet in the dreariest spot,  
And lightens all labor and pain.

And if the mercury drops  
To "twenty below," do you really think  
That they indoors will stop?

Their cheeks are like apples—as round and firm  
And red as a "Northern Spy."  
They pity the children who have no snow  
And who play beneath a southern sky.  
COUSIN BOBOTHY.

### Winter in St. Petersburg.

The people run so fast in the streets that you would think they were running for their lives; and so they are, for if they were to stand still, they would be frozen. Little children cannot go out at all in the midst of winter, but boys who are fast runners can. The people wrap themselves up in fur, with only noses and eyes peeping out. Sometimes you will see a man's nose grow very white indeed. He feels nothing, but some kind person passing by will call out, "Father, mind your nose!" and then the man will take up some snow, and rub it.

There are large rooms in St. Petersburg, where poor people may always go and warm themselves. The rich people keep themselves very warm in their houses. They have double windows, and they put salt or sand between. In the sand, flowers are planted, and so little gardens bloom in the winter, between the windows. The salt is made into the shape of little houses, trees and hills. Which would you put between your windows, sand or salt? There are two or three doors to each room, one behind another, to keep the cold from getting in, and there is a large stove in the middle of the room.

### How the Professor Apologized.

Professor Blackie, of Scotland, was lecturing to a new class, some of whose members he did not know very well. A student rose to read a paragraph, his book in his left hand.

"Sir," thundered Blackie, "hold your book in your right hand!"—and as the students would have spoken—"No words, sir! Your right hand, I say!"

The student held up his right arm, ending piteously at the wrist. "Sir, I have nae right hand," he said.

Before Blackie could open his lips there rose a storm of hisses, and by it his voice was overborne. Then the professor left his place and went down to the student he had unwittingly hurt, and put his arm around the lad's shoulders and drew him close, and the lad leaned against his breast.

"My boy," said Blackie—he spoke very softly, yet not so softly but that every word was heard in the hush that had fallen on the class-room—"my boy, you'll forgive me that I was over-rough? I did not know—I did not know!"

He turned to the students, and with a look and tone that came straight from his heart, he said, "And let me say to you all, I am rejoiced to be shown that I am teaching a class of gentlemen."

Scottish lads can cheer as well as hiss, and that Blackie learned.

Do the work that's nearest;  
Though it's dull at whiles,  
Helping when we meet them  
Lame dogs over stiles;  
See in every hedgerow,  
Marks of angels' feet,  
Epics in each pebble  
Underneath our feet.

—Charles Kingsley.

### The One-talent Man.

He couldn't sing and he couldn't play,  
He couldn't speak and he couldn't pray.  
He'd try to read, but break right down,  
Then sadly grieve at smile or frown.  
While some with talents ten begun,  
He started out with only one.  
"With this," he said, "I'll do my best,  
And trust the Lord to do the rest."  
His trembling hand and tearful eye  
Gave forth a word of sympathy;  
When all alone with one distressed,  
He whispered words that calmed that breast,

And little children learned to know,  
When grieved and troubled, where to go.  
He loved the birds, the flowers, the trees,  
And, loving him, his friends loved these.  
His homely features lost each trace  
Of homeliness, and in his face  
There beamed a kind and tender light  
That made surrounding features bright.  
When illness came he smiled at fears,  
And bade his friends to dry their tears.  
He said, "Good-by," and all confess,  
He made of life a grand success.

I received the handbag safely, and I am well pleased with it. It is a beauty. Accept thanks. JAMES SHELLEY.  
Tazewell, Dec. 21st, 1905.



**"Where There's a Will There's a Way."**

The soul of the sluggard desireth, and hath nothing: But the soul of the diligent shall be made fat.—Prov. xiii: 4.

Then Jesus answered and said unto her, O woman, great is thy faith: be it unto thee even as thou wilt. And her daughter was made whole from that very hour.—St. Matt. xv: 28.

Never be idle, find something to do; Water grows stagnant when still, Tools, if neglected, will rust—so will you;

Work, while you can, with a will, With patience and zest, And hope for the best, Whate'er the position you fill; Men who were poor Have pushed to the fore, And toiled to the top of the hill: What they have done You may do if you try: What they have won You may win by and by!

Man is a wondrous self-acting machine, Made with unmatched skill; Sloth clogs and injures him, work keeps him clean,

And potent for good or for ill, Man needs no oil Other than toil, Labor-oiled works do not creak; Action ne'er clogs Cranks, pistons, or cogs; Labor gives strength, sloth makes weak. Be this your plan: To persistently try To work when you can, And to rest when you die!

If you should call on another farmer and find him standing gossiping with a chum over the fence, and then if you noticed that his fences and barns were tumbling to pieces and his fields were overgrown with weeds, you would probably make up your mind to two things. The first, of course, would be that, as he set out to farm, he "desired"—like the sluggard—to make his farming pay. But the second thing that you would know without being told would be that he did not "will" to be a good farmer. There may be exceptions to the rule—"where there's a will, there's a way"—but they are scarce. The Syrophenician woman obtained her "desire" because she strengthened it with the whole power of her "will." Strange, indeed, is that one record in the life of the Good Physician, when He apparently turned a deaf ear to unselfish, earnest, faithful prayer. Over and over again she pleaded, until—like Jacob wrestling with his mysterious opponent—the blessing she had set her heart on, was poured out richly on her head. And not only to her is the promise given: "Be it unto thee, even as thou wilt." I suppose we all "desire" to be good, but do we all "will" it? "If any man willeth to do His will, he shall know," says our Lord—I am quoting St. John vii: 17, R. V.—and how many sit down contentedly under the burden of doubt and uncertainty, when the path to light is so clearly pointed out. He does not say it is enough to "desire" to do the will of God, we must bring the whole force of the "will" to the pursuit of holiness. No one ever does that persistently for years without having enough light to walk by. If the prayers are careless and hurried, Bible-reading almost entirely neglected, and no daily attempt made to conquer sin and grow in holiness, it does one little good to say, hopelessly: "I wish I was as good as so-and-so." You would know it was folly to look at another's farm or house, and say: "I wish mine was as well-ordered as that!" unless you went to work to improve matters; and the law of cause and effect is just as supreme in the spiritual world. A man who not only "desires" but "wills" to be a good farmer will surely become one, if he should live long enough, and men or women who not only "desire" but "will" to become like

Christ—who has set us the one perfect Life to copy—will continually reflect more and more of His image. Failing over and over again to obtain their heart's desire, like the poor woman of Canaan, they will follow Him and plead with Him until they win the rich reward of His commendation, "Well done, good and faithful servant. . . . enter thou into the joy of thy Lord." About 300 years ago a strange, mystical doctrine was preached, which has been called "Quietism." The chief business of the Quietists was to attain a state or passive rest or "quiet," in which total inaction of will and intellect was supposed to bring the soul into the best condition for becoming one with God through the operation of the Holy Spirit. Perfect prayer was considered to be a state of absolute quiet, with no thought or wish or hope. Any word of confession, petition, or even of praise, was considered a hindrance. Probably most of us ordinary people would go to sleep if we tried to pray in that mystical fashion, and this is too practical an age for "Quietism"—as it was taught in those days—to gain much ground. But too many seem to think that goodness is like a self-propagating weed. Like the "Quietists," they leave their souls in a state of inaction, and then wonder, in great surprise, that they are no better than they were a year ago. Better! the wonder is if they have not lost ground. Our life may be "victory all along the line," but it certainly will not be unless we fight; really make a steady effort to conquer our own besetting sins; unless we sow seed of high ideals and holy thoughts; and grow the fruit of love, joy, peace, long-suffering, gentleness, goodness, faith, meekness, temperance." These will not grow of themselves, and they will be a very poor crop unless we live a life of prayer—communion with God. Prayer is no more altogether "petition" than communion with an earthly friend is altogether asking favors from him.

Mind, I am not raising the vexed question of salvation by faith or works. I am not talking about salvation, but about holiness. The penitent thief was saved, just as he was; but he was hardly what would be called a "holy man," or he would never have declared that the terrible punishment of crucifixion was a just reward for his misdeed. St. Paul, in his first letter to the Corinthians, explains that some will be saved, "yet so as by fire." If their work cannot stand the fire—for "the fire shall try every man's work of what sort it is"—then the work shall be burned, but the worker, if he have built on the foundation of Jesus Christ, shall be saved. Is that all the salvation you care about? Just to be rescued from punishment! If that is all you want, then it is waste of time for you to ever look at the "Quiet Hour," for I have no message for you. I cannot understand a soul that has no aspirations after holiness. Surely any man who is made in the image of God must, sometimes at least, try to be like Him. But let us never rest satisfied with high ideals. Hear St. Paul's warning to some who made their boast of God, approved the things that are excellent, were not only instructed in the law, but quite willing to be instructors of the ignorant. He declares that because they were untrue to their own ideals, and broke the commandments of God, they brought dishonor on His great Name, which, as he says, "is blasphemed among the Gentiles through you." One who has high ideals and rests satisfied with them, without putting them into practice, can do more harm to the cause of Christ than an open enemy.

Marden says: "Whoever evades the burden, misses the blessing. True living is never easy; there never comes a day when a noble life can be lived without effort." The soul is like the body, it needs food, pure air and exercise to keep it healthy. The food may be obtained in the Lord's Supper, study of the Bible and other good and helpful books, hearing of sermons, etc. The air which it should breathe continually is holy communion



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with God. The exercise is the daily pursuit of holiness and the battle against sin. One who is in deepest earnest in this soul-cultivation will grow steadily and surely. Light, followed and acted on, opens the eyes to more light; until it would be as easy to doubt one's own existence as the existence of a loving Heavenly Father. Each victory won makes another more possible, just as a little child learns to add one and one together, then two and one, and mounts up by steady persistence to the conquering of difficult problems, which once were absolutely insurmountable. The soul is not perfected in a hurry, any more than the body grows in a year from childhood to manhood. But no smallest victory is ever wasted: the little temptation to speak crossly resisted, the little kindness to "one of the least" of Christ's brethren rendered cheerily and heartily, the temptation to speak unkindly of a neighbor fought down and conquered, the finding time of prayer and Bible-reading on a busy day, these, and hundreds of other things which may be small taken separately, are not only faithfully recorded in God's memory, but also in the character of the soldier of Christ. Not one is lost, each one helps a little. Does not that thought make these little battles seem worth while? No human eye may notice them, but a beautiful soul is the grandest, noblest thing on earth; and it is a possession open to anyone who "wills," with all his heart and mind and strength, to do the will of God. Whatever you do, keep up your courage, and never give up the fight. As Jeremy Taylor says: "Nothing that is excellent can be wrought suddenly."

If thou wouldst work for God, it must be now,  
If thou wouldst win the garland for thy brow—  
Redeem the time.  
Shake off earth's sloth!  
Go forth with staff in hand while yet 'tis day,  
Set out with girded loins upon the way;  
Up! linger not!  
Fold not thy hands!  
What has the pilgrim of the cross and crown  
To do with luxury or couch or down?  
On, pilgrim, on!

With His reward ...  
He comes; He tarries not; His day is near;  
When men least look for Him will He be here;  
Prepare for Him.

HOPE.

One of our readers in Manitoba has asked me to say a few words to cheer those who, through force of circumstances, are cut off from the outward sign ordained by our Lord Himself for our help and comfort and to bind us closer to Himself and to each other. Perhaps the following verses will meet the need:

#### For the Lonely.

(Spiritual Communion.)

Lord! Lord! I plead for all, who—like to me—  
Are kneeling, lonely, far from Church or priest:  
We have no altar, save Thy love Divine,  
Nor have we share in that all-wondrous feast.  
Yet, leave us not bereft, dear Lord, I pray;  
Within the corners where Thy love is known  
Raise Thou an altar that our souls may see;  
So shall we feel that we are not alone.  
No, not alone, dear Lord, if Thou art there!  
If Thou wilt be both Sacrifice and Priest!  
And Thou, Thyself, the absolution give!  
Oh, wondrous mercy! and, oh, wondrous feast!

We raise to Thee the lonely, broken prayer;  
We feast on Thee in spirit, hearing naught  
Of music trembling through the dim-aisled Church;  
But Thou art with us, as Thy Truth hath taught.  
Strengthened and glad, O Lord, we lean on Thee,  
Thankful for this sweet crumb our souls have known;  
But, still, we long to greet Thee in Thy Church,  
And kneel with others at thine Altar-Throne.

—Anna B. Bessel.

# DOMESTIC ECONOMY.

**AUNT PATSY'S BISCUITS.**  
She was just beginning to keep house, and her biscuits and pies were a world of trouble to her. Recipes for biscuits that rose light, and soft, and white in other people's hands, in hers only resulted in awful things, hard and flat, and—tell it not in Gath!—sometimes positively green. And the cap sheaf of her worry was put on when, one day her small brother, with tantalizing boyish honesty, wanted to know when she had begun "manufacturing pumice stone." . . . . . And then the pies, those awful pies, thin, tough, indigestible. No wonder she shed secret tears, lest Tom's digestion should be ruined, and lest—fear more horrible still—he should be beginning to find out what a stupid little wife he had married. Then, one day, some good fairy directed Aunt Patsy in just when Tottie was in the midst of her baking, industriously kneading her biscuit dough as though it had been bread. The good soul stood the sad sight as long as she could, then the murder was out.

Good sakes alive, Tottie," she burst forth, "Are you goin' to ruin them biscuits? Don't you know biscuit dough should be handled as if it was hot bricks?"

And then she proceeded to show Tottie how to make delicious light biscuits. First, she put a quart of flour in the sifter, and dropped upon it two teaspoons baking powder and a pinch of salt. These she sifted through into a round-bottomed mixing basin, afterwards, and as quickly as possible, mixing through the flour with the tips of her fingers, two heaping tablespoonfuls of butter. After that she made a hole in the center of the flour and poured in gradually a cup of sweet milk, mixing the flour up with it all the time with a knife, until at last the dough was in a nice round ball, which turned out on the knife, leaving the bowl almost clean.

Now, slightly flouring the bake-board and the rolling-pin, she took up the latter and very lightly ran it over the dough a few times, just enough to leave the sheet about an inch, or a little more, in thickness. Last of all, she cut out the biscuits, brushed them over the top with milk, and baked them in a rather brisk oven for fifteen or twenty minutes.

The biscuits were delicious. Will you not try some like them? Next time, no catastrophes intervening, we shall give Aunt Patsy's recipes for a few other things, so that you, if you need it, may profit as well as Tottie.

Nervous people and those with weak hearts should abstain from coffee.

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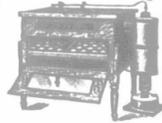
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A young man who keeps up his father's senseless quarrels is a chip of the old blockhead.

A good listener is a welcome conversationalist.

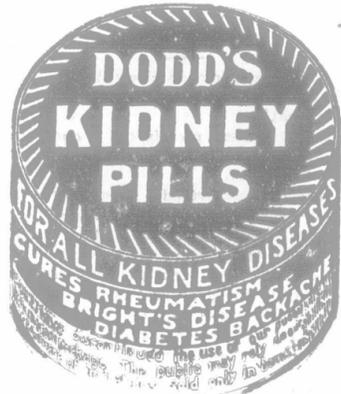
One lie can soon exhaust the multiplication table.

A retailer of gossip soon becomes a wholesaler of lies.

Happiness may be thought, sought or caught, but not bought.—[Saturday Evening Post.

"SHOW HIM THE PAPER."

A short time ago some men were engaged in putting up telegraph poles on some land belonging to an old farmer, who disliked seeing his wheat trampled down. The men produced a paper by which they said they had leave to put the poles where they pleased. The old farmer went back and turned a large bull in the field. The savage beast made after the men, and the old farmer, seeing them running from the field, shouted at the top of his voice, "Show him the paper! Show him the paper!"



Dear Chatterers,—Back again to the Ingle Nook, and a new year's work. I don't feel exactly like Farmer John:

"His good clothes off, and his old clothes on, 'Now, I'm myself,' said Farmer John."

There isn't any "pup," you see, to jump up to meet me—bless the darlings, how I'd love to keep one of them right here in the Ingle Nook Corner if it weren't so dreadfully impracticable!—and the old horse and cow at the gate are absent quantities; but the ink bottle and mulligan pot look "kind of" friendly, and then there are the memories of a host of Ingle friends who are likely to come again. . . . In a word, I have come straight from the farm again after a five months' holiday, am more in love with the country than ever, but, paradox of paradoxes, am enjoying getting down to work again too.

You will be sorry to lose my proxy, Dame Durden Number Two, who has been such a good friend to us all, and who has thrown herself into our cozy corner with the true Ingle spirit; and, I am sure, you will join me in a hearty vote of thanks to her, and wish her, with me, the very happiest and most prosperous of experiences in her new field of work.

And, now, down to business. I hardly know what to begin talking about this morning. In the very first place, perhaps, I may say that I hope to see all of the old Ingle folk back in short order. We shall still keep the Ingle a place for social chat, and I shall feel quite lonely if the old friends do not all come—and soon. We shall hope, also, to meet a great many newcomers during the present year. Housekeeping and "homey" things will, I suppose, be, as heretofore, the principal topics, the more especially as we are taking the step—a good one, it would seem—of throwing our Life, Literature and Education page more fully open to our readers.

So, how will this do for a start? Send me a postal card, or a letter, whichever you choose, asking any question which perplexes you in regard to housekeeping or the home life. I here and now promise you faithfully that if running around this town and questioning people can supply an answer, the thing shall be done. If no help appears here, then the request shall be thrown open in our paper, and surely someone among our hundreds of thousands of readers will be able—and ready—to supply the required information. Kindly begin sending in your questions at once. They will be answered, as far as possible, in order of their arrival.

