

Farmer's Advocate and Home Journal

WESTERN CANADA'S AGRICULTURAL WEEKLY

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

Vol. XLVI

WINNIPEG, CANADA, MAY 25, 1910

No. 922

WHY THE CAPITAL GETS 999/1000 OF ALL THE CREAM!

In order to realize just why The Capital Cream Separator gets more cream from a given quality of milk than any other type of separator anywhere—why its loss of butter-fat is less than one-fifth the average loss of machines of all other makes—one has only to study the wonderful wing-cylinder skimming device of The Capital, as against the comparatively crude mechanisms of other types.

This wonderful wing-cylinder is really a very simple affair when you come to look at it—so simple, in fact, that the only wonder is it was not invented long ago. It is merely a number of curved wings of thin, tough steel, all heavily tinned and with all the flanges locked to one central ring.

Think of the simplicity of washing it!

Now, there are two important things to remember about this wing-cylinder: first, that it gets 999/1000 of all the butter-fat; second, that after the butter-fat is once extracted, it is never re-mixed with the skim.

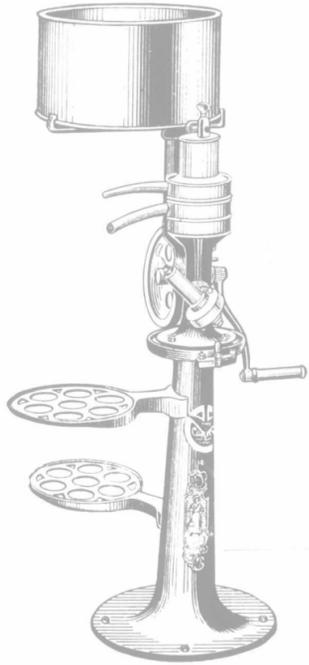
The way The Capital gets all the butter-fat is this: As the whole milk enters the revolving bowl, it is instantly whirled between the wings in a perfect multitude of exceedingly thin films; centrifugal force at once sends the lighter contents of the milk—the cream or butter-fat—to the

upper edges of the wings, whence it is led direct to the point of exit; the heavier skim milk, freed of all the butter-fat that any process can get out of it, falls, naturally, to the wings' lower edges, flows thence to the bowl's wall, and from there travels in a straight line to the discharge spout.

Notice how directly both the cream and the skim leave the machine as soon as they are separated. The whole process is complete in one, single operation—a statement that can be made only of The Capital Cream Separator. This statement can be made of no hollow-bowl machine—of no machine that uses perforated cones, regardless of their size or number. There is no re-mixing and re-separating with The Capital.

What this means in labor is easy to calculate—just as it is easy to understand the cream it saves. The difference in favor of The Capital is the difference between a loss of 4 1/2 ounces of butter in every 500 lbs. of whole milk, and a loss of only 8-10 of one ounce in the same quantity of whole milk.

But this is only a single point about The Capital. There are other facts, fully as important, which we will be glad to tell you if you will only ask us. Will you WRITE us about it?



The above illustration shows the wing-cylinder Capital Cream Separator—the separator that gets 999/1000 of all the butter-fat.



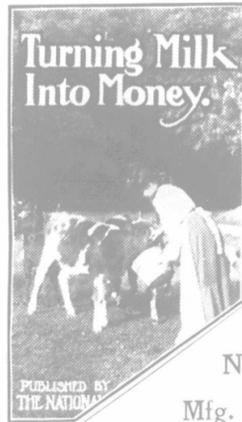
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EDMONTON, ALTA.; MONCTON, N.B.

THIS book, "Turning Milk Into Money," is worth money—stands for dollars in the pocket—to any man who is in the business of dairy farming for profit. The aim of this book is to point out to the intelligent dairyman the methods by which he can realize as high a percentage of profit as possible upon his fixed capital. The story of The Capital is told in the book, of course. But it is told only from the standpoint of increased revenue—in the light of helping to make your business a payer of greater dividends. We believe that if we can make more farmers realize how great are the profits of the dairying business, when it is worked right, that more farmers will go into dairy farming, and that we will have a wider market. And it is with the object of making the practical, level-headed man realize these facts, that "Turning Milk Into Money" was written. Do you want to read it?

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Sign your name and address to the coupon, address it to our branch nearest you, and send it in today. The book will go to you postage paid and without charge by return mail. Then when you get it go through it carefully, study its contents, page by page, and after you have read it put into execution the suggestions it offers. Do this and you will find it will help you in "Turning Milk Into Money." Don't put it off; fill out the coupon and send it now. Get your copy as soon as you can, for the edition is limited. Remember, this puts you under no obligation. If you are interested, we want to send you "Turning Milk Into Money."



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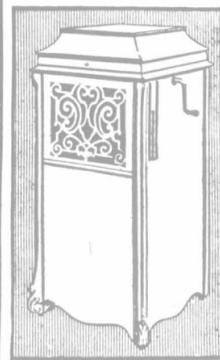
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EDITORIAL

Cleaning Up

Nothing is more objectionable about a farm than an evidence of slovenliness. It is, of course, practically impossible always to have things spick and span. The remnants of previous season's growth and the high winds of winter generally leave a conglomeration of dead weeds and grass and other rubbish lying about, and it is difficult to arrange for their disposal until the seed is well taken care of and general utilitarian operations attended to. But when gross neglect steps in and allows such foreign materials to accumulate year after year, the situation about the farm affected becomes deplorable. Such condition, too, generally is accompanied by dilapidated fences and ramshackle buildings.

Therefore, clean up and make repairs! As soon as work on the fields has been disposed of, a day around yards and fences can be spent to advantage. There will be much to burn and many nails to drive perhaps, but the satisfaction is worth the labor.

Ready Cash in Summer

Cash is needed on the farm at all times. The development of the creamery business and high prices for dairy products have brought to light a regular source of supply. Large creameries report that patrons in various parts of Manitoba send on an average twenty-five to fifty pounds of butter-fat per week. Payments are made by many of the concerns twice a month and the remittances range from \$15 to \$50 or more.

When the frugal housewife is the recipient of twenty or thirty dollars every couple of weeks there is little room for complaint regarding scarcity of cash. This, in addition to a few

eggs for purchases at the local store and a delivery or two of pigs to market, aids the farmer in financing and leaves the bulk of the grain crop as clear gain or to meet big payments on investment, buildings or machinery.

What the Cow Gives

Farmers who for years have made a respectable living out of grain growing are not liable to appreciate the returns that can be derived from a herd of cows of reasonable milking propensities. Intelligent dairymen have learned that it is possible to have cows that will average 5,000 pounds of milk or more for every twelve months. Many herds give double that quantity. But take a cow that produces only 4,000 pounds of milk in a year, that milk testing four per cent. This represents 160 pounds of butter-fat in a year. Prices vary greatly, but easily average over twenty cents per pound of butter-fat. At this low estimate the returns from one cow reach \$32 in a year, to pay the farmer for feed and care and the labor incident to turning the product into cash.

The labor problem is the stickler. However, where it is possible to find help to milk the cow, separate the cream from the milk and ship the cream there is no doubt about direct profits. In addition skim milk is on hand to rear strong calves for feeders, or to feed pigs or poultry. It gives opportunity to provide manure and to grow grasses to supply fibre for the fields and avoid soil drifting.

Value of Demonstration

THE FARMER'S ADVOCATE always has supported the idea of practical demonstration in impressing the advisability of improved methods in connection with agricultural operations and incident increased returns. The average farmer who has been making a comfortable living seems to refuse to change his methods, unless something definite is in view to show that a slight change will do much to give bigger profits.

A little over a year ago *The Farmer's Advocate and Home Magazine*, of London, Ont., rented a three acre orchard a few miles out of that city and proceeded throughout the season of 1909 to demonstrate to farmers in the locality that it would pay to practice modern and more thorough methods in handling the trees and the land on which the purpose was to produce apples. Although the rental was high, and spraying outfit and other equipment had to be purchased and all labor hired, the net profit was so encouraging that a second orchard has been secured for 1910. The object is to handle these orchards according to expert advice for three years or more. The response by way of more and better fruit for the first season was most encouraging. Farmers throughout the district have become

interested, and are following the example of *The Farmer's Advocate* in caring for their orchards as though they wanted to encourage the trees to give something worth while.

As yet the Canadian West is practically without recognized demonstration farms, but there are progressive and prosperous farmers in every locality whose advice can well be accepted and whose methods are worth following.

Investigating the Swine Industry

The department of agriculture for Saskatchewan is investigating conditions in the swine industry in the province, and the article published in another column of this issue summarizes results up to date. It would seem that the status of the industry in Saskatchewan is very nearly what it is assumed to be in most parts of the West. Farmers, despite the high prices being paid for hogs, do not seem over anxious to embark in the business, and apparently prefer the considered easier business of cereal raising to the hazardous undertaking of trying to produce pork at 10½ cents per pound live weight—as if there was much risk or prospect of risk in raising hogs at present prices or at the prices live pork seems likely to sell at for some time to come.

