

**PAGES
MISSING**

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**R GROWING CORN
RN LATITUDES**

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C. P. BULL,
Minn. Exp. Station.

It Costs Thousands of Dollars a Year

To Publish "The Farmer's Advocate and Home Journal"
and Every Year the Expense Increases

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Winnipeg, Manitoba

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AND NOW—YOU DON'T**

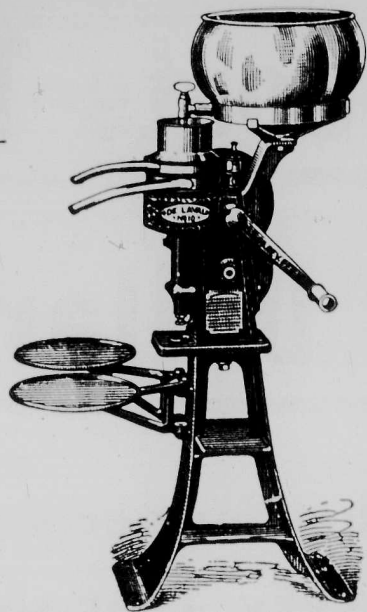
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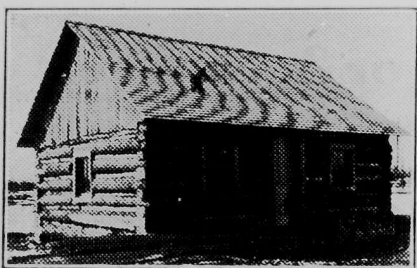


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Where the people are progressive, independent, intelligent and prosperous.

VILAS COUNTY, WISCONSIN

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We will sell 40 acre farms for \$10 down and \$10 a month—no interest, no taxes, and if buyer dies before payments are completed, we give the farm free to his family.

Make your plans to go to Eagle River, Vilas County, on the Chicago & Northwestern Railroad and see for yourself what we have and what we are doing there. Our representatives will meet you and take you right out to any piece of land you want to see and we will pay car fare from any point within 500 miles, if you buy land.

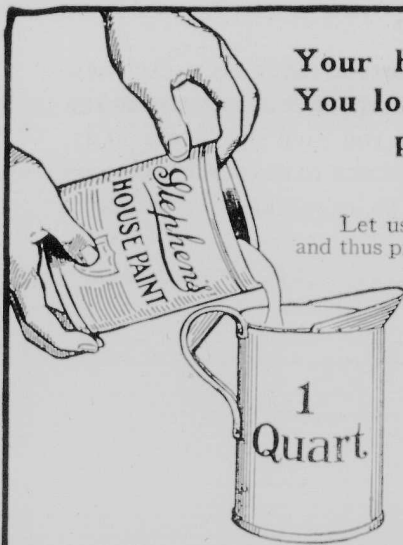
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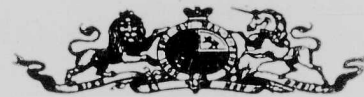
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ANY person who is the sole head of a family or any male over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the district. Entry by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties.—Six months residence upon, and cultivation of, the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may pre-empt a quarter section alongside his homestead. Price \$3.00 per acre.

Duties.—Must reside six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may take a purchased homestead in certain districts. Price \$3.00 per acre. Duties.—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.00.

W. W. CORY, Deputy of the Minister of the Interior.

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grown on breaking, no wild oats, true to name, cleaned ready.

DANISH 1.50c. per bus. from backsetting, not on ISLAND 1.60c. account occasional black oat cleaned and not guaranteed, otherwise a splendid seed for main crop, true to name, large plump kernel, grade No. 1 white, bags extra.

COLTART & OBR, Beulah, Man.

Far

Vol. XLV.

FARMER'S AND HOME JOURNAL

ESTABLISHED

Canada's Foremost Agricultural Journal Published Every Week

SUBSCRIPTIONS

Canada and Great Britain, per annum

United States and Foreign, per annum

Date on label shows time subscription is for

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British Agency, W. W. C. Norfolk St., London, W. C.

Specimen copies mailed free

Address all communications to individual.

FARMER'S OF WINNIPEG

14-16 PRINCESS STREET

EDITORIAL

If any of the stockmen... the possibility of war... try to imagine John M. Bredt engaged in a

Opportunity

When we think of it... much of the convenience... say profit in farming... get done during the... spring. Most of all, we... the field crops seeded... neglect many smaller jobs... afford an incredible... throughout the whole year

Take some instances... attention just as soon as... but if men and teams... from Monday morning... the chances of having... new potatoes, and fruit... of the year are about... can be made after seeding... good garden that one... early attention. Why... an afternoon to the garden... harrows? But merely... the garden is not all the... advantage. Nearly every... the West would be improved... of more trees, and the... cane fruits. These are... be planned for ahead... until spring arrives and... anything is done. The... June by breaking up the... the fall by backsetting... winter by ordering the... the fencing material to

Farmer's Advocate and Home Journal

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. XLV.

Winnipeg, Canada, May 12, 1909

No. 868

FARMER'S ADVOCATE AND HOME JOURNAL

ESTABLISHED 1866.

Canada's Foremost Agricultural Journal
Published Every Wednesday.

SUBSCRIPTION PRICE

Canada and Great Britain, per annum, in advance \$1.50
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United States and Foreign countries, in advance 2.50
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Address all communications to the firm, not to any individual.

FARMER'S ADVOCATE
OF WINNIPEG, LIMITED.

14-16 PRINCESS STREET

WINNIPEG, MAN.

EDITORIAL

If any of the stockmen contemplate seriously the possibility of war with Germany let them try to imagine John A. Turner and Paul M. Bredt engaged in a pitch fork duel.

Opportunity of Spring

When we think of it, it is surprising how much of the convenience and comfort, not to say profit in farming, depends upon what we get done during the six to eight weeks of spring. Most of all, we are concerned to get the field crops seeded, and in doing this often neglect many smaller jobs that if done would afford an incredible degree of satisfaction throughout the whole year.

Take some instances. The garden requires attention just as soon as the land is fit to work, but if men and teams are kept on the fields from Monday morning until Saturday night, the chances of having fresh vegetables, early new potatoes, and fruits throughout the rest of the year are about all gone. True a garden can be made after seeding but it is not the same good garden that one has by giving the soil early attention. Why is it not possible to give an afternoon to the garden with the plow and harrows? But merely putting a little time on the garden is not all that might be done with advantage. Nearly every house and barn in the West would be improved with the planting of more trees, and the setting out of bush and cane fruits. These are things that have to be planned for ahead. It is no use waiting until spring arrives and the ground is fit before anything is done. The start should be made in June by breaking up the sod and continued in the fall by backsetting, then followed up in the winter by ordering the stock to be planted and the fencing material to protect it. But if all

these preparations are neglected the opportunity of planting in the spring when nature is ready to lend her hand to start growth is of no value.

When a man sees the hot summer days drag by without fresh vegetables and fruits, he not only regrets the missing of the opportunity of having a garden to draw from, but generally resolves that he will be provided for next season. Alas for good resolutions! Farming is not all simply growing crops. There is a responsibility to oneself and family and each spring the opportunity to discharge it is offered and availed of or neglected as the case may be.

Side Line Crops

It is scarcely necessary to call attention to Professor Bedford's article on another page of this issue upon the growing of our less important field crops. But as there is always a large amount of land that lies idle during summer, on account of not being considered suitable for wheat, oats or barley, it is worth while to emphasize the advantages of growing such crops as peas, rye, emmer and flax. Each of these crops has some peculiar characteristic that makes it suitable under certain circumstances for particular conditions of soil. We are coming to a time now when we cannot so well afford to leave land idle as we could when \$25 an acre was considered a high valuation for our best soils. It is becoming more and more necessary to get the most out of land of which it is capable, and also to keep the most in our soil of which we are capable.

If we were asked to name some farm practise out of the common run that promised something a little better in return than the average crop gives we would say grow clean flax seed. During the past winter we heard more enquiries for clean flax seed than for any other class of grain unless it was wheat, and everyone wants wheat. Flax reaches a fairly good figure for commercial purposes, but for seed it is difficult to say how much might be got for a pure article.

A hint is dropped in Mr. Bedford's article about growing peas for seed. Has anyone ever attempted to work up a trade in growing peas for seed merchants and for the trade which supplies the restaurants with peas for soup? In this direction we believe there is a side line that can be followed with profit. There are exceptional advantages for growing peas in the West, and it should be worth while exploiting them.

In connection with what Mr. Bedford says about rye it might be remarked that harness makers pay from six to ten dollars a ton for clean rye straw, and this probably accounts for a large proportion of the acreage in Manitoba. With a revenue from both straw and grain even the poorest farmer on the poorest land can manage to get something for his work.

A Dollar a Steer and a Slow Train

While a good many suggestions relative to the improvement of conditions in the cattle trade have been made, and some of them are being pushed for adoption by different interests, it seems to us that enough is not being done to secure a faster service for trains of live-stock. The nature of our live-stock trade, the fact of our markets being so far from the points of production makes it all the more necessary that in the marketing of grass-fed cattle, particularly, a better service than is given ranchers in any other part of America be put on by the C. P. R. True, as compared with other roads the C. P. R. has nothing to be ashamed of, but in the matter of live-stock shipments the actions of other roads should not be the standards of service. Rather the fastest service of which the road is capable should be the aim of all concerned.

In matters of this kind the C. P. R. is notably ahead of practically all other systems, but we believe if stock shippers and ranchers would get together in conference with the railroad officials and the actual advantage of a faster service calmly considered, stock trains run on local passenger train time schedules would be the result.

In the past it has been claimed that stock trains cannot be run faster than the time they now run on, and that it would not be safe to run at express train rates with heavy trains of live-stock, but the unanimous opinion of shippers and attendants is that if stock trains were classed as passenger trains and were not held up so long at sidings waiting for other freight, the average rate of movement might easily be doubled. In other words, on a run from Alberta to Winnipeg, or Montreal, nearly half the time is taken up with stops.

A steer's time is not supposed to be worth anything, but when a steer is losing around twenty pounds a day of flesh that sells in the Old Country for from 10 cents to 14 cents a pound, it is not hard to calculate how much a day that steer's time is worth to the shipper, but the unfortunate feature of the case is that no one gains by what the steer loses. It is a complete waste. Estimate what it means to have a train load of 30 cars, 24 hours longer in transit than is absolutely necessary allowing only 10 pounds loss per steer per day with 16 to the car, and 6 cents per pound for the loss. On the train load the daily loss would be \$576, and this, as every one knows, is not a large shrink. For the 90,000 cattle exported last year the loss on the same basis amounted to \$108,000 per day. Putting the situation the other way around every day saved would be a gain of \$576 on each 30 cars or \$108,000 on all the export cattle. Money can be made easier in very few undertakings.

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Beulah, Man.

HORSE

"Scotland Yet" lectures Canadian horsemen on their registration rules and regulations respecting the importance of Clydesdales. Mr. Tom Rawlinson then turns to "Scotland Yet" to remind him that he misrepresents the Shires. Another Alberta horseman censures the secretary of the Scottish Clydesdale Horse Society for attempting to supply the public with misinformation on Suffolks. When will our experts know it all?

* * *

Now that the foaling season is at hand, every breeder who has even but a single brood mare should provide himself with a rubber-bulb syringe. The foal should be watched carefully and if there is difficulty in expelling the faeces an injection per rectum of a half-pint of blood-warm water should be given. A tablespoonful of glycerine mixed with the water will prove beneficial. If the bowels are not evacuated in half an hour repeat the injection and continue at intervals until there is a movement. Many foals die every year from a lack of attention in this direction. The remedy is simple, inexpensive and harmless.

Premium Pictures of Great Horses

The demand for the pictures of the Clydesdale sires Baron's Pride, Hiawatha, and Oyama has completely exhausted our first supply, but a new consignment is about ready. Horsemen find it a pleasure to accept subscriptions from their friends for a paper like the FARMER'S ADVOCATE and the pictures they get for the service are suitable and appreciated. Several have sent one new name and have now part of the series, another subscription will secure the three.

The rules are two new names (not the sender's) for the three pictures or one new name at \$1.50 each for any two pictures. When a new subscriber sends his own name it does not entitle him to a premium.

Racing in the West

Unusual interest promises to develop in the West, in harness racing and running during the present year. Towns all over the prairies and in British Columbia that have not previously given much attention to horse racing, small places most of them, are organizing turf clubs, laying out tracks and preparing for meets some time during the summer. Turf clubs have been formed recently at Millarville, Alta., and Stoughton, Sask., and most of the previously organized clubs in other towns have manifested renewal of interest in the greatest of all sports, by the holding of annual meetings, election of officers and pre-

paration generally, for the season's sport. In British Columbia the season promises to be an eventful one. At Victoria a turf club has been organized, and a track laid out on which 60 days of racing, running mostly, will be held this summer.

In the Manitoba Circuit, which opens at Brandon on May 24th with a three day's meet, purses are offered aggregating \$60,000.

The Queen of Pacers Again in Racing Form

The Broncho, the Winnipeg owned pacing mare with a mark of 2.00 $\frac{1}{4}$ will appear on the track again in a few days for the first time since her retirement in the spring of 1907. She is in training at Palatine, Illinois, under the management of Charlie Dean, and is entered for the principal meets of the Grand Circuit. Her first appearance will be in the Wolverine handicap, at Detroit, a free-for-all pacer event worth \$3,000.

It was a serious lameness that threw the Broncho out of training in the fall of 1906, just when she was at the height of her fame and in the most transcendent form, and lameness of a most baffling nature. There was no visible or findable cause for it, her limbs and feet showing no telltale trace. And, apparently, after a few months of rest she was again sound, but again she went amiss in the spring of 1907, and before she had had any really strenuous training. So it was decided that the only hope for her was to give her a long and complete rest. Consequently she was bred and last season spent her time in mothering a lusty colt. But before it was weaned she was once more put at jog work, and ever since has been undergoing the preliminaries of another preparation for the races. Thus far she has given the most encouraging possible account of herself. Her legs look like steel and whip cord and she has not taken a lame step for considerably over a year. Late last fall, after the campaign was over and Dean was back home for the winter, he started her up once or twice for a little piece only and she acted as if she could run away on the pace in her old-time fashion. Just now she is as hard as iron, and every indication is that she will train absolutely sound. At the time she went lame she was unquestionably good for a mile in 2.00 or better, while as a racing machine it is conceded that nothing like her has ever been seen. Despite all the racing phenomena that have been doing astonishing things since she went into retirement her world's record for three consecutive heats in a race—2.03, 2.03 $\frac{1}{4}$ and 2.02 $\frac{1}{4}$ —made at Cleveland, has not been equaled or beaten. If she can be brought back to the form that she was then in, that she will once more be depended upon to do some remarkable things is certain. That Dean is confident of bringing her back to it is shown by the events for which the mare has been entered for during the present racing season.