I wanted to talk to you awhile about—but never mind, there isn't room this time anyway. . . . Did you have a jolly Christmas? And have you made a whole heap of New-Year resolutions—to be broken before the month is out? But, truce to that! An odd one may stick, and it's a very great deal better to be making good resolutions than none at all, isn't it? What is it that the poet—somebody, who was it?—said about aiming at a star, and striking higher far than if one only aimed at a tree?

Now, don't forget to step in to see us—and soon. . . . With very best wishes for a Happy and Prosperous New Year to you all, Very cordially yours, THE ORIGINAL DAME DURDEN.

The following letter I found peacefully awaiting me in my desk. . . . We have out knitting, and are with you already, Julia. Invite us in again whenever you are lonely, won't you? Your fire looks very tempting.

An Evening in the Northern Woods.

Dear Dame Durden,—Now, if the chatterers will draw their chairs closer, and make room for one more, we will bring our knitting again, for the "liege lord and master" is away in the lumber camps, and we must confess to paying a debt of loneliness, bordering on de-

spondency. You spoke of the Ingle Nook members relating something of the manner in which they spend their evenings. For our part, there is so little worth telling, still so much to enjoy.

While living a life of isolation with range of vision limited, we are permitted to enjoy close relationship with nature. What a wonderful inspiration to live in touch with such purity! Well, has Byron said: "There is a pleasure in the pathless wood." Yes, that tranquil peace and charm of the wood, as we breathe the pure air in the depths of the forest. We find expression in Holmes' words: "All nature assumes one tone of love." Though disappointment often overtakes us, and bereavements leave the heart desolate, we feel nearer Him when we behold his handiwork.

When the short days are so soon overtaken by the dark mantle of night, we follow Cowper's suggestion "and stir the fire and close the shutters fast, and welcome peaceful evening." It matters little if it is forty below zero outside, if we can shut everything out with the cold that is unpleasant, and everything that is of the "whatsoever things are lovely," into the warm room that answers for parlor, library, dining-room and kitchen. However, the light shines just as brightly, and we have our "favorite rocker," while the glowing fire is just as cheerful as it would be if we were able to build it in "the next room."

Now comes the children's hour, and as we have no musical instrument, our music is all vocal, and the children all seem to enjoy singing. It is astonishing how soon the wee tots begin to sing. Our little two-year-old boy can carry a tune quite well.

After the babes are tucked away for the night, and the older children have told of the happenings at school, they begin to study.

I have a sermon tucked away for the Quiet Hour. Among those I prize most are those prepared by "Hope." May her words of comfort and instruction continue to visit our secluded libraries. What a blessing and inspiration the bright thoughts and words are when conveyed to people who so rarely hear sermons, and depend largely upon written ones for their spiritual instruction. Well, it is about chore time, besides my welcome must not get threadbare. Now, this is "Home, sweet home," in a little log cabin in the woods, where the proud mother is. JULIA.

More Help for Mollie Bawn.

Dear Dame Durden,—I have not written before to the Ingle Nook, partly because I am so busy and partly because I would much rather read others' letters; but, noticing Mollie Bawn's request in regard to beef dripping, thought I might help her out, as I have been using it all the time of late. Our beef this winter is quite fat—more than we can use in gravies—and after it is cooked (I make pot-roasts), before making the gravy, I pour off what I don't need, and when it cools, it makes very nice shortening. When I have suet, I boil it well in water, and when done, set it away to cool. It will rise to the top, and will work evenly into the flour. Wishing Mollie and all the chatterers a very Happy New Year. DAISY.

P. S.—I may come again.

Come again? Why surely—come soon and often. We have had a welcome waiting for you for ages, and you have only now come to claim it. If everybody "would much rather read the others' letters" what an empty Ingle Nook we would soon have. A Happy and Prosperous New Year to you also. D. D.

A Woman-writer's Opinion.

Remembering our little chat on country walks, I was interested, and thought you would be, in this item taken from an exchange:

"Amelie Rives, the noted author, who is said to look like a girl in her teens, recently told of her reply to a physician

who wrote her to send him the secret of what he called perpetual youth. 'I wrote back that he must consider the cost,' she said. 'It is a cost that few of his fashionable patients would make, for I rise at 7 or 7.30, ride or walk in the country roads, live close to my books, see few people, and retire at 10. What fashionable woman could endure my life? I remember thinking about it one winter morning, when I was walking alone, the crisp, crackling snow under my feet, the fairy outline of a gossamer frost, revealing every twig of bush and tree, and I was so invigorated and happy I could have whistled like a boy with delight; but if I had been a woman of fashion I couldn't have endured the silence, the empty distance, the quiet; why, a woman of fashion would die in my place, and I am quite sure I should in hers.' It is in such solitude and close communion with nature, in the home of her childhood—an old-fashioned, rambling country home in Albermarle County, Virginia—that much of Amelie Rives' literary work is done." DAME DURDEN.

Recipes.

New England Cake.—1 cup butter (creamed), 2 cups brown sugar, 3 eggs (beaten), 1/2 cup molasses, 1/2 lb. chopped raisins, 1/2 lb. currants, 2 tablespoons fruit-preserve juice, 4 cups of some good flour, 1/2 teaspoon soda, 1/2 teaspoon cream tartar.

Gems.—1 egg, small piece of butter, 3 cups Graham flour, 1 cup of the best flour, 2 teaspoons baking powder, milk to make a stiff batter.

With the Flowers

"A Constant Reader" writes:

"Will you kindly tell me what is the proper treatment for a Maidenhair fern, whether they do best in the sunshine or shade, warm or cool place, and if they require much water? I think a great many of the hints given in 'The Farmer's Advocate' are very helpful."

Ans.—Put your Maidenhair fern in a pot large enough to afford plenty of root room, and see to it that the drainage is good—a large enough hole in the bottom of the pot with fully an inch of broken crockery or such drainage material next to it. Give the fern a rich soil, consisting of good loam and leaf mould in equal parts; keep in a partially-shaded position, and moderately moist. The temperature should be from 60 to 65 degrees.

St. Martin's Summer.

It was a bleak, bitter day in November, The sheep huddled close in the fold; But homeless and friendless, a beggar Crouched down in the rain and the cold By the great brazen gate of the city, As Martin, the soldier, came by— Brave Martin, whose marvellous weapons Nor demon nor man durst defy!

Yet tender his heart as a woman's, And, seeing the beggar, he cried: "Poor brother! no gold can I give thee. But look, I will gladly divide My cloak, for the half would be better Than none on this pitiless day!" And, seizing his sword, he cut it In twain—so the legends say.

And wrapping the half of his mantle About the poor shivering form, The beggar forgot he was hungry, Forgot the bleak wind and the storm, For down on the rain-sodden pavements Where only the dead leaves had been, And over the mist-shrouded mountains There came a strange glory just then.

The summer retracing her footsteps, Touched all things below and above, Till the whole gloomy world was trans- figured.

Because of that one deed of love, And now when in dreary November There comes a warm sunshiny day, The Normandy peasants will tell you "St. Martin is passing this way."

—Theresa R. Barry, in Lutheran Young People.

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QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free. 2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer. 3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

LAME STEER.

Steer is lame in shoulder. The point of the humerus looks like a ball, round and prominent, and when walking, goes sideways. The shoulderblade looks hollow, and foot held a little out, looks like dislocation. If so, can it be put in place now?

Ans.—Shoulder is not dislocated. If such condition existed, the joint would be immovable. The shoulder has, however, been subjected to a severe sprain. Clip the hair closely from the affected region and apply, with prolonged and smart friction, the following blister: cantharides (pulverized), three drams; lard, three ounces. Mix. Repeat in two or three weeks. Let the steer rest.

BARB-WIRE CUT.

I had my horse cut in barb-wire fence last spring in front of hock joint, and it healed very good until nearly well. Then it started to get big around the sore; seems to get bigger all the time. There is a little sore left yet in a kind of cavity, right in the joint. What can I put on to heal it up, and can the bunch be taken off?

Ans.—Enlargements in the region mentioned, resulting from a wound, are often difficult to reduce. Would advise you to apply the following blister: Binioidide of mercury and cantharides, of each, two drams; vaseline, three ounces. Mix. Wash the part well with warm water and soap, removing all loose scab; dry off, and rub blister well in; let it remain for forty-eight hours; wash off, and apply lard or vaseline to the blistered surface.

LUMPS ON HORSES.

Mare went lame in rear hind leg. Trouble is apparently in hock, which was considerably swollen. This swelling continued inside thigh, and later developed into a large lump, which was very hard. Skin on lump was soft, and hair came off easily. Some matter came out apparently through the skin. We fomented with hot water, and lump has disappeared, but leg is weak yet. We now find that another mare is similarly affected, but lump is on belly. This is also giving off matter, and there are signs of others appearing towards breast. What is this disease? Give treatment, and the cause. Is it contagious? J. E. W. H.

Ans.—Would advise you to secure the services of a veterinarian. The case is, perhaps, one that requires to be personally examined by a professional man.

BRAIN TROUBLE-TYPHOID INFLUENZA.

Young gray horse, apparently in good health, has been attacked as follows: When being driven in wagon, suddenly stops; the muscles of the flanks twitch violently; blinking of the eyelids, and twitching of muscles of the mouth and face. When unhitched, will perhaps pull back, and has a tendency to go forward in a circle, but continues to retain the standing posture. He gets over the attack in about five minutes, and is followed by no bad after effects. The attack generally follows active exertion. Has been attacked a number of times. Please diagnose, and prescribe, if necessary.

2. Give symptoms of typhoid influenza. Alta. J. R. R.

Ans.—1. The symptoms indicate some obscure affection of the brain, probably a temporary obstruction of the blood circulation in some portion of that organ. The trouble may culminate in sudden death. The animal should have a long rest. After preparing in the usual manner, give purgative: Barbadoes aloes, seven drams; calomel, one dram; ginger (pulverized), two drams; soap, sufficient to form a ball. When purgative has ceased to operate, give, morning and evening, in food, or in drench, for ten days: Iodide of potassium, one dram.

2. Dullness, more or less loss of appetite, high temperature 103 to 107 degrees, quickened pulse 80 to 90 beats per minute, oedematous condition of abdomen and limbs, which usually scanty and highly colored.

LUMPS ON SHOULDER.

I started to work a mare, four years old, in October, causing large lump, on shoulder, which seemed very sore. I gave her rest, then put her to work again. It has left a hard lump on shoulder, as large as a goose egg. Works well now; don't seem to have any soreness when working, but muscles under lump seem to have fallen away. What could I do to remove lump? Could rest mare, if necessary. A. F.

Ans.—Have the lump dissected out by a veterinary surgeon, if you are within reach of one. If not, get your family doctor or some other handy person to operate.

DULL STALLION.

I have a stallion about eight years old, which has no ambition, and hind legs are badly swollen. Always eats well, but exercise does not do him any good. What would you advise to give him? A. S.

Ans.—You do not mention whether your horse is of light or heavy breed, nor the length of time he has been out of condition. If a heavy horse, prepare him for a purgative by feeding exclusively on bran-mash diet for at least sixteen hours, and then administer the following: Barbadoes aloes, eight drams; calomel, one dram; ginger, two drams; soap, sufficient to form a ball. When the physic has operated, give, morning and evening, in food or by placing back on tongue with tablespoon: Sulphate of iron, one dram; nitrate of potass. and bicarbonate of soda, of each, two drams. Give at noon, two tablespoonfuls Fowler's solution of arsenic. Continue for two weeks. Hand rub and bandage the legs morning and evening. Give daily walking exercise, weather permitting.

SWEENY.

I have a horse that has been sweened. He is no longer on the leg, but the muscle is still contracted. Please let me know: (1) How to put the muscle right, as I want to work him breaking this summer? (2) If, after it is cured, will it ever affect the horse again? (3) What causes the sweeny? O. S. S. Man.

Ans.—Sweeny is a meaningless term applied to a spain of the muscles of the shoulder, and the subsequent wasting of the parts, which is always more or less in evidence. The injury in young horses is often received, especially by the furrow horse, in drawing the plow with one foot in the furrow and the other out. Sudden jerking while drawing a load, or anything that will place undue strain on the shoulders are causes of this condition. Apply to the shrunken parts, every alternate day until the skin becomes sore, the following liniment: Soap liniment, four ounces; tincture cantharides, four ounces. When the skin becomes irritated, leave off for a few days, and commence again. A long rest is necessary.

LAME HORSE.

1. About three months ago, while out at pasture, one of my horses was so lame when I found her in the morning that she could not walk on the hind leg. I blistered it in the stifle, and she got some better, and has improved slowly since, but is a little stiff, and if she runs and makes a false step, it seems to catch her, and she will hold it up for a moment as if in pain, and then walk away better. What would you advise, as she will rest until spring?

2. Another horse has small lumps on the side of his body, they appear to be a little itchy, but he does not rub himself. He is in fine condition.

3. A two-year-old heifer was served last August, for about three weeks passed some blood; was served again, and since then, when in heat, acts as if she wants to water. She is in good condition. G. H. L.

Ans.—1. If you are sure that you have located the seat of lameness, apply another blister, and after two or three weeks, apply another, and yet another, if the lameness has not altogether disappeared.

2. Feed one teacupful of flaxseed in bran mash every night for two weeks, and give for the same length of time, morning and evening, two tablespoonfuls Fowler's solution of arsenic.

3. There is evident irritation of the vagina or neck of the womb. The case should be examined by a veterinary practitioner.

WEAK FETLOCKS.

Will you kindly give advice through your "Veterinary" columns re the following: Clyde mare, 15 years' old, worked hard all summer. When walking behind team, driving them with lines, in the fall, I noticed that each time this mare put her hind feet on the ground, the flexing of the fetlock joints caused them to make a snapping sound, and she seems weak on them. Can anything be done to help her? E. J. J. Alameda.

Ans.—Give the mare a long rest in a roomy and comfortable box stall. Give morning and evening, in food, for two weeks: Soda salicylate, two drams. Apply to the fetlock joints, two or three times a week, the following liniment: soap liniment, six ounces; tincture cantharides, four ounces; liq. ammon and tincture of opii, of each, two ounces. Mix. The animal being up in years, treatment of any kind may not be very satisfactory.

HORSE'S LEG STOCKS.

Clydesdale horse stocks in one hind leg. There is no sign of scratches. He got fast in a hole a year ago and probably sprained his ankle. W. A. H.

Ans.—It is probable the swelling is due to the injury received a year ago. Purge him with 10 drams aloes and 2 drams ginger. Feed bran only for 12 hours before and 24 hours after administering the purgative. Follow up with one dram iodide of potash three times daily for ten days; cease giving the drug for a week, then repeat, etc., etc. Hand rub and bandage the leg when he is standing. If it breaks out, apply oxide of zinc ointment. V.

FILLY DRAGS LEG.

Four-year-old filly that has not been worked sometimes drags her hind leg. She gets all right after she takes a little exercise in the yard. T. J. H.

Ans.—This is either cramp of the muscles of the haunch or dislocation of the patella (stifle bone). Give her a purgative of 8 drams aloes and 2 drams ginger. Feed bran only for 12 hours before and 24 hours after administration. Put her in a box stall, and if the trouble continues, apply a blister to the front and inside of the stifle joint. Details of the contents and application of the blister are frequently given in these columns. V.

GOSSIP.

Messrs. Alex. Galbraith & Son, of Brandon, Man., have recently brought to the West, from their Wisconsin stables, four of the best stallions they have for the season's sales. They are Baron Roggill and Baron Romeo, both mature horses, by Baron's Pride; Lord Shapely, the first-prize two-year-old at the recent International, and a smashing-good Woodend Gartley horse, Carion. This is a quartette that is seldom equalled, and we advise anyone requiring a good horse to get after one of these. Mr. Galbraith will himself be at Brandon for the next few months, looking after the trade. He is satisfied that the horses he is offering this year are as good as anything in the breed that money could buy, and from what we have seen of them, we heartily concur.

PEACE BE UNTO YOU is a great phrase. It is the very highest wish we can make for anyone. To be at peace means to have an absolutely clear conscience and an awakened spirit and a broad understanding of God's ways and a large sympathy with all humanity. So when you wish your enemies peace and light, you ask for what will make them your friends and their own saviors, if they open their hearts and receive.

"The late Judge Andrew Wyke," said a New York lawyer, "had a happy gift of illustration."

"In an address on Lincoln I once heard him illustrate in an odd way the power of perseverance."

"Lincoln persevered," he said, "and it is only they who persevere, who succeed. Don't give three years to journalism, and then, discouraged, try the law a while. Don't learn the grocery business and in a little while take up placer mining or plumbing. Consider rather the postage stamp, whose usefulness depends on its ability to stick to one thing until it gets there."

**QUESTIONS AND ANSWERS.**  
Veterinary.

**SWELLINGS ON HEIFER.**

Have a yearling heifer that has a large swelling on each of her sides, which feels to the touch soft, and as though full of water. First noticed swelling about a week ago. It was then under belly and looked like a rupture. Swelling moved from belly to sides a couple of days ago. The heifer eats and drinks well, and appears to be quite healthy. Please let me know what the trouble is. W. J. S. Man.

Ans.—As there appears to be no constitutional disturbance, the swellings likely do not indicate any trouble of a serious nature. They probably have been caused by some external injury, such as a bunt from the head of some belligerent companion, or in some other way equally effective in causing a bruise. If the swellings are on the side of the belly, would not advise you to open them with a knife. They will probably gradually disappear without any special treatment.

**RELAXED BOWELS.**

I have a horse twelve years old. I am feeding him three gallons of oats per day along with good hay. He is in fair condition, and working nearly every day. He is scoured a little all the time on the farm, and if I take him on the road, he is very bad, and gaunts up terribly.