The department, however, is showing commendable progress in investigating the various phases of agricultural development in the province, and the present work deals very completely with one important branch of animal husbandry. It is one of the chief functions of departments of agriculture to gather, compile and publish such information as this report contains, and the sooner some others of the provincial departments in the West become obsessed with the idea that something resembling actual service to agriculture is required of them, the better it will be for the interests they are supposed to represent. Let some light be shed on some phase of agriculture in Manitoba. The industry can stand it.

The Pasture Land

Much of the disappointment from pastured areas is due to careless or thoughtless handling. As the prairies become settled, it is out of the question to depend on open prairie in many sections of the West. Cultivated grasses and in some instances clovers have been sown, and the live stock is kept within fences the same as in older countries.

In some cases damage was done last fall by too bare pasturing late in the season. But, again, in the spring there is a tendency to rush the stock to grass. While a feed or grass is relished by stock and is beneficial to their systems, it is disastrous to a grass or clover field to allow it to be pastured off before it has become well started. The wiser plan is to

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keep all stock off the pasture land until there is something worth while there.

Later in the season, too, there is danger of damage by pasturing so close that it requires weeks to have the crop again make a start. Many farmers now have two or more pasture areas and change the stock from one to the other at regular and frequent intervals, whether the grass is done or not. Moreover, they also provide some fodder crop, such as corn, rape, millet or late sown grains to meet requirements late in the season when pasture lands have dried up.

Canadian Wheat and Flour Exports

Exports of wheat and flour, the produce of Canada, have increased very greatly since 1900. Beginning in 1900 with a value of \$14,787,373, representing 20,365,392 bushels of wheat, which includes flour expressed in terms of bushels of wheat, these exports have increased with a fair measure of regularity, until, in the fiscal year ending March 31st, 1909, they amounted to a value of \$56,139,355 from 57,103,457 bushels of wheat (flour included) exported. This is the highest mark yet reached, both in bushels and value. It will be noticed that values have increased more than bushels, on account of rise in prices. While the number of bushels exported increased to nearly threefold, the value was almost four times as great in 1909 as in 1900.

A small percentage of these exports is sent to the United States. A considerably larger proportion usually goes to other countries not including Great Britain, but Great Britain receives, on the average, nearly 90 per cent. of the whole.

North Dakota Demonstration Farms

The Red River Valley in North Dakota was settled in the late seventies and early eighties. It was almost immediately put under the plow. The harvests were very abundant, the average yield of wheat being between 25 and 30 bushels per acre, and 40 bushels was quite common, even on large areas. During the first ten or fifteen years all the farmers had to do was to seed wheat in the spring, cut it at harvest and prepare the land for another crop of wheat. But as time went on many weed pests were introduced, such as yellow mustard, French weed, Canada

thistle, sow thistle, wild oats and quack grass. The fungus diseases which cause smut, rust, root blight, etc., became more prevalent each year.

These enemies of the wheat plant were reducing the yield from year to year until 1905, when the average wheat yield in the Red River Valley was not more than half what it had been when the land was first cropped. The United States Government Experiment Station had been running at Fargo since 1891, and had accumulated some very valuable data on how to keep up wheat yields, eradicate weeds and increase soil fertility. Many of the farmers of the state were making use of this information and some of them were growing as large crops of wheat as they did when the land was first broken up. But such farmers were the rare exception, as the great majority of farmers were still using the single crop system with less and less profit as time went on.

In order to remedy these conditions in the older sections and to prevent their occurrence in the newer sections of the state, the authorities of the Government Experiment Station determined to establish a system of demonstration farms that would embrace every county in the state.

Six of these farms were established in the spring of 1906 in as many different counties. The wheat crops produced on these farms that season were considerably above the average of the surrounding farms. The farmers in the vicinity of each demonstration farm watched these experiments very closely, and they were very quick to copy methods that were to their advantage. Each year the crops on these farms became much better; the past season the wheat yields on the original six farms averaged over 26 bushels of wheat per acre, and no field fell below 20 bushels per acre. Only the best pedigreed seed wheat, oats, flax and barley are seeded upon these farms. The following year the manager of each farm seeds his own farm with the seed grown upon the demonstration farm plots. His neighbors from far and near want some of this seed for their own farms, as they can readily see it is pure and superior to scrub varieties so generally grown. In this way each demonstration farm rapidly causes the farmers in its vicinity to quit growing scrub grains and grow the best pedigreed varieties instead.

The eradication of weeds is a vital problem in nearly all sections, and this is taken in hand on these farms. Land that is infested with annual weeds, such as yellow mustard, French weed, pigweed, sunflowers, false flax, shepherd's purse, etc., is harrowed frequently in the spring to start all these weed seeds that is possible. Later applications of the harrow kill the young plants that have germinated. After the grain is up the weeder is used at intervals of seven to ten days,

destroys nearly all the weeds that have previously germinated and causes still others to germinate. In two or three years, fields that are badly infested with such weeds as yellow mustard, French weed and shepherd's purse have become practically free from these pests by this method alone, but particularly if what few plants escape this treatment are pulled before they go to seed. When the farmers in the vicinity of a demonstration farm see such simple methods as these so practical they immediately begin applying them to their own farms.

Wild oats are not planted in any seed and all that are in land are prevented from going to seed in such crops as corn, winter rye and late barley. These crops are followed one after another, and as wild oats seed will not stay in the ground more than three years without being destroyed, this pest is readily controlled by this means. Canada and sow thistles are cut in a hay crop (generally oats and peas), when in blossom about July 30. The land is then immediately plowed and all thistles are kept below the surface of the soil for a month by means of frequent cultivation. About September 1 winter rye is sown at the rate of 1½ bushels per acre. The next year the rye is cut in mid-July, when thistles as have survived the former year's adverse treatment are again at their weakest. The land is immediately plowed and no green shoots are allowed above the surface of the ground during the remainder of the season. By these means practically all these pests are destroyed and a paying crop is produced each season. These methods of eradicating wild oats, Canada thistles and sow thistles are also very quickly taken up by the farmers who see such methods worked successfully.

In the new sections of the country the new settlers have to learn many things, as the agricultural methods are generally quite different from what they have left behind. The new country always has a great many new problems for the settler to solve, such as the best time and depth to break the sod, the best crops to seed and the rate to seed per acre. The new settler wants to know the best methods of conserving soil moisture in his fields—on this alone may mean his ultimate success or failure. He wants to know what forage crops, such as alfalfa, corn, clover, brome grass and timothy will do well. As a rule, he has but little money, little experience, and a large family to support, so he cannot make these experiments for himself. The state, by means of demonstration farms, can answer all these questions for the new settler in such a way he cannot fail to understand the answer.

The local papers always like to receive and print any material on their demonstration farms. If this is well written up and contains practical suggestions for farmers in the community which have been worked out by the experiment stations, it places such facts where they will do the most good, as few farmers fail to read their local papers.

The first six demonstration farms established in North Dakota have proved so practical in bettering farming conditions generally, that the number has been increased to twenty-one, and several more are being put in operation this spring.

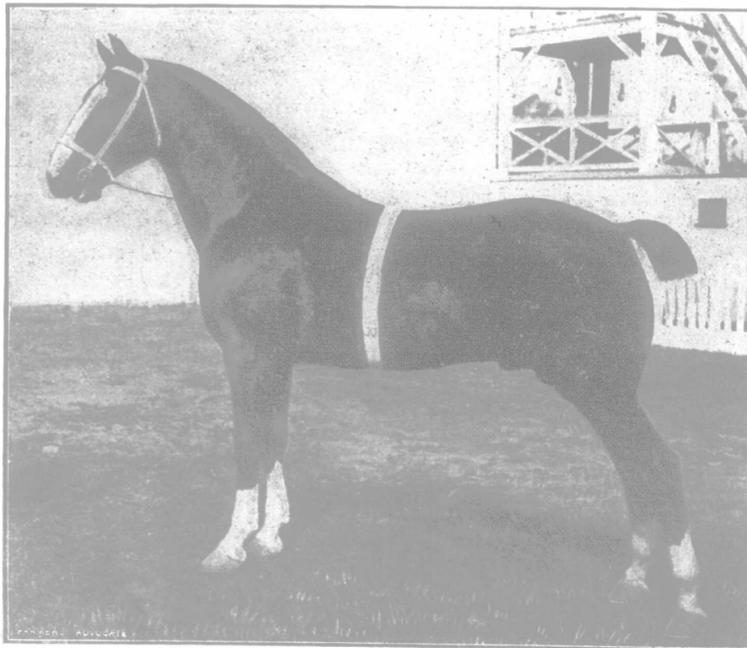
W. R. PORTER,
Superintendent.

* * *

A new collar should lie in water till thoroughly soaked before it is put on, and then it will shape itself to the shoulder. Where changing from pads to naked collars, it might be well to change during the slack time so that the shoulder may toughen before getting sore. A collar should always be hard, never soft.

* * *

An officer of the Royal College of Veterinary Surgeons says it is easy to tell a horse's character by the shape of his nose. If the profile has a gentle curve, and at the same time the ears are pointed and sensitive, the animal may be depended on as being gentle, and at the same time high spirited. On the other hand, if the horse has a dent in the middle of his nose it is safe to set him down as treacherous and vicious. A horse with a slight concavity in the profile will be easily scared and need coaxing, while one that droops his ears is apt to be both lazy and vicious.