Digestive Trouble in Horses

According to the report of the Director-General of the Veterinary Service of the British army, one out of every 200 horses in the home army died, in the hospital last year, from disorders of the digestive systems. This is a heavy death percentage, remarks the London Live Stock Journal, and if this is the condition in the army, where the feeding and care of horses has been reduced almost to a science, what must be the sickness and loss from this source among horses owned by private individuals?

Improper feeding produces much digestive sickness in horses, and a horse with an acute attack of indigestion is in the utmost need of veterinary help. There is not much use in pouring medicine into the stomach. As that organ is in a deranged condition, no assimilation of anything put into the stomach takes place, and consequently no action is obtained by administering drugs through the mouth. The injection of concentrated medicines under the skin is the only rational way of treating such cases. No ordinary owner or farmer has either the instruments or skill to do this. But he can, and should, place the sick animal in a big box stall, plentifully supplied with bedding, and with a careful man with him to prevent, as far as possible, the horse from injuring himself when the pains are very intense. Many a horse suffering great pain from indigestion has thrown himself down violently on a hard floor and burst the stomach (which in this disorder is distended with gas) and thus destroyed whatever chance there might have been of successful treatment. It always gives some relief in cases where there is great abdominal pain to take hot cloths, wrung out of a pot of hot water, and applied as hot as the patient will stand, to the lower part of the belly. This is usually easily done, as the animal is in almost every case lying down, and in many cases lying on his back. Much can be done in this way to keep the horse from injuring himself and also to give relief, till veterinary help can be obtained.

Feed for a Growing Colt

An Alberta correspondent writes: "I have a Percheron stallion that is two years old in June I would like to know what to feed him and how much to feed him, and how many times a day. I would like to make him a big horse and not hurt him. Should I water him before feeding? I have a box stall and lots of good oats and bran, and also a lot of good hay."

"I would also like to know what to put on his mane to stop him from scratching it. He is wearing it off in places and it is so short I cannot brush it."

The question our correspondent raises, directs attention to an important point in raising young horses. It is too frequently the case that in an anxiety to make a colt grow into a big horse he is

kept too fat or "fed off" horse should be kept in just what this condition is everyone who has fed st. In some horses "growing covered an inch thick and just concealed out of sight skin should be pliable, the normal and all the functi

In order to have the normal state a colt must be as a stuffed specimen at have an opportunity to t system demands and this over fat than if he carries keep a colt in his stall day hour or two for outdoor c system will become clo bition, his muscles will g in a fair way to become us

When a colt has been gi his muscles and to keep sufficient to satisfy it w flesh nothing more can be If he is fed more and loo idea of making a big ho weighs heavy at so many that the extra weight will shape, stock his legs and p

The size to which a colt horse is very largely dete His inherent tendency—t his ultimate limits, but t assisted or hindered by c is just as easy to kill a col neglect. Therefore take natural tendencies, feed c give him fresh air and an muscles.

A colt that has been ke fed heavy with the idea c him will no doubt matur been given a natural co softer and the chances ar as he would otherwise.

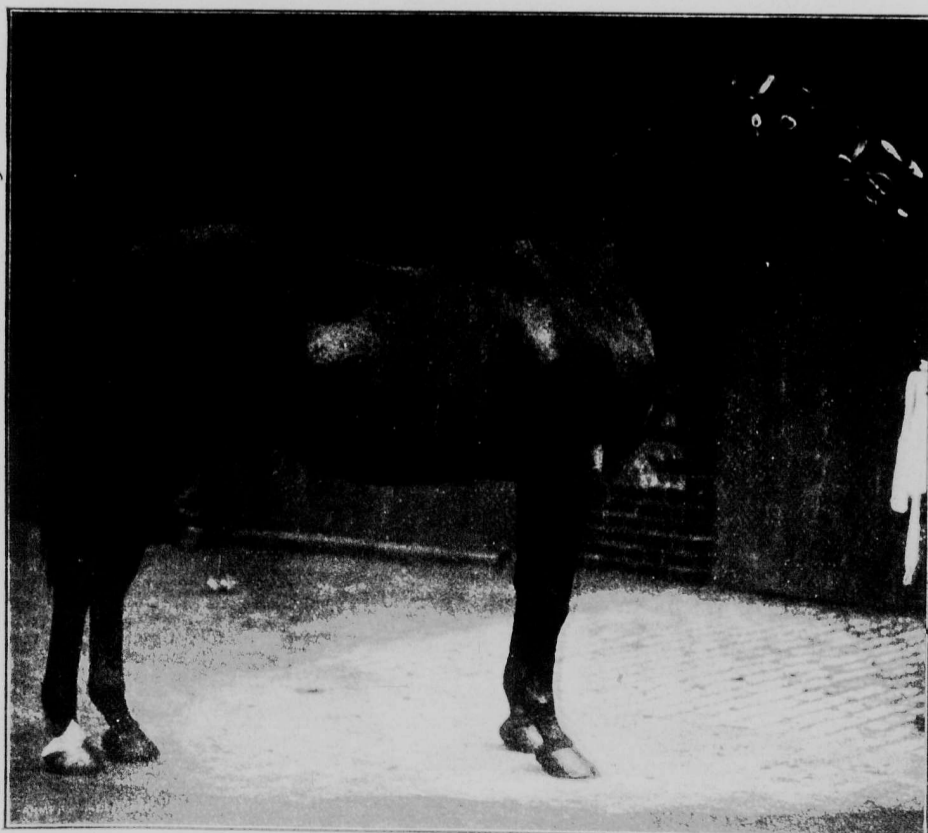
anxious to have their y olds look as finished as fo

The case of our corre instance and it is always tively upon special ca them. But, as a breed, heavy feeders, and as a them too much for their are to be offered for sale

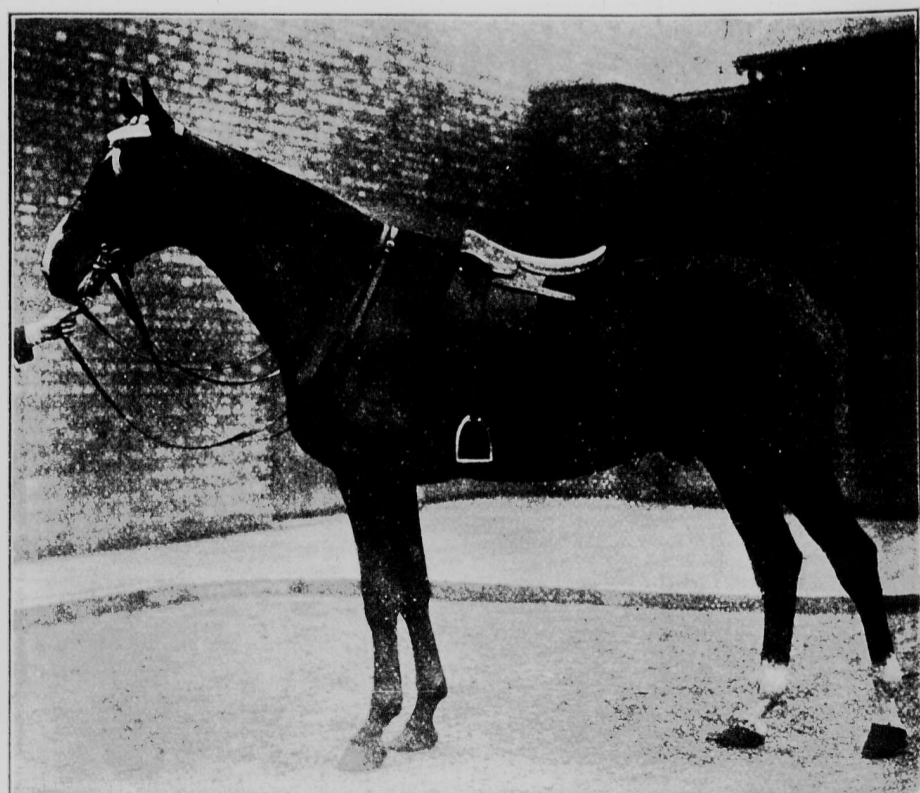
The materials for feed is actually required bu "strong" for a growing some green oat sheaf inst oat straw, he would k From now on he will be the place of hay. If th will do well on it alone, fail give him from a qua a day. If he is not to be him a big corral to run clean in an hour and n little at noon, and abou quart of bran three time as a basis, but, if he see it a little. It is hardly Let him have salt and v In fact, always water h this colt is inclined to be fall or winter give him once a day for awhile, an oat sheaf for him as it i stipating as is hay.

For itchy neck, or t organs working easily b flaxseed, then mix abou oil in a pint bottle with nto the part. This ma in three or four days. habit, which is someti opportunity to rub. It that he has lice. Anot with an ounce of creoli soft water.

Concrete should not be ter it has been allowed. Each day during that pe wet down by sprinkling w ing and afternoon. This on the outside will not d concrete in the center of ried out carefully, especi months. Old canvas, sl so as to hang an inch or concrete will do very well well as the concrete.



MERRY MATCHMAKER.
Thoroughbred Stallion winner at Hunter Show, London Eng., 1909.



SIGNAL
Hunter bred Stallion, not Thoroughbred, champion Hunter Show, London Eng., 1909.

ble in Horses

of the Director-General of the British army, one of the home army died, from disorders of the is a heavy death per- ion Live Stock Journal, ion in the army, where orses has been reduced t must be the sickness among horses owned by

duces much digestive horse with an acute at- the utmost need of veter- much use in pouring t. As that organ is in a ssimilation of anything s place, and consequent- by administering drugs e injection of concen- the skin is the only ch cases. No ordinary er the instruments or can, and should, place r box stall, plentifully d with a careful man r as possible, the horse n the pains are very in- fering great pain from nself down violently on stomach (which in this gas) and thus destroyed ight have been suc- ways gives some relief eat abdominal pain to t of a pot of hot water, patient will stand, to elly. This is usually is in almost every case ases lying on his back. way to keep the horse also to give relief, till tained.

rowing Colt

nt writes: "I have a two years old in June t to feed him and how w many times a day. big horse and not hurt n before feeding? I of good oats and bran,

ow what to put on his scratching it. He is it is so short I cannot

pendent raises, directs point in raising young ly the case that in an w into a big horse he is

kept too fat or "fed off his feet." A growing horse should be kept in "growing condition." Just what this condition is, is hard to describe but everyone who has fed stock knows what it is. In some horses "growing condition means ribs covered an inch thick and in others the ribs are just concealed out of sight. But in any horse the skin should be pliable, the hair soft, the digestion normal and all the functions working naturally.

In order to have the functions in a natural normal state a colt must be treated as a colt, not as a stuffed specimen at a circus. He should have an opportunity to take all the exercise his system demands and this will be more if he is not over fat than if he carries a lot of flesh. Never keep a colt in his stall day after day with only an hour or two for outdoor exercise. His digestive system will become clogged, he will lose ambition, his muscles will get soft and he will be in a fair way to become useless.

When a colt has been given a chance to stretch his muscles and to keep his appetite active with sufficient to satisfy it without making a lot of flesh nothing more can be done to force growth. If he is fed more and loaded with fat with the idea of making a big horse of him because he weighs heavy at so many months, the chances are that the extra weight will spring his joints out of shape, stock his legs and probably set up "grease."

The size to which a colt will attain as a mature horse is very largely determined by his parents. His inherent tendency—the great factor in fixing his ultimate limits, but these tendencies may be assisted or hindered by care and feeding, and it is just as easy to kill a colt with kindness as with neglect. Therefore take into consideration his natural tendencies, feed carefully and plentifully, give him fresh air and an opportunity to use his muscles.

A colt that has been kept fat from weaning and fed heavy with the idea of making a big horse of him will no doubt mature earlier than if he had been given a natural colthood, but he will be softer and the chances are he will not live as long as he would otherwise. Horsemen are often too anxious to have their yearlings and two-year-olds look as finished as four-year-olds.

The case of our correspondent is a particular instance and it is always hard to speak authoritatively upon special cases without having seen them. But, as a breed, the Percherons are quite heavy feeders, and as a rule, their owners stuff them too much for their good, especially if they are to be offered for sale as two-year-olds.

The materials for feeding this colt are all that is actually required but probably are a little "strong" for a growing colt. If he could get some green oat sheaf instead of hay, or some good oat straw, he would keep his system cooler. From now on he will be able to get grass to take the place of hay. If the grass is fairly good he will do well on it alone, then when it begins to fail give him from a quart to two quarts of oats a day. If he is not to be turned on the grass give him a big corral to run in, what hay he will eat clean in an hour and night and morning, and a little at noon, and about a quart of oats and a quart of bran three times a day. This will serve as a basis, but, if he seems to need more, increase it a little. It is hardly likely he will leave any. Let him have salt and water him before feeding. In fact, always water horses before feeding. If this colt is inclined to be harsh in the skin, in the fall or winter give him about a pint of flaxseed once a day for awhile, and by next fall have some oat sheaf for him as it is not so heating and constipating as is hay.

For itchy neck, or tail, first get the digestive organs working easily by use of bran mashes and flaxseed, then mix about one-half a glass of coal oil in a pint bottle with water, shake well and rub into the part. This may require to be repeated in three or four days. If the rubbing is simply a habit, which is sometimes the case remove the opportunity to rub. It is quite probable though that he has lice. Another good wash is soft soap with an ounce of creolin to the pound used with soft water.

* * *

Concrete should not be exposed to the sun until after it has been allowed to set for five or six days. Each day during that period the concrete should be wet down by sprinkling water on it, both in the morning and afternoon. This is done so that the concrete on the outside will not dry out much faster than the concrete in the center of the mass, and should be carried out carefully, especially during the hot summer months. Old canvas, sheeting, burlap, etc., placed so as to hang an inch or so away from the face of the concrete will do very well as a protection. Wet this as well as the concrete.