Sask. C. E. W.  
Ans.—There are horses which are naturally "washy," and it is often difficult to treat them with success. Give the horse a bran mash at night, and withhold all fodder. In the morning, give: One and a half pints raw linseed oil; turpentine and tincture opium, of each, one and a half ounces. Keep on bran-mash diet until the bowels have been acted upon. After this, give, morning and evening, for ten days: Nuxvomica, one dram; bicarbonate of soda, two drams.

**UNTHRIFTY COW.**

I have a cow that is doing badly. She calved two months ago, but did not clean very well. Her manure at times smells offensively. I drenched her with one pound Epsom salts, one-quarter ounce ammonium carbonate. For a time she did better, but again fell back in milk, and a second drench of salts and ammonium carbonate did no good. I have fed her oats and pea hay, roots and oat and barley chop, varied with bran. She has become dainty in her feed, and varies very greatly in her yield of milk.

J. C. H.  
Ans.—Evidently the incomplete expulsion of the afterbirth has considerable to do with your cow's present condition. The following may be beneficial: Hyposulphite of soda, twelve ounces; gentian (pulv.), six ounces; nuxvomica, three ounces. Mix, and divide into twenty-four powders. Give one powder, morning and evening, dissolved in one pint of sweetened water, until all are given.

**SPAVIN AND RINGBONE.**

Two-year-old blood filly got a nail in her left hind foot a year ago last spring, and stood on one leg for about a month. A short time after, a ringbone appeared on the other leg. This spring she got a very bad cut on inside the hock joint on left leg. She could not put it to the ground for three weeks. The ringbone increased in size, and a bone spavin came on the right leg. Had her fired and blistered in July, and, since, she is not near as lame; but is not improving now. I believe the ringbone is nearly all right, but the spavin is not. She is a well-bred Hambletonian.

1. Can it be cured? If so, how?  
2. Would a colt raised from her be bothered in the same way? It is not hereditary in the filly.

3. Would a little driving hurt her any?  
Man. C. M. J.

Ans.—Your filly has, indeed, been very unfortunate, so much so that she is at least permanently blemished, if not permanently unsound.

1. The proper treatment is firing and blistering.

2. The fact that both a spavin and a ringbone has appeared shows that the filly is predisposed to those diseases, and, in consequence, it would not be advisable to breed her.

3. If the action of the joints causes pain, it would be cruel to drive her. Let her exercise in a comfortable and roomy box stall.

**STOCKED LEGS.**

I have a five-year-old mare that stocks in the hind legs when standing in the stable. I am feeding good hay, and half a gallon twice a hay of oat chop.

D. A. M.

Ans.—The following treatment may prove beneficial: Sulphate of iron, three ounces; nitrate of potass. and gentian (pulverized), of each, four ounces. Mix, and divide in twenty-four powders. Give one powder in the morning in usual food, and give one at night in mash made by boiling a teacupful of flaxseed in sufficient water to scald four quarts of bran. Continue until all the powder is given. Groom well every day, and give moderate exercise.

**DEAD FETUS.**

I had a cow due to calve last week; but, beyond a big flow of milk, she showed no other signs of calving. Two or three days after, we discovered (by the smell) that the calf was dead, and we got it away from her. Half an hour after we got the calf away, the cow suddenly died. What caused her death? The cow had three calves before, and never had any trouble. Is there any way you can tell whether an unborn calf is dead or not, except by the smell when they have been dead a few days?

Sask. K. R. F.

Ans.—The cow either died from blood-poisoning, or had been fatally injured in taking away the calf, and would suspect a rupture of the uterus. While the cow remains in good health, and shows no sign of parturition, either natural or premature, there is scarcely any way of determining whether the fetus is alive or dead. Of course, if the motions of the fetus are observed, they are a sure indication that it is alive. Any abnormal discharge from the vagina when the cow is pregnant is an indication of some uterine trouble.

**SICK PIGS.**

I have three sows with litters. They seemed to do well until two weeks old, then their mouths got sore. One had the teeth discolored. I thought it was the black tooth. If I take one of them up to examine the mouth, it will squeal and struggle, and when I put it down, it will pant for about a minute, and then roll over and die; seems to shut its breath off. Could you inform me the cause and cure of same? E. J. M.

Ans.—There is no such disease as "black tooth." Your description of the disease is not sufficiently extensive or definite to warrant us in giving a correct diagnosis. The symptoms you have mentioned would indicate an inflamed condition of the throat or upper air passages, probably the result of unsuitable conditions, or undue exposure. See that the little animals are provided with warm, clean and dry quarters, which will probably be all that is necessary to bring about their healthy condition. Walk them around in the pen each day, and lessen the food given the sow.

**ACUTE INTESTINAL DISEASE.**

A nine-year-old horse died at ten o'clock on Tuesday morning, which was taken sick early Sunday morning. During the time of sickness, he suffered a great deal of pain, and was bloated very much. The first day, he would run around in the barn as if he was crazy. At times he would be entirely wet with sweat. His bowels moved all right, only he seemed to be in pain when they moved, and we saw him pass his water once. On cutting him open after he was dead, I found considerable brown water between the stomach and the skin, and a great deal of gas in the intestines and stomach. We gave him two doses of Mayer's colic draft and two doses of ginger and soda on Sunday, which relieved him some. Twelve o'clock Sunday night we inserted a tube through the skin, between the rib and the hip bone. This let out considerable gas and eased him some. What is this sickness, and what should we do if we have a similar case again?

E. B. Q.

Ans.—Death was caused from some acute disease of some portion of the intestinal tract. There is nothing in the post-mortem appearances you have mentioned to indicate the special seat of the trouble. There was possibly a twist of the large intestines, or a knot in construction of the small ones, which in either case is rarely amenable to treatment. All such cases require the personal attendance of a qualified practitioner.

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"Mr. Ludger Pinet of our town," wrote Mr. Amos Theriault, Postmaster of Theriault, Gloucester County, N.B., in a letter dated November 18th, 1904, "after spending thirty-three dollars on various medicines found himself as great a sufferer from Dyspepsia and Bronchitis as he was before. These are not the times to throw money away, and I advised Mr. Pinet to try MOTHER SEIGEL'S CURATIVE SYRUP. He did so, and after taking two bottles is a new man altogether, able to work as well as the best among us, with always a good word for the Medicine that cured him. My advice to Mr. Pinet was not of the second-hand variety. I spoke from actual experience, well knowing what SEIGEL'S SYRUP will do, for it has greatly benefited me, and also my wife. My family is never without a bottle of

**MOTHER SEIGEL'S SYRUP.**

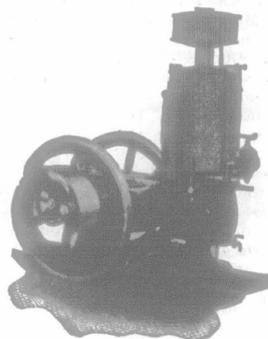
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**RINGWORM.**

Kindly prescribe, through the columns of your paper, a cure for ringworm on cattle.

W. J. R.

Alta.  
Ans.—Clip off the hair, and wash the parts thoroughly with soap and water. Remove all loose scab. Rub the parts dry with coarse cloth. Apply to the parts, every alternate day until cured, the following ointment: Iodine and iodide of potassium, of each, three drams; vaseline, four ounces. Mix.

**OBSTRUCTED TEATS.**

I have a heifer just calved. One quarter milks very freely. The other three are very hard, and will only come in drips. She is in no pain with them.

H. W. H.

Ans.—The ducts of the three teats are temporarily contracted, and may be relaxed by bathing with warm soft water for fifteen minutes before each milking. After each milking, apply to the affected teats and quarters of the udder: Camphorated oil, six ounces; fluid-extract of belladonna, two ounces. Mix. This treatment usually proves effectual if there are no tumors or adhesions in connection with the ducts. If pea-like tumors can be felt in the teats, the services of a competent veterinary surgeon will be required.

**WASHY HORSE.**

Could you tell me how to cure a horse of the scours? He is ten years old, and is fed on straw and a half gallon of oats at a feed.

L. R.

Man.  
Ans.—It is probable the teeth need filing. See that they are even and have no sharp edges next the cheeks. As a tonic, take three ounces each of gentian, ginger and catechu, and six ounces of bicarbonate of soda. Make into 24 powders, and give one night and morning in bran or boiled oats. It might also be well to give a mixture of grains. Feed some small wheat, if you have it.

**HORSE REFUSES TO DRAW.**

One of my horses that I work in the woods suddenly refused to draw. He is not balky, as I know he is true. He is in good condition; has good appetite, and I feed him hay and three gallons of oats per day; has a slight cough, and seems to be short in breathing.

L. L. W.

Ans.—If there is no apparent external cause to account for the horse's conduct, such as sore shoulders, badly-fitting collar, etc., I am inclined to think, from the very few symptoms you have mentioned, that the horse's heart is faulty. If you are within reach of a veterinary practitioner, I would advise you to secure his personal services.

**WANTS & FOR SALE**

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.

**FOR SALE**—Good, clean, improved American oats, in car lots or smaller quantities. Write for samples and prices. Harry Sulborn, Pleasant Forks, Sask.

**FOR SALE**—Twenty Yorkshire pigs; fifteen Bronze turkeys; twenty Pekin ducks; ten highly-bred Jersey heifers. Prices right. J. E. Frith, Fritchton Farm, Moosomin, Sask.

**FOR SALE**—960 acres of land in the Okanagan Valley; six miles from Armstrong, nine miles from Vernon; suitable for fruit, wheat and cattle. Price, \$12,000. Apply J. M. Wright, Armstrong, B. C.

**FOR SALE**—Shorthorns: My Lord Stanley-bred stock bull; some choicely-bred cows and a few heifers. Prize-winners at large local fairs. Thos. Jasper, Harding, Man.

**FOR SALE**—Five Improved Yorkshire sows, five months of age. These are the long bacon type, and I will clear them out at \$30.00 each. Geo. Hamilton, Neepawa, Man.

**HIGH-CLASS** Scotch Collies for sale. Choice young puppies and brood bitches; \$15 up. King Edward Collie Kennels, 7 Concord Ave., Toronto, Ont.

**IMPROVED FARMS**—We have some of the greatest bargains in Northwestern Canada. Write for price list. If you have a farm for sale and want to sell it quick for cash, write us, giving description and price and we will tell you at once what we can do. Address: American Land and Title Co., 505 Manhattan Building, St. Paul, Minn.

**UMBER** and dimensions, fence posts and cordwood for sale in carload lots. For particulars, write Thos. Spence, Rainy River, Ont., or J. B. Post, Greenridge, Man.

**MILK WANTED**—The Dairy Department of the Manitoba Agricultural College is prepared to contract with farmers on liberal terms for the purchase of milk and cream, beginning Feb. 1st, 1906. For particulars address W. J. Carson, Professor of Dairying, Agricultural College, Winnipeg, Man.

**POST CARD** will bring catalogue of household necessities and novelties. Agents wanted. Box 72, Winnipeg, Man.

**STRAYED** from Indian Head on Nov. 21st, 1905: one sorrel gelding, white stripe on face, white stockings hind legs, about 1150 lbs., branded lazy S over bar on left hip and M in circle on shoulder; one tall brown mare (in foal), right ear slit, about 1200 lbs., branded on left shoulder; one blocky bay colt, 3 or 4 years old, about 1100 lbs., branded on right shoulder and V N on left hip. Last seen going south-west. \$30.00 reward. S. R. Edwards, Indian Head, Sask.

**TWENTY-FIVE** thousand acres in famous Moose Mountain District. Prices ranging from ten to twenty dollars. Apply W. A. Rose, Forget, Assa.

**WANTED TO RENT**—An improved quarter-section in Saskatchewan, with house, out-buildings and good water. State terms and conditions. Herbert Parks, Amherstburg P.O., Essex County, Ontario.

**WANTED**—A farm to work on shares, near Brandon or Indian Head. One with stock and implements preferred. If farm is large can furnish plenty of first-class help. Address, A. Bonsteel, or J. W. Wooden, North Bay, Ont.

**WANTED** by a married man, position as herdsman with beef breeds; capable of fitting for sale or show ring; good references. Address: John Roberts, Starbuck, Man.

**WANTED**—Farm on shares, Edmonton or Red Deer district. Two men, horses, implements. J. S. McKessock, Massie, Grey Co., Ontario.

**35 CENTS**, postpaid—A Home and Business Manual, illustrated, containing a complete course by experts, of Penmanship, Bookkeeping, Letterwriting, Banking and Business Law. Also legal forms, interest tables, vocabulary of mercantile and technical terms, social forms, speaking, gems of thought and "Elements of Success," by Marshall Field. 372 pages of interesting, instructive and intelligible reading matter, beneficial to any age or sex. The price places it within the reach of all. This offer cannot be repeated unless there is a great and immediate demand. Your money returned if not satisfied. Frank Sheppard, Calgary.

**NEVER-LOSE KEY TAG.** Only Key Tag which makes it easy for the finder to return lost keys without cost or inconvenience. Two parts hinged together. Name, address and postage on inside. Finder simply reverses and drops in nearest mail box. German Silver, handsomely made. 25c., postpaid. Agents wanted. H. M. BURROWS, 141 Bannatyne Avenue, Winnipeg.

**WANTED! SEED GRAIN**  
Wheat, Spring Rye, Oats, Peas, Barley and Speltz, suitable for seed. Send Samples. Highest prices paid.  
JOHN G. PURVIS, Box 98, WINNIPEG, MAN.

**Higher Prices and Prompt Remittance.**  
If you ship to us, all your Hides, Furs, Pelts, Wool, etc., we pay you same day as goods are received. Make us a trial shipment; we guarantee you will be satisfied, and remain our shipper. Write for price list and shipping tags.  
**BERMAN BROS.,**  
319 1st STREET, SO., MINNEAPOLIS, MINN.

**GOSSIP.**

**MAPLE GROVE SHORTHORNS AND YORKSHIRES.**

The Maple Grove herd of Shorthorns, the property of Walter James & Sons, Rosser, Man., have been known to Western farmers for the past twenty years, not so much on account of the show-yard records, as for the general satisfaction given by animals sold to all parts of Manitoba, Saskatchewan and Alberta. In beginning his breeding operations, Mr. James favored a big, square cow that would give lots of milk, and when later he began to purchase first-class, high-priced Scotch bulls to use on such cows, the "nicking" was most fortunate, for the young stock has been coming thick, deep, rugged and sappy. At present the herd is in a thrifty, healthy condition, not fat nor lean, the mature stock wintering well, and the young things growing. The bulls at present in use are Choice Goods, Judge Senator, and Metropolitan. Choice Goods 40741 is a roan, four years old, bred by John Davidson, Ashburn, Ont., by that great sire, Sittytion Hero 23313, and out of an exceptionally heavy-milking cow, Ashburn Lass. Choice Goods is one of these very mellow, well-balanced, easy-feeding, good-dispositioned bulls that eats well and converts his food into flesh. His stock, like himself, all have thick, soft coats, mellow hides, and with every indication of being good feeders. Judge Senator 48829 is a smooth, closely-knit, rather small bull, three years old, and a son of Mr. Greenway's best known and most successful stock bull, Judge 23419. His dam is Matchless 11th, by the celebrated Watt bull, Barmpton Hero. Judge Senator, while an easy keeper, active, and a quiet-dispositioned bull, is not very large nor stylish about the head, and for a time was offered for sale, but since his stock have been coming so big and soggy, it has been decided to keep him for a time yet. Metropolitan 50061 is a two-year-old roan, imported in dam by John Isaac, Ont. His sire is Marconi, bred by Robt. Bruce, and his dam, Moss Rose 4th, now in Maple Grove herd, was by the Duthie-bred bull, Murillo, and his great-grand sire was Prince of Archers, by Scottish Archer. A review of the extended pedigree of Metropolitan shows ten of his crosses are identical with those of that great bull, Choice Goods, imported by Mr. Flatt, and since a winner at the best American shows, and whose stock is as prominent as he was himself. Metropolitan is a big bull, and full of character. He is nicely covered with flesh, and when full grown will be a bull of more than average size. There is now only one yearling bull, Vulcan 53767, by Choice Goods, and out of Veronica, a milking strain of cow. This is a bull of the right type, being smooth on the shoulder, full and deep in the fore ribs, and smooth behind. Three bull calves are in the pens, being Lucio, by Choice Goods, out of Lady Beresford 2nd 22000; Justice, by Judge Senator, out of Janet 50870, and Manrico, by Choice Goods, out of Marjorie.

**Females.**—There are about seventy head of females all told, ranging from the old cows which have done service for years and which now show the effects of age, down to the fresh-blooming young calves—growthy, mossy and sappy. Among the older cows is Minister's Favorite 50876, a Guardhouse cow, by Prime Minister (imp.) 15290, and out of Highfield Favorite. This cow was chosen for her big, square frame and large udder. Lady Louisa 45606 is out of Fanny 6th, and by Brave Baron 23259, an Indian Chief bull. Moss Rose 4th is the imported cow, dam of Metropolitan. She is a thrifty-looking, square animal, which won prizes at several Old Country fairs (see breeding above). Lady Coburg 34788 is one of the most attractive cows in the herd. She is red, and a most regular breeder. She is by Indian Wave 23000, one of Arthur Johnston's bulls, and her dam is Lily 2nd 28'29. She now has a promising heifer calf. Lady Coburg 2nd is one of her daughters, by British Hope 30946, and she now has a nice, square heifer calf, by Choice Goods.

Last spring three new cows were added to the herd, being purchased at Mr. Thos. Wallace's sale at Portage la Prairie. These are Portage Blossom 47831, and Maiden's Beauty 33368, full sisters, out of Maiden's Blush, a half-sister to Mayflower 3rd, the champion cow at Toronto and Winnipeg, through their sire, Royal Sailor, the sire of this pair being

Charger, by Judge. The third cow is Vanilla 6th, by Backstop, and out of Vanilla of Ellerslie. The last cow we shall mention is a Scottish Canadian cow, Rosette 20th, which has proved a useful breeder.