CHAMPION HACKNEY IN ONTARIO—AT REST.

HORSE

Observations on Horse Subjects

We notice in THE FARMER'S ADVOCATE of May 18 that our old friend, "Scotland Yet," is harshly critical of the department of agriculture, Ottawa, in recognizing the Imperial Hunter studbook, which he characterizes as a "studbook upstart" and not to be taken seriously. "Scotland Yet's" displeasure arises, we surmise, not so much because "a gentleman in a remote town in the south of England" has succeeded in establishing a studbook for this useful breed of horses, as it does from the fact that those in charge of live stock registration in this country, or rather the Clydesdale Association of Canada, have not seen eye to eye with him and his confreres in the matter of accepting for registration the get of certain Clydesdale sires, that, for reasons which need not be entered into here, but which the Clydesdale Association of this country considered sufficient, were not deemed eligible for registration in the Clydesdale studbooks of the Dominion. And for this reason he makes this report excuse for going a little out of his way to take a crack at his Canadian friends for being "superlatively strict" about one thing and careless in another. We were not aware, until we read "Scotland Yet's" remarks in the matter, that the Ottawa authorities had decided to "recognize" as purebred animals recorded in the particular studbook to which he refers. However, if they have, we cannot see that any great harm will result from it, providing the book in question is not an entirely private affair, something to be confounded with the studbooks which certain American importers of French horses have made up to accommodate the animals they bring over.

It is questionable whether any useful end would be served in making a distinct breed of the hunter. It is doubtful if foundation stock for such a breed could be secured which could be depended on to reproduce the type and qualities required in the hunter. And yet there seems no reason why horses of hunter type should not be as easily bred as horses of draft type, harness type, or any of the other distinct types into which the equine family has been divided. They are a class of horse for which good demand exists in England, and when a man succeeds in raising a well made horse with a back that won't break when he is sent over the jumps with a weight up of 175 pounds or so, with legs that will stand the strain the animal is put to in cross country work—jumping hedges and ditches, going over soft ground, up hill and down, and keeping up a galloping pace for miles at a stretch—when he produces a horse of the type quality and stamina to do this, he has an animal that is worth some money, in England or any part of the world where horse flesh for riding purposes has any particular value.

Hunters usually are the get of Thoroughbred sires. It is generally agreed that Thoroughbred blood is required to give stamina, staying power and ambition, without which the hunter would be no better than the cab horse. Hence a usual practice in breeding hunters is to cross a mare that is herself a good hunter, with a Thoroughbred stallion. But the results of such matings have not shown that consistency in type can be expected in the offspring. Such a mare is usually a crossbred herself, or may have in her the blood of several different breeds; she may foal a hunter, but she is just as apt to foal something else. It is strongly probable that the offspring of such breeding will be a "weed." So hunters usually are "misfit" Thoroughbreds, and thus far the chances of getting enough saddle horses of this type in the ordinary course of breeding for speed purposes have been long enough to supply requirements, that and the "misfits" that result from other courses of breeding.

It is difficult to see how much uniformity can be expected in hunters as a breed. The foundation stock such breeds start from have not the

quality of reproducing their own characteristics, and while it would be reasonable to suppose that after several generations of careful selection a hunter horse that would reproduce itself with some uniformity might be developed, it seems as reasonable that a sufficient number of equally as good horses could be produced in the manner in which hunters are now ordinarily bred. But then, something of the same criticism might have been offered when some individuals were laying the foundations of the various and distinct breeds of horses which now exist. A breed cannot start pure and reproduce itself uniformly true to type from the first. That character has to be developed, and perhaps when several generations of purebred hunters have been reared we shall have a breed that will reproduce hunter qualities as uniformly as the Clyde or Shire reproduce draft qualities, or the other breeds the particular types or characteristics for which they have been developed. The Irish have had a stud book for hunters for some time.

EQUITANT.

Opportunities in Veterinary Profession

EDITOR FARMER'S ADVOCATE:

Equitant's letters are interesting, but I should like to point out a few things with reference to the veterinary profession, of which he seems to be an admirer and regarding which he is perhaps too optimistic. It is extremely doubtful if the country veterinarian approaches anywhere near the country lawyer or medico in income from his profession, and besides for years, unless in exceptional cases, he has not had the same social position. Veterinarians in good circumstances in Western Canada have made what money they have outside the profession. Further, it is well known that veterinary bills are hard to collect, and this fact is doubtless one reason for many veterinary surgeons hankering after government employment. The regular stated salary has its advantages, even though that salary to begin with does not quite equal that paid to postmen in Western cities (postmen are paid \$65 per month, and uniform) to begin with and are required to be able to read and write; veterinary inspectors start at \$75 per month, have to be graduates of a three-year professional school and pass a stiff civil service examination. The postman can in course of time work up to \$1,100 a year; the veterinary inspector may go up to \$1,200-\$1,500, so that the prospect is not quite so alluring as Equitant believes. If in the meat inspection service the hours are long, passed in surroundings not the most pleasant or ideal; if in the field, the inspector has it rougher than the private practitioner, longer drives, is often-times obliged to put up for the night in vermin-infested premises; further, marriage in the veterinary civil service is frowned upon, although it is well known that the married man is steadier, more sober and reliable than his single confrere; further, Canada needs homes and population. The reference to the United States veterinary schools is not quite fair, and the impression given, erroneous; Canada at no time possessed and does not yet possess, veterinary

schools to rank with those of the universities of Pennsylvania, New York and Iowa. Further, the veterinary profession, where organized in the Dominion, has almost invariably forced the man applying for a license to practice, to take a third year at college, generally at Chicago—an attitude which has been of great service both to the public and the graduate who intends making a living by practice. Again I do not believe McGill has re-opened her veterinary college doors, which were shut some years ago. The Toronto school has undergone re-organization, is now under the aegis of the provincial university, but it is yet too soon to say whether she will turn out men with sufficient clinical knowledge, as to render it unnecessary for them to go to Chicago or elsewhere. I sincerely trust that the course at Toronto will be strengthened in that respect, for at the present time Canada has, to all intents and purposes, two veterinary schools only—one English at Toronto, one French at Laval. Yet, for all, if a farmer's son wishes a profession other than agriculture and is not afraid of hard work, then the veterinary field is open to him, and undoubtedly affords great opportunities, in the conservation of the health of his fellowmen and of domestic animals, but he need not expect to win a competence.

PRACTITIONER.

STOCK

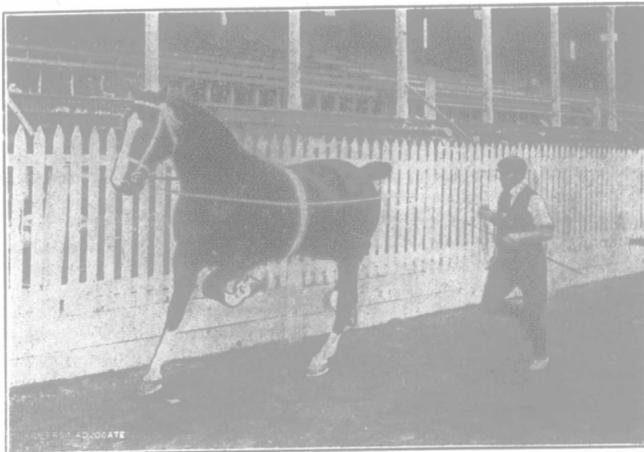
Western Livestock Breeders

The Western Livestock Growers' Association held their annual meeting at Medicine Hat on May 12. The wane of the cattle industry of the West was the main topic of discussion before the meeting, and various opinions were expressed as to what action the ranchers and stockmen should take. The following resolution was unanimously passed:

That this association desires once again to place itself on record that it considers it absolutely necessary in order to safeguard what remains of the cattle-raising industry, that the tenure of grazing leases shall be made more permanent; that when a grazing lease is granted it shall not be liable to cancellation at the will of the minister of the interior. We would recommend that grazing leases shall be made for at least a period of ten years, and that when once granted they shall be permanent for the said period, existing leases to be brought under similar conditions.

The following officers were elected for the year: President, Walter Huckvale, Medicine Hat; first vice-president, George Lane, Pekisko; second vice-president, A. E. Cross, Calgary; executive committee, P. Burns and W. R. Hull, Calgary; Howell Harris and A. J. McLean, Lethbridge; H. Eckford and J. S. Brown, High River; J. Lineham, A. P. Day and W. A. Taylor, Medicine Hat; E. H. Mansell, Macleod; H. M. Hatfield, Pincher Creek; A. B. McDonald and G. Pemberton, Willow Creek; A. J. Day and D. J. Wylie, Maple Creek.

The number of sheep in Great Britain last year was 27,618,419, the highest total since 1882. The number of sheep has increased rapidly in recent years, and for the present supply exceeds demand, with consequent low price. The number of horses in Great Britain is said to be 11,552,993, an increase of 7,322 over 1908. A gratifying feature is that in agricultural horses the number is the largest on record. Cattle were also in record numbers, at 7,020,982. Pigs numbered 2,380,887, a decrease of 15.7 per cent. since 1908.



HACKNEY STALLION IN ACTION.