STOCK

Comment upon Live-Stock Subjects Invited.

Goitre in Lambs

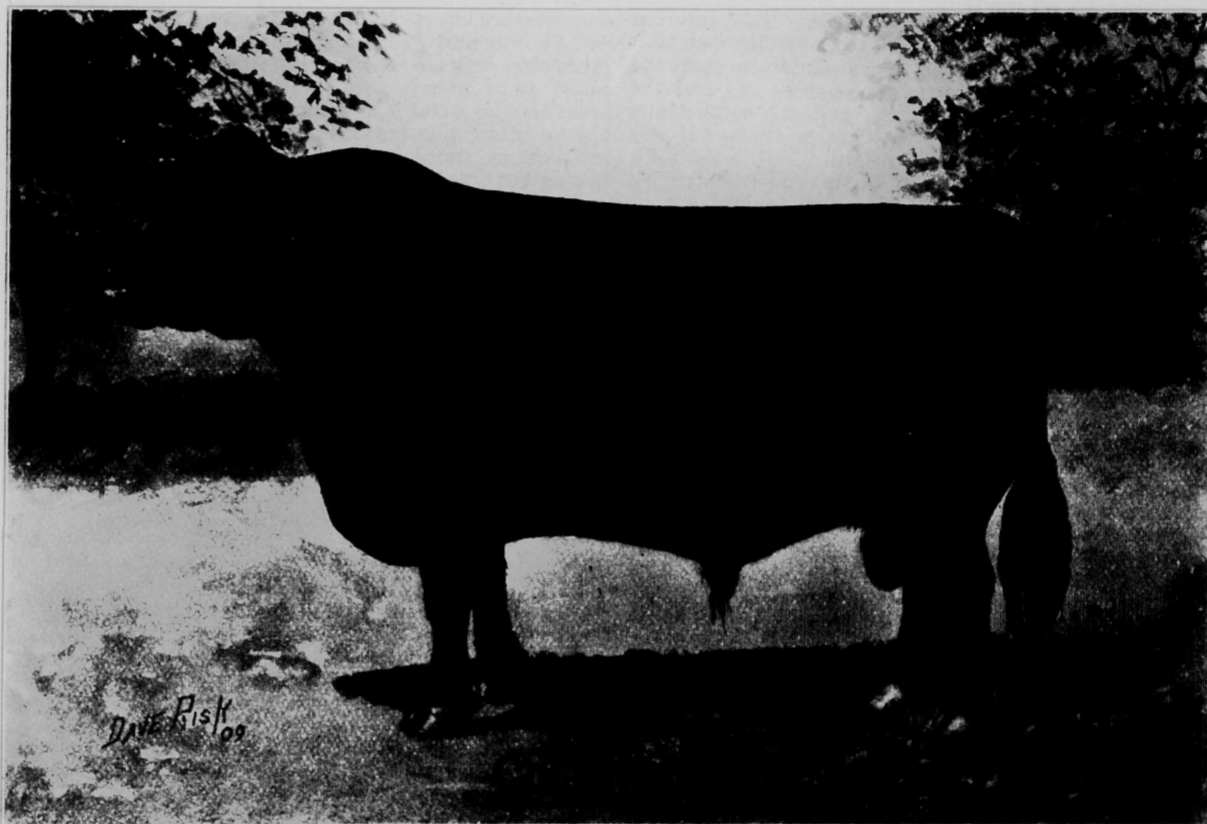
A correspondent writes that his lambs are coming with thick glands in the throat and live only a few hours. Others were not so bad and got well in a few days. The ewes were fed on hay and oats and allowed to run out on fine days.

From this description it appears that the lambs have goitre of which the author of "Modern Sheep" says:

Goitre seems to be one of those mysterious, insidious maladies that has long and successfully baffled scientists so far as its cause is concerned. Sheep of all ages are subject to this trouble, but young lambs more especially so. It seems to be more prevalent in some seasons than in others. Sometimes the greater part of the lamb

straw and a moderate allowance of roots, and their drinking water was from the same spring as supplied the Shropshire flock. Now, while not a goitered lamb made its appearance in the grade flock fully 50 per cent. of the Shropshire lambs died of goitre without ever gaining their feet. The next year this same Shropshire flock, under similar treatment to that given to the grade flock, gave pretty close to a 150 per cent. increase with only one case of goitre to record.

My experience tends but little to encourage a belief that the water the sheep drink has much to do with goitre, although it is well known that the human race acquires goitrous troubles in certain sections through the water it drinks. Especially is this true of Derbyshire, England, where people attacked with goitre are said to have "Derby Neck." Where sheep have unlimited exercise and have to work a little for their living, as it were, goitred lambs are generally conspicuous by their absence. Goitre is very readily cured in full grown sheep, but not so easily with the young lamb, as its constitution is not sufficiently strong to undergo the severe



Aberdeen-Angus bull, "Golden Glean," at the head of Glencarnock herd. Property of J. D. McGregor, Brandon. The following is his show record:

As a yearling, 1907.

- 1st at the Iowa State Fair.
- 2nd at the Minnesota State Fair.
- 1st at the Wisconsin State Fair.
- 2nd at the Inter State Live Stock Show, St. Joseph, Mo.
- 2nd at the Missouri State Fair.
- 2nd at the Royal Show, Kansas City.
- 1st at the International Stock Show, Chicago.
- 1st at the Illinois State Fair.

As a two-year-old, 1908.

- 1st at the Iowa State Fair.
- 1st at the Minnesota State Fair.
- 2nd at the Wisconsin State Fair.
- 1st at the Inter State Live Stock Show at St. Joseph.
- 1st at the Illinois State Fair.
- 1st at the Missouri State Fair.
- 1st at the Royal Show, Kansas City.
- 2nd at the International, Chicago.

crop is lost or severely damaged by this disease. Many reasons have been advanced for the prevalence of goitre among new born lambs. Insufficient exercise, an excessive fat condition of the ewe, the use of highly-fitted show rams which have been improperly reduced from showyard condition to breeding condition, inbreeding and the drinking water are among them. The writer believes that the trouble is due more to insufficient exercise and to high feeding than to any other cause. A few years ago I had charge of a large flock of Shropshires, which to all appearance were in fine breeding condition; that is, if full flesh and good condition of the ewe is any criterion. All were bred to imported prize-winning rams, and their rations consisted of roots, clover, bran and oats, to which was added just previous to lambing a small quantity of oil cake. The promise of a strong lamb crop was met with a large proportion of fat swollen-necked, hoofless and almost boneless freaks, covered with a thin covering of hair rather than the natural growth of wool. These prodigies generally squirmed and struggled around for a few hours in their endeavor to gain their feet, which in only very rare instances did they succeed in doing, and then died. On the same farm was kept a large flock of well-bred grade ewes, which carried in a very marked degree the blood of the Leicester. They were bred to high-class Shropshire rams; their rations consisted of clover hay, oat straw, pea

treatment necessary for the destruction of the growth. In the treatment of strong animals suffering with this trouble the cure is, cut into the growth quite deeply and just as soon as it has stopped bleeding inject with a small syringe a small quantity of full strength tincture of iodine. The enlargement should also be painted with iodine at regular intervals, say once in two days.

The Centre of Live-Stock Industry in Manitoba

COMMENTS ON THE WINTER FAIR

Like many another Western Manitoba farmer I found myself in the city of Brandon, in March, to attend the winter fair and there I got some impressions that I would like to pass on to my fellow farmers.

Being one of those unfortunate human beings who somehow got the idea ingrained into his system in early youth that to farm, decently and in order, one must keep cattle, sheep, hogs, poultry, etc., I naturally took a look into the cattle end to see what they had, and I was delighted to see a few splendid specimens and to have the liberty of handling them all over, no one being around to prevent me from doing so. After having examined McGregor's Blacks, and "Jimmy" Yule's roans, and placing the championship where it should go, I began to wonder where all the people who were jostling me at the ticket office had gone to, so I set out to explore and as soon as I had got to the horse department I came to the con-



London Eng., 1909

clusion that neither McGregor's ox or Yule's cow would get the championship, but that at this winter fair horse was king, and that horse the Clyde. The light horse tries to satisfy the people who sit in the gallery, and to a certain extent succeeds. The Percheron also has a certain following, but I noticed they were distinguished as the black, the grey, the dark grey, the big fellow, the fellow with the turned in toes, and the one with the white specks on his shoulders, etc. After looking them over I concluded that the Clydes will have to hustle to keep out of the way of the Percherons. I got a seat amongst what I thought were a pretty good bunch of horsemen, and after a bit the Clydes began to stream in. What an exhibition! No more black, grey, etc., but—that is Van Horne's "Lord Ardwell," that "Pleasant Prince," this is "Silver Plate," "Black Ivory" or "Chamberlain Joe," and the younger classes seemed to be quite as familiar, "Baron Shapely," "Baron of Arcola," "Morpheus," "First Baron." The chief interest in the younger classes seemed to hover round the produce of former champions. Some of these made a good showing and were only turned down by some of Scotland's best and latest productions. The colts of Woodend Gartly and Concord coming well up, while the get of some of the other 'one time prize-winners' showed far down the line where they properly belonged. But I began to grow weary of horse, horse, and made my way upstairs through the seed grain division and inspected the different varieties. One is almost forced to the conclusion that Red Fife wheat holds the same place amongst the wheats that the Clyde does amongst horses, and the Shorthorn does amongst cattle, and the same thing holds as to the permanency of that position. It will have to hustle to hold it, people will follow a fad for a while but utility will win out in the end. But if we can get a wheat that will yield as well, weigh as well, sell as well, and mature five to ten days earlier, then good-bye Red Fife, sorry to part with you, you have done so much for me.

In the poultry department everything was just as animated as in the horse ring, giving one the impression that the whole world had gone live-stock crazy. Facts were being forced upon me and I had to get them straight in my mind. Only a few years ago it was nip and tuck with the breed societies to keep alive, good stock horses were being sold for from \$300 to \$500, importations had all but ceased, good brood mares were selling for \$75 and bigger ones, with long pedigrees, as good as anything in the show went begging at \$250. Then when the sale came on, after the show, things were reversed. One man put four or five head into the sale, including two nice heifers and a strong three-year-old and did not receive a single bid. Another good heifer sold for \$75 that was worth \$80 for beef. Brandon butchers apparently do not need to pay for heifer beef! and so long as we farmers will submit to it, so long will our butchers buy at rock bottom kill-the-trade prices, and sell for "all the traffic will bear." The well-to-do people may have no reason to complain, everything in the local shops is put up at ten cents per pound, and the poorer people who buy on credit are glad to take the poorer cuts, while the others who pay cash have no complaint at ten cents for the best. So those who have most reason to complain cannot, and what would be the use?

As for the bulls, some got no bids and others got bids that seemed almost extravagant. The high priced bulls apparently could not bring their value in a land of 2½ cent beef, they are worth more in countries where there are markets worthy of the name. Why were there no bids on the others? Well, it seems as if buyer and seller never would take each other seriously in Manitoba when it comes to an auction of cattle. One would think that if a cattle sale is, from year to year, a failure from the seller's standpoint it would naturally be a success from the buyer's standpoint, and one would expect to see buyers on the increase. Evidently a sale at the time of the winter fair should be held earlier in the week, say two hours on Thursday, and if everything is not sold open again on Friday. It is simply courting failure to put on a sale after so many had gone home and when those who wanted to buy or sell would have to remain over Sunday. The breed associations should leave off wrangling as to whether a director lives east of Portage or west of it. They should make the auction sale a success. This could be done by 20 or more breeders clubbing together and agreeing to put in one animal each that they would be willing to sell for what it would bring, insist upon a certain standard and if one man's stuff went cheap he could get even by buying another's that would not go much higher and at least have an exchange of blood to take home. If one breeder does not show confidence enough in another's animal to put a decent bid on it, how can I expect a bid on my own? Then arrangements might be made for a line of credit on the higher priced animals. Breeders should be prepared to give as good terms at a sale as they give in their own yards, then the sales will become popular.

Brandon citizens are enterprising. They have built a splendid city out of the colony of tents that many of us saw in the 70's, they have brought their summer fair to magnificent proportions, the winter fair has sprung into a robust existence necessitating a display of civic and private hospitality that is rarely seen. But Brandon must have live-stock to have a fat stock show. Some day soon Brandon's business men will take down a map and see how easy

it is to extend a railway line up by Hamiota to Binscarth, and so tap the great cattle country about Yorkton, and having once secured cattle they will then establish stock yards and markets. With this accomplished the asylum and Smithfield farms will have to give way to city buildings, Brandon prices will be quoted on all the world's markets and many of her citizens will be in the class of the "rich" through energy and opportunity.

Man.

WM. IVERACH.

The above letter was received immediately after the Winter Fair but the press of other matter prevented us from printing it. (Ed.)

The Hog of To-day

The hog is more of an individual than a machine, and his breeder should treat him as such. Methods which may be accepted as established have been worked out in swine breeding, but adherence to all of them cannot, for many practical reasons, be rigid. The breeder himself, his breeding stock, environment, feed resources, climate and other factors are so largely involved that one man's success may spell another man's failure. A common-sense type of hog in the hands of a common-sense breeder constitutes a combination best calculated for satisfaction and profit during a succession of years.

Live-stock husbandry represents a high type of constructive effort, and swine breeding offers as much satisfaction and gain as any other branch. It may profitably engage the attention of the man who raises hogs merely from financial motives, but a breeder who attains a foremost place in his calling has an interest in his business not inspired solely by rewards in money. The compensations of swine raising are ample for the man who desires to make his work a profession, as hundreds who have a just pride in their achievements can testify.

Intelligence used in his breeding and care has raised the hog from the plane of the veriest savage, unsought except when hunted like any other wild beast, to that of a benefactor, contributing a wide variety of meats, among them the most toothsome known to the epicure, and other products essential to the best tables, to commerce and the trades. The hog's disposition has yielded to the influence of good breeding. His conformation has been molded by skilful methods from bony, angular uncouthness into a structure of massive width, depth and thickness, affording a marvelous yield of pork and lard. Incidentally, by domestication and generations of breeding him for early maturity and quick fattening, the length of his intestines has been increased, it is claimed by scientists, more than 130 per cent.