Several heifers among the yearlings represent very gratifying evidence of the value of the stock bulls, among which might be mentioned Myra 61654, a roan, out of Moss Rose 4th, by Choice Goods; Rosemonde 61686, by Choice Goods, out of Rosette 10th; Frida 56294, a red, out of Fanny 9th, a massive roan Davidson-bred cow. These three are the proper type of Shorthorns, typical of several others in the same stable.

Last spring's calves were mostly heifers, and a very superior lot as well. They have all been named, and have their numbers, which shows with what promptness and thoroughness the records of the herd are kept. In one box are four, three by Judge Senator, and one by Choice Goods. The former are Minerva, a red, out of Minerva 50875; Charman, roan, out of Christina 42056, and Maid of Honor, roan, out of Maid of Kent, and the latter is one of the most evenly-balanced, sappy calves we have seen outside the big shows. She is Marcelin, dark roan, out of Mahtab 25464, one of Senator Cochran's cows. A calf that excels her in heavy points, though, is Ruth, out of Rosette 20th, and by Judge Senator. Another big roan is Lady Coella, by Choice Goods, and out of Lady Coburg. Felice, a red, out of Fanny 9th, and by Choice Goods, is the last we shall enumerate.

**Swine.**—Although trade has been fairly brisk in Yorkshires since winter set in, there are still quite a number of choice breeding stock on hand at Maple Grove. The stock has been well selected from the most approved strains, and is kept in the best possible condition, the boars and sows running outdoors all the time, the sleeping pens and yards being sheltered by a large bluff. The herd boars are Dalmeny Turk II. (imp.), Richard Calmady (imp.), and Summer Hill Nottingham Lad (imp.). Dalmeny Turk is a good type of the modern Yorkshire—smooth, deep and large, with plenty of bone and constitution. Writing about his breeding, Geo. Sinclair, manager for Lord Rosebery, said: "The pedigree of Dalmeny Turk II. needs no comment from me, being himself after such boars as Dalmeny Turk, and his dam, by Borrowfield Eclipse 5427, is a good enough recommendation. Dalmeny Turk was the sire of the prizewinning pens at the H. & A., 1903, Smithfield, 1903, and other shows. His sire sold for \$525." Richard Calmady (imp. in dam), while a long, deep, smooth hog, is quite as thick as is permissible in baron breeds, but is such a good doer that his thickness rather commends him. He is rather a stylish hog about the head, and has good bone. His sire is Nottingham Lad 7175 (British), and his dam, Summer Hill Nottingham Lady Sarah 17th, she being by Borrowfield Felipe, one of the most noted of Old Country Yorkshires. Summer Hill Nottingham Lad was imported in dam, Woodstock Dalmeny Gem, full sister to the winning pen, under 12 months, at the Smithfield, 1903.

The brood sows are of good size, and of the best type, as can be judged by their breeding. They are headed by Summer Hill Nottingham Lady Sarah 17th; but out of the lot could be picked several good enough to win in the best of company, for instance, Sunnydale 12th and Sunnydale 13th, and which produce large litters, the average of the herd the past year being ten to the litter. Some good sales have been made lately, including a boar each to Thos. Mawson, Weyburn; J. Pante, Summerset; R. Scott, Souris; A. Guilbert, Letellier; S. Benson, Neepawa; E. Trudel, St. Laurent; J. F. Jaques, Macdonald; C. E. Howe, Rosser; two to F. E. Keniston, Headingly; Thos. MacFarlane, Stonewall; J. Sandcock, Clearwater; H. Riddemann, Hitchcock, Sask.; R. Martin, Rosser; and sows to J. B. Herrington, Lacombe, Alta.; C. R. Ratcliff, Elm Creek; five to Chas. Vokes, Quill Lake; two to Thos. Collin, Russel; R. Scott, Souris; K. McIver, Virden; two to H. Tiffin, Rosser; Alex. Smith, Indianford, and two to Sir Wm. Van Horne, Selkirk. There are a few sows and boars now ready for sale, and others that will be ready for delivery at almost any time. Intending purchasers will be met at the station, if they give notification, and correspondence will be promptly and carefully conducted.

**Tobacco Habit.**

Dr. McTaggart's tobacco remedy removes all desire for the weed in a few days. A vegetable medicine, and only requires touching the tongue with it occasionally. Price \$2.

**Liquor Habit.**

Marvellous results from taking his remedy for the liquor habit. Safe and inexpensive home treatment; no hypodermic injections, no publicity, no loss of time from business, and a cure certain.

Address or consult Dr. McTaggart, 75 Yonge street, Toronto, Canada.

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**POSITIVELY CURED. A DOLLAR BOX FREE!**



I will send One Dollar's worth of medicine and my book in which you will find cases of 20 years' standing cured by my new discovery. My remedy cures chronic or acute, inflammatory, nervous, muscular or articular Rheumatism, gout, sciatica or lumbago. If every part of your body is ailing and every joint is out of shape, if your kidneys or stomach is troubled, write me at once, and I will send you relief in the form of a DOLLAR BOX of my medicine FREE OF CHARGE. Address:

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Via the **SHORT LINE.**  
Through first-class sleepers. Dining Cars, serving meals a la carte.  
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**FARES REDUCED**  
Between EDMONTON and WINNIPEG and other Stations in Manitoba.  
Full information from any CANADIAN NORTHERN Agent.

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Farmers and Fruit-growers everywhere are greatly pleased with the Spramotor. With it they have doubled the yield from their orchards, banished wild mustard from their fields, made potato growing very profitable, kept their barns and buildings neatly painted—all with a minimum of labor. 86-page treatise R. free. Agents wanted.  
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BUFFALO, N. Y. LONDON, ONT.

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Handsome 64-Page Illustrated Pamphlet of **B.C. FARM & FRUIT LANDS** MAILED FREE on request  
E.I. HART & CO. Box 242, NEW WESTMINSTER, B.C.

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A carload heavy and medium weight very suitable for Northwest trade. These horses, in good condition, will be sold very reasonable. May be seen at Hendrie & Co.'s stables, Toronto, Ontario. For further particulars apply:  
**WM. WILKIE, Hendrie & Co., Ltd., Toronto, Ont.**

**PENMANSHIP** Book-keeping, Short-hand, Typewriting, Telegraphy, and all business subjects thoroughly taught. Write for particulars. Catalogues free. Address **WINNIPEG BUSINESS COLLEGE,** cor. Portage Ave. and Fort St., WINNIPEG.

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COLLEGE,  
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JANUARY 17, 1906.

## QUESTIONS AND ANSWERS. Miscellaneous.

### OXEN FOR SALE.

Where can I dispose of 5 or 6 teams of broken oxen? S. W. D.

Ans.—Advertise same in Wants and For Sale column, such ought to sell readily in the spring.

### WANTS DUAL-PURPOSE CATTLE.

Am running a small dairy here and some range cattle, and I want to secure a dual-purpose bull. Could you tell me where I could get a Shorthorn from a good-milking strain that would produce good beef steers too? Are the Red Polled better for milk or beef than the Shorthorns? What beef breed do you consider the largest? SUBSCRIBER.

Alta.  
Ans.—The Shorthorns are the largest of the beef breeds. Either Shorthorns or Red Polls should suit your purpose; the former being the larger would probably be more suited to your conditions. The latter breed has done quite well at some British fat-stock and dairy shows.

### STORING ONIONS.

Would you give me some information as to the best way to keep onions (the large winter variety) from the time of gathering until spring. There is practically no frost here in B. C., but I wish to know the best method to adopt to keep, say, a hundred tons from decomposing, and have them in good shape about April. R. T. W.

B. C.  
Ans.—The great trouble with onions, both on the coast and interior, is the lack of firmness, which indicates a coarse unfinished product, and which also foretells a short life. If the onions have been thoroughly matured and dried off before storing—the rough outside rubbed off—store in slatted-bottomed crates, not more than one foot deep in the crate, and put in thoroughly dry, cool store-room, turning the onions occasionally. If you can crate them in bushel crates, and put in cool, dry storage, so much the better. The great trouble will be that some lots will be matured and some will not be.

### LIGHTNING RODS.

I live in a house which stands on the same foundation off which a house has been burned by lightning, being struck twice. It is on a high point of ground, and seems to attract lightning. I propose to erect a pole or something for protection. What would be most suitable and least expensive, and where should it be placed? G. W. B.

Ans.—Your best scheme would be to erect home-made lightning rods, made of barbed wire. Take the wire and twist into a rod by attaching two ends to a grindstone or cutting-box rod, then turn the crank, and wind the wire tight; make the rod long enough to extend about four feet above the peak of the house and down into moist earth. Fasten to the roof and gables of the house by stapling to small cedar blocks. Set the rods up about twenty feet apart upon the ridge-board, and be sure to have continuous strands to the earth. The greater the number of points of barbs upon the rod, the better it will conduct the electricity from the atmosphere to the ground. Have as few sharp turns as possible, so that the currents can move with as little resistance as possible. On an ordinary farmhouse, three or four rods should be sufficient, or one extending over each gable. If you wished you could also have one on a high pole near the buildings. If there is a well convenient, it would be a good plan to run the ground end of the wire into the water. At any rate have the rods grounded in moist earth. Dry earth is a non-conductor, and would probably make the current jump from the rods to the house. Rods made as described have been tried and have proved most satisfactory.

"It's easy enough to pick out the bankrupt," said the unsophisticated reporter at the creditors' meeting.  
"Yes?" replied the other.  
"Yes. See how shabby and careworn he looks."  
"That's the principal creditor. The bankrupt is the man with the fur overcoat and diamonds."

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The DE LAVAL from every standpoint represents the greatest value in Cream Separators. During a history extending over more than a quarter of a century, its prestige has never been questioned—except in the advertisements of "would-be" competitors.

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**CLYDESDALE  
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it will pay you to correspond at once with us. Prices reasonable, terms easy, satisfaction guaranteed.

A few choice prizewinning Clydesdale mares for sale.

We can use a few strictly first-class, reliable salesmen to assist in forming syndicates. Apply to

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A sleeper is a railroad coach in which you lie awake all night trying to get the worth of your money in sleep.

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"Stop looking for limitations. Your opinion of the motive of another is a flashlight on your own character."

"We must grant to all people the liberty we would have for ourselves, else we are in bondage in trying to shape them to our viewpoint."

"The older I grow," Sam Jones says, "the more I care for facts, and the less I care about theories. I used to love to sit down and read articles on agriculture; but I wouldn't give 10 cents a dozen for them to-day. But I love to walk with a good old farmer through the magnificent growing crops, look at the fat cattle, horses and hogs; and see his full granaries. There is something charming about that to me. I always did despise theology and botany, and I always did love religion and flowers. I don't want a doctor to sit down and talk hygiene and anatomy and physiology to me. Let him take me out to the cemetery and show me what he has done."

"Health is the morality of the body."  
"Truth is not yours until it takes possession of you."

"Renounce prejudice; every prejudice is a limitation."

"Self-discovery is the most important thing in the world."

"Our life-work is overcoming the world, the flesh and the self."

"It is immoral for a man to swear, it is immoral for a woman to sulk."

"Every pulse-beat, every moment of time, is making for or against character."

"Every moment you spend in bemoaning past deeds is LOST TIME. Build a new life for yourself. Create a new body."

The Kingdom of God is within. Build around the kingdom a physical, mental and moral environment worthy of the occupant—your divine self. Health, happiness and usefulness are yours. Claim them.—Wilcox.

# Percherons

# WANT A STALLION

# Shires

If so, visit "The Oaks."

Just received—not the largest importation ever brought to Canada, but best quality.

Seeing is believing. Come and see. Fare refunded to purchasers. Bone, size and quality were the considerations in making selections.

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1903:

One first Missouri State Fair.  
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Two firsts East Michigan State Fair.  
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1903:

One first Missouri State Fair. One first Iowa State Fair. One first Minnesota State Fair. One first Wisconsin State Fair.

The colts are closely related to above prizewinners, and have breeding and conformation to make just as good horses.

Why not buy a yearling or two-year-old and get the rise in price yourself? Do you need a stallion in your district? If so, I will assist in forming a syndicate. Write or call on

## JNO. H. STOUT, Westbourne, Man.

I also have **50,000 acres Manitoba Wheat Lands** for sale. Can sell you farms with record of 30 bushels wheat average for 10 years.

# Money Saved is Money Earned

## RENEW TO-DAY.

There are thousands of farmers who would be greatly benefited by reading the Farmer's Advocate and Home Magazine regularly

Every issue contains things worth knowing. It is a storehouse of information and delight to every member of the household.

Every **stock raiser**, every **dairyman**, every **grain, fruit and vegetable grower**, every **bee-keeper**, every **teacher** and **student**, and every **home maker** will find real help in its pages.

### 10,000 NEW HOMES!

We want the Farmer's Advocate and Home Magazine introduced into the above number of new homes. You may make all **NEW SUBSCRIBERS** the following offer:— If they do not consider the paper was worth more to them than they paid for it, we will refund them the full amount they paid you at the end of the year, if they write us to that effect. Is there another paper in Canada that will make you such an offer?

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Clubs of 6 or more, one half of which must be new subscribers, \$1.00 each; Clubs of 5 or more renewals, \$1.25 each, in one remittance. No variation from these prices will be allowed.

No premiums are allowed in connection with the foregoing clubbing offer.

All new subscribers will receive the Farmer's Advocate and Home Magazine from date of subscription to the end of 1906, including the beautiful Christmas Numbers for both years.

It is worth remembering that the Home Magazine department alone contains more useful information and entertaining reading than can be found in most of the regular magazines.

In no case can we allow any commission on above rates. The Literary Page is welcomed everywhere and everybody is delighted with **Ralph Connor's** story, "**Glengarry School Days**," which we are running. Subscribe at once.

If you have any friends to whom you would like a sample copy sent, we would be pleased to have their names and addresses.

Start out to-day and see how many new subscribers you can get. Remit by money order or registered letter. Address:

**The William Weld Co., Ltd., Winnipeg, Man., Canada**

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Gentlemen,

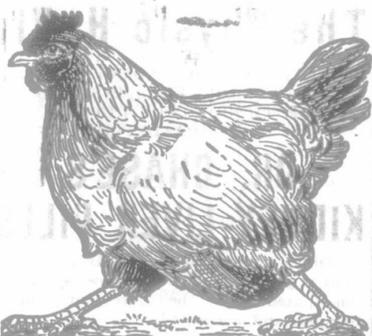
Enclosed please find \$..... being subscription to the FARMER'S ADVOCATE AND HOME MAGAZINE for the balance of this year and all of 1906 for the following list of names:

NAME \_\_\_\_\_ P.O. \_\_\_\_\_

Remit by money order or registered letter.

NAME OF SENDER \_\_\_\_\_

P.O. \_\_\_\_\_ DATE \_\_\_\_\_



**They Get Very Busy**

because they can't help it. Dr. Hess Poultry Pan-a-ce-a makes hens lay. They have to lay. The fowl gets more nourishment from the food taken, and the egg-laying organs develop new egg clusters. It is upon the organs of digestion that egg-making depends. Pan-a-ce-a contains tonics that increase the digestion; it also contains iron for the blood and nitrates to expel poisonous material through the skin; it is the only reasonable way to produce eggs without stimulants that are injurious.

**DR. HESS Poultry Pan-a-ce-a**

is the prescription of Dr. Hess (M.D., D.V.S.), and besides making hens lay it cures cholera, roup, indigestion, etc. Nearly all forms of disease are due to digestive derangement or bacteria. Pan-a-ce-a has a principle peculiar to itself. It is a germicide; it destroys the minute germs of disease known as bacteria. It has the endorsement of leading poultry associations in the United States and Canada. Costs but a penny a day for about 30 fowls, and is sold on a written guarantee.

1 1-2 lb. package 35c  
5 lbs. 85c.  
12 lbs. \$1.75  
25 lb. pack \$3.50

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

**DR. HESS & CLARK,**  
Ashland, Ohio, U. S. A.  
Instant Louse Killer Kills Lice.

**BREEDERS' DIRECTORY**

Breeders' 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. DAMSON BROS.,** Gladstone, Man. Young Scotch-topped Shorthorn bull for sale.

**A. & J. MORRISON,** Glen Ross Farm, Home-wood, Man. Shorthorns and Clydesdales.

**BROWNE BROS.,** Ellisboro, Assa., breeders of Polled Angus cattle and Berkshire swine. Stock of both for sale.

**C. BALDWIN,** Emerson, Man.—Yorkshire swine, both sexes. Herd boar purchased from Camfield, Minn.

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

**H. V. CLENDENING,** Harding, Man.—Breeder and importer of Red Polled cattle, the dual-purpose breed. H. V. Clendening.

**JOHN GARDHOUSE & SONS,** Highfield P.O., Ont. Breeders of Scotch and Scotch-topped Shorthorns, Lincoln and Leicester sheep and Shire horses.

**J. COFFEY,** Dalesboro, Sask. Shorthorns. Yorkshire swine of all ages and both sexes.

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

**JAMES DUTHIE,** Melgund Stock Farm, Hartney, Man.—Shorthorns and Berkshires.

**P. F. HUNTLEY,** Registered Hereford cattle. Lacombe, Alta.

**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.

**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.

**T. W. ROBSON,** Manitou, Man. Breeder of pure-bred Shorthorns. Large herd from which to select Young bulls and females of all ages for sale.

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

**W. N. CROWELL,** Napinka, Man. Breeder of Shorthorns and Berkshires. Stock for sale.

**SEED WHEAT:**

**IMPROVED FIFE WHEAT.**

A quantity of Minnesota No. 163 for sale. Imported from Minnesota in 1900 and grown on summer-fallow and on new land every year since. Free from bearded wheat and noxious weed seeds. Price and sample on application.