ENQUIRY INTO THE HOG-RAISING INDUSTRY

DURING the month of April, 1910, the department of agriculture for Saskatchewan conducted by mail an enquiry into the hog-raising industry in the province. Several hundreds of men whom the statistical records of the department showed to have been keeping upwards of twenty hogs last summer were written to and a large number of replies were received. The objects of the enquiry are set forth in the six questions asked. They will be discussed separately and a summary given of the replies received to each.

Question 1.—Is the tendency of the farmers of your district to go into hog-raising or to go out of it?

Out of every twenty farmers replying to the circular between seven and eight thought there was a tendency upon the part of their neighbors to go into hog-raising; ten—or half the number—were equally confident that in their district farmers were inclined to go out of the business, while three out of every twenty thought there was no change in the local situation in this respect. One man phrased his reply: "The tendency around here is to stay out." As Saskatchewan has not up to the present time acquired prominence as a hog-producing province, perhaps this reply was quite apt. If the number of districts where the industry is normal, therefore, is added to that of districts inclined to further restrict production, the conclusion arrived at will be that in only one district out of every three in the province as a whole is there any marked tendency to increase the number of hogs kept upon the farms. As all the men addressed were themselves keeping a fairly large number of hogs, it may reasonably be inferred that they were quite in touch with the local situation and competent to speak with reference to it.

No particular area or portion of the province can be named as taking a greater interest in hog-raising than it formerly did. It was noticed that a large number of the districts in which hog-raising is being more extensively engaged in are either now or adjacent to new districts. This would in itself account for increased enquiry for hogs. In other cases conflicting reports come from the same district. One man thinks his neighbors are going into, while another is equally confident that they are going out of hog-raising. In such a case the conclusion would be justified that the movement is not very marked in either direction. Upon the whole, in summing up the present tendency in this matter throughout the province, as reflected in these reports, there is small ground for the belief that any marked additional interest is being taken in the possibilities of hog-raising by the farmers of Saskatchewan as a body.

Question 2.—Have the farmers of your district any confidence prices for hogs will remain for a year or more as high, or nearly as high, as they are at present?

Out of every ten farmers answering this question, six thought the feeling in their district was that prices would remain satisfactory and profitable for at least one year; three thought the feeling was that they would not; while one had no opinion to offer on the question. Evidently, then, it is not fear of a slump in prices alone that is keeping men from raising more hogs, for about half the men stating that fewer hogs were being kept in their districts also state that they and their neighbors have confidence in the outlook for good prices.

Question 3.—Have an undue number of old brood sows been sold from your district since prices reached their present level?

Many of the answers to this question were not very definite. In many of the districts so few hogs of any kind are kept, that if an "undue" number of sows were disposed of there would be absolutely none left. In such districts the number of sows kept is an average of one per farm. About three out of every five replying thought that no undue or unusual number of old sows had been disposed of. On the other hand, two

out of five thought that the number of sows had been much reduced. Several hinted at "a clean sweep" and "everything in sight sold." No great dependence could be placed upon any conclusions that might be drawn from the answers received to this question.

Question 4.—Are you or your neighbors withholding many young sows from market with the idea of making brood sows of them?

It would naturally be expected that there would be substantial agreement and harmony between the answers to this question and those to question No. 1, and such was actually the case. If it was properly understood and answered carefully, the answers received to this question should give a fair indication as to the prospects before the industry in the immediate future.

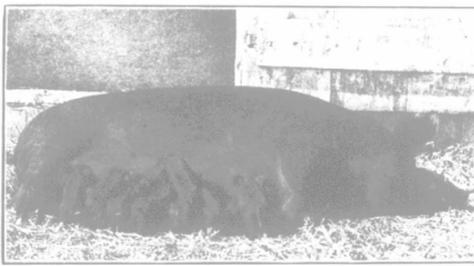


FINE TYPE OF BROOD SOW

Looked at in this way it must be admitted that there is no ground for supposing that there will be any marked increase in hog production in Saskatchewan within a year. Fully two-thirds of those replying were of the opinion that in their district no more young sows than usual were being withheld from market. Many stated that such were almost impossible to get.

Question 5.—Are any boars that are not purebred used by yourself or in your district?

There was more agreement in the replies received to this question than in those received to any of the four preceding it. Practically all those replying were agreed that the purebred boar is greatly in the minority. In some districts there are none but grade and scrub boars; in a few there are none but purebred. But in



GIVING THE MONEY-MAKERS A START IN LIFE

the great majority of districts there are one or two purebreds and a number of grades or scrubs. Nearly all the farmers heard from (it must be remembered that these are the leading hog-raisers of their respective districts) either keep and use, or obtain the use of a purebred boar, but they admit that they are exceptions to the general rule—which rule appears to be that any boar is good enough.

Question 6.—Is anything being done by yourself or neighbors to provide a summer pasture or supply of cheap succulent feed for your hogs? We refer to feed such as rape, clover, alfalfa, fall rye, or peas and oats.

The replies received to this question form the most gratifying feature of the whole enquiry. From them it is evident that many men are

awake to the advantages to be secured from the providing of a summer pasture for their hogs. Almost without exception the men reporting stated that they are doing something along this line. Some claim that the practice is comparatively general throughout their district; others assert that it has not been common in the past, but that many are intending to take the matter up this season. There can be no doubt but that the heaven is at work in this matter, and that the day is rapidly passing when the farmers of this province will attempt to keep hogs in any number during the summer months without making some adequate provision for a summer pasture or other supply of cheap succulent feed for them. It will only require a demonstration for a few years upon the part of a few of the leading hog-raisers in each district, of the reduction in work required and the increase in profits which follow such a system to cause it to be more generally adopted.

Rape appears to be most commonly grown. More than half of those replying reported it as among their crops. Many had wild native pastures fenced in and fed their hogs each day rape and roots. Many others had a pasture of mixed grains such as oats and barley. Still others are trying alfalfa in this connection. Brome grass, too, has its advocates as a hog pasture.

A few extracts from the replies received to this question will be of interest as indicating the wide variety (for a new country) of methods that are being tried for the production of cheap and succulent feed for hogs in the summer time: Weyburn—"Rape is grown more or less every year in the district; also some alfalfa. I am seeding two separate pastures this spring, one to alfalfa, and one to brome grass." Regina—"I have 12 acres brome grass and timothy and have had ever since I came here. No man can raise hogs successfully without pasture." Glen Adelaide—"I have three acres fenced off for hog pasture which I seed down to green barley, rape and peas. It is the only pasture to my knowledge in Glen Adelaide." Garnock—"To a certain extent special pasture is being provided for pigs. Chiefly mixed grains, green oats and barley. I have a patch of alfalfa successfully grown without inoculation of seed or soil." Lumsden—"I grow rape and turnips and a few mangels." Saltcoats—"We have each year had pasture for our hogs, using grain for early pasture and rape for late pasture, and others are following our example." Tuxford—"I have been growing rape for the last five years and would not raise six hogs without it. I am trying a little alfalfa this year." Forget—"I sow rape for feed, and fence the hogs on a grass run. I throw them a few mangels once a day." Langbank—"I have fenced with wire a two-acre hog pasture, on which I raise rape and a mixture of grains as a pasture for the hogs all summer." Bradwell—"Last few years we grew rape; this year we are trying an experiment with pigweed, as the pigs ate it well last year, so we fenced a yard." Moffat—"I grow a patch of rape and turnips mixed and use the turnips when the rape is too dry, also barley and peas green. A few others grow rape, but no clover, alfalfa or rye in this immediate neighborhood." Drinkwater—"I use a pasture of brome grass, keeping it down to proper height. I find it the best for green feed, as it remains green the entire season."

Questions 5 and 6.—Indicate two of the lines along which the stimulating of the hog-raising industry in Saskatchewan must be pursued, so far as the producing end is concerned.

More men should be got to realize the necessity of using only the best breeding stock obtainable, and of following this up with the providing of feed supplies, which will insure in the pigs vigorous, healthy growth, at a comparatively low cost. The means of providing such feed supplies outlined or suggested in question No. 6, however, deal with only one source of supply. The other source—and one perhaps equally as important—is the farm dairy. Whatever may be possible

(Continued on page 791)

STRY

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Weaning the Pigs

If not properly managed weaning proves detrimental to both the sows and the pigs. Pigs begin to eat when four or five weeks old and it is always best to have them eating well before weaning. They can be fed to the best advantage in a creep, or small pen, away from the old sows. A good ration for small pigs before and after weaning consists of equal parts by weight of ground oats, free from hulls and wheat middlings. The addition of a little oil meal and salt will increase the feeding value and palatability of the mixture, which should be made into a slop by adding warm skim milk. Fresh feed, clean troughs and feeding floors, with comfortable quarters, will aid much in securing these results.

The young pigs should be fed at least three times a day, but not an excessive amount, and may be weaned at six weeks, but eight weeks is preferable. Many farmers allow pigs to run with their dams for 10 or 12 weeks, which is possible where only one litter is produced per year. It is good practice to allow a few of the smaller pigs to remain with the sows, when the larger ones are weaned, in order that the milk flow of the sows may be dried off gradually. If this is not convenient, the sows should be turned in with the pigs once a day for three or four days. This will obviate trouble with their udders.