Swine are as susceptible as other animals to the influences of environment, and three or four generations cover a period long enough to bring about great changes in them. Experiments made at the Wisconsin station in crossing the wild or Razor-Back hogs and their crosses with the improved and approved breeds showed that a marked improvement in appearance and quality in the wild hogs' progeny was possible, although in constitution and gains of flesh they did not compare with pure-breds, and when cholera struck the station herds of the supposedly hardier hogs were the first to succumb. Their feeding habits were irregular; on one day they would gorge themselves so that they would be found fasting for the next day or more. These compelling forces of heredity made plain that both right breeding and right environment are essential to the attainment of right results. At the same time environment may be, in some cases, as destructive in its results as in other cases it is beneficial. Swine typical of the best breeding require but two or three generations of wrong environment to degenerate to the level of the most unappreciated types. Much, therefore, depends upon the breeder and his provisions for and care in handling.

—From Coburn's "Swine in America."

Treating Scours in Calves

Professor C. C. Humphrey, of Wisconsin University, gives the following outline of the method followed on the experimental farm to prevent and cure scour in calves. First, special care is taken to avoid scours by keeping the calves in clean, bright, well-lighted and well-ventilated quarters. They are fed regularly until four weeks old on two to six pounds of their mother's milk three times daily. Care is taken to have the temperature of the milk as near that of freshly drawn milk as possible and always to have the calf pails scrupulously clean.

In spite of all precaution, we now and then have cases of scours among our calves. For the past two years we have successfully treated such cases as follows: As soon as symptoms appear, two to four tablespoonfuls of castor oil are mixed with one-half pint of milk and given to the calf. This is followed in four to six hours by one teaspoonful of a mixture of one part salol and two parts sub-nitrate of bismuth. It can also be given with one-half pint of new milk or the powder placed on the tongue and washed down by a small amount of milk.

The salol and sub-nitrate of bismuth can be secured from any druggist mixed in the proper proportions at the time of purchase and thus have the powder readily available for use at any time. As an additional precaution against contagious scours, it is advised that the navel of the new born calf be wetted with a 1 to 500 solution of bichloride of mercury (corrosive sublimate)

FARM

Letters Upon Farming Operations Welcomed.

Topics for Discussion

To afford an opportunity for the interchange of ideas, and to provide a place where information may be given and received, we will publish each week at the head of this department a list of topics, which our readers are invited to discuss. Opposite each topic is the date of publication of contributions on it and readers are reminded that articles contributed on any of the subjects given, must be in our hands at least ten days earlier than the subject is scheduled for discussion in our columns.

Readers will understand that this department of the paper is entirely and altogether their own. They are invited at all times to write the editor fully and freely expressing their opinion of the manner in which it is conducted. They are invited to suggest topics to be discussed. If any reader has in mind any question which he or she may think could be profitably discussed, it will be given a place in the order of subjects, if brought to the notice of the editor, and is of sufficient general interest. Because this notice runs weekly at the head of the Farm Department does not mean that farm questions, only, may be discussed. The discussions will be spread over every department of the paper.

For the best article received on each topic, we will award a first prize of Three Dollars and for the second best Two Dollars, paying the latter sum for other contributions on the subject received and published in the same issue. Article should not exceed 500 words in length.

ORDER OF SUBJECTS.

May 19.—Which pays the average farmer best, to stable feed and fatten his steers in winter, to feed them outside in yards or in the scrub, on hay or straw and grain, or to sell them as stockers? Some farmers may think that none of these three methods of handling, offer profit making possibilities so they are invited to explain their own system of turning profit out of the cattle they rear each year. Just now while the experiences of a season's operations are fresh in the mind is a good time for the discussion of such questions as this.

May 26.—Describe your farm garden tell what, and what amount of vegetables, fruits, and flowers are grown. Send photos if you have them. Miss Brenda Neville is contributing articles upon garden subjects which we would like our readers to discuss.

June 2.—What do you consider is the best method of using the time of the men and horses in the fields, on summer fallows, at haying and harvest? Is it better to quit at 6 at all times or to work later?

June 2.—What is the best way to clean up a poultry house, to rid it of vermin and make the surroundings healthful. How do you make and apply the wash.

The Value of Inoculating the Seed

EDITOR FARMER'S ADVOCATE:

Regarding the growing of clover there is one point, learned from my own experience in growing this crop in an experimental way, that may interest some of your readers. I began with two varieties, alfalfa and White or Dutch clover. I sowed my first alfalfa on June 10th, 1907, and it did remarkably well the first year. In the fall I had a good even stand all over the plot that averaged 21 inches in height and gave a yield of 1 pound, 3 ounces to the square yard. In 1908 I noticed that the plants in the plot that had been inoculated had nodules on their roots, while on the uninoculated plot only few plants showed any. There was, however, between the plots a marked difference in appearance and strength of the stand. The alfalfa that had been inoculated was far the best, was of a rich green color and averaged 32 inches in height. A square yard of the crop weighed 4 pounds cut in July and there was a second cutting in the fall that was left on the ground. On the other plot the alfalfa grew spindly, was of a yellowish color, measured 24 inches in height when cut at the same time in July, and yielded 2 pounds, 4 ounces to the square yard.

The Dutch clover grew well and I believe will make a splendid pasture. This variety seems to take well to our soil and climate, and spreads itself well on the ground. This tendency to spread prevents it from growing very high and I am inclined to think that Dutch clover would be better for pasture than for hay. The land is a sandy loam with a clay subsoil. It was broken and backset the year before the clover was sown, potatoes being the first crop grown upon it.

A. J. Young.

OUR

The price of flax seed high recently and many to give this crop a trial. In Ontario and the usually grown for the exclusively grown for the The Manitoba Crop 1908, gives the area a little over 50,000 acres half a million bushels, per acre.

The province of S per final report of Fe acres of flax, averaging acre. A large proportion of the provinces was grown on gin prairie is plowed spring, then disced a sufficient soil for a seed treatment is often followed is a leveller composed of clap-board fashion, is level it before seeding, is towards the end of The usual practice is pecks of seed per acre seeding has given the Experimental Farm. is the most suitable method it cuts its way through the seed at a uniform rate visible to follow the harrow, and a good rate at harvest time.

In selecting seed care should be taken to secure a sample free from noxious weed seeds. Nearly the flax offered for sale is more or less mixed with wild mustard seed. I have found six seed rate and distinct kinds of wild mustard seed one sample of flax seed. It is difficult to separate mustard seed from flax with the ordinary farm mill, and I have found thousands of acres of flax land seeded down with ball mustard, false flax and here's ear must be the very first year of cultivation.

When flax is sown only summer fallow or wise the weeds will pay crop. The delicate and will not be with weeds.

Flax is a short seed quickly, but it should be ripe and not left exposed afterwards, as is the case in the West.

Where large areas usual practice to cut together, having the ty together, or worked with flax in bundles, these dry and then drawn chine.

Flax is somewhat delicate be fed slowly into charged for threshing for grain. Flax seed mould and should be kept where the snow will

THE

The field pea has been from the early ages. in the Swiss Lake district

The different varieties color, and earliness. been produced by cross As stock food peas greatly relished by England they are fed horses engaged in heavy ceeds best in a cool Eastern States produce supplies, and the West grow a better sample than other part of Canada

OUR LESS IMPORTANT FIELD CROPS

By S. A. BEDFORD

The price of flax seed has been comparatively high recently and many farmers will feel inclined to give this crop a trial for the first time.

In Ontario and the Eastern States flax is usually grown for the fiber, but in the West it is exclusively grown for seed.

The Manitoba Crop Bulletin of December 15th, 1908, gives the area in flax in the province as a little over 50,000 acres and the yield slightly over half a million bushels, averaging 11 8-10 bushels per acre.

The province of Saskatchewan in 1907, as per final report of February 1908, grew 125,029 acres of flax, averaging nearly eleven bushels per acre. A large proportion of the flax in both provinces was grown on new breaking. The virgin prairie is plowed as early as possible in the spring, then disced and spike harrowed until sufficient soil for a seed bed is obtained. This treatment is often followed by "planking," that is a leveller composed of planks nailed together, clap-board fashion, is drawn over the land to level it before seeding. The best time for seeding is towards the end of May or beginning of June. The usual practice is to use from two to three pecks of seed per acre, but a somewhat heavier seeding has given the best results at Brandon Experimental Farm. A disk drill, in good repair, is the most suitable implement for this purpose, as it cuts its way through sod or rubbish and deposits the seed at a uniform depth. Usually it is advisable to follow the drill with the ordinary iron harrow, and a good rolling will facilitate cutting at harvest time.

In selecting seed care should be taken to secure a sample free from noxious weed seeds. Nearly all the flax offered for sale is more or less mixed with wild mustard seed. I have found six separate and distinct kinds of wild mustard seed in one sample of flax seed. It is difficult to separate mustard seed from flax with the ordinary fanning mill, and I have found thousands of acres of new land seeded down with ball mustard, false flax and hare's ear mustard the very first year of cultivation.

When flax is sown on old land it pays to use only summer fallow or broken grass sod, otherwise the weeds will prevent the harvesting of a paying crop. The young flax plant is somewhat delicate and will not thrive when badly crowded with weeds.

Flax is a short season crop and will mature quickly, but it should be harvested as soon as ripe and not left exposed to the weather for weeks afterwards, as is the practice with some farmers in the West.

Where large areas of flax are grown it is the usual practice to cut the crop with a grain harvester, having the tying portion removed altogether, or worked without twine. This leaves the flax in bundles, these are left on the ground until dry and then drawn direct to the threshing machine.

Flax is somewhat difficult to thresh and should be fed slowly into the separator. The price charged for threshing is somewhat higher than for grain. Flax seed is easily damaged from mould and should be quite dry when binned and kept where the snow will not drift on it.

THE FIELD PEA

The field pea has been grown for human food from the early ages. This grain has been found in the Swiss Lake dwellings of the bronze period.

The different varieties vary greatly in size, color, and earliness. These different kinds have been produced by crossing and selection.

As stock food peas are very nutritious and are greatly relished by swine and cattle, and in England they are fed in limited quantities to horses engaged in heavy work. This grain succeeds best in a cool climate. Canada and the Eastern States produces the bulk of the American supplies, and the Western prairies of Canada grow a better sample than can be produced in any other part of Canada. They are very heavy in

weight, quite free from injury by the pea weevil, and are seldom discolored from mould or exposure to weather. The usual dry harvest weather of the West ensures an excellently colored sample.

The vines after the peas have been removed make good fodder for sheep, but should not be fed to horses as the straw is injurious in some cases.

Immense quantities of peas are grown in the States of Delaware, Maryland and New Jersey and a few counties in Ontario for canning purposes. For this purpose the vines while still green are run through what are called "Viners" which remove the soft green peas without injury.

In the South and East this grain has two insect enemies. The one is the pea aphid, a green louse, which feeds on the juices of the plant and often completely destroys the crop. The injury from this little insect is said to have cost the pea growers of the United States four million dollars annually.

The other insect enemy is the pea weevil. The eggs of this insect are deposited by a fly on the young pea pod in blossom, later on when hatched the larva burrows its way into the soft kernels of the grain and feeds on it until winter, when it works its way out leaving little more than the shell of a pea behind. Weevil-eaten peas are light and usually very few of them germinate.

with the wind. Owing to our ideal harvest weather the peas will remain in the pod for weeks after ripening without injury. If pulled with a sythe when nearly ripe, as is often done in the East, the bunches will frequently roll for miles with the first stiff breeze and shatter out all the grain on the way.

While all other grain crops tend to the depletion of the fertility of the land a crop of peas gathers nitrogen from the atmosphere and builds up the soil, for that reason fall wheat is often sown on fall stubble in Ontario in preference to summer fallow.

RYE

The cultivation of rye is not nearly so ancient as that of wheat and barley. It was unknown to the ancient Egyptians and the ancient Greeks did not mention it. Its introduction into the Roman Empire was hardly earlier than the Christian era.

Its cultivation is supposed to have originated in North Eastern Europe. It was formerly a very important crop. About the middle of the past century rye formed the principal sustenance of one-third of the population of Europe. In the early days it was sown mixed with wheat and in New England corn and rye were often mixed for flour. About one-half of the world's production of rye is grown in Russia and fully five-sixths is raised in Russia, Germany and Austria Hungary.

Russia raises more rye than the United States does wheat, but in France and England rye holds but a subordinate position.

The average yield per acre of this grain in the United States is about 12 bushels, and the average price 62 cents per bushel, the least average value per acre of any of the cereals, when we consider the grain alone.

The acreage of rye sown in Manitoba shows a rapid increase, the Government Report for 1906 estimates only 6,029 acres in this crop, while the final crop bulletin estimates the area sown in 1908 at 17,611 acres and the yield at 19 bushels per acre. No doubt this increased area is largely due to the additional

land devoted to this crop by our Russian immigrants, many of them still preferring the black rye bread of their forefathers.

The rye plant is much hardier than the wheat plant. I have found fall rye quite hardy at Brandon, and I understand that the Minnionite settlers in Southern Manitoba grow a considerable area of it.

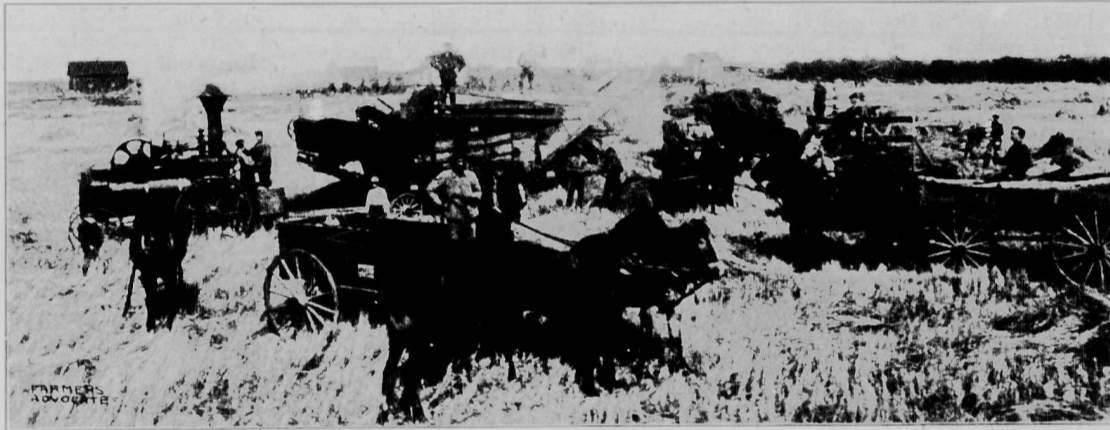
Rye has the advantage of being able to produce a crop of grain on soil so badly exhausted that no other kind of crop will grow. It is excellent as a nurse crop for seeding down to grass, as it occupies the ground only a short time, is very erect and does not shade the ground to any great extent.