**D. W. McCUAIG,** Portage la Prairie, Man.

**QUESTIONS AND ANSWERS. Veterinary.**

**CHRONIC BRONCHITIS IN DOG.**  
Dog has been sick for some time. He is dull; will not eat, and coughs mostly all the time. R. M. S.

Ans.—He has chronic bronchitis, which is very hard to treat. Make a warm woollen blanket that will cover the breast and chest well. Apply mustard, mixed with water, to breast and chest. Leave it on for an hour, and repeat daily for three times. Keep comfortable; avoid drafts, etc., and give him 4 grains quinine three times daily. Give him anything he will eat. V.

**WORMS.**

Mare throws her head up, and turns up her lips as if in pain, and I have noticed a white substance around the rectum. C. M. W.

Ans.—This is probably only a habit, and is possibly caused by intestinal worms. Take 1 1/2 ounces each sulphate of iron, sulphate of copper, tartar emetic and calomel. Mix, and make into 12 powders. Give a powder every night and morning. Give bran only for 12 hours after she takes the last powder, then give a purgative of 8 drams aloes and 2 drams ginger, and feed bran only for 24 hours longer. Do not work after giving the ball, until her bowels regain their normal condition. V.

**UTERINE IRRITATION.**

The placenta had to be removed by hand from our cow. She discharges a matterly substance. She eats well, but is getting thin. Is the trouble infectious? Is the milk healthy? A. G.

Ans.—There is an irritable condition of the lining of the uterus. Flush the womb out every third day as long as the nozzle of the injection pump will enter easily, with 2 gallons of a three-per-cent. solution of Zenoleum heated to 100 degrees, Fahr. Give, internally, 30 drops carbolic acid in a pint of cold water as a drench three times daily, until the discharge ceases. I think it would be wise to call your veterinarian in, as an injection pump is necessary, and it requires some skill to use it properly. It is not infectious, and the milk is healthful. V.

**UNTHRIFTY MARE.**

1. Mare raised a foal last summer. Her coat is dry and hard, and urine scanty and high-colored. She is in foal again.

2. Killed a hen; wife opened her and found several soft-shelled eggs of different sizes in her. Was her flesh fit to eat? J. Y.

Ans.—1. Give her a diuretic compound of four drams each nitrate of potash and resin every night in soft food for three doses. Feed on good hay, chopped oats and bran, with a pint of linseed meal each day, equally divided in the three meals. Give one dram each sulphate of iron, gentian, ginger and nux vomica twice daily. If she will not eat this in her feed, mix with a pint of cold water and drench. Give regular exercise. V.

2. Yes; this is a perfectly normal condition.

**SPAVIN—ENLARGED LEGS.**

1. Driving mare has blood spavin.  
2. Three-year-old colt got his leg cut between hock and fetlock. It is healed now, but the leg is swollen. G. W. C.

Ans.—I presume you mean a bog spavin. If she is not lame, and you are not anxious to reduce the bog, leave her alone. If she is lame, or you want to reduce it, give her rest and blister. Take 2 drams each, biniodide of mercury and cantharides, and mix with 2 ozs. vaseline. Clip the hair off the parts, tie head so that she cannot bite the parts; rub the blister well in daily for two applications, and on the third day wash off and apply sweet oil. Let head down now, turn into a box stall, and oil every night. As soon as the scale comes off, blister again, and once monthly afterwards as long as necessary.

2. Hand rub and bandage the leg, and give 1 dram iodide of potash internally three times daily every second week. V.

**America's Leading Horse Importers**

AT THE 1905 INTERNATIONAL LIVE-STOCK EXPOSITION

Won the Greatest Victory of the Age.



Roseberg—Grand Champion Percheron Stallion.  
Apropos—Grand Champion French Coach Stallion.

18 FIRST PRIZES. 43 PRIZES IN ALL.

Champion Group of Percheron Stallions over 3 years old.  
Champion Group of Percheron Stallions under 3 years old.  
Champion Group of French Coach Stallions.  
Champion Group of Belgian Stallions.

THE BEST HORSES IN THE WORLD.

The First-prize Winners and Champion Stallions at all the leading shows of both continents are now for sale in the stables of

**McLAUGHLIN BROS.,**

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

**IN THREE LANGUAGES**

Directions for the use of Stevens' Ointment accompany every box in English, French and German. It is used and valued all over the world. Write for a box to-day, you will never regret it.



**Splint, Spavin, Curb, Ringbone**

and all enlargements in horses and cattle. \$1.00 small, \$3.00 large box, at Chemists, or direct from

**MARTIN, BOLE & WYNNE**  
Wholesale Agents in Winnipeg, Man.

**Hackneys and Clydesdales**



From such noted champions as Baron's Pride, Hiawatha, Marcellus, Macgregor, Lord Lothian, etc. Stables at Regina, Sask. Inspection invited. For fuller particulars and prices, write

**J. C. FYFE, V. S.,** Regina, Sask., or **T. H. HASSARD,** Minbrook



**A. & G. MUTCH**

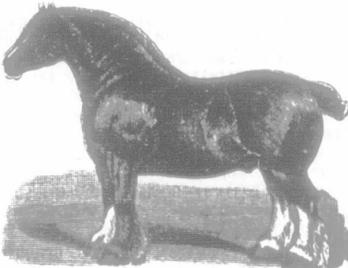
BREEDERS OF **CLYDESDALE HORSES and CRICKSHANK SHORTHORNS**

Stud headed by the champion breeding horse, Baron Gem. Herd headed by imported Cruickshank bull, Leader.

Young stallions and fillies for sale; also two young bulls fit for herd headers.

**Craigie Main. Lumsden, Sask.**

**Clydesdales and Hackneys**



**DALGETY BROS.,** Dundee, Scotland, and London, Ont., have on hand just now at their stables, London, Ont., a choice selection of above, including several prizewinners in this country and Scotland. All combining size and quality. Come and see them. om

**JAMES DA'GFTY,** Gloucoe, Ont.



**J. B. HOGATE'S Shires, Clydes, Percherons, Hackneys and Spanish Jacks.**

My latest importation includes 45 head of Shire stallions and fillies, Clyde stallions and fillies, Hackney and Percheron stallions and Spanish Jacks, many of them prizewinners in England, Scotland and France. This is a gilt-edged lot and the best we ever imported, combining size and quality.

Stables at **WESTON, ONT.** Telephone connection.

**J. B. HOGATE, Proprietor.** om

**HORSE OWNERS! USE**  
**CAUSTIC BALSAM.**  
 A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from horses. Impossible to produce scar or bluish. Send for descriptive circulars.  
 THE LAWRENCE-WILLIAMS CO., Toronto, Can.

**Fistula and Poll Evil**  
 Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 15 to 20 days.  
**Fleming's Fistula and Poll Evil Cure**  
 is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it.  
 FLEMING BROS., Chemists.  
 46 Broad Street, West, Toronto, Can.

**An Inflamed Tendon NEEDS COOLING**  
**ABSORBINE**  
 Will do it and restore the circulation, assist nature to repair strained, ruptured ligaments more successfully than flaxing. No diluter; no hair gone; and you can use the horse. \$2.00 per bottle delivered. Book 2-B Free.  
**ABSORBINE, JR.,** for mankind \$1.00 Bottle. Cures Strained Torn Ligaments. Cures Varicose Veins. Always pain quickly. Genuine manufactured only by  
 W. F. Young, P.D.F., 46 Monmouth St., Springfield, Mass.  
 Canadian Agents, Lyman, Sons & Co., Montreal.

**Shire Horses**  
 We breed the very best and soundest, 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.  
 No fancy prices, and all delivered free Liverpool landing stage. Correspondence invited.  
**Station: Atherp Park, L. & N.-W. Ry.**  
**JOHN CHAMBERS & SONS,**  
 Holdenby, Northampton, England

**THOROUGHBREDS.**  
 Representatives for sale, carrying best blood in the stud-book.  
 Stud headed by Kelston, first prize and sweepstake stallion, Winnipeg, 1905.  
 Young stock for sale. Prices reasonable. Correspondence solicited. Visitors met.  
**R. DALE - - S. Qu'Appelle.**

**GLYDESDALE STALLIONS.**  
 Two acclimated and proven stallions, seven years and two years old. Both are of the modern type, on clean legs and strong bodies. Address:  
**S. McLEAN, Franklin, Man.**

He was a punctilious Yankee, who was fond of boasting that his watch had never been slow or fast for forty years. One morning, to please a guest from Boston, he rose to see the sun rise. As they were waiting the Yankee kept looking at his wonderful watch and consulting, at the same time, a farmer's almanac which gave the time of sunrise and sunset for each day. There was a pause in the pale, vague dawn. Tapping his watch, the Yankee remarked:  
 "If the sun ain't over that hill in a minute and a half, he'll be late!"

**BLACK LEG VACCINE FREE**  
**CUTTER'S BLACK LEG VACCINE**  
 "CALIFORNIA STOCKMEN'S FAVORITE"  
 Powder, String or Pill Form  
 (Sells for \$1 PER PACKAGE OF TEN DOSES)  
 To introduce, we will send one package and our booklet on Black Leg and Anthrax Free to each stockman who sends 6 cents postage and the names and addresses of twenty cattlemen; state form of vaccine wanted. Address, THE CUTTER LABORATORY DEPT. 3, SAN FRANCISCO, CAL.

**Lost, Strayed, Impounded.**  
 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, Saskatchewan and Alberta Governments.  
 This department 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.**  
**CARDSTON, Alta.**—One light-bay mare, 4 years old, branded right shoulder, one-half diamond, 9 - H, right thigh W, with a lazy S, one white hind foot. \$10 reward. Walter Crockett.

**ALBERTA IMPOUNDED.**  
**EDMONTON.**—Since Dec. 1st, 1905, cow, red, about eight years old, branded C H on right shoulder; calf, red, piece off left ear, about six months old. F. W. Stevens, poundkeeper, Queens Avenue.

**LETHBRIDGE.**—Dec. 15, 1905, horse, gray, branded X, reversed S, on left thigh, and J D on right thigh. Town Inspector Parry, poundkeeper.  
**WETASKIWIN.**—Gelding, bay, black tail and mane, hind feet white, star on forehead, weight about 1,000 lbs., about eight years old, no visible brand. A. W. Anderson, poundkeeper.

**RAYMOND.**—Heifer, one year old, black, white under belly, under bit in left ear, under slope in right ear, branded 6 S, quarter circle under. J. B. Wasden.

**ALBERTA ESTRAYS.**  
**DIDSBURY.**—Pony, gelding, brown, star on face, branded C S, quarter circle over. J. M. Reed.

**HEATHER BRAE.**—Steer, red and white, horned, four years old, branded D on right hip, almost invisible brand on left hip; steer, red, horned, white star on forehead, four years old, branded D on right hip, almost invisible brand on left hip; steer, red, a few white hairs on forehead, white spot behind each shoulder, also on hind quarters and under breast, short stumpy horns, four years old, branded D on right hip; steer, red, hornless, four years old, branded D on right hip, almost invisible brand on left ribs. John H. Swanson (S. W. 1/2 2-46-19).

**EWING.**—On the ranch since Sept. 8th, 1905, pony, buckskin, with mane roached, branded H, bar after, on right hip, boot brand on left hip and N on left shoulder. Robt. Smyth.

**WHITFORD.**—Steer, light red, two years old, no visible brand. Mechilo Gorday (N. E. 1/2 36-55 w 4).

**DINWOODIE.**—Steer, red and white, right ear split and end cut off, small rope on horns, rising three years old, no visible brand. O. Lesink (S. W. 2-53-13 w 4).

**SKAFSE.**—Since Oct. 15th, 1905, heifer calf, light red, tail, belly and flanks white, branded reversed L 7, bar over. Iven Reid (S. E. 1/2 34-45-20 w 4).

**SPRING POINT.**—Since December, 1903, steer, red, little white on face, two years old. J. Paisley (31-9-29 w 4).

**LACOMBE.**—Mare, sorrel, aged, white feet, white strip on face, tail docked, mane cut, shod on fore feet, weight about 800 lbs., indistinct brand on left thigh; mare, sorrel, young, white strip on face, weight about 800 lbs., may be in foal. Jas. B. Gray (N. W. 1/2 12-40-28 w 4).

**WETASKIWIN.**—Since Dec. 6th, steer, roan, dehorned, no visible marks or brands, three years old; steer, dark red, dehorned, three years old, no visible marks or brand. C. D. Tate (N. W. 1/2 19-43-22).

**LETHBRIDGE.**—Cow, black, curved horns, four years old, indistinct brand on right side. M. Lynn (35-11-22).

**ANGUS RIDGE.**—Since Nov. 1st, mare, gray, brand on left shoulder resembling shepherd's crook. C. Nelles (N. E. 1/2 10-45-23 w 4).

**BARDO.**—Since June, 1905, steer, red, no horns, coming three years old, brand resembling O on right hip. Gust Carlson.

**PONOKA.**—Since Sept. 20th, 1905, steer, about three years old, branded C J T. John Weiss, three miles east.

**DIDSBURY.**—Pony, mare, gray, slight snick sore, tail trimmed, no visible brand. S. J. Miller, 1 1/2 miles north.

**WETASKIWIN.**—Since Sept. 1st, cow, muley, red, branded C, inverted round-topped T, on right ribs. Amos Doufe (W. 1/2 26-15-23 w 4).

**HIGH RIVER.**—Since last spring, mare, bay, buckskin, with foal at foot, yearling colt following, no visible brand. Charles Lehr, north fork of Mosquito Creek.

**NELMILTON VALLEY.**—Band of six

horses: one gray gelding rising three years old, branded inverted Y on right shoulder; one bay gelding, rising three years old, indistinct brand on right shoulder; one bay mare, rising two years old, blazed face, branded O on left stifle; one bay gelding, harness marked, rope on neck, branded P J, monogram; one sorrel horse, halter on and rope around neck, branded on left shoulder; one bay gelding, rising two years old, star on forehead, white spot on nose, right hind foot white, branded inverted Y on right shoulder, badly cut with wire. Horace King (20-49-15 w 4).

**OKOTOKS.**—Since 1897, mare, black, white strip down face, hind feet white, left hind leg crippled, branded indistinctly N P on right shoulder, unbranded foal at foot. Herbert Jones (N. W. 1/2 18-2 w 5).

**LLOYDMINSTER.**—Pony, gray, about five years old, no visible brand. Jos. Heathcote (24-51-3 w 4).

**WAVEY LAKE.**—Since Dec. 7th, 1905, bay horse, left hind foot white and white face, wearing a leather halter, branded reversed E W, monogram, on right shoulder, lazy P, quarter circle over, on left shoulder. W. W. Russell (N. E. 1/2 32-45-14 w 4).

**GOSSIP.**

There is true wisdom in the "recipe for having good neighbors—be one!" When we complain of any fault in those round us, blaming them continually for being cross, indifferent, selfish, rude, unfair, or bad-tempered, it is always well to see to it that our own conduct shall be invariably cheerful, sympathetic, unselfish, courteous, fair and good-tempered. Otherwise—strange as it may seem—they may be justified in complaining of us too!

We want the religion that softens the step and turns the voice to melody and fills the eye with sunshine, and checks the impatient exclamation and harsh rebuke; a religion that is polite, deferential to superiors, considerate to friends; a religion that goes into the family and keeps the husband from being cross when the dinner is late, and keeps the wife from fretting when the husband tracks the newly-washed floor with his boots, and makes the husband mindful of the scraper and door mat; keeps the mother patient when the baby is cross, and amuses the children as well as instructs them; cares for the servants, besides paying them promptly; projects the honeymoon into the harvest moon, and makes the happy home.

**OPPORTUNITY TO GET A1 SEED WHEAT.**

In this issue President D. W. McCuaig advertises some pure seed wheat, grown from Minnesota 163, an improved hard Fife wheat. The University of Minnesota bulletin says as follows re this wheat, advertised by Mr. McCuaig:

"This wheat was originated by a system of rigid breeding by selection, begun in 1889. During the first two years only one seed was planted in a hill, that the best plants might be chosen. The yield in the above table was recorded under conditions of soil and field management no better than on many of the best farms of Minnesota. No commercial fertilizers were used. The fact that these comparatively large yields represent six annual crops—1895, 6, 7, 8, 9 and 1900—is conclusive proof that the soil was only moderately manured with stable manure, because during some of these years heavy manuring would have caused the loss of crops by lodging. Under these conditions common stocks of Fife and Bluestem wheats yielded about 25 bushels per acre, while Minn. No. 163 wheat yielded 29 bushels.

"The averages of two milling and four baking tests show that Minn. No. 163 is identical with our best No. 1 hard wheat in selling quality, in milling quality, and in baking quality."  
 No other wheat has such a pedigree of actual performance as to yield of grain and money value per acre in Minnesota. At the University Farm during the past six years it has averaged two to five bushels per acre more than the best Fife and Bluestem varieties. The sample exhibited by Mr. McCuaig at the Canadian Seed Grain Fair, tested by Mr. Murray, weighed 65 lbs. to the bushel.

**The Physic Habit**

THE RESULT OF USING SALTS, CASTOR OIL, ETC., INSTEAD OF THOROUGHLY CURING CONSTIPATION BY

**DR. CHASE'S KIDNEY-LIVER PILLS**

"Oh, a dose of salts will fix me up all right," you say, when the bowels become constipated and the liver and kidneys sluggish and congested.

And the temporary relief you obtain in this way deceives you for a time, but you are soon in distress again, and must increase the dose, and resort more frequently to the use of this weakening and debilitating treatment.