Above all, young pigs should have abundance of exercise. Litters coming in the spring should be housed so that they can run out at will. Much of the loss in litters is due to the fact that the pigs do get out into the sunlight and onto the soil.

Mangels and Bladder Stone

EDITOR FARMER'S ADVOCATE:

The report of the Iowa Experiment Station concerning kidney and bladder stones, caused by the use of mangels and sugar beets fed to rams, published in your issue of May 11, is doubtless true, but that the use of these roots has the same effect when fed to ewes and cattle (suggested in this report) I very much doubt. Unquestionably mangels fed too liberally to rams will cause the trouble mentioned (and I have never known any cure for it when once the animal is attacked). On the other hand, I have never known ewes injured in the same way by their use. I have fed (years ago in the Old Country) large quantities of mangels to all kinds of sheep and cattle, and never experienced any trouble except with rams. And rams seldom become attacked under judicious management. The mistake occurs by the too liberal use of these roots, generally when forcing the animals for show or sale purposes. What makes me think that ewes are proof against attack is because I have repeatedly prepared both ewes and rams for exhibition, using mangels heavily in the daily rations, and never knew a case of the kind to occur with ewes, while rams under the same feeding are liable to be seized and die. The longer the roots are stored before using (although of greater feeding value) the more danger there is in heavy feeding, owing to the larger amount of saccharine matter they contain.

Sask.

FRANK SHEPHERD.

Note.—The report referred to above was from the Iowa Experiment Station, covering some experimental work carried on to determine whether or not the feeding of mangels caused kidney and bladder stones in stock. The results were not conclusive, in that rams only were used in the test. It has not been the experience of feeders in this country that feeding mangels is the cause of this disorder, either in sheep or cattle. Certainly the results of these tests do not warrant the conclusion suggested in the bulletin, of which the report referred to was a summary, that some risk is entailed in the feeding of these roots. Kidney and bladder stones are of rare occurrence anyway, and it would be as easy to prove they were due to several other feeds that might be named as it was to show in the manner shown by this test that they were due to the feeding of mangels. EDITOR.

FARM

Topics for Discussion

In recognition of the fact that valuable hints always are obtained from men engaged in actual farm work THE FARMER'S ADVOCATE has adopted the "Topics for Discussion" column, in order that our readers may see an open channel through which they may inform their brother farmers as to practices that are worth adopting and warn them against methods that prove unprofitable. Not only do we wish our readers to discuss the topics announced for the various issues, but also we desire that they suggest practical subjects on which it would be well to have discussion.

This notice appears under the "Farm" department, but the questions dealt with cover all branches of the farming industry. Letters should not exceed 600 words and should reach this office 10 days previous to the date of issue. They are read carefully and a first prize of \$3.00 and a second prize of \$2.00 awarded each week. Other letters used will be paid for at regular rates to contributors.

June 1.—*What advice have you to offer as to summer treatment of the summer fallow? Give specific instructions as to the use of plow, harrows, packer and other implements.*



A GOOD BUILDING LOOKS BETTER WHEN WELL PAINTED—IT ALSO LASTS LONGER. BARN ON FARM OF WM. CONNELL, NEAR NEEPAWA.

June 8.—*Give your opinion of satisfactory fencing for prairie Canada. Which do you prefer, ready-made rolls or wire stretched and braced as put up? Discuss size of posts, distance apart, bracing of corner posts and other particulars incident to good fencing.*

June 15.—*Give directions for handling a flock of hens in summer when it is necessary to close them in to avoid damage to crops.*

June 22.—*Describe how to build an implement shed. Particularize as to dimensions of a building to house the implements on an average sized farm; state where you would locate it, how you would build it, and what would be the probable cost.*

Painting Fences and Buildings

Paint is perhaps more generally in use on buildings in the Canadian West than it is in Eastern provinces of the Dominion. Those who have used it do not hesitate to say that it pays. When high grade material is used and properly applied when the weather is neither too hot nor too cold, there is no question about the wood on which the paint is applied lasting longer than similar unpainted surfaces. Then the question of general appearance must be considered. Read the letters following. Awards have been made as they stand.

Painted Buildings Increase Land Values

EDITOR FARMER'S ADVOCATE:

There can be no ground for disagreement as to the advisability of painting buildings, fences, walks, etc. Everyone who has given any thought to the matter will admit that it pays to paint, that it is advisable to paint not only buildings and other things constructed of wood and exposed to the weather, but metal work as well. The trouble, however, with most of us is that we don't do it. Painting is one thing that is neglected on the average farm. The house is painted generally, that is, if it is worth painting, but it is only rarely that it is repainted when the first coating has peeled off, so that it is no longer a protection to the wood.

Buildings should be painted as soon as they are constructed. The longer wood is left exposed, the more paint is required to cover it. Dry lumber, that has never been exposed to the weather, contains in the interstices between the cells in the wood, a gum-like protective material that is dried out or washed out after the wood has been for some time subject to the elements, and not only are the processes of decay facilitated, but paint is required to fill in these interstices, if painting is delayed for any period. Paint all structures of wood or metal as soon as they are put up.

For farm use the handiest paint is the ready mixed kind, which comes in cans or barrels, and

is specially mixed for particular uses. A good paint for outbuildings may be made from oxide of iron and raw linseed oil. I painted a barn with this mixture some years ago, and found it satisfactory in every way. Iron oxide, which is simply iron rust, may be purchased for a few cents a pound, and, mixed with the oil, makes a heavy red paint that is very enduring. Oil, however, these days is rather high priced. I am unable to state what the cost was of painting this barn, but I know that I have got my money back several times over in the saving of the building alone, not to mention the value added to my property by improved appearances. This is a point that should not be overlooked. If I had a farm for sale I would paint the buildings and everything about the place before offering it. The work might cost two hundred dollars or so, but I would risk getting three or four times that sum from the value resulting from improved appearances. The appearance of the buildings counts for a lot more than most men think in making a price for their farms. Land all looks pretty much alike. And the appearance of things about the place oftentimes is what moves the buyer to meet your price.

If a cheaper paint than the kinds above mentioned is required, whitewash, made up after the formula frequently published in THE FARMER'S ADVOCATE, will be found useful and satis-

factory. I have used it for years. It is made by slaking half a bushel of fresh lime with boiling water, using sufficient water to make the mixture of milk-like consistency. This is then strained through a fine sieve, and a peck of salt, previously dissolved in hot water, added. Boil three pounds of rice to a paste and stir it into the mixture, hot; dissolve a pound of glue and half a pound of Spanish whiting and stir in. To this add five gallons of hot water, stir up, cover and let stand for a few days. Heat the mixture before applying and put it on hot. One pint is supposed to cover a square yard of surface.

This paint does not soak into the wood as well as oil paint, and wears off more quickly, but it protects the timber while it is on, is easily made up, may be applied with a whitewash brush very quickly, and does nearly as well as regular paint. By using color, it may be made up to any tint.

Man.

J. M. G.

Advices Thorough Painting

EDITOR FARMER'S ADVOCATE :

Certainly it is advisable to paint fences and all buildings made of lumber. In my younger days I lived among Scotch people, whose aims were to save every cent. So bent were they on saving that they considered it unwise to spend anything beyond what was absolutely necessary. My father also looked after his money pretty well, but he always wanted to see things looking fine. Paint brushes and paint were in evidence at almost every season of the year. Perhaps time was, wasted in using the brush, but I noticed that in addition to having more desirable surroundings, the boards and scantlings, and even the fence posts, lasted longer than similar buildings and fences on neighboring farms that never saw paint. I was branded "a chip off the old block" because of my attachment to the paint brush. Eventually, I decided to serve apprenticeship as a painter.

A few years ago being attracted by cheap lands and a glowing future, I decided to come to the Canadian West and take up land. Of course, new buildings were needed, and almost before they were completed I was busy with my paint brush. Some say it does not pay, but it is a satisfaction to me to feel that I have things looking right. Perhaps on rough boards it scarcely pays for the time taken and the paint used. However, on smooth boards there is no room for question. It pays every time.

Never buy cheap paints, and if you prefer to mix your own paint be sure to get the best linseed oil available. I have seen buildings on which cheap paint was applied look worse after one season than if no painting had been done. A large proportion of white lead is desirable, but in this climate it is well also to add zinc oxide. The consistency must be changed according to the wood, painted hard woods requiring greatly reduced paints. Turpentine or some such substance must be used more freely in the first coat in order to secure penetration and avoid sealing. For general use perhaps one part of turpentine to ten of oil is sufficient.

However, reliable firms put up satisfactory paints at fair prices, and the average farmer does not care to bother with too much mixing.

He can, however, often save money and make a better job by a judicious use of oil or turpentine, according to the wood.

Nothing equals the old-fashioned way of putting on paint—the brush. For large areas I use a brush about four inches across. A large surface can be done in a day and done right. For whitewashing and applying thin paints, a spray pump can be used to advantage. When the object is simply to color a barn or shed of rough boards, the sprayer is satisfactory. For a good job intended to last 8, 10 or 12 years, give me a good brush.

Every farmer should paint. It adds to the value of the property and makes the place look like home. Never mind the cost per square yard. You get value for the outlay.

Sask.