Rye also makes one of the earliest soiling or pasture crops in spring. The fall variety sown the previous August is often fit to pasture by the end of May and can be cut for green fodder early in June. Land that is badly exhausted may be restored somewhat by having repeated crops of rye plowed under in a green stage. This plan adds considerable humus to the soil and assists in restoring the fertility.

There are two well known kinds of rye, the fall and spring, but there are very few varieties of each, Giant and Common are the only two I have met with and there is very little difference between them.

Bread from rye flour is supposed to be more nutritious than that made from wheat, but it is much darker in color and very quickly sours. The grain is largely used for distilling.

Rye straw is very useful for some purposes, being tougher than that of other grain. In Europe thousands of people are employed throughout the year in the production of baskets, hats, etc., from the straw. In America, about its only use is for stuffing horse collars, the making of paper and for packing. If cut quite early before the head is well formed it makes a very fair hay,



THRESHING CROP OF SPELTZ WHICH YIELDED 84 BUS. PER ACRE, ON FARM OF JAS. WILSON, DUGALD, MAN. This section grew 17,000 bus. of grain in one season, 9000 of which was wheat, realizing \$6740.

Fortunately the Northwest is quite free from both of these insects and this fact should prove an inducement to growers to engage largely in their production for seed purposes.

The best soil for peas is a somewhat stiff clay loam, with abundant moisture, and the best preparation is a well worked summer fallow. The next best is a piece of backsetting or newly broken cultivated grass sod.

To secure a paying crop in this country peas must be sown early, late sown peas will produce plenty of mouldy vine but very few pods. They should be sown as early as wheat. The young plants of all field peas are hardy, also most of the garden peas, and there is very little danger of injury from spring frosts.

From two or three bushels of peas should be sown to the acre, depending on the size of the pea, the larger the pea the more seed to the acre. The Golden Vine is a good variety of the smaller size, and the Mackay is a good large variety. In sowing this grain it is very important that every pea should be placed at a good depth, any left on the surface are quickly devoured by birds or gophers. They will germinate well even three inches deep. For this reason the newly introduced disc drill is excellent for sowing peas, every grain is deposited below the surface and at a uniform depth.

In the eastern provinces it is the practice to mix oats with peas at the rate of one peck of oats to two bushels of peas. By this plan the combined crop will grow erect enough to cut with a binder, but I have found that the plan lessens the yield, and a much better system is to sow the peas alone and leave the crop until it is dead ripe, then cut with a common grass mower having a pea harvester attachment, costing about \$12.00. By means of this appliance the peas can be cut quickly and drawn at once to the stack or separator, avoiding the danger of the bunches drifting

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Contributions Welcomed.

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FLAX FIBRE EXTRACTED BY ROTTING

Of course, the value of flax fibre for the manufacture of various fabrics, yarns, threads and twine has been long recognized, and utilized for numerous purposes for hundreds of years, but the systems adopted in the past for extracting the fibre from the plant have been crude, slow, and expensive. Under these systems, it was necessary to put the plant through a process of rotting, or, as it is commonly called "retting," in order to get it into a condition whereby the fibre could be separated from the plant.

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The alarming scarcity of wheat is the topic uppermost in everyone's mind at present. London has only 50,000 quarters in storage—a single week's supply and stocks all over the world are said to be low. The supplies in farmers' hands here are only about 20 per cent. of the average for the time of the year.

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Dearer and dearer bread has been the consequence and poor people have suffered severely owing to the rise.

Very few English farmers could have been convinced a few years ago that wheat would ever go over 40s. a quarter again, but year by year the average price has crept up to the present high figures.

Farmers here will not benefit much by the abnormal prices as most of their wheat has been disposed of, and even dealers do not seem to be in a position to make large profits owing to the small stocks week by week for some time past.

If wheat should keep permanently near the 40s. mark the acreage of wheat in the United Kingdom will be largely increased, perhaps doubled.

The "Mark have Express" thinks the present prices are genuine, and encouraging from the point of view of the producer. Editorially, the Journal claims, that low prices accepted for wheat last autumn are the cause of the present high quotations and calls for assistance by state or bank aid to enable farmers to hold their wheat so that deliveries may be steady throughout the year instead of being crowded into the first half of the cereal year.

Some authorities claim that the high prices will bring out reserve supplies from all sorts of unexpected quarters, but for the moment the outlook is exceptionally alarming.

* * *

The Dairy Society has published some exceedingly valuable and interesting data regarding dairy cattle. The Society has made many tests in the last quarter of a century, and the results of the milking trials and butter tests at the last meeting bring these tests up to date.

The awards are calculated on the following basis—each breed being required to reach a certain standard of points:

One point for each ten days since calving, deducting the first forty days, with a maximum of twelve points.

One point for every pound of milk, taking the average of two day's yield.

Twenty points for each pound of butter fat.

Ten points are deducted when butter fat falls below 3 per cent., and ten points when solids not fat fall below 8.5 per cent.

The standard set for each breed is as follows:

	Points
Pedigree Shorthorns	90
Lincoln Red Shorthorns	100
Non-Pedigree Shorthorns	110
Jerseys	95
Guernseys	85
Ayrshires	90
Red Polls	90
S. Devons	100
Kerries and Dexters	75

At the last meeting 91 cows were tested and 33 exceeded the standard. Ayrshires, Red Polls and Dexters showed many failures. Five Jerseys out of 16 were successful; 10 Pedigree Shorthorns out of 15 tested; and 4 Kerries out of 5. A peculiar feature of the test is the comparatively low scale of points for the Pedigree Shorthorns in comparison with the Non-Pedigree.

Twenty-two animals failed to produce 3 per cent. of butter fat; 12 of these being of the Shorthorn breeds. Still the 15 Shorthorns averaged 48½ pounds of milk per day, and 12.58 per cent. of solids. The Non-Pedigree Shorthorns averaged 51 pounds per day, with 12.7 per cent. solids, and a fat average of 3.83 per cent.

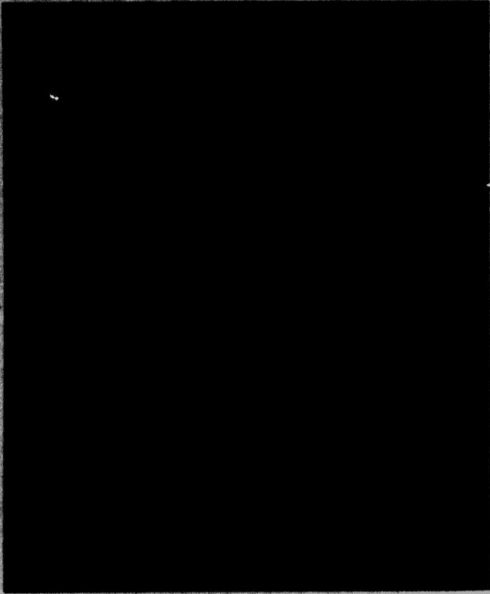
The Jerseys fell off very much from the showings of recent years, and Guernseys showed the same tendency in a lesser degree. The Ayrshires were disappointing, fat averaging only 3.13 per cent with a low yield. The Kerries did well.

The Champion was the Pedigree Shorthorn, "Dorothy", though her fat percentage was lower than some others, both Pedigree and Non-Pedigree Shorthorns, she produced a much larger quantity.

These contests show how few dairy farmers are able to judge what their cows really are as producers, and how very few actually test their cows.

* * *

The Easter Parade in Regent's Park of the London Van Horse Society was a decided success, and formed a delightful holiday feature. The entries have grown from 132 in 1904 to 458 this year. The great drapery houses of the West End are strong supporters



GEO. A. HARRIS.

One of the prize winning grain grower's in the Heward district, Sask. Mr. Harris specializes in oat growing, and won first prize in oats at the Regina Provincial Seed Fair.

but is much too hard for this purpose if left later.

The grain can be used for stock feeding to a limited extent, being perhaps about equal to wheat for that purpose. The by-products from rye are bran and distillers' grains. Rye bran has about the same feeding value as wheat bran.

By the Grain Inspection Act rye is divided into three grades: No. 1 and 2 Manitoba rye and rejected. From the wording of the Act it would appear that the principal objection to some of the samples is the mixing of other grains with it.

Land for this grain should be prepared as for wheat, and about one and one-half to two bushels of seed used, it matures quicker than wheat, and if sown at the same time can be harvested and stacked before the wheat.

Although I can not recommend the general cultivation of rye in this county for the grain alone, I think that it will often prove very useful for early pasture or for a soiling crop, and the straw can generally be sold, if convenient, to large harnessmakers.

SPELTZ AND EMMER

There is considerable confusion among average individuals regarding the above cereals. What is generally grown in the West as speltz is properly speaking, a variety of emmer, and the true speltz is almost unknown here.

Common emmer is the variety usually grown here, it has about 78 per cent. of kernel to 22 per cent. of husk. The straw of emmer is very free of rust and usually stands up well. If the crop is allowed to become over ripe and some of the heads break off and scatter on the ground, reducing the yield more or less and sometimes proving a nuisance to future crops.

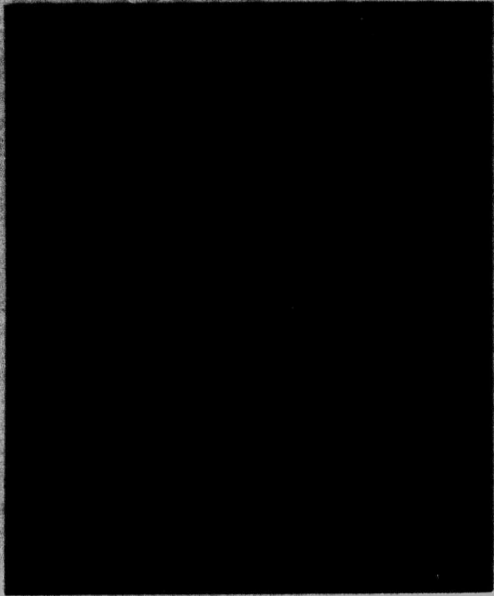
Emmer withstands drought rather better than wheat. On some soils it also proves more productive than the common wheat, but when we consider the amount of kernel alone it scarcely ever equals the macaroni or goose wheats. The Brandon Experimental Farm has usually given large yields of this grain. Evidently the soil there is specially well adapted to emmer. In 1901, emmer gave a return of 3,080 pounds of grain, including husks; Red Fife, 1,720; American Beauty oats, 2,320 pounds and Mensury barley, 2,320 to the acre.

Owing to the unusual size and formation of the berry of emmer there is much uncertainty regarding the most suitable manner of setting the grain drill when sowing this grain. In 1902 it was found at the Brandon farm that with the Massey-Harris shoe drill set at 1¼ bushels of wheat the best yield was obtained.

In the same year it was found that there was only a difference of about two bushels per acre in favor of summer fallow as against unplowed stubble.

During that year a trial was made in feeding emmer to fattening steers, in comparison with a mixture of wheat, oats and barley. The lot of steers fed on emmer gave a somewhat larger profit than those fed on mixed grain.

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Farmers here will not benefit much by the abnormal prices as most of their wheat has been disposed of, and even dealers do not seem to be in a position to make large profits owing to the small stocks week by week for some time past.

If wheat should keep permanently near the 40s. mark the acreage of wheat in the United Kingdom will be largely increased, perhaps doubled.

The "Mark have Express" thinks the present prices are genuine, and encouraging from the point of view of the producer. Editorially, the Journal claims, that low prices accepted for wheat last autumn are the cause of the present high quotations and calls for assistance by state or bank aid to enable farmers to hold their wheat so that deliveries may be steady throughout the year instead of being crowded into the first half of the cereal year.

Some authorities claim that the high prices will bring out reserve supplies from all sorts of unexpected quarters, but for the moment the outlook is exceptionally alarming.

* * *

The Dairy Society has published some exceedingly valuable and interesting data regarding dairy cattle. The Society has made many tests in the last quarter of a century, and the results of the milking trials and butter tests at the last meeting bring these tests up to date.

The awards are calculated on the following basis—each breed being required to reach a certain standard of points:

One point for each ten days since calving, deducting the first forty days, with a maximum of twelve points.

One point for every pound of milk, taking the average of two day's yield.

Twenty points for each pound of butter fat. Ten points are deducted when butter fat falls below 3 per cent., and ten points when solids not fat fall below 8.5 per cent.

The standard set for each breed is as follows:

	Points
Pedigree Shorthorns	90
Lincoln Red Shorthorns	100
Non-Pedigree Shorthorns	110
Jerseys	95
Guernseys	85
Ayrshires	90
Red Polls	90
S. Devons	100
Kerries and Dexters	75

At the last meeting 91 cows were tested and 33 exceeded the standard. Ayrshires, Red Polls and Dexters showed many failures. Five Jerseys out of 16 were successful; 10 Pedigree Shorthorns out of 15 tested; and 4 Kerries out of 5. A peculiar feature of the test is the comparatively low scale of points for the Pedigree Shorthorns in comparison with the Non-Pedigree.

Twenty-two animals failed to produce 3 per cent. of butter fat; 12 of these being of the Shorthorn breeds. Still the 15 Shorthorns averaged 48½ pounds of milk per day, and 12.58 per cent of solids. The Non-Pedigree Shorthorns averaged 51 pounds per day, with 12.7 per cent. solids, and a fat average of 3.83 per cent.

The Jerseys fell off very much from the showings of recent years, and Guernseys showed the same tendency in a lesser degree. The Ayrshires were disappointing, fat averaging only 3.13 per cent with a low yield. The Kerries did well.

The Champion was the Pedigree Shorthorn, "Dorothy", though her fat percentage was lower than some others, both Pedigree and Non-Pedigree Shorthorns, she produced a much larger quantity.