Constipation and intestinal indigestion cannot possibly be cured until the liver is made active in its work of filtering bile from the blood and pouring it into the intestines, where it acts as a natural cathartic, hastening the process of digestion, and the removal of waste matter from the body.

Dr. Chase's Kidney-Liver Pills have a direct and specific action on the liver. They not only afford prompt relief, but positively strengthen and invigorate the kidneys, liver and bowels. Instead of encouraging the physic habit, they thoroughly cure constipation, liver complaint, biliousness and kidney disease.

If you would like to regain your old-time vigor, and feel strong and well again, use Dr. Chase's Kidney-Liver Pills. The backaches and body pains will disappear, your appetite and digestion will be good, you will escape sickness and disease because the filtering and excretory organs will keep the body cleansed from poisonous waste matter.

Dr. Chase's Kidney-Liver Pills, one pill a dose, 25 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto. Dr. Chase's Backache Plaster drives out all pains and aches.

**Carlton Herefords.**

THE STATE FAIR PRIZEWINNING BULL Gold Prince 88168 at head of herd.  
 Cows selected from the leading herds in the U.S.A., the Anxiety blood predominating.

**BULLS FOR SALE**

All ages, all sizes, all prices and all O.K.  
**FENTON BROS.,**  
 Carlton Hereford Farm.

**SOLSGIRTH - - MANITOBA.**

Our good friend, Mr. Alex. Fraser, the harness merchant, says that the joke of the week he got in the Presbyterian Witness: "An Irishman was painting a barn and seemed in a desperate hurry. A friend asked him: 'Pat, why do you work so hard?'"  
 "Be jabbers," replied Pat, "I want to finish the job before the paint gives out."

**HE MEANT EVERY WORD HE SAID**

**Ex-Reeve's Rheumatism Cured by Dodd's Kidney Pills.**

Was so Crippled that he could Hardly get Around and could get no Relief from Doctors or Medicines.

Dresden, Ont., Jan. 15.—(Special).—"Dodd's Kidney Pills cured me of Rheumatism slick and clean." Mr. W. G. Cragg, the well-known merchant and ex-reeve of this place, was the speaker, and he evidently meant every word he said.

"It was the inflammatory kind of Rheumatism I had, and it crippled me up so that I could hardly get around to do my work in my store. I had the best doctors and everything in the line of medicines I could hear of, but nothing even gave me relief."

"Then I tried Dodd's Kidney Pills and six boxes cured me completely."

Dodd's Kidney Pills cure Rheumatism by curing the Kidneys. Rheumatism is caused by Uric Acid in the blood. If the kidneys are right, they will strain all the Uric Acid out of the blood, and the Rheumatism will go with it.

**QUESTIONS AND ANSWERS.**  
**Legal.**

**COLLECTING NOTE.**

If A were to buy a horse from B and give note, could B collect from A, A being under 21 years old? N. N. Man.  
Ans.—Yes, if the deal was made in good faith.

**Veterinary.**

**WORMS.**

Have a mare troubled with worms; I would call them pinworms. Give simple remedy. W. C. Alta.

Ans.—These worms are generally located in the rectum, and can best be removed by injections. A simple one is made by adding a handful of common salt to a gallon of water.

**Miscellaneous.**

**GRASS FOR A PASTURE.**

I should think it a great favor if you would kindly advise me how to start a pasture. I have a field, about ten acres, close to the house, and I am thinking of using it for general purposes. I thought I would put three or four wires around, so that pigs, cattle and a few sheep could be pastured on it. At the present time it is an unplowed suble field. Oats were the last crop. I should like to know what kind of grass seed to sow; what amount of seed to the acre; how to prepare the seed-bed, and when might I expect it to be early enough to support the latter? I am drawing my manure unto the field in the meantime. Mdsa. E. W.

Ans.—Grass for such a purpose, and in so small a plot, is likely to get considerable cropping, and, therefore, should be of the most tenacious sorts. Probably the best varieties in this case would be brome grass and timothy. Under ordinary conditions we would not recommend brome, on account of the persistence with which it remains in the soil, but we do not know of any other variety that would stand constant heavy cropping as well as will brome. Prepare the soil for a crop of barley next spring, and sow about six pounds each of timothy and brome seed. If the soil is not very rich a light coat of manure the following winter would help the stand. It will then be ready for grazing the following spring. In about two or three years the brome will have become so thick as to need plowing to relieve sod binding. This can be done in the fall, then roll or pack, and the field will be ready for pasturing the next spring. For fall feed we would recommend a patch of rape, especially if many sheep and young cattle are kept. Four or five acres of rape in a corner of the summer-fallow will keep the stock in good, thrifty condition during October and November, after the grass has dried up, and would give the pasture a chance to recover before winter. Care should be taken to let the stock on gradually when the rape was dry. If the field referred to is low lying or sheltered by woods, we would advise sowing upon part of it about eight pounds of clover and six of timothy seed per acre. This would give a variety for the stock, and would probably prove the better grazing, though it is hardly probable it would last as long as the brome and timothy.

**WOULD TRY CLOVER.**

I have been reading the talk re clover and grasses in your paper, and think I would like to try ten acres either in grass or clover, instead of summer-fallowing it. The land is a black loam, fairly heavy, and has had five grain crops taken off it. I have sufficient brome grass seed to sow it. Would you advise me to sow it with brome grass, or timothy or clover, or a mixture of timothy and clover? Is there any advantage in brome grass to pay for the disadvantage of having to break and backset it; whereas with the others, I presume I could take the crop of hay off and then have the land ready for wheat

the same fall? I was only thinking of taking one crop of hay off. I am giving the land a very light covering of manure; do you think I could sow with a nurse crop, as if I could I should not be losing the use of the land at all; say clover with a nurse crop, second year crop of hay, and then plowed for wheat, third year wheat? J. S. H. Sask.

Ans.—Ten acres is a large amount of clover to sow where its successful growth is more or less problematical. Would suggest sowing clover and timothy mixed, seven pounds of the former to three of the latter per acre; sow either in a broadcast attachment in front of the drill, or by a wheelbarrow or hand broadcaster, as advertised in the nursery catalogues. Would prefer sowing it with wheat rather than any other nurse crop, and the seeds could be sown at the same time as the wheat, or left for a few weeks until the wheat was nicely up, then harrow and put on the grass seeds, as suggested above. The manuring of the land will aid materially in securing a catch of the clover. It might also be a good idea to broadcast the wood ashes lightly over the clover plot when established. Jno. Mooney, Valley River, the winner of one of "The Farmer's Advocate" silver medals this year for clover growing, informs us that he soaked his clover seed in tepid water over night before sowing, and that it germinated more rapidly as a result. He also reports a much better growth where wood ashes (remains of bush fires) had been. Would not advise the sowing of brome, although it has done well with some people. For a permanent pasture, brome grass may be used, but for short-term leys would use either the clover-timothy mixture, timothy, or native rye grass, seed of which can be obtained from seedsmen advertising with us.

**FEEDING TURNIPS TO COWS.**

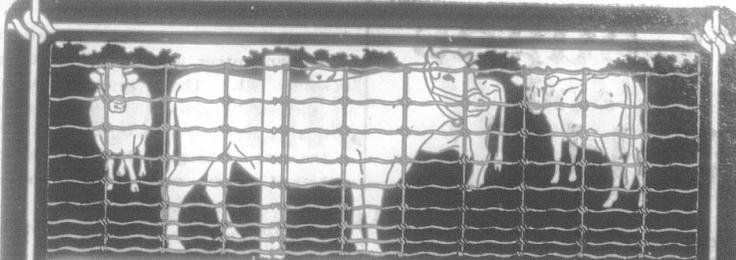
1. By feeding turnips to milk cows, will the milk taste of turnips?
2. If so, would the milk of a cow that is fed turnips at night taste of the turnips next morning?
3. Which is better to feed milk cows, turnips or mangels? J. T. Alta.

Ans.—A good deal depends upon the amount fed, the character of the other feed given, and upon the inherent nature of the cow. Almost invariably the milk will taste after a feed of turnips, but by feeding in small quantities along with chaff and chop, the flavor may be suppressed. Many good dairy farmers feed this way without there being the slightest hint of turnip flavor in the milk they sell. We think that unless precautions were taken to mix the turnips with other dry feed, they would taint the milk, if fed at night. With age, however, turnips lose some of their redolence, so that late in the winter they can be fed in larger quantities than when first harvested, especially if kept in a well-ventilated place. Mangels are generally preferred to turnips for milch cows, as they can be fed with impunity. If your milk goes to regular customers, you may begin by feeding a few turnips, and thus accustom them to the flavor so that they will not mind or even notice it, even though you increase the ration of turnips considerably.

**GOSSIP.**

**PERCHERONS AND SHIRES FOR THE WEST.**

A splendid consignment of full-blooded Percheron and Shire horses, from Crawfordville, Indiana, has been received by Jno. H. Stout, the real-estate dealer at Westbourne, Man. This lot consists of 8 stallions and 4 mares. The stallions are headed by the celebrated prizewinner, Medoc 30936. This horse is a dapple-gray Percheron, weighing 2,200 lbs., and has won prizes at nearly every State fair in the United States, taking first in Sweepstakes class in an entry of 45 horses at the State Fair in Iowa. He was also a winner at Chicago International and St. Louis World's Fair. There are also a fine lot of three-year-olds, ready for next year's service. Mr. Stout intends to follow up this line of work, and anyone looking for this class of stock will do well to look over his stables, where every effort will be made to supply the best of stock at the most reasonable prices.



**IDEAL FENCE**  
**WHEN YOU FENCE, FENCE FOR GOOD.**

A good fence adds its price to the value of the land. A poor fence soon becomes unsightly and worthless. The job must be done over again. You must go to all of the expense of erecting a fence again. This costs lots of money in time and labor; it means piling expense on top of expense. It pays to do the job right in the first place. Put up the Ideal woven wire fence as shown above, and you will have done with that piece of fencing for many years. It's not going to rust out in a few years because it is heavily galvanized and it always looks well. It stands up. It holds its shape perfectly on any surface, hilly or level. There is a reason for this, and the reason is that Ideal Fence has the weight. It's all made of No. 9 hard steel wire, and has the famous Ideal lock at every wire crossing. Slipping wires are impossible with this lock. Any strain or pressure is distributed and borne by all of the wires. That means strength. There is not a domestic animal living that can go through or over it. And there is no trouble about hot or cold weather. It adjusts itself to all temperatures. If you cannot be sure of these things, investigate. Let us send you a book giving all details about Ideal fence. It is free; write for it.

**THE MCGREGOR-BANWELL FENCE CO., Limited,**  
Dept. A, WALKERVILLE, ONTARIO.



**THE BIG TRUTH STICK**  
**SMASHES WORTHLESS SEPARATORS**

**EASY OR HARD WHICH FOR YOU**

Put Facts and Common Sense to work on a Tubular Cream Separator and you know it must be easy to operate. Put Facts and Common Sense up against a back breaking, hard to wash, high can "bucket bowl" machine and you can't make yourself believe it is easy to operate. In the light of truth, the out-of-date, "bucket bowl" separators go to smash.

Which kind for you, the

Tubular	or	"Bucket Bowl"
Low Can	or	High Can
Simple Bowl	or	Bowl Full of Parts
Enclosed Gears	or	Exposed Gears
Self Oiling	or	Oil Yourself

Catalog O-186 tells all about Tubulars. Write for it.

**The Sharples Separator Co.**  
Toronto, Can. WEST CHESTER, PA. Chicago.

**Manitoba's Leading Shorthorn Herd**

Among those offered being Nonpareil Prince, a straight Nonpareil two-year-old, winner of first at Winnipeg, 1904-5, and Fairview Prince, same age, another winner this year, and younger bulls fit for service. Am crowded for room, hence have heifers and cows for sale at rock-bottom prices.

**JOHN G. BARRON, Carberry, C.P.R., Fairview Siding, C.N.R.**

**Senega Root** Ship us your Senega and turn it into money while prices are high. We predict low value in near future.

**THE LIGHTCAP HIDE & FUR CO., Limited**  
Dealers and Exporters of Hides, Pelts, Deerskins, etc.  
Northern Furs and Senega.  
Highest Prices, Prompt Returns. 172 KING ST., WINNIPEG, MAN

**Joseph Rodgers & Sons**  
Limited,  
SHEFFIELD, ENGLAND.

Please see that this EXACT MARK is on each blade.

**James Hutton & Co., Montreal, SOLE AGENTS IN CANADA.**



## "Coughs and Colds"

Colds are the most dangerous of all forms of disease. A neglected cold leads to Bronchitis, Consumption, Pneumonia. "Coughs" are the result of irritated bronchial tubes. "PSYCHINE" cures coughs by removing the irritating particles and healing the inflamed membrane. It is a germicide and destroys the tubercle germ. It is a tonic that strengthens the lungs, the liver, and tones up the system. It makes for better health in all conditions of humanity. Get strong and the cough will disappear. "PSYCHINE" makes weak people strong. It cures coughs of the most obdurate kind and breaks up a cold in a few hours.

GREATEST OF ALL TONICS

# PSYCHINE

(PRONOUNCED SI-KEEN)

ALL DRUGGISTS—ONE DOLLAR—FREE TRIAL

DR. T. A. SLOCUM, Limited  
178 King St. W. Toronto, Canada



POPULAR GROYS  
**HEREFORDS**

The Leading Herd  
of Western Canada

Grand young bulls,  
cows, heifers, and

PURE-BRED  
**Shetland Ponies**

FOR SALE

J. E. MARPLES, Deleau, Man.

## HEREFORDS



A score of choice young bulls  
of A1 breeding; also some good  
breeding females, all ages. In-  
spection and correspondence  
invited.

OSWALD PALMER, Lacombe

## SCARCLIFFE HEREFORDS

Bulls and females of the most ap-  
proved strain. Sampson 1st at  
head of herd. Young stock of his  
get. Terms to suit the trade.  
Orders solicited.

H. M. BING, Glenella, Man.

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. In-  
S. Martin Rounthwaite, Man.

## Forest Home Farm.

CLYDESDALES, SHORTHORNS,  
YORKSHIRES and B. P. ROCKS



A couple of one-year-  
old Clydesdale stallions,  
good ones; four yearling  
bulls and a dozen bull calves;  
cows and heifers all ages.  
Boars and sows, old and  
young. Prices of cattle  
are down, and we will  
quote accordingly. We  
need the room, and can  
use the money. A  
choice lot of Scotch collie  
pups, eligible for  
registration.

ANDREW GRAHAM,  
Carman and Roland Stns. POMEROY P. O.



**Grandview Herd**

Scotch Shorthorns

Herd headed by Trout  
Creek Favorite  
=53595=.

Stock for sale at all  
times. Correspondence  
solicited.

JAS. WILSON,  
Innisfail, Alberta

Farm 8 miles south of town

### TRADE NOTE.

**FORAGE CROPS.**—The need of alfalfa, clovers and other grass seeds for forage is keenly felt. These crops can be and are successfully grown here. The secret of this success lies in the proper planting of the seed in the ground so that it will withstand the dry weather, by the proper retention of moisture in the soil. In other words, the storing of moisture against time of need.

Mr. J. R. C. Honeyman, Regina, Deputy Commissioner, together with Mr. George Harcourt, examined plots of alfalfa and oats on the farm of Mr. J. A. McDonald, Fort Qu'Appelle, and were highly pleased with the success of these crops.

The crops in question were sown with the Low-down Press Drill, and Mr. Harcourt, speaking of the work of this machine, says:

"For sowing alfalfa, and other clover and grass seeds, and the seeds of forage crops, I cannot conceive of any machine that would do the work better, because it is constructed so as to put the seed in the ground within the reach of moisture, and yet not actually cover it any deeper than if sown nearer the surface. In my opinion, such a machine should be in use on every farm, for not only does it seem to be the best drill with which to sow grass seeds and catch crops, but it is equally available and useful for putting in the second crop."

Mr. Honeyman concurred heartily in Mr. Harcourt's opinion, and expressed the hope that great numbers of these machines would be sold.

The Hoosier Low-down Press Drill, by reason of its construction, enables the user to plant the seed in furrows about six inches deep, but covers the seed only about two inches. The reason for this is that the large press wheels, which track in the seed trench made by the furrow openers, pack the ground firmly over the seed in the furrow, thus retaining the moisture in the soil at planting time. In addition to this, a trough about four inches deep is left over each furrow, and creates a ridge of equal height on each side of the furrows.

It will be readily seen that any moisture of rain that may fall will naturally settle in these troughs, soak into the ground, and thus be retained for the nourishment of the young plants.

The alfalfa crop successfully withstood nine nights of 53 degrees below zero last winter. Alfalfa is naturally a deep-rooted plant, and once it gets started right, success surely follows.

Mr. J. A. McDonald, Fort Qu'Appelle, N.-W. T., has experimented and made a close study of alfalfa during the past five years. He has achieved success, and we refer you to him with pleasure, as to his experience with the Low-down Press Drill.—American Seeding-Machine Co., Box 713, or 283 James St., Winnipeg, Man.

### Some Seed Special Lectures.

The Agricultural Limited, otherwise known as the Dominion Department of Agriculture's Seed Special, will carry as a train crew some of the most noted farmers and agricultural scientists in America. Prominent in the train crew are two well-known men, farmers' favorites, Supt. S. A. Bedford (Brandon Exp. Farm) and Dr. Jas. Fletcher (C. E. F., Ottawa), along with that painstaking, investigating farmer, Supt. Angus Mackay (Indian Head Exp. Farm). There will, no doubt, be many recent comers to Manitoba, Saskatchewan and Alberta interested in reading the following epitome of their careers:

Superintendent Bedford, of Brandon, is to be one of the chief speakers, and those in Saskatchewan will be pleased to renew his acquaintance. No speaker attracts bigger crowds at Farmers' Institute meetings, or is heard with greater interest and profit. Mr. Bedford has been intimately associated with Manitoba agriculture since the early days of the Province; for several years he guided to their homes in Southern Manitoba many settlers, who have since become not only successful but prominent citizens of the West. He then spent several years in the vicinity of Moosomin, Assn., which constituency he represented in the councils of the Northwest Territories Assembly. In 1889 he was chosen by the Direct-

Dr. Saunders, to act as Superintendent of the Experimental Farm for Manitoba, and the splendid success that he has made of this work is a tribute to the sagacity and foresight of Dr. Saunders in choosing men for such positions. Mr. Bedford has long been known as agricultural authority of Manitoba, and his lectures on the Seed Train will be popular and useful.