H. O. HANSON.

How to Cure Meats

A reader writes to enquire for the best way to cure meats for use through the summer. We cannot do better than repeat instructions given by W. H. Moore, a Manitoba farmer, who disposes of all he can provide to Winnipeg trade at high prices. Mr. Moore wrote THE FARMER'S ADVOCATE as follows last fall :

Curing pork and beef on the farm is something that could be profitably done during the winter months by the mixed farmer. I say the mixed farmer, because he would be in a position to have the right kind of feed to make good pork—and, after all, it is the feed we use that makes the meat good or bad, from the barnyard chicken to the Christmas beef. We read a great deal about the long, lean bacon hog, but I would say here that in my experience of twenty-five years in raising pigs for selling alive, killing and curing, I was never asked by a buyer if my pigs were of the long, lean bacon type. If they were pigs and in proper condition for the knife that was all there was to it. I have raised several breeds of pigs and found them all to make the best of meat when fed the proper kind of food and killed at the right age. A pig fed on crushed barley and water, which is the usual feed in this country, will make an oily and rich dry meat, while the same pig fed on barley meal, boiled potatoes and a little skim milk would make considerably more pork at the same age, and the resulting meat would be of better quality—much milder, less oily and more juicy.

The pigs I kill for my own curing are from eight to eleven months old, but never over eleven months; and I always see that if they have not been fed on the above ration from the start they have it at least three weeks to a month before killing.

My process of cutting up a pig for curing is simple. First take off the head, then split the pig down the back, take out the ribs, cut off the hams and shoulders, which are cured in brine or pickle. The sides we make into what we call spiced rolls, made by rubbing in a mixture of sugar, spice, saltpetre and salt. When cured the sides are rolled tightly, bound with twine and smoked if desired. The head, feet and trimmings can all be used on the farm or sold if made into headcheese.

My curing room is part of the basement of my house. It is of concrete and is cool, airy and

light. My smoke house is a small frame building, eight feet square, without a floor. We have always been able to find ready sale in Winnipeg at good prices for all the cured pork we had to dispose of.

We do not do much in the way of curing beef, except for our own use, though we fatten and kill quite a number of cattle every winter, and dispose of the meat fresh. We sell some in the quarter, but frequently cut up a beef, send the best cuts into the city and sell to consumer. More of it we corn and use on the farm, and the very coarse pieces, such as neck, shanks, head, feet and offals of the beef we feed to our hens, and find it quite profitable to do so. Below are recipes for curing hams and shoulders, also spiced rolls of pork and corned beef.

Pickle Hams and Shoulders.—Make a brine strong enough to float an egg, and to each three gallons add one teaspoonful saltpetre and for each hundred pounds of meat allow 4 pounds brown sugar. The meat should be covered with the above mixture and should be stirred every two or three days. Small hams will cure in three weeks; large ones will require six.

Curing Spiced Rolls.—To four quarts salt add two tablespoonfuls each of ground allspice and cloves, one tablespoonful saltpetre and two cups brown sugar. This amount is to be rubbed in in two rubbings. The above is enough for four sides. Put the sides one on top of the other, rub and turn them every day for a week. Then leave for a week, when they will be ready to roll and tie, and smoke if desired.

Corned Beef.—Make a brine same as for hams and shoulders, but leave beef in brine for only two weeks.

Fence Post Observations

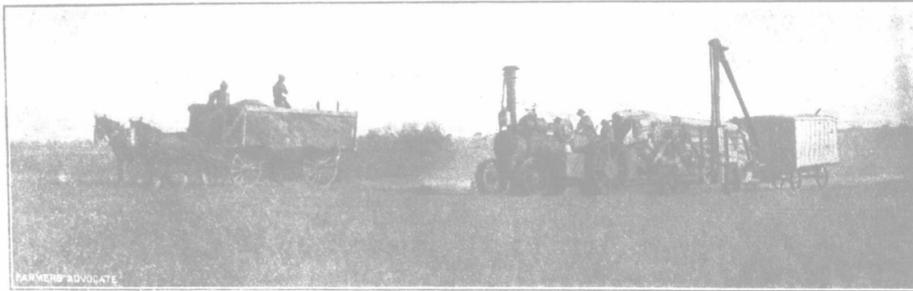
A Treherne subscriber gives his opinion on wooden fence posts and asks for experiences of others. We shall be pleased to have letters from others who have used posts or stakes and also any who have used paint or coal tar.

Experienced fence men generally seem to favor full-round posts with the bark off. A good coat of paint, reaching slightly below the ground surface, adds to the life of the post. It is well to have the top slanting or pointed so as to shed water. Coal tar or pitch also would serve as a preservative and would keep insects away. In some districts dirt is filled in around the post and tamped well to within six or eight inches of the surface. Then cement is filled in for the balance to afford protection to the post.

Subscriber's letter is as follows:

"I would like to get advice as to building a fence with cedar posts. Some claim that an unpeeled post lasts longer than a peeled one, but I think otherwise. A post seldom rots off down in the ground. It rots at the part where the air and water come together at the level of the ground, and in taking up old fences we always find the post solid underneath. Even poplar or oak or balm will be solid there, although they are cut to a point and driven down. I may not be right, but I wish someone who has tested it to let it be known, not for my benefit alone, but for the help of others.

"I have never tried cedar posts, but I think that a good green cut and peeled cedar post, with post holes either dug or bored to take the full size of the post, will last as long or longer than an unpeeled one, as there is not the chance for moisture and dust and dirt to gather around them to decay them. Besides when unpeeled posts are put in the worms work under the bark and cause decay and also the bark falls off and makes a good fire trap to burn the post in case of prairie fire, while peeled posts are clean and add a great deal to the appearance of a place. I think that a peeled post, painted or daubed with coal tar or pitch, about one foot around the post before being set in place just at and below the ground line, will outlast any unpeeled or any post of any wooden material. I wish some interested one to answer this coal tar or pitch question. It would not cost much compared with buying new posts and building a new fence."



THE HORSES MOVE THE WAGON BUT THE BIG TRACTOR HAULS THE SEPARATOR AND CABOOSE.

Crust Under the Mulch

Gradually farmers of the Canadian West are appreciating the advisability of surface cultivation to keep a mulch of loose soil that will avoid excessive loss of moisture. In many instances, however, little attention is paid to the crust that forms under this mulch. Writing in *Dry Farming Congress Bulletin* recently E. R. Parsons has the following:

Every dry year some one asks: What can we do when a crust forms under the mulch? Nothing can prevent this crust forming if the drouth lasts long enough. The top inch of the mulch dries first, then the second, then the third, and then the inevitable crust begins to form underneath and becomes thicker and thicker with every day of drouth.

We cannot break up this crust without destroying the crop, but we can render this crust perfectly harmless by the right kind of plowing, and that is all that is necessary. The formation of this crust depends on two different factors, the drouth above and the moisture conditions below.

People sometimes talk and write in magazines about the dry farmer making a cistern for moisture and putting the lid on and so forth, as if he had all the water he could handle, but the fact of the matter is we can wet up our land by conserving moisture to a certain percentage to a certain limit only, which is determined by the capillarity of the soil in question, and above that limit, which is more or less constant, it is impossible to raise it, as long as there is a dry subsoil below, which is the true condition of the dry farm soil. What I mean is this: when a storm comes the water goes down by capillarity or gravity, or both combined, until it is too diffused to go any further; capillarity ceases for the time being until another storm comes and starts it again; then it goes down again until it stops for lack of water. Now, if we make a test of this soil for moisture a day or so after a storm, when capillarity has ceased working, we find we have no more moisture in the soil than we had before. The percentage is the same, but it has gone down further. We are obtaining a greater depth of moist ground.

Some farmers plow shallow, owing to a misconception of this action of moisture. They expect the moisture to rise by capillarity to moisten their crust and hold the drouth at bay, when capillarity is already exhausted by the downward pull of gravity.

After making several hundred tests in all varieties of soil during the last 30 years I have been unwillingly forced to the inevitable conclusion that capillarity, as a help to the dry farmer in bringing up moisture from the subsoil to the roots of his crops, is a negligible quantity on true dry farm land that is not sub-irrigated. We all know, however, that capillarity works very strongly sometimes for a few days on the top three or four inches after wet weather, before the moisture has diffused downward, and we can make use of this knowledge for seed germination, by using the press drill, which will draw the moisture to the packed seed rows, without packing and baking the whole field.

DEEP PLOWING

Since the moisture does not rise to moisten our crust except very slightly by distillation, it is clear that the best thing we can do is to go down after the moisture. The only way to do this is to plow deeply, not any six or seven inches, but eight, nine, ten or twelve inches.

Supposing a man plows six or seven inches, his mulch, which should be about three inches, becomes dry; then the inevitable crust forms, one or two inches thick. How much will he have left for his crop? About one inch. Is it any wonder the crop dries out? On the other hand, if he plows 10 to 12 inches deep, he will have six inches of soil left for his crop before coming to the hardpan. After six or eight weeks' drouth this crop will have as much dirt to grow on as the shallow plower gives his crops at the start.

Packing or rolling increases the conductivity, but reduces the moisture holding capacity of land for water, and promotes the formation of a crust in clay soils. Every inch the drouth creeps downward into our soil the longer it takes

to dry out the succeeding inch; the top inch may dry out in a few days, but it takes months to dry out the fifth inch, therefore, with even 10-inch plowing, we have a very good chance to weather any drouth that comes.