These contests show how few dairy farmers are able to judge what their cows really are as producers, and how very few actually test their cows.

* * *

The Easter Parade in Regent's Park of the London Van Horse Society was a decided success, and formed a delightful holiday feature. The entries have grown from 132 in 1904 to 458 this year. The great drapery houses of the West End are strong supporters

June 12-16, 1871, New York, 400 miles, 4 days 23 hours 32 minutes.
 Oct. 14, 1871, Macon, Ga., 50 1/2 miles, including one-half mile backward, 8 hours 49 minutes 45 seconds.
 May 11-16, 1874, New York, 430 miles.
 June 17-30, Philadelphia, 200 miles, 40 hours.
 Dec. 14-19, Newark, N. J., 500 miles, 5 days 23 hours 28 minutes.
 January, February, March, 1886, with Dan O'Leary in various cities, 2,500 miles; beat O'Leary 200 miles.
 December, 1893, Battery, New York, to Albany, 160 miles, 59 hours 59 minutes.
 December, 1896, New York, 103 miles, 23 hours 59 minutes.
 May 23, 1906, Philadelphia to New York, 100 miles, 23 hours 54 minutes.
 Oct. 29, 1907, Portland, Me., to Chicago, 1,234 miles in 25 days.
 In England, Feb. 8-9, 1876, 110 miles, 24 hours.
 Feb. 16-18, 1876, 180 miles, 24 hours.
 Feb. 23-26, 1876, 275 miles, 75 hours.
 March 6-11, 1876, 450 miles.
 June 19-25, 1876, 450 miles.
 Sept. 25-30, 1876, 500 miles.
 Feb. 12-17, 1877, 330 miles, three miles backward, 72 hours.
 April 2-7, 1877, 510 miles, 5 days, 23 hours.

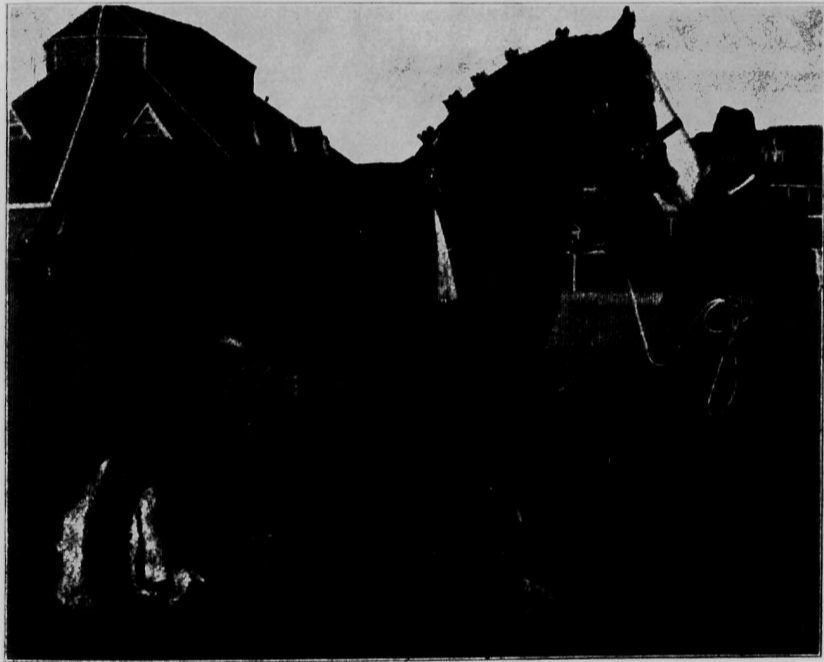
the Rio Grande to Seattle, and from Chicago to San Francisco, intersect a vast territory. In the meantime, Messrs. Armour & Co. are getting together a new team. A life of ease is promised the old horse Jim at the close of his memorable career in the show-ring.

A GREAT THOROUGHBRED SIRE

An inadvertent misstatement occurred in connection with our report of Mr. R. M. Dale's importation of Thoroughbreds in the April 21st number. In place of the horse Manuel being described, there should have been a description of a much more notable sire.

By reference to his papers, Mr. Dale finds he has secured "Azra," by Reform, out of Albia, by Alarm. He won the Champagne Stakes, the Kentucky Derby, the Clark and Travers' Stakes, and many other races. This is one of the grandest race horses ever brought to Western Canada, and Mr. Dale has been congratulating himself that he has got possession of such a sire.

Some enormous figures are contained in a report upon the destruction of rabbits prepared by the Chief Inspector of Vermin in Australia. During the last five-yearly period, 41,423,000 frozen rabbits were exported, and 98,242,000 skins, while 5,000,000 skins went into local con-



TWO-YEAR-OLD CLYDESDALE STALLION, "MASTERPIECE."
 First in his class, first for Canadian Bred Stallion, any age, and reserve for Championship, Calgary Spring Show, 1909. Bred by John A. Turner. Property of Bryce Wright, De Winton. Sire, Consul by Baron's Pride.

June, 1877, 400 miles, five days, repeating in July and September.
 January, 1878, 1,000 miles, 400 consecutive hours.
 February, Glasgow, 1,500 miles in 625 hours.
 June, 1879, won Astley belt, 550 miles, 141 hours 44 minutes.
 Nov. 21, 1883, to March 5, 1884, for Church of England Temperance Society, walked 50 miles a day for 100 days, Sundays not included, over country roads and hills, and delivered temperance lectures daily.

On March 5th, the Armour six-horse team of Percherons, with William Wales and the big yellow truck, took the road from Chicago on the most extensive advertising tour of the sort ever undertaken. It will be on the road until late next autumn, travelling all over the West and South-west. The team will be composed of Mack and Dude, leaders; Phil and Star in the swing, and the new pair of wheelers shown at the last International. Big Jim is to be taken along, to have a good time in a sort of retired old gentleman fashion, getting all he wants to eat, a comfortable place to sleep, and daily exercise in the parades. How many thousand miles will be travelled before the team comes home again it is hard to say, but lines drawn from

sumption, making a total of 103,242,000. The net total of exported skins for five years has been 67,838,000, or a yearly average of 13,567,000 skins, which Mr. Allan says represent rabbits that would consume as much grass as 1,500,000 sheep.

THE TOBACCO HABIT

The mother who desires to convince her boys that the tobacco habit is inadvisable should be careful that her statements are such as will not be contradicted by their observation of men who are addicted to this practice. Extreme assertions to the effect that the use of tobacco is deadly, leads the boys to think later that the mother spoke from prejudice and not from knowledge. There is enough that is rational and probable to be said against tobacco, and these facts calmly stated will convince the reason and judgment of the boy.

We are quite certain that the use of tobacco in all cases is a superfluity; it is not necessary either to health or happiness. It is legitimate that we reason with boys against the formation of useless habits; as reasonable beings who are to aim at successful and happy lives they should learn at the start that doubtful or needless habits become incubrances, become like burdens that the foot traveller has to carry. When men have to enter battle they carry as little as may be that is likely to

HAIL! HAIL! HAIL!

Loss Claims paid last year \$30,152.89

Paid last five years - \$302,866.24

Plans of Insurance Same as in 1908

Average Rate of Assessment six years, 16 1/2c, per acre

Have now \$1,600,000.00 Insurance in force

Assessment governed by amount of loss

SURPLUS ASSETS \$23,339.00

Including premiums on Insurance now in force over \$87,000.00

NO LIABILITIES

Cash Deposited with Government \$5,000.00

The Company is now stronger financially than ever before.

For further information see our agent, or write.

The Manitoba Farmers' Mutual Hail Insurance Co.

W. C. GRAHAM, Manager, Winnipeg

Box 1147

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 interesting information about Watches, sent free on request.

THE WALTHAM WATCH CO., WALTHAM, MASS.



Bruce's New Century Swede Turnip

Sales season 1901, when first introduced 16 lbs.; 1906, 9370 lbs. The best all-round variety. It is one of the few Swedes that resist mildew, the best shipping variety, and for cooking purposes cannot be excelled by any other Swede. It is a purple-topped variety resembling Westbury, of splendid uniform growth, of fine quality, a heavy cropper and the roots are clean and of handsome shape. In sections where large quantities are grown for the American market, the Growers and Shippers will have no other; one-fourth pound, 12 cents; one-half pound, 18 cents; one pound, 30 cents; four pounds for \$1.15 postpaid.

Bruce' Mam. Inter. Smooth White Carrot

Sales season 1891 when first introduced 14 pounds, now 1352 pounds. The best of all field carrots and invaluable for horses. This grand half long Carrot is of large size, solid, productive, of finest quality, a splendid keeper, and has the advantage of being much more easily harvested than the old long varieties. One-fourth pound, 17 cents; one-half pound, 33 cents; one pound, 55 cents. Postpaid.

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J. A. BRUCE & Co. Seed Merchants Established 1850 **Hamilton, Ont.**



hinder freedom of action. Soldiers on long marches take only what is essential. The boy must learn that the less he is encumbered by needless habits the better are his chances of success.

The boy should know that the red Indians, from whom we imitated the use of tobacco, never allowed their own boys to touch the weed until they were full grown and had been on their first warpath; the Indians in their natural condition, before the white men depraved them, were one of the healthiest races in the world; they had extraordinary powers of endurance, and they knew much about simple laws of health. They knew from ages of experience with tobacco that, whatever its effect on mature persons, it was not good for growing youths. The youth had to leave it alone until he had become a young man and had proved his endurance by going with the warriors to battle. This ought to be enough to influence any boy who is ambitious to be well and strong to let tobacco alone at least until he is of age. The Indians were keen observers and so far as taking care of themselves for hunting and for war knew much about nature. Then as to the practice for grown men among them, we must remember that with the Indians the smoking of tobacco was originally a religious ceremony; it was like the offering of incense. In their smoking of the pipe of peace, they passed the pipe from hand to hand around their circle and only took a puff or two each. It is probable that the uncorrupted Indians did not make a practice of smoking constantly, as many white men do, and as perhaps the degenerate Indians now do.—Home Magazine.

ALBERTA FAIRS

The following are the dates set by the annual convention of the Alberta Agricultural Fairs Association for the fairs to be held in Alberta in 1909:

- Edmonton, June 29 and 30, July 1 and 2.
- Calgary, July 5, 6, 7, 8, 9 and 10.
- Innisfail, July 12 and 13.
- St. Albert, August 3.
- Fort Saskatchewan, August 4.
- Olds, September 13 and 14.
- Clareholm, August 3.
- Macleod, August 4, 5 and 6.
- Lethbridge, August 10, 11 and 12.
- Leduc, September 21.
- Daysland, September 22 and 23.
- Sedgewick, September 24.
- Lloydminster, September 27.
- Innisfree, September 28 and 29.
- Vegreville, September 29.
- Vermilion, Sept. 30 and October 1.
- Viking, October 5.
- Raymond, September 16 and 17.
- Nanton, September 20 and 21.
- Pincher Creek, September 22.
- Magrath, September 23 and 24.
- Cardston, September 28 and 29.
- Taber, September 30.
- Irvine, October 1.
- Didsbury, October 5 and 6.
- Ponoka, October 6 and 7.
- Lacombe, October 7 and 8.
- Three Hills, October 12.
- Priddis, October 14.
- Alix, September 29.



How a Reliable Engine Economizes Labor

OF course, you, like other farmers, want to economize your time.

Think in how many places a power would be a help to you—would save time and work—if you had it in a handy form ready for use in a minute.

Think how much hard work it would save you in cutting feed—in sawing wood, posts or poles—in running the cream separator or churn—in operating shop or other machinery.

The I. H. C. gasoline engine is a power that is always ready at your hand. It is not necessarily stationary, like the windmill, and on that account adapted to doing only one kind of work.

The engine is built in many styles—there are portable engines on trucks and skidded engines which can be moved wherever the work is to be done. Then there are stationary engines, both vertical and horizontal, in sizes from 1 to 25-horse-power, air cooled and water cooled, and also gasoline traction engines 12, 15 and 20-horse-power. Besides, there are special sawing, spraying and pumping outfits from which you can select an outfit

The engines are simple in design so that they can be easily understood.

They are strong and durable—constructed with a large factor of safety, inasmuch as they have greater strength than would ordinarily be required. Yet they are not clumsy or too heavy.

All parts are accessible and easily removed and reassembled. Every engine will develop a large per cent of power in excess of its rating—you get more power than you pay for.

They are absolutely reliable—you cannot find one inefficient detail. They are unusually economical in fuel consumption—less than a pint of gasoline per horse-power per hour. This means that a 2-horse power engine will produce full 2-horse power for five hours on only one gallon of gasoline.

Would it not be a wise plan for you to investigate and learn how an I. H. C. engine will save time and lighten the labor on your farm?

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Milnerton, October 6.
Wetaskiwin, September 30 and October 1.
Gleichen, August 19 and 20.

A LESSON FROM A MIXED FARMER

A correspondent at Gilbert Plains, Mr. J. R. Dutton, sends us a clipping from the Chester (Eng.) "Chronicle," the moral of which, he thinks, is good for many Manitoba farmers, and, as we think so too, we reproduce it herewith. Mr. Dutton says:

"There is much in this of interest to dairymen, especially that part dealing with the care of the cattle. If Mr. Shepherd's plan was followed I do not think there would be much trouble with impure milk or tainted butter, and the animals would be entirely free from diseases, such as tuberculosis, etc.

"Possibly as the article contains so much valuable information on general farming, you may find room for it on some future occasion. The Old Country farmer is not so slow after all if Mr. Shepherd is a fair sample."

Parkside Farm, Aston, Preston Brook, the home of the courageous Mr. Robert Shepherd, is well worth a visit. Even on a cold February day, when nature adds little to the charm, there is here much to interest and educate. We are farmers visiting a farmer, not with the object of describing our visit in "The Chronicle," but just desirous of seeing one of the largest dairy herds in the United Kingdom, and hearing from the owner of his methods; we saw, and heard, and were in no way disappointed. Mr. Shepherd has been tenant here for 11 years. The history of this farm previous to Mr. Shepherd's tenancy was a lamentable one. That awful scourge, which we regret to say is still with us (we refer to anthrax) had played havoc among the live-stock to such an extent that for two years the place remained tenantless. It is surely a testimony to Mr. Shepherd's indomitable character that he ventured to stake his all upon a place with such a disastrous history. It may interest many readers if we describe Park Side as we find it to-day. Eleven years of strenuous endeavor has brought about a reformation indeed.