Dr. James Fletcher, Entomologist and Botanist of the Dominion Experimental Farms, best known by the appellation, "the bug and weed man," is another prominent member of the lecture staff. Dr. Fletcher has had a long and wide experience in his work, covering every Province of Canada, from Atlantic to Pacific. He knows no peer as an authority on our plant and insect pests and the means of overcoming them, and during his fifteen years' connection with the Experimental Farms he has proved his worth to the farmers of Canada by assisting them through various bug and weed problems. He has paid repeated visits to the West, lecturing extensively at Farmers' Institute meetings, and is conversant with the many problems which confront the farmers on the prairies. Dr. Fletcher has a pleasing eloquence, and apart from the fund of information which his addresses contain, they are thoroughly enjoyed by his auditors.

### GOSSIP.

A CHICAGO PAPER ON A BRANDON FIRM.

Robert Burt, Jr., in the Live-stock World, recently says of a Manitoba firm of horsemen, "Alex. Galbraith & Son, of Janesville, Wis., and Brandon, Man., are among the oldest importers of draft stallions in the United States. During all this long term of activity before the public, not one act of dishonor, graft or trickery has attached to their name. Mr. Galbraith is rather a retiring sort of a man, not given to bombast or boasting. Indeed, he seems rather reticent, to do even deserved justice to his great stud of Clydesdale and Hackney stallions. A recent visit to their barns reveals a wealth of Clydesdale and Hackney stallion blood that is hardly equalled in the country. One of their Clydesdales, known as Prince Ailsa, is a beautiful and most powerfully-built specimen of the breed. The sire of his dam earned \$4,500 in one season. Baron Afton is one of the finest Clydes in the country to-day. Baron Afton recently sold at auction for \$2,800, and it was a bona fide sale.

Baron Robgill is a half-brother to Afton, and is one of the four that got second prize as get of sire at the International. His dam was a prizewinner, both in England and this country. Baron Robgill's sire earns \$15,000 every year in England.

Show King was second to the Chicago champion Clyde, Refiner. He is as perfect in legs and feet as it would seem possible for a horse to be. Mr. Galbraith feels confident that he can fit him to beat Refiner next year.

Baron Romeo was fifth in the open class, and had many admirers who favored him for a place nearer the head of the class. If an Old Country judge had judged him, he probably would have been placed higher. He is just a trifle low in the back. This the American judges object to.

Lord Shapely was first-prize winner in the two-year-old class of sixteen. He was re-serve to the champion Refiner.

Two Percheron stallions are models of symmetry and power. One is a black, the other a gray; each will weigh over 2,200 lbs.

They have ten head of Hackneys in their barns. One of these is Langton's Denmark. He was third at the Chicago show, and should have gone higher, but through flight was too nervous to receive fair judgment. His sire, Langton's Performer, sold for \$20,000, and the sire of his dam, Danlight, sold for \$25,000, and there was no slice of or company promoter's estate, either. Farmers looking for a good horse will find it a pleasure to deal with the Galbraiths, while at the same time they can be assured of a

## OBSTINATE COUGHS AND COLDS.

The Kind That Stick.  
The Kind That Turn To  
**BRONCHITIS.**  
The Kind That End In  
**CONSUMPTION.**

Do not give a cold the chance to settle on your lungs, but on the first sign of it go to your druggist and get a bottle of

## Dr. Wood's Norway Pine Syrup.

It cures Coughs, Colds, Bronchitis, Sore Throat, Pains in the Chest, Hoarseness, or any affection of the Throat or Lungs. Mrs. Goushaw, 42 Claremont Street, Toronto, writes: "I wish to thank you for the wonderful good Dr. Wood's Norway Pine Syrup has done for my husband and two children. It is a wonderful medicine, it is so healing and soothing to a distressing cough. We are never without a bottle of it in the house."

Don't accept a substitute for Dr. Wood's Norway Pine Syrup. It is put up in a yellow wrapper, three pine trees the trade mark, and price 25 cents, at all dealers.

**Woodmere Stock Farm**  
Neepawa, Man.

## Shorthorns

For sale. My herd has always been FIRST on the ring where shown. Have on hand a number of young things of both sexes.

### Clydesdales

A few Clydesdale Fillies for sale.

### Yorkshire Pigs

Always a good supply of both sexes for sale Not related.

**PLYMOUTH ROCKS A SPECIALTY**

**STEPHEN BENSON**

## WILLOW BANK SHORTHORNS

Four bull calves, fit for service in 1906, sired by Alberta Prince =40190=, champion at the Calgary Spring Sale, 1905. Herd now headed by Nonpareil Victor =45240=, sired by Nonpareil Archer (imp.) dam, Primrose, also imported. Address:

D. SINCLAIR, - Innisfail.

## SITTYTON STOCK FARM

High-class SCOTCH SHORTHORNS FOR SALE

Sittyton Hero 7th, my great show and stock bull, is now for sale. (Three times champion at Winnipeg, Man.; three times champion at Regina's big Fair; SECOND at World's Fair at Buffalo, and other prizes too numerous to mention.)

GEO. KINNON, - Cottonwood, Sask.

## Rushford Ranch

Young Stock for Sale.

Sired by Trout Creek Hero and Loyalty. Also several cows. Write for particulars.

R. K. BENNET,  
Box 95. Calgary.

## SHORTHORNS and TAMWORTHS.

Prizewinners at Winnipeg, Brandon and New Westminster. Select stock always for sale.

T. E. M. BANTING,  
Banting, Man.

## Shorthorn Bulls, Heifers and

### Heifer Calves for Sale.

The get of Sir Colin Campbell (imp.)—28878—and General—30399—. Cows all ages, in calf or calf at foot. Seventy head to choose from.

Two Clydesdale Stallions two and three years old. Also mares and fillies. Leicester Sheep, both sexes. Stock always on hand.

Geo. Rankin & Sons, Hamiota, Man.

## BUNNY SLOPE SHORTHORNS

I have now for sale one 2-year-old red bull (imp.) and six extra well-bred yearling bulls and several cows and heifers. Prices reasonable and quality right.

JOHN RAMSAY,  
Priddie, Alta.

## SHORTHORNS

Cows of true Scottish type. A good prize-ring record made by the herd.

GEORGE LITTLE, NEEPAWA, MAN  
FIVE MILES FROM TOWN.

QUESTIONS AND ANSWERS  
Veterinary.

CHOLERA

When my horse is backed up after standing a while, he swings one hind leg out, just for one step. F. C.  
Ans.—This is a form of chorea, a nervous disease, which is often incurable. Purge him with 8 drams aloes and 2 drams ginger. Feed bran only for 12 hours before and 24 hours after administration. Follow up with six drams bromide of potash night and morning in damp food for ten days. Cease giving the drug for a week, and then repeat.

EDEMA

Two-year-old filly has a soft swelling from the mammary gland forward for about three or four inches. Sometimes it is sore, and causes her to hump when she trots. The swelling increases in size when she stands in the stable. K. M. D.

Ans.—Give her a purgative of six drams aloes and two drams ginger. Feed bran only for 12 hours before and 24 hours after administering the purgative. Follow up with one dram iodide of potash twice daily every alternate week, and rub the parts well twice daily as long as necessary with a liniment composed of four drams each iodine crystals and iodide of potash, and four ounces each glycerine and alcohol.

LEG SWELLS—DIARRHOEA

1. Mare swells on one hind leg. The back of the leg is rough and scruddy. She shows some lameness.

2. Pregnant mare, 18 years old, has chronic diarrhoea. When on pasture she is all right. A. E. K.

Ans.—Give a purgative of 8 drams aloes and 2 drams ginger. Follow up with 1 dram iodide of potash three times daily every alternate week. Dress the scruddy or raw parts with oxide of zinc ointment; keep dry and give regular exercise.

2. It is quite probable defective mastication is the cause. Have her teeth dressed; add to her drinking water about 1/2 of its bulk of lime water. If this does not check the trouble, give 2 drams powdered opium and 4 drams each of catechu and chalk in a pint of cold water as a drench every 5 or 6 hours until the diarrhoea ceases.

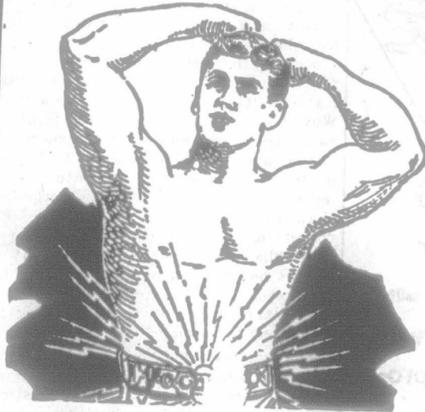
Miscellaneous.

MARRIED WOMAN'S PROPERTY.

- 1. The farm we are on is heavily mortgaged, and in case of my husband failing, could furniture bought by me, through keeping boarders on the farm, but allowing two-thirds for expenses to my husband, be taken from me?
- 2. I bought a piano to teach a few pupils; could it be taken if it is being paid for by me with the proceeds derived from selling honey? I have a large number of bees. The piano was bought by me personally.
- 3. Could I conscientiously send my children to high school, to prepare them for teachers, through the proceeds of my turkeys, if I allow my husband for all grain consumed by them, and a small rent for the building I use for the little ones? I raise a large number of turkeys annually.
- 4. Could money given to me and used for stock or fowl or furniture, could any of these things be seized if my own family gave the money to me?
- 5. When married first a few animals belonged to me; could I still have their value in the stock my husband has?
- 6. If I take entire care of a number of bees, and pay for every expense they incur, is not that money my own?

Ontario. "READER."  
Ans.—1. No.  
2. No.  
3. Yes.  
4. No.  
5. We think not.  
6. Yes.  
Grow old along with me!  
The best is yet to be.  
The last of life, for which the first was made:  
Our times are in His hand  
Who saith, "A whole I planned,  
Youth shows but half; trust God: see  
all, nor be afraid!"  
—Robert Browning.

# Strength for the Weak.



## A CURE WITHOUT DRUGS.

No person should be weak, no person should suffer the loss of that vitality which renders life worth living. No person should allow themselves to become less than nature intended; no one should suffer when there is at hand a certain cure for their weakness.

Most of the pains, most of the weakness of the stomach, heart, brain and nerves from which people suffer are due to an early loss of Nature's reserve power. You need not suffer from this. You can be restored. The very element which you have lost you can get back, and you may be as happy as any person that lives.

I have the grandest invention of the age for weak people; the surest and easiest cure for all nervous and chronic diseases. Its wonderful power is directed to the seat of the nervous system, through which its vitalized strength penetrates into all parts of the body, carrying new life into every organ or part which has been weakened by dissipation, restoring energy to the brain and power to the system. No weak, sickly or delicate person will ever regret a fair trial of my

## DR. McLAUGHLIN'S ELECTRIC BELT

It will make you strong. It will send the life blood dancing through your veins, you will feel the exhilarating spark warm your frame, the bright flash will come to your eye and a firm grip to your hand, and you will be able to grasp your fellow man and feel what others are capable of doing is not impossible for you. This grand appliance has brought strength, ambition and happiness to thousands in the past year. It is the one sure remedy for the cure of Rheumatism, Weak Kidneys, Weak Stomach, Nervous Debility in young or old, and similar ailments, as well as Dyspepsia, Constipation, etc. How can any one remain in doubt as to the value of this grand remedy when you see so many cures?

### IMPROVEMENT IN TWO MONTHS. SORRY HE DID NOT GET BELT TEN YEARS AGO.

Chance Harbor, St. John Co., N.B., November 24, 1905.  
Dr. McLaughlin:

Dear Sir,—Since wearing your Belt these two months I am glad to say that my back is ever so much better, my stomach and bowels are also improving. The suspensory has done wonderful things for me, and the Developer is doing me a lot of good, too. I am sorry I did not get one of your Belts 10 years ago. I am gaining flesh every day, and feel more like a man. I am stronger mentally and physically. I shall ever speak well of your Belt. Yours very truly,

WINSLOW H. BELDING.

North Bay, Ont., October 9th, 1905.  
Dr. McLaughlin:

Dear Doctor,—It is with pleasure that I write you with regard to the Electric Belt I purchased from you about four months ago. After using the Belt and following the directions for three months, I felt like a new man, and it is now three weeks since I stopped using it. I am satisfied to say that your Belt is far ahead of medicine or any other electrical treatment I ever tried before, and it is worth its money many times. I can strongly recommend your Belt, and shall always do it. I thank you from my heart for your wonderful remedy. Yours truly,

O. JOHNSON.

## DON'T PAY A CENT UNTIL CURED.

That is my offer. You take my latest improved appliance and use it in my way for three months, and if it does not cure, you need not pay me. My only condition is that you secure me, so that I will get my money when you are cured.

Write To-day for My Free Illustrated Book and Full Information.

### CALL TO-DAY.

If You Can't Call Send,  
Coupon for Free Book.

DR. M. D. McLAUGHLIN, 130 Yonge Street, Toronto, Can.  
Dear Sir,—Please forward me one of your books as advertised.

Name .....  
Address .....  
Office Hours—9 a.m. to 6 p.m.; Wednesday and Saturday till 9 p.m.  
Write Plain.



**ARTHUR JOHNSTON**  
Greenwood, Ont.

Offers for sale at moderate prices:

- 3 high-class imp. bulls.
  - 2 excellent yearling bulls, home-bred.
  - 17 first-class bull calves.
- Also cows and heifers, imp. and home-bred.  
Most of the above imp. or sired by imp. bulls and from imp. dams.

**JOHN GARDHOUSE & SONS, Highfield P.O., Ont.**  
Breeders of  
Scotch and Scotch-topped Shorthorns, Lincoln and Leicester Sheep and Shire Horses.  
A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 49, at head of herd. Royal Albert (imp.), 20867, at head of stud. Farms 3 1/2 miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

When putting ice into the house this winter be sure the roof does not leak, or next summer you will find your work in vain.

## Maple Shade



Cruickshank Shorthorns and Shropshire Sheep  
16 choice young bulls of Cruickshank breeding, from which you can select high-class herd-headers. If you wish to see the breeding we shall be pleased to mail a catalogue.

**JOHN DRYDEN & SON,**  
Brooklin, Ont.

Stations { Brooklin, G.T.R. Long-distance  
Myrtle, C.P.R. telephone.

**Shorthorn Cattle and Lincoln Sheep**  
Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days.

**J. T. GIBSON, Denfield, Ont.**

## Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from Imp. sires and dams. For particulars write to  
**Ed. Robinson, Marham Sta. and P. O.**  
Farm within town limits.

## Maple Lodge Stock Farm.

1854.  
An excellent lot of Shorthorn bulls and heifers for sale now. Have choice milking strains. Have a few Leicesters left yet. Bargains in ewes.  
**A. W. SMITH, Maple Lodge, Ont.**

## SCOTCH SHORTHORNS

- 9 heifers, yearlings.
- 29 heifers, calves.
- 4 bulls, yearlings.
- 26 bulls, calves.

All out of imported sires and dams.  
Prices easy. Catalogue.

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Manager. Cargill, Ont.

## Pine Grove Stock Farm.

Breeders of  
**High-class Scotch Shorthorns,**  
Choice Shropshire Sheep, Clydesdale and Hackney Horses.

Herd catalogue on application. Address:  
**C. W. WILSON, Supt., Rockland, Ont.**  
W. C. EDWARDS & Co., Limited, Props. Ont.

**T. DOUGLAS & SONS,**  
Strathroy, Ont.

## SHORTHORNS and CLYDESDALES

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.

It is said there are three ways of getting out of a scrape—push out, back out and keep out. The best plan will be to keep out.



Frosty, snowy or sloppy weather means cold, wet feet, chilblains and misery, unless your feet are protected by **ARMOUR CLAD** Lumberman's and Boots. Weather and waterproof, comfortable, and made to stand any wear. All styles. "The mark of quality" on the genuine



**Alberta's Show and Sale.**

The announcement of the annual sale of pure-bred cattle, under the auspices of the Alberta Cattle-breeders' Association; the annual stallion and foal show, under the auspices of the Alberta Horse-breeders' Association, and the second annual Provincial Fat-stock Show, is made, and will be held at Calgary, on May 7th to 10th. In the cattle sale only animals belonging to a resident of Alberta can be offered; no bull born prior to the first of January, 1900; no animal born after the first of April, 1905 (except calves at foot); no animal below the age of three years on the first day of sale not calved in Alberta, and no animal which has not been in Alberta for at least a year shall be eligible for entry. A rule has also been made, that any bull failing to bring a bid of \$50, and any female failing to bring \$40, shall not be sold at any association sale. Entries for the cattle sale will be received from February 1st to March 1st.

For the stallion and foal show, classes have been provided for Clydesdales, Shires, Percherons, Suffolk Punches, Thoroughbreds, Standard-breds, Hackneys, coach breeds and grades. The horse show will be held on the 7th and 8th of May, and entries close on April 5th, as also do the entries for the fat-stock show. The programme as at present arranged is as follows:

- Monday, May 7th. Judging pure-bred cattle and horses, 2 p. m. Annual meeting Horse-breeders' Association, 8 p. m.
- Tuesday, May 8th. Annual meeting Alberta Cattle-breeders' Association, 8 p. m. Judging horses all day. Judging cattle, 9 a. m. to 2 p. m. Auction sale of pure-bred cattle, 3 p. m. Fat-stock Show.
- May 9th and 10th, sale of pure-bred cattle.