There are few things so unpopular with the farmers of the West as deep plowing. Fair results are often obtained by shallow plowing during wet seasons, for the reason that whether a man takes care of his land or not, if there is sufficient rainfall to soak the subsoil the roots of a crop do not stop at the bottom of the furrow, but go on down into the moist solid dirt underneath. But even in a wet season, like last year in Montana, for instance, deep plowing always pays. The greatest crop of dry raised potatoes I ever heard of was raised by N. E. Holden, of Dillon, Montana, who follows deep plowing methods—230 bushels to the acre on 75 acres, bringing him in a profit of \$5,000 to \$7,000 on potatoes alone for the second year of working the soil; the quality also was excellent, as the first premium for display and varieties at the International Dry Farming Exposition will attest.

The solution of this often recurring and much talked of problem is simply this: Plow deep and let the crust form; it can hurt nothing and nobody but him who plows too shallow.

The Weeder for Conserving Moisture and Eradicating Weeds

For light soils there is no better implement to use than the weeder for forming a surface mulch after the grain is up, and for cutting off many of the annual weeds before they have made serious headway. The weeder is a machine that has a long, slightly curved spring tooth, the lower six inches is round, about three-eighths of an inch in diameter, and pointed. These teeth are generally carried in three rows on a rigid steel frame, which is carried on a light truck. Two horses will easily handle a 12-foot machine and go over 25 to 30 acres in a day. The teeth can be set so that they can be pressed in three to four inches deep. This machine should be run over the grain fields after the grain is up and set so as to form a good dust mulch and at the same time not injure the grain roots.

Such cultivation causes the seeds of kinghead, pigweed, buckwheat, pigeon grass, French weed and mustard to germinate more freely and the later use of these implements kills the young plants. The very worst infested fields of mustard can be cleaned in three or four years, if these machines are thoroughly used and the few plants that escape are pulled by hand when in blossom. At the same time the land will yield much better crops, due to the firming of the subsoil, and the dust blanket formed, which thoroughly conserves the soil moisture for the use of the growing crops. The liberal use of these machines saves soil moisture for the crop in two ways—it prevents surface evaporation by means of the dust mulch and it destroys vast numbers of weeds before they are large enough to draw upon the supply

of soil water, which is so necessary to have in order to secure a maximum crop.

W. R. PORTER,
Superintendent North Dakota Demonstration Farms.

Reasons for Summer-Fallowing

EDITOR FARMER'S ADVOCATE:

We summer-fallow for more than cultivation purposes. The facility for cultivation found in the summer-fallow is only half its value. The more important half is in giving the land a rest, a rest from growths of every kind for one whole season. Land which has been cropped continually year after year becomes burdened with a mixture of half decayed material—stubble, roots, etc. While under a crop all its resources are employed upon that growing crop and decay is almost at a standstill. To get this partly decayed material into a proper state of usefulness, when it will impregnate the soil and build up its fertility, the work of decomposition must be assisted to its utmost extent. *This is best done through the modern method of summer-fallowing.* Thus all growths are prevented and the desired work is assisted by cultivation, which mixes the soil, retains the moisture and exposes the soil to the action of the sunlight, air and heat. In working a summer-fallow we are but to assist the forces of nature to their work. And the bare fallow is the only way we may do this without hindrance. In consideration of this I cannot see how we can do without the summer-fallow.

A proper summer-fallow should begin early in the spring, or if possible in the fall of the previous year by disking or plowing, and continue until late in the fall. A system of cultivation at regular intervals should be persistently carried on. Farmers complain of summer-fallowing as being time wasted and yet they do not even make full use of this time! Two months, or perhaps a good deal less, in mid-summer, the driest time of the year, is all their summer-fallow will ever see of them, and then once plowing and a stroke or two of the harrows is deemed all that is necessary. Instead of utilizing time and energy to their fullest extent they limit them to a few weeks.

Summer-fallowing rightly should commence with the taking off of the last crop and continue till the next is in the ground. Why not? What profit is there in having your land idle for any length of time? Bear in mind a properly worked summer-fallow is not idle. The more thorough is the cultivation the more thorough is the soil decomposition. And decomposition is just as essential as is growth construction. The two cannot be carried on at the same time without greatly interfering each with the other's work, and without greatly exhausting the resources of the soil. Thus if we are looking for the best conditions to produce a crop we must have the crop preceded by a summer-fallow.

Farmers would be better off with more frequent summer-fallowing. The longer the land is crop-



FINE BARN BUILT BY EDWIN DIXON OF LEMBERG DISTRICT ABOUT EIGHT YEARS AGO. THE TREES, MOST OF WHICH ARE MAPLES, WERE PLANTED ABOUT THE SAME TIME.

ped the longer has decomposition been retarded, and the more undecayed material has there been accumulated within the soil. Then no thorough system of cultivation can be followed for fear the land is made too "rich" by a too rapid decay, and is caused to produce too great a growth on the succeeding year.

Summer-fallow your land more frequently, when there is less undecayed matter and less accumulated "strength" within the soil and you may without fear cultivate your fallow most thoroughly and reap to the full the benefits of all that your land contains. There would then be a more continuous use of the soil's fertility, as there would be no great amount of partly decayed matter lying "dead" and unused.

I believe that if we were to summer-fallow every third or fourth year we would not have such heavy crops of straw as are found after less frequent summer-fallowing. And we should by a system of constant cultivation germinate and kill every foreign growth in the field; also by the same process we should be enabled to bring every particle of substance in the soil to a condition where it would be of use. There would be less waste, and more constant and effectual employment of the soil's resources; consequently, there would be greater crop returns.

However, if anybody is looking for a system which comes nearest to removing the summer-fallow without serious effects, I will give them what we would consider the best. The rotation is to cover a period of eight years, so that the summer-fallow if used would come only once in that time. If the summer-fallow is to be carried on at all regularly that would be the outside limit.

The yearly rotation would be followed thus: (1) Summer-fallow, (2) wheat, (3) barley, (4) wheat, (5) hay, (6) pasture, (7) wheat, (8) oats.

The first year might be turned from summer-fallow to a crop of corn, roots or any other fodder, or to pasture; though that would necessitate keeping a great number of stock. If the field were well worked I think it would stand some such crop and still produce as heavy a yield, with less straw, on the following year. No two crops of wheat follow in consecutive order, and all crops are so arranged that they ought to average well.

Man.

J. E. SLATER.

Electric Power on the Farm

Agnes C. Laut, a Canadian contributor to some of the leading magazines, has a recent article in *Collier's*, in which she deals with one of the vast and urgent problems of the day. By way of preface, she refers to the problem of help upon the farm as one of the most pressing and expensive at present. Wages have risen enormously, and even at what are considered high wages neither sufficient nor efficient help can be secured. And so profits are lowered, and hours of labor lengthened, and this, according to the writer, tends to make the farm less attractive and to accentuate the trouble by tempting the boy and girl to still further lessen the farm force and go where hours are shorter. This, of course, is a very gloomy picture, and not a true one, but there is some force in it, and it is so drawn in order to emphasize the brighter side, the possibility of help from electric power. We smile at the suggestion, yet we must admit that most of the conveniences we at present enjoy were thought impossible at first.

Water-power is the cheapest form of energy in the world. "Harness me," calls the brook, "and I will do your work." Steam-power has had its day, and electric energy from water-power will drive the wheels in days to come. It is pointed out that water-power costs nothing, once it is started working. The dam and the dynamo, the belt and the wire, are the harness, and the only things that cost. Hitch the brook to the washing machine, the churn, the fanning mill, the cutting box, the thresher and the pump! Light the house and the stables and the lane with a glow direct from the sun!

Making allowances for exaggeration, and for the fact that those conditions, where brooks are

plentiful, are in mind, there is probably a prophecy in the article. Electricity may be a source of farm power in coming days, though scarcely likely from the harnessing of small brooks by individual users. To instal a water-wheel and dynamo on a brook to furnish light for farm buildings is an expensive proposition, and makes the light cost very dear. With present conveniences for utilizing water-power in the form of electricity, such a proposition is by experts regarded as impracticable. Prof. Wm. H. Day, of Guelph, advises us that he has figured on the proposition two or three times, always with the same conclusion. When a large number of farms can be supplied from one generating outfit, it is a different proposition. Not from brooks in all parts, but from the power lines being stretched in so many directions, or from some as yet unthought-of sources, will the energy be probably tapped.

A much-needed warning is hinted at in a few sentences pointing out how the water-powers of the continent are being secured by capitalists. "When the big capitalists of a country secretly get out after a thing, it is worth getting, and the big capitalists are out after water-power." Canada has immense water-powers, mostly unalienated. These should not be allowed to be gobbled up by corporations. Their value is but beginning to be realized. They are a part of the people's heritage and should be held for the people's benefit.

DAIRY

Feeding Dairy Calves

"Young calves need whole milk for the first few days," says Prof. D. H. Otis, of the Agricultural Experiment Station of the University of Wisconsin in a recent bulletin. "Skim milk is a cheap feed for calves, but should be fed carefully in limited quantities and only while it is warm and sweet. The best skim milk is that which is fresh from the separator and still warm.