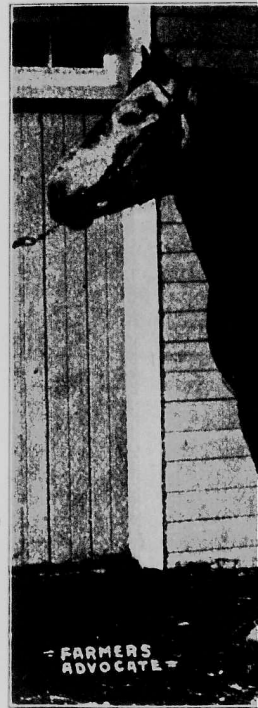
With an area of 427 acres all in a ring fence, a soil of good sandy loam, it gives ample scope for mixed farming. Mr. Shepherd is a milk-producer, and supplies from 3,500 to 4,000 gallons of milk per week, all the year round, to the Runcorn and Widnes Co-operative Society, but some part of this is from another farm which Mr. Shepherd holds at Ince. We were not surprised, therefore, to find a rotation of crops amply providing the necessary food for winter and summer milk production. He crops 70 to 80 acres with early potatoes, which permits of a second crop of cabbage. He grew 50 acres of these last season, from which since October he has taken a daily toil of eight to ten tons, and we saw on the field several acres of good solid "hearts" yet remaining. His mangels are the produce of 24 acres, and he has also six acres of Swedes.

"Just have a look at the seed potatoes," said our host, and we walked from the ground floor of one yard along the second, or loft floor of three ranks of buildings which surrounds another yard on a lower level. Here we saw stacked, 12 boxes high, the whole floor covered, just leaving room for inspection, 5,000 boxes of early potatoes—a sight worth seeing to those interested in this branch of agriculture, all beautifully sprouted, of the best known varieties, stored safe from the frost, and in a temperature that could be altered to suit their requirements. The inspection of the tubers was just a preliminary as we waited the arrival of a fourth party. Our delinquent friend having now arrived, we proceeded to inspect the dairy cattle. Whether he talks like it or not, Mr. Shepherd is a man who keeps cows; two hundred and fifty of them we saw, well housed, well groomed, well fed. They are mostly of Irish extraction, not over big, but well selected and showing excellent milking properties, and

mostly quite young. Shepherd feeds off all they are in quality, never in the "one note" rears about 20 calves a year, buys calves to regulate supply to his customers.

He feeds abundantly, supplementing his home-grown oats with Indian meal (old corn), and decorates the meal. The cows get this per day, after morning, again when watering in the form again before evening sides this, of course, dant rations of hay, r bage. The cows are at a time in the forenoon access to an abundant water in troughs so close the animals cannot taminiate it. The cat than half of which hay by Mr. Shepherd at h are well constructed, a room on the floor suftilation is perfect; our own ideas about this that light and efficient more important than space.

We now come to theories of cleanliness, disinfection, as prevent against the contraction tuberculosis in his her



Winner of 2nd at the Regina

tion is better than cu and without doubt he he preaches. The periodically sprayed with disinfectant and then The whole floor surface week spread over w quick lime and chloride an animal shows signs she is at once isolated, well disinfected before cupied. We were much the cleanliness of this were perfect in this res bedded in clean wheat ters.

Mr. Shepherd's prev ures play a very impo the precautions which keep dirt out of the mi with much interest the of milking operations. is provided with a apron, and is required hands before commencing boy precedes the milker with two cloths cleans udder. Fifteen to ei are employed, all men; talk," says Mr. Sheph is not practised, an in cows' udders after the that is considered nec respect.

Mr. Shepherd has no finding milkers; he emp 20 men. There are ni his farm, so that a fa

mostly quite young animals. Mr. Shepherd feeds off all his stock while they are in quality, but is no believer in the "one note" system. He rears about 20 calves each season, and buys calves to regulate his milk supply to his customers' requirements.

He feeds abundantly with corn, supplementing his home-grown wheat and oats with Indian meal (best-quality old corn), and decorticated cotton meal. The cows get three rations of this per day, after milking in the morning, again when tied up after watering in the form of mash, and again before evening milking. Besides this, of course, they get abundant rations of hay, roots, and cabbage. The cows are turned out 50 at a time in the forenoon, and have access to an abundant supply of good water in troughs so constructed that the animals cannot themselves contaminate it. The cattle sheds, more than half of which have been erected by Mr. Shepherd at his own expense, are well constructed, allowing ample room on the floor surface. The ventilation is perfect; our friend has his own ideas about this, and declares that light and efficient ventilation are more important than actual air space.

We now come to Mr. Shepherd's theories of cleanliness, sanitation, and disinfection, as preventative measures against the contraction and spread of tuberculosis in his herd. "Preven-

tion is better than cure," says he, and without doubt he practises what he preaches. The shippens are periodically sprayed with a powerful disinfectant and then lime washed. The whole floor surface is twice a week spread over with powdered quick lime and chloride of lime. If an animal shows signs of tuberculosis she is at once isolated, and the stall well disinfected before being again occupied. We were much struck with the cleanliness of the cattle. They were perfect in this respect, and stood bedded in clean wheat straw like hunters.

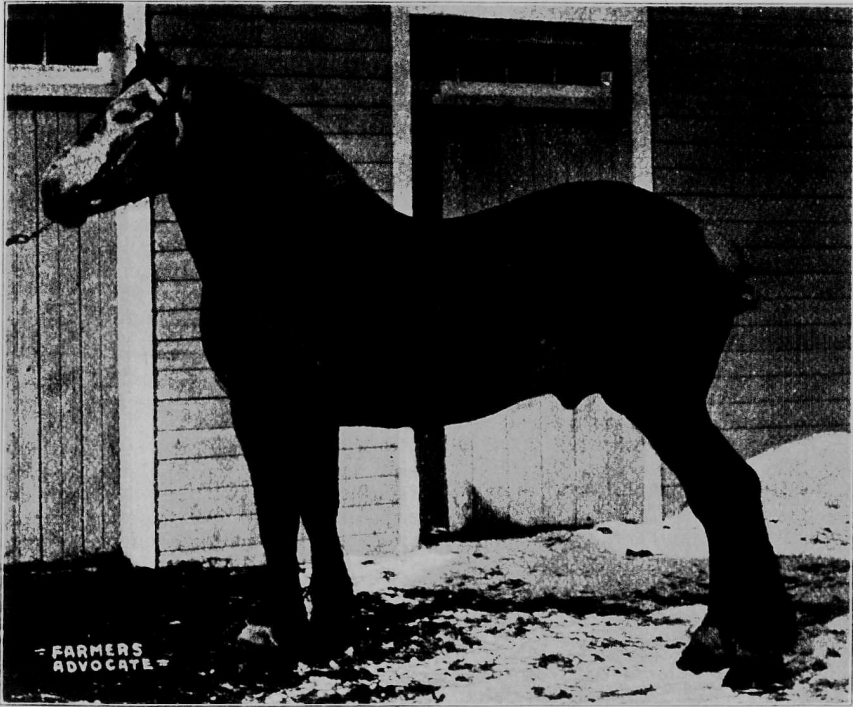
Mr. Shepherd's preventative measures play a very important part in the precautions which he takes to keep dirt out of the milk. We noted with much interest the commencement of milking operations. Each milker is provided with a large overall apron, and is required to wash his hands before commencing to milk. A boy precedes the milkers, and armed with two cloths cleanses each cow's udder. Fifteen to eighteen milkers are employed, all men; "women will talk," says Mr. Shepherd. Stripping is not practised, an inspection of the cows' udders after the operation is all that is considered necessary in this respect.

Mr. Shepherd has no difficulty in finding milkers; he employs regularly 20 men. There are nine cottages on his farm, so that a fair amount of accommodation is available for laborers. It is worthy of note that there should be no labor problem involved. One so often hears farmers remark that they cannot get men unless they are provided with beer at harvest time. Mr. Shepherd contradicts this, as he states that he has not given his men a pint of beer since he came to the farm.

To sum up, we regard our friend as a thoroughly practical and efficient farmer, and as an exponent of modern methods of milk production he has few equals. We discussed with him the scheme which he advocates for the eradication of tuberculosis from bovines. His arguments are backed up by practical experience. Mr. Shepherd as a farmer knows full well the value of systematic prevention; his conclusions are the outcome of experiments which he has carried out, as he says, from the standpoint of making it pay, and after all, in the consideration of this great question, the commercial aspect of the schemes advocated, is one of vital importance to us, who will have to assist in carrying out the measures decided upon. That something must be done is unquestionable.

TRADE STILL HOLDS GOOD IN CLYDESDALES AT CRAIGIE MAINS

In a recent letter to the "Advocate" Messrs. Mutch say: "Our



PERCHERON STALLION DOCTUER.

Winner of 2nd at the Regina Spring Stallion Show. Six years of age, owned by W. C. Swanston, Pense, Sask.

tion is better than cure," says he, and without doubt he practises what he preaches. The shippens are periodically sprayed with a powerful disinfectant and then lime washed. The whole floor surface is twice a week spread over with powdered quick lime and chloride of lime. If an animal shows signs of tuberculosis she is at once isolated, and the stall well disinfected before being again occupied. We were much struck with the cleanliness of the cattle. They were perfect in this respect, and stood bedded in clean wheat straw like hunters.

Mr. Shepherd has no difficulty in finding milkers; he employs regularly 20 men. There are nine cottages on his farm, so that a fair amount of

sales still keeping brisk. We have sold, since writing you, the following: A first-class colt to W. H. Dodds, of Cut Knife; to John Simpson, of Moose Jaw, Earl Bombie, by Baron Hood, a big, thick colt; to Fred Brook, of Elgin, Man., the good horse, Lord Middleton, by Royal Favorite. This is a young horse that was a lot thought of at Regina and Brandon shows. He is one of the fleshiest-legged horses that ever graced a western show-yard, and, in another year, he should stand well to the front. Mr. Brook, in selecting this horse to head his valuable stud, has displayed excellent judgment. He had just previous to this bought the three good mares, Lady Eva, Gay Jess and Lady Marshall, and was so well pleased with them that he ended in adding Lord Middleton. To R. H. Miller, of Lumsden, two fillies, Sturdy Rose and Trolane Nell. The first-mentioned was sired by the great breeding horse, Prince Sturdy, and is out of a Baron's Pride mare. She won two first prizes in Scotland, and was an easy winner in her class at Regina. We do not hesitate in saying that this filly is one of the best animals that ever passed through our hands, and, should she do well in Mr. Millar's hands, we predict for her a great show-yard career.

[Craigie Mains is one of the best places to go to get good Clydesdales. —Ed.]



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If the customer's own lawyer drew the guarantee he could not devise

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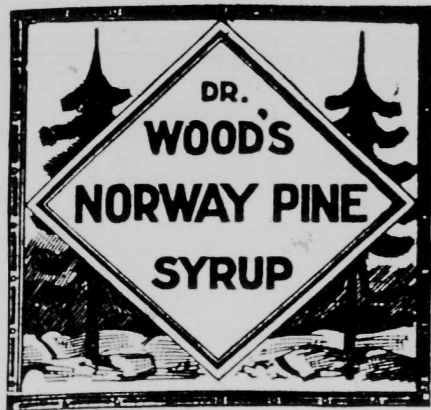
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and all throat and lung troubles. It is put up in a yellow wrapper, 3 pine trees the trade mark and the price 25 cents.

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Mr. J. L. Purdy, Millvale, N.S., writes:—"I have been troubled with a hard, dry cough for a long time, especially at night, but after having used Dr. Wood's Norway Pine Syrup, for a few weeks, I find my cough has left me. To any person, suffering as I did, I can say that this remedy is well worth a trial. I would not be without it in the house."

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APOPLEXY IN HENS

I had a beautiful, healthy pullet about seven months old that had been laying for the last two months. One day I came in and she was lying in the nest. In about two hours I came to see again, and she was nearly dead; her comb had turned black as coal, and she was simply useless. In a few minutes she died. What caused her death, and is the sick-ness contagious?
L. M. M.

Ans.—Death in this case seems to have been due to apoplexy, probably brought about by overstraining in laying, or trying to lay an egg. There is really no treatment in such cases, which are sometimes due to overfeeding or to injury. Exercise, green food, and varied rations—fed in judicious quantity—are recommended as preventive measures.

TAPEWORMS IN POULTRY

Have a rooster which has been moping all winter. On killing him, we found worms on the outside of the intestines, and holes eaten in the crop. The worms were white, and about four inches long, pointed at both ends. Could you tell me what they are?
G. H. W.

Ans.—The worms which caused the moping condition of the bird before it was killed, and which would doubtless have proved fatal, were most likely a species of tapeworm. There are several kinds of tapeworms which infest the intestines of fowls, and all, if allowed to accumulate, will eventually cause death. There is a round worm, varying in size from one-third inch to five inches in length. These worms are more common than tapeworms, but, except when massed in great numbers in the intestines, are not as fatal as the others. If worms are suspected, the diet should be limited to grain, which should be soaked in turpentine and fed to the fowls. Follow by giving two teaspoonfuls of castor oil to each bird. Or, dissolve in the warm water which is to be used in mixing the mash, two grains of santonine for each bird to be treated. Mix a small quantity of dry mash and add half a teaspoonful for each bird. Feed to the birds and note results. The droppings of the birds should be carefully collected every day and burned. Dr. Sanborn, whose treatment is the foregoing, also recommends for suspected tapeworm, six drops of oil malefern in one teaspoonful of castor oil. Give to each bird in the morning, while crop and gizzard are empty. Two to three hours after the malefern, give each bird a table-spoonful of castor oil.

SOW FAILING TO BREED

I bought a pure-bred and registered sow in December, and have bred her twice, but she fails to conceive. Would it be wise to try her again, or could you give me any advice as to how to get her started to breed?
H. F.

Ans.—It is not unusual for a sow to fail to conceive to the first two matings and to breed to later services. It would be well to give her a full dose of Epsom salts to move the bowels, and then feed her laxative food, as bran and roots, and let her run out on the early grass to cool her blood, and breed her twice during a period of heat, the last time when the period is nearly ended.