For all particulars regarding these different events, write C. W. Peterson, Secretary Live-stock Association, Calgary, Alta.

It is stated that plaster of Paris mixed with bran or flour is a good feed to kill off rats. This ought to be a good formula to try on those farms which are bothered with the rodents.

**Bone Spavin**

Know it by the lump and the limp—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, 44 Front Street, West, Toronto, Can.**

**STEVEN'S FIRE ARMS**

Accuracy is not more than the high scores of a crack shot.

The accuracy of the Stevens barrel is the result of best material, best workmanship and careful testing at every point.

**Our Catalogue of Firearms** will interest you. 140 pages, describing different styles, how to select a rifle, how to care for a rifle, talks on ammunition, and much other valuable information. Send 4 cents in stamps to cover postage, and we will send it free. If your dealer cannot supply you, write to us.

**J. Stevens Arms & Tool Co., 45 High Street, Chicopee Falls, Mass., U. S. A.**

**FARM WANTED.**

Wish to secure immediately two good farms in the agricultural section, soil must be good and the property will pay cash for the right place if it is good wheat land preferred. We want one farm of four hundred acres, and one medium size. Full description and lowest cash price. Possession must be had in April. Address: North American Land Co., Lock Drawer 880, Minneapolis, Minn.

**An Interesting Experiment.**

Statistics are now being compiled by the U. S. Dept. of Agriculture into a report on the "Cost of Producing Field Crops." As the work progressed from year to year, it became apparent to those in charge that this method of gathering statistics might profitably be applied to other lines of production on the farm. Why not investigate the cost of producing beef, pork, and milk under actual farm conditions? Why not attack many of the theories of feeding and breeding live stock in the actual environment of the farm rather than under the more artificial conditions of the experiment farms? Why not collect statistics pertaining to rural sociology and to the general subject of agricultural economics? Statistics of this kind are more accurate when collected systematically and methodically than by arm's-length proceedings. Facts concerning the business of farming can be published in the knowledge that they cannot be attacked on the ground of being impractical or inaccurate. Thus, in 1905, the scope of these investigations was greatly extended.

The number of farms on which statistics are being kept has been reduced to eight in each district, but statistics of every item in the farm business are being recorded. On a number of these farms the Department of Agriculture has installed steel wagon scales to facilitate the work of weighing fat stock and taking accurate inventories of the yields of field crops. The route-statistician lives for three successive days in every month on each farm. During this period, he weighs and tests the milk of each cow in the herd; he weighs the feed consumed by each class of live stock, and he obtains the cash records of sales and expenses during the past month. Each morning he travels over his route and obtains the labor reports of the previous day from all the farmers. All these statistics are posted into a double-entry card ledger, so that the profit and loss of every enterprise on the farm, from wheat to chickens, is being determined. Other statistics concerning farm life are also being gathered that will be of interest to the student of sociology, such as the cost of table board, and the average household and personal expense.—[Review of Reviews.]

**TRADE NOTES.**

**INTERNATIONAL HARVESTER CO., OF AMERICA.**—A choice lot of calendars have been sent to this office by the International Harvester Company of America. This big company has also issued a splendid lot of catalogues. Either catalogues or calendars may be secured at all local offices of the company for the asking.

**HOW A RIFLE WAS BAPTIZED.**—Our readers will be interested to learn the result of the prize competition inaugurated by the J. Stevens Arms & Tool Company, 315 High St., Chicopee Falls, Mass., makers of the famous Stevens rifles.

The object of this competition, which closed August 15th, was, as already stated in this paper, to get an appropriate name for a new boy's rifle.

The name selected as the best was "Little Scout," sent in by C. F. Meromey, of Greensboro, N. C., who is the fortunate winner of the first prize, a Stevens "Favorite No. 17." Several competitors suggested the same name, but Mr. Meromey's letter was the first to be received.

We understand the "Little Scout" made its first appearance about Jan. 1.

Thousands of names were received from all over the country. The choice of names handed in was a flattering tribute to the character of Stevens firearms, for it was a significant indication that dependability and accuracy are characteristics closely connected in the minds of the public with Stevens rifles.

The company has brought out a book of 140 pages, which every gun lover should possess. It illustrates the many different types of the world-renowned Stevens firearms, besides giving a font of useful information on such questions as the care of shotguns, rifles, pistols, choice of ammunition, reloading, adjustments, targets, etc. The company, as a really an educational work by sending this book free to all who, for only four cents in stamps, request the postage.

**Suffered Terrible Agony**

**FROM PAIN ACROSS HIS KIDNEYS. DOAN'S KIDNEY PILLS CURED HIM.**

Read the words of praise, Mr. M. A. MoInnis, Marion Bridge, N.S., has for Doan's Kidney Pills. (He writes us): "For the past three years I have suffered terrible agony from pain across my kidneys. I was so bad I could not stoop or bend. I consulted and had several doctors treat me, but could get no relief. On the advice of a friend, I procured a box of your valuable, life-giving remedy (Doan's Kidney Pills), and to my surprise and delight, I immediately got better. In my opinion Doan's Kidney Pills have no equal for any form of kidney trouble."

Doan's Kidney Pills are 50 cents per box or three boxes for \$1.25. Can be procured at all dealers or will be mailed direct on receipt of price by The Doan Kidney Pill Co., Toronto, Ont.

Do not accept a spurious substitute but be sure and get "Doan's."

**Burnside Ayrshires**—One two-year-old and two yearling bulls; also females of all ages, just imported June 1st, Scotch prizewinners; also a number of imp. and home-bred cows, due in Aug. and Sept. Order a good calf from heavy-milking dams.

**Brampton Jersey Herd**—We have now for immediate sale 10 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, Brampton, Ont.**

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Secretary of the Kent or Romney Marsh Sheep Breeders' Association.

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**Large English Berkshires**

For the fall trade I have to offer about 30 young April sows, of the up-to-date type; these will be bred to a prizewinning boar for early spring litters. Also 10 nice young spring boars fit for fall service. I have some nice September pigs that I am offering at right prices. Correspondence solicited. Address,

**J. A. MCGILL, Neepawa, Man.**

**MOUNT FARM BERKSHIRES**

Choice-bred stock now for sale. Pairs supplied not akin. Inspection requested, and correspondence invited and promptly answered.

**C. G. BULSTRODE, Mount Farm, Qu'Appelle, Assa.**

**YORKSHIRES AND SHORTHORNS**

In **Yorkshires** we have now for sale a number of first-class sows bred to farrow next spring; also several good boars ready for service. We can ship any distance in light, strong crates.

In **Shorthorns** we have a few heifers bred to imported Metropolitan; also two bull calves sired by Choice Goods. Prices to suit the times.

**WALTER JAMES & SONS, Rosser, Man.**

**Holyrood Production 70785**, is offered at the small fee of \$5 to a limited number of approved bitches for a short time. Send for stud card, free. **R. E. CLARK, Glencairn Kennels, West Lorne, Ont.**

Why Incubator Chicks Die in the Shell.

There seems to be a wide and varied opinion as to why chicks die in the shell. Many claim, which is true in a sense, that the germ is weak, caused by too close inbreeding. It is true also that we find weak germs at times when the parent stock is not related.

Too close confinement, with little or no exercise, or improper feeding, will also cause chicks to die in the shell, the germ not being strong enough to withstand the various changes during incubation.

The writer is fully convinced after careful demonstrations, that while the above causes are partially true, the main cause is improper ventilation. The system of ventilation in incubators of to-day is such as to cause a draft, drying the eggs too fast, causing the membrane or lining beneath the shell of the egg to become tough, so much so that at hatching time the chick is unable to break through, many even dying in the shell after being pipped; whereas, if this membrane could be kept soft and brittle as when fresh-laid, the chick would easily have picked its way out.

By placing a hygrometer under a sitting hen, the humidity or moisture will register about 60 per cent., while in almost all makes of incubators less than half that amount will be shown. Herein lies the explanation of such poor hatches in high altitudes, the air passing too rapidly through the incubator, taking the moisture from the egg too fast, drying and toughening the membrane until the chick cannot break through.

To demonstrate that chicks die in the shell from lack of ventilation, I have made an incubator in which instead of using a two-inch pipe (the size used by manufacturers) to convey the heat from the heater into the incubator, I used one of four-inch diameter, which furnished me with a much greater volume of pure warm air. Also in addition to the larger pipe I constructed within the outer wall of the heater a reservoir, containing water for evaporation. Hygrometer tests made with the heater without the reservoir showed the degree of humidity to be only 18 degrees, while with the reservoir containing water the humidity registered normal, or about 60 degrees. I am positive that the eggs to retain their natural condition must have added moisture, and some must be taken in with the supply of heat, and not from moisture pans, which affect principally the eggs near them. With the above system the air is moistened to the normal condition of the hen, which by hygrometer test, is shown to be 60 degrees, and by being carried in with the source of the heat, every egg is affected the same.

The machine constructed was of 200-egg capacity, walls 14 inches deep between the top and bottom. I made several hatches with a percentage ranging from 90 to 94 per cent. out of fertile eggs, and the finest, strongest chicks I have ever seen, no cripples, and no weak ones, and why? For no other reason than that the ventilation was right from beginning to end of hatch. These experiments were made in all kinds of temperature, varying from 98 degrees to below freezing. This demonstrates the simple fact that to secure good hatches and to prevent chicks dying in the shell the incubator must be made with more ventilation, and that the eggs must be incubated with the proper amount of humidity.—O. P. Scott, in Farm Poultry.

A Scotch minister and his servant, who were coming home from a wedding, began to consider the state into which their potatoes at the wedding feast had left them.

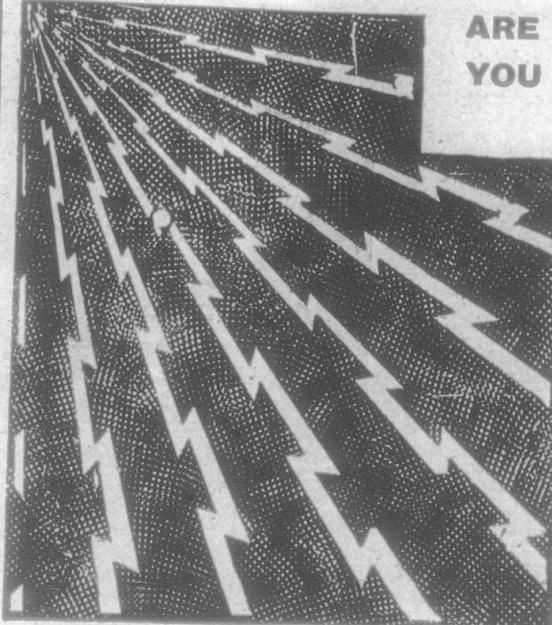
"Sandy," said the minister, "just stop a minute here till I go ahead. Maybe I don't walk very steady, and the good-wife might remark something not just right."

He walked ahead of the servant for a short distance, and then asked:

"How is it? Am I walking straight?"

"Oh, ay," answered Sandy, thickly, "ye're a' recht—but wha's that wha's with you?"

"If it's a stint He's set us, I don't see but we've got to work it out somehow. I never see anybody yet that didn't want to pick out her own stint; but mebbe if we got just the one we wanted it wouldn't be no stint."—Kate Douglas Wiggin.



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The Remedy of To-day Given to Sufferers upon Absolute Free Trial until Cured. Not One Penny in Advance or on Deposit.

This is the age of Electricity. To-day the accepted light is Electricity. To-day we can talk with a friend in any town in Canada through Electricity. To-day we can reach China with a message within five minutes, through Electricity. To-day we know that the whole planetary system is absolutely controlled by a vast Electric current. To-day we know that life itself cannot exist without Electricity, and hence the thinking man of to-day also knows that health is directly dependent upon Electricity. A sufficiency of it in the body means health—a deficiency, sickness, weakness and disease.

Less than a hundred years ago none of these facts were known. To-day they are all accepted as indispensable necessities except the last, the most important of all—THE FACT OF ELECTRICITY BEING HEALTH. Upon this great living truth some people are still sceptical, but the day is fast approaching when the sick will as naturally look to Electricity for relief as the thirsty look to water. I have carefully watched the trend of Electrical progress in this direction for the past forty years, and I assert that there will be a constant increase in disease and suffering until Electricity is as freely adopted by the sick as medicines and drugs now are. I claim that as there are no mistakes in nature, she has a remedy for every discord, whether it be in the elements or in the human body. She uses Electricity to clear and purify the atmosphere when congested or out of harmony. She would do the same for the sick and disordered human body if allowed to.

Most of the diseases that afflict mankind are due to a lack of electricity in the system. In these strenuous days, who is there who has not wasted his vitality or natural electricity by overwork, worry, excess or some disobedience of nature's laws? If you are weak or ailing and have not found a cure through the old-fashioned methods of treatment, why not turn to this great natural source of life and strength, and give Electricity a trial? My newest Herculex Appliance, patented March 7th, 1905, is worn about the waist either day or night, and gives a prolonged, mild, soothing, vitalizing current, which so fills your body after a few hours' use, that a feeling of glowing, sparkling vitality, strength and confidence immediately takes possession of you. I invite you to try this Appliance at my expense and risk, for I am confident a cure will result. A call or letter will bring you one on absolute

FREE TRIAL UNTIL CURED.

You ought to be cured in about 60 days, and when well I expect you to pay me the price of the Appliance—in many cases as low as \$5. If not well or satisfied, simply return the Herculex to me and the transaction is closed. Should you prefer to buy outright for cash, I give a liberal discount.

I give the Herculex on the above terms to all sufferers from Nervousness, Lost Vitality, Rheumatism, Lumbago, Sciatica, Stomach Trouble, Varicocele, Kidney and Liver Complaint, etc.

As the originator and founder of the Electric Body-Battery system of treatment, my success is the envy of many and I am flattered by many imitators, but my great knowledge to advise and direct my patients is mine alone and cannot be imitated. My advice is given free to all my patients until the cure is complete. My Herculex is guaranteed for at least one year.

Call or send for one to-day, or if you want to look into the matter further, I have two of the best little books ever written on Electricity and its medical uses, which I send free, sealed, to all who apply.

DR. C. F. SANDEN, 140 Yonge Street, TORONTO, ONTARIO.

COSSIP.

A bunch of Galloway steers, averaging 1,251 lbs., brought \$7.05 per cwt. on the Kansas City market last week, the highest price paid there since 1902; and 36 Hereford yearlings, 959 lbs., brought \$7. Both lots were bought by the Armour Packing Co.

If a farmer is depending upon his own grain for seed, he ought to make sure that the crop from which his seed has to be taken had been properly harvested and the grain properly stored after being threshed. It will be found that newly-threshed grain germinates more quickly than that which has been threshed and stored in a granary for some time.—Bruce.

The different kinds of farming are often but a choice of evils; as soon as one evil is past another cometh. No one becomes rich on the produce of the soil nowadays; but the healthy life, fresh air, early hours, pure food, love of live stock, the free life of the country, the sunshine and rain, and the stern joys of facing a storm in winter as it sweeps across the hills, have charms for many which cover a multitude of drawbacks, and which will ensure that there will never be lacking men to follow the plow while there is a furrow to be turned.—McConnell.

With the spring horse shows within a measurable distance of time ahead, many exhibitors will have made considerable progress in the schooling of the young stock which they have decided shall represent them. The turn of the older horses will come later, when the question of condition enters into the arrangements, but the two-year-olds require a very necessary course of handling and schooling in addition to being made fit for show. Nothing is worse than a hurried preparation. A horse, no matter what its age is, is sure to suffer from a sudden change of food. A preliminary course of physic, mild or otherwise as circumstances dictate, is usually necessary, and the daily allowance of stimulating food should be gradually increased. Happily, the tendency of the times is all against the over-fatted show horse. More attention is paid to the muscular development of the horses, and no one can gainsay the advantage that has attended the change of ideas.—[Live-stock Journal.

It is, of course, aggravating and irritating to have lies told about you. It mars the beautiful hours of life to know you have enemies who try to make trouble for you. But far worse than knowing you have enemies is the consciousness that you are any man's enemy.

If to do were as easy as to know what were good to do, chapels had been churches, and poor men's cottages princes' palaces.—William Shakespeare.

So long as you can look your own soul in the eyes and say, "THERE IS NO BEING ON GOD'S EARTH I WISH ANYTHING BUT GOOD; there is no one I would not do a good turn if I had the opportunity," then you have nothing to fear, here or hereafter.—Wilcox.

Seek not to know to-morrow's doom; That is not ours which is to come. The present moments are our store, The next should Heaven allow Then this will be no more; So all our life's but one instant—now. —William Congreve.

Here is a good example of a "thin-velled" hint, which a certain Dakota editor published in his journal: "It is reported that one of Harvey's fastidious newly-married ladies kneads bread with her gloves on. The incident may be peculiar, but there are others. The editor of this paper needs bread with his shoes on. He needs bread with his pants on, and unless some of the delinquent subscribers of this 'Old Rag of Freedom' pay up before long' he will need bread without a thing on, and North Dakota is no Garden of Eden in winter time."



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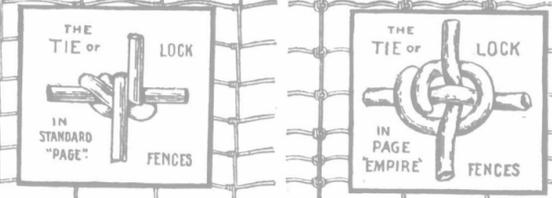
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