LIVER COMPLAINT

Two young hens died, one early in winter and one the other day. Noticed them moping for about a week before they died. On opening, found liver spotted, and so enlarged as to almost fill abdominal cavity. Feed mixed grains, and warm mash every other day, also meat in small quantities every day. Plenty of fresh water always before them. House light and well ventilated. What would cause that diseased condition?
J. S. M.

Ans.—Fowls probably died from one of several forms of liver complaint. In the latter case, where examination was made, the symptoms point to

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Now offered to the progressive farmers of the Great Northwest, at lower prices than ever before. We sell annually to customers located at 19,000 postoffices in the States, and have been selling direct for nearly one quarter of a century, distributing direct from factory to farm more than double the quantity of any other concern in the world.

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To protect credit buyers from exorbitant prices, charged by discriminating retailers, we will accept notes from responsible parties, payable November 1st, at only 4 per cent added to our low cash price, which we quote for this season, F.O.B. Winnipeg as follows:—
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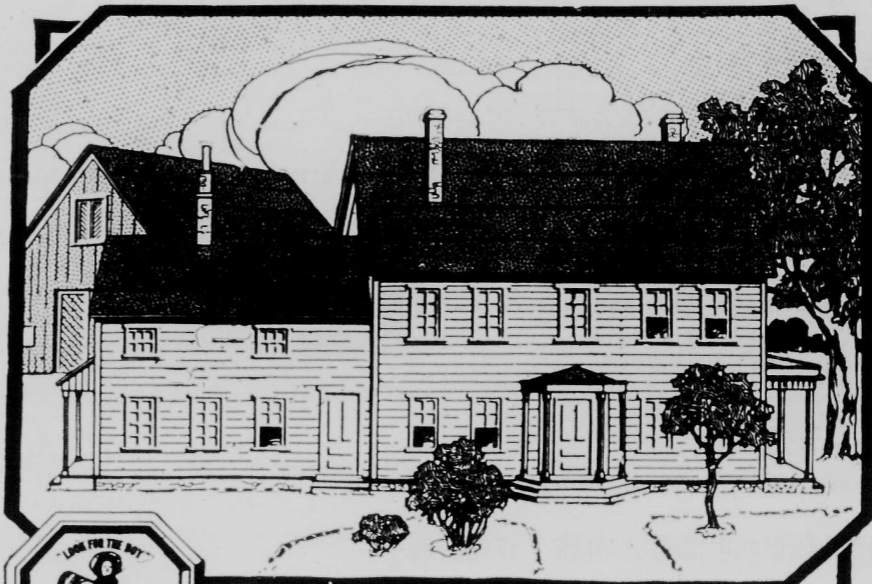


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200 PAGE MEDICAL BOOK ON CONSUMPTION

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This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma

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Write at once to the Yorkerman Consumption Remedy Co., 1314 Rose Street, Salomazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.

of wheat. The present year is an example of this. The world had gone short on wheat, but of oats we had a larger supply than usual. In this country the oat harvest might have been taken as a likely indication of lower values, but high-priced wheat has held oats up to a fairly good level of value thus far.

Speculation as to what crops, the seed of which is still in the bins, will sell for next fall, is rather idle. To one conversant with the world's situation, it looks as if the high prices that have prevailed for wheat during the past year must be continued.

The world is short in wheat, and there are no indications up to the present to indicate that the crop of 1909 will bring the reserves up to strength and supply demands from every quarter. As a matter of fact grave doubts are beginning to be entertained by those desirous of lower-priced wheat, that the crop of the present year, unless it is a bumper one, and the backward seed-time all over this continent pretty well precludes that, there is likely to be as wild a scramble for the world's first food product during the season of 1909-10 as anything seen during the present year. We see no reason why wheat should not maintain a high-price level during the coming cereal year.

If you note the option quotations in our market column, you will see that wheat for next fall delivery is already selling over the dollar mark. While there may be a slump in prices, it is hardly likely to happen. We can see no reason why oats should not be a good price next fall. There is as much indication for strength in them as in wheat. At present, October delivery is quoted in Winnipeg at 38c., and in Chicago at 41c.

Which is the most satisfactory pump for a well sixty feet deep, a single-action or double-action pump? Sask. J. J.

Ans.—A straight-lift iron pump, single cylinder will be the most satisfactory. H. CATER, Brandon Pump Works.

SPRINGHALT Have a gelding eleven years old. While standing in the stable, he lifts his left hind foot from the floor, and holds it up for several minutes at a time. He does this so much that his foot must be off the floor nearly half the time. When he puts it down, he stands up on it as though it were all right. He does not limp or show any lameness in walking. He does not flinch when the leg is felt or compressed with the hands. I can not see any lump or swelling on the leg. He has been doing this ever since I bought him on March 1st last. When I first noticed the habit, I thought that probably the hoof needed trimming, as it seemed to be rather overgrown. I, therefore, had the blacksmith trim all four of his hoofs. When trimming the affected foot, I had it done so as to remove as much pressure as possible from the sole by paring the sole well down and leaving the wall of the hoof to support the weight. But this brought no improvement. The sole of the foot seemed to be sound and of good color. A' some time in his early years the horse has had his right hind foot badly cut, probably with barb wire, and the blacksmith thought that perhaps the horse favored the right foot so much then that the left foot is now paying for the extra work it has had to do. I think the horse has worms. He chews the woodwork in his stall. He rubs his upper lip sometimes just as a painter would rub or slap a paint brush back and forth to get paint well into the wood. His coat is rather rough too. The horse eats well, but for a horse of his size (about 1,400 lbs.), he does not drink as much as one would expect. Sask. W. G. K.

Ans.—Cases such as you have described are occasionally met with in practice, where a horse has received an injury to one leg, and, as a consequence, has been allowed to stand on



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We are offering at present a big selection of home-bred and imported Clydesdale Stallions at very tempting prices, comprising some big drafty Stallions of different ages from prize winning stock, among them sons and grandsons of the famous "Baron's Pride." Intending purchasers will be driven out to the farm free of charge by J. Materi, Balgonie.

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of the Forest Home Shorthorns and Clydesdales will be held at the Farm, June 2nd.

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For fuller particulars see future issue. For sale catalogue write. ANDREW GRAHAM Pomery P. O., Man.

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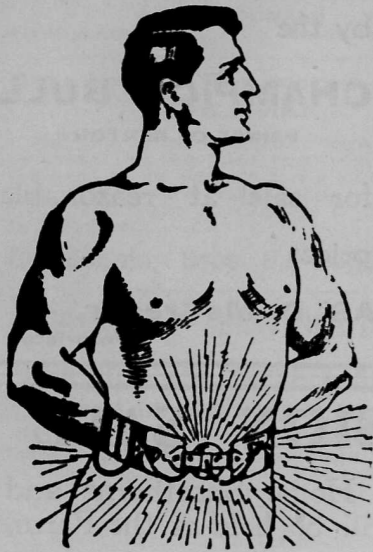
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Every man should understand that physical power, large muscles, strength and endurance come from animal electricity. My treatment will pump every part of the body full of that, and perfection will result.

It not only restores vigor and increases nerve power, but it cures Rheumatism, Pains in the Back and Kidneys, Indigestion and Constipation, and all troubles which result from weakness of any vital organ.

I have learned to put a lot of confidence in men, especially men who are weak, sickly and delicate, who have tried everything to restore their vitality and failed, who have lost faith in themselves and humanity in general, because they have been led to try so many remedies which were no more use than as much water. These are the men I want to wear my Belt, and I will wait for my pay until they are cured. All I ask is that they give me reasonable security while the Belt is in their possession and use. If it doesn't cure you it costs you nothing. Is there anything more fair?

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Where there is any physical constitution to work on, my treatment will develop perfect manhood. It will take the slightest spark of manly vigor and fan it into a flame which will encompass the whole structure and charge every nerve and muscle in the body with the vigor of youth.

Dear Sir.—My indigestion has quite disappeared and my kidneys are free from pain. I no longer feel any weakness in my spine and my appetite has returned, so that I can enjoy as good a meal as any man my size. I have gained five pounds in weight, I am also free from diarrhoea, which was severe during the summer months. I am most thankful to say that the Belt has about cured me of other weaknesses. I believe your Electric Belt is a genuine success.

Yours truly,
A. P. HICKLING, St. James, Man.

Wherever you are, I think I can give you the name of a man in your town that I have cured. Just send me your address and let me try. This is my twenty-fourth year in the business of pumping new vim into worn-out humanity, and I've got cures in nearly every town on the map. All I ask is that you secure me and pay me only when your cure is complete.

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the opposite limb for a long time, until the nutrition of the sound foot and leg have become seriously interfered with. When a horse has been injured to the extent that all his weight has to be borne on one leg, especially if it be a hind leg; he should be placed in a comfortable sling, or bad results may follow, such as laminitis and often drop sole. The inflammation produced in the foot and leg is liable to extend to all the structures, including the nerves. This is likely to have occurred in your horse, and accounts for the continual elevation of the foot. Inflammation of the nerve sheaths have produced a form of stringhalt, for which we cannot suggest any treatment beyond regular monthly attention to the hoof. Give him a ball composed of Barbadoes aloes, 8 drams; calomel, 1 dram; powdered ginger, 1 dram; soft soap, sufficient to combine. Roll in soft paper and give after feeding bran mash only for one day (no hay or grain). Continue to feed bran mashes until the physic commences to operate, then give half his usual allowance of hay and oats, increasing the amount as purgation ceases. Cover the wood with sheet iron. This is a very bad habit or vice for a horse to acquire and should be prevented.

DIARRHOEA

About three weeks ago one of my horses began to scour, and now the others are affected with the same trouble. I am feeding good timothy hay and oats chopped, about four quarts. They are working most of the time, and are the same when not at work.

Ans.—Diarrhoea is due to indigestion or to irritation of the bowels from eating moldy or musty food, impure water or watering immediately after feeding, exposure to cold, low or damp stables, or diseased conditions of the teeth. It is sometimes one of the complications of influenza. In all cases look to the feed and water. If either of these are at fault they should at once be discontinued and a change made to some easily-digested foods. Horses should always be watered before feeding and only a few swallows allowed after, to wash out their mouths. If it is the result of some irritation to the bowels, it is best got rid of by a drench of raw linseed oil, from a pint to a pint and a half, according to the size and condition of the animal. If purgation still continues, give wheat flour in the drinking water, or 2 drams of powdered opium three times a day till it ceases. Clothe the animals well, and keep in a warm but well ventilated stable. If they are those peculiar nervous horses called "washed," they should always be watered before feeding, and, if possible, allow an hour to elapse after meals before putting them to work.

MORTGAGES—NOTES

1. I wish to obtain a mortgage on my house and lot in an incorporated village. How is this done? Can necessary printed forms be purchased, or must it necessarily be done by a solicitor? Please state usual proceedings with probable cost, etc. Is it necessary to register it, and should amount be endorsed on title deeds?

2. A signs agreement, giving right-of-way across his land to B forever. If A sells his land, does agreement bind purchaser to give B right-of-way, and, also, if B sells to A, or purchaser of A's land, bound to give right-of-way to purchaser of B's land? Would this be legally binding without being registered, and would this have to be stated on title deeds?

3. C gives promissory note, but cannot meet it, and has nothing besides house and lot in incorporated village. What can D do to protect himself? Is it necessary to renew note when due, or does it hold good until paid?
R. D.
Manitoba.

Ans.—1. The proper procedure is to make an application for a loan to some responsible loan company. Most of the larger companies have

agencies established at country points throughout Manitoba, but if there is no such agency convenient, then application could be made to any of the principal loan companies' offices in Winnipeg. The mortgages are usually attended to by the company's solicitors, and the costs deducted from the amount of the loan. It is impossible to state what the amount of the costs would be, but if the property in question has a Torrens title it should not cost more than \$20.00 or \$25.00. All mortgages should be registered against the land which they cover. If the property is under the Torrens system, the title deeds are deposited in the Land Titles Office. If the land is under the old system, the title deeds are either registered in the Land Titles Office, or the mortgagee retains possession of them until the mortgage is paid off.

2. If A has a properly executed agreement giving a right-of-way to B forever, purchasers from A will be bound by A's agreement, and B will have the right to grant his right-of-way to his purchasers. Such an agreement might not be binding without registration. So much depends, however, on the way in which the agreement is drawn, and the question of the land being under the Torrens system or the old system that it is impossible to satisfactorily answer the question without knowing the exact circumstances of the case.

3. C is entitled to a house worth \$1,500, or to an equity of \$1,500 in a house. The only thing that D can do if C does not pay up is to sue, recover judgment and exercise the remedy by way of execution and judgment summons or other proceedings to which he is entitled under the Manitoba Statutes. A promissory note in Manitoba is good for six years from its due date.

TRADE NOTES

THE SUIT-CASE THAT TRAVELLED 'ROUND THE WORLD

Anybody can buy the labels of the big hotels of every country nowadays, and decorate their travelling bags to impress people with the fact that they are great would-be travellers. But when you see a case, which has earned its decoration through world-wide travel, it is something of a curiosity, and it becomes intensely interesting to trace through its labels the progress of its journey from city to city and country to country. This suit-case started from San Francisco, bound for Japan.

After a world-tour, embracing a year-and-a-half, this famous suit-case now sets its face towards home and embarks for New York on the steamship Caronia, thus encircling the globe on its mysterious mission.

• But what was its mission? What were the contents of this case? Well, the case contained Genasco Ready Roofing, on an expedition to sample the nations of the earth. This illustrates the great field that its makers have dared to anticipate for this wonderful roofing made of Trinidad Lake Asphalt. And the field is big because Genasco is adapted to roofs in every part of the world. It is not affected by extremes of temperature nor sudden changes, and it, therefore, doesn't crack, break, rot, or leak. Genasco is made by the Barber Asphalt Paving Company, Philadelphia, whose more than a quarter-century's experience with Trinidad Lake Asphalt, the weather resister from which Genasco is made, is sufficient guarantee that the roofing lasts, yet this company strengthens it with a written guarantee, and throws the weight of its thirty-two-million-dollar organization against it.

A roofing that stands the test of world-wide weather conditions will surely withstand any kind of weather we have at home, and prove a source of economy and lasting satisfaction.