"Experiments show that it is only one-fourth as expensive to raise a calf on skim milk as on whole milk. Two pounds of grain with the proper amount of skim milk equals in feeding value one pound of butter-fat. Buttermilk properly handled may profitably be fed to calves.

"The grain for calves should be fed first while the calf is quite small, with a little bran to aid the calf in learning to eat. High-priced concentrates are unnecessary, and give no better results than oats and bran, ground barley, etc., when fed in proper combinations.

"The roughage for calves should first be fed at two or three weeks of age when the calf begins

to eat grain. Good clean hay, either timothy, blue grass, clover or alfalfa may be used. Corn silage is an excellent calf feed when fed in moderate amounts. Good pasture is an essential after four to six months.

"The management of the calf during the first year has much to do with its later usefulness. Plenty of water and salt should be given in clean vessels. Sudden changes of diet should be avoided and regularity in feeding should be practiced. Warm, dry quarters should always be provided in damp weather. Plenty of roughage should be given, and not too much grain, so as to develop a large capacity for handling food, as is desirable in dairy animals."

Renovated Butter and Oleomargarine

As showing the extent of the business of renovating butter across the line, note these figures from the *New York Produce Review*, which observes that the March output of renovated butter in the Chicago district was somewhat larger than during any month since December. The total production for the past four months was as follows:

Month of March	1,750,052 lbs.
Month of February	1,142,900 lbs.
Month of January	1,651,752 lbs.
Month of December	1,995,600 lbs.

At the same time there was a larger output of oleomargarine in that district during March than in the previous month, the consumption of oleo in some sections of the country being heavy. During the past six months, October to March, the output of oleo in the Chicago district was 54,137,382 pounds of colored, and 1,474,700 pounds uncolored, or a total of 55,612,082 pounds oleomargarine.

* * *

Prof. Hecker, of Minnesota, an international authority on dairying, estimates the feeding value of a ton of fodder corn at \$4.90, as compared with a ton of timothy hay at \$6.00.

* * *

At this season of the year we receive many inquiries asking for the causes of stringy milk. The cause of this trouble is due to the swallowing of small germs while drinking out of stagnant pools of water. A few days after the germs are swallowed it will be noticed that the cow's milk is curdy and stringy looking and comes out in jerks when milking. This will be noticed for a few days, and then the animal will apparently get all right for a week or so, when it will come on again. If it is caused from drinking out of low springs or pools or stagnant water. Keep the cows away from the water by fencing it off. The main thing is to correct the cause. Give 2 drams or 1 teaspoon of bisulphide of soda in a mash at night. This will soon make the milk all right and the trouble will not come back again if the drinking water is all right.



GUERNSEY COW, GOLDEN CHERRY, FIRST IN INSPECTION CLASS AT LONDON DAIRY SHOW.

FIELD NOTES

Fine Cattle at Binscarth

One of the finest lot of fat cattle ever prepared for market in one stable in Manitoba is made up of about thirty head fed by Freeman Rice, of the Binscarth district. These animals have been well fed during the winter in a modern stable, where everything is convenient and nothing is wasted. The bunch are in fine shape, and go to market this week. Mr. Rice is another Westerner who believes that it pays to feed stock, because he understands his job and realizes that it pays to finish the animal before selling.

Elevator Commission Named

The Manitoba government have announced the personnel of the elevator commission, which is to administer the government elevator system in the province: D. W. McCuaig, Portage la Prairie, president of the Manitoba Grain Growers' Association, is chairman. The other members are: W. C. Graham, Winnipeg, manager of the Farmers' Mutual Hail Insurance Company, and F. B. MacLennan, Winnipeg, grain commission merchant. Mr. McCuaig is well known in all parts of the province, having been connected with the grain growers' movement since its inception and president for six years. Mr. Graham was secretary of the Patrons of Industry in the halcyon days of that order in Manitoba. Mr. MacLennan has been in the grain business all his life, and has had wide experience in the grain trade. The commission is expected to get to work immediately.

Saskatchewan Elevator Commission Meets

The first meeting of the commission appointed by the Saskatchewan government to gather evidence in respect to the present elevator system and grain shipping facilities in the province, was held at Moose Jaw last week, where plans were made for the prosecution of inquiries into these matters in the various parts of the province. The personnel of the commission are Professor Magill, Dalhousie University, Nova Scotia; Geo. Langley, M. L. A., Maymont, Sask., and F. W. Green, Moose Jaw, secretary Saskatchewan Grain Growers' Association.

At Thursday's session, E. A. Partridge gave some interesting evidence as to what in his opinion would furnish ideal conditions for marketing grain. He opposed anything less than a government-owned system, and said that mere government regulation was ineffective. Professor Magill gave Mr. Partridge a vigorous examination on public and private ownership. The latter admitted it would be difficult to avoid pecuniary loss on the start, but he considered there was a strong general feeling among the people for public ownership. The professor hinted that his ideas were rather socialistic. Mr. Partridge agreed to furnish figures and estimates as to details of the scheme proposed by the Saskatchewan Grain Growers' Association, of which he is a director.

Provincial Good Roads

Gradually the Manitoba Good Roads Association is asserting itself along lines that are sure to result in an improved condition of rural highways in the province. At a meeting of the executive and municipal representatives in Winnipeg on Wednesday of last week, it was decided to make a special effort to show municipalities in all parts of Manitoba the advisability of becoming members of this young organization. In order to further impress upon the people of the province the need for better roads, an attempt will be made to have A. W. Campbell, who until recently was the leader in the good roads movement in Ontario, come to Winnipeg during the industrial exhibition to deliver an address. This function it is hoped will take the form of a huge provincial good roads convention.

A general discussion on the construction and maintenance of satisfactory roads was entered into with enthusiasm. Captain Smith, reeve of St. Paul's, said that in making roads the tendency was to make them too narrow. Near a city 22 feet should be the limit. In rural parts, far removed from town or city, 18 feet was advocated. He also pointed out that it was necessary to have thorough drainage and culverts that are large enough to carry away the biggest flood. Reeve Chapman, of Assiniboia, opined that a good clay road was superior to gravel roads such as he had seen. The former was good during dry weather, while the latter was not suitable for fast driving with light vehicles at any time. In reply Reeve Henderson, of Kildonan, said this statement with regard to gravel roads held good only for the first year or two. When a gravel road was carefully built and properly looked after it was almost as good as asphalt the third year.

The new commissioner of highways, A. McGillivray, gave an outline of his plans to be used in an endeavor to work out an improved system of road construction.

He stated that with a money supply any number of miles of good roads could be built. In some parts of the province, however, it was difficult to get suitable material. He suggested that the association approach the railway authorities with a view to getting a reduced rate on broken stone, gravel and other materials. The railways always were anxious to assist in providing good roads.

The commissioner is preparing bulletins and pamphlets on road-making and repairing, and these will be distributed to members of municipal councils and others who apply. In the near future he hopes to build one mile of model road to serve as an object lesson.

Arrangements are being made for a demonstration in road-making near Manitoba Agricultural College next month, when the provincial weed inspectors are in the city for a short course. Teams are to be provided by the college, and the board of control of Winnipeg have instructed Street Commissioner Tallman to provide the necessary road machinery.

Secretary Bentley was instructed to write to clerks of all municipalities, giving particulars of the work to be carried on and enclosing a copy of the constitution. All are requested to forward the membership fee (not less than \$20 per municipality) at once. Winnipeg has shown a practical interest in the organization by making her membership donation \$200.

COMPETITION WITH DRAG

Arrangements have been completed for the split-log drag competition, made possible by donations of \$100 each from Wm. Harvey and THE FARMER'S ADVOCATE. Entries include the municipalities of Rosser, Assiniboia, Springfield and St. Andrews. The competition is confined to June, July and August. Individuals in each municipality entered will have charge of one mile of leading highway, and they are allowed \$15 each to recoup them for the time and labor. Municipalities supply the drags. Three prizes of \$25, \$15 and \$10 are offered in each of the four municipalities. Judges appointed are A. McGillivray, S. R. Henderson, W. F. Tallman and R. D. Waugh. Three inspections will be made, one before June 1, one during the competition and the final on or about September 1.

Falsifying Pedigrees

A case of importance to stock breeders all over Canada has recently come before the courts in Alberta. S. R. English was charged and found guilty of falsifying a pedigree or pedigrees, contrary to the provisions of section 14 of the Dominion Live Stock Pedigree Act, in the police court at Strathcona, Alberta. A fine of \$100.00 and costs, which will run up to probably \$300.00, was imposed. The evidence disclosed that in May, 1908, the accused brought from the Winter Fair at Calgary three of his young Shorthorn bulls which he had not disposed of there, sold one at Vegreville on his return and turned the other two out on his range with his stock bull and his purebred females. During the period that these young pulls were said to have run with the herd, some seven or eight purebred cows were served, conceived and subsequently had calves, which were registered on application of the accused. All were registered as the progeny of his chief stock bull, Cracker. The accused denied this in part, and said that only one of the young bulls had run out, and that he had only registered the calves where he had seen Cracker serve the dam, and where there was any doubt about the service he had not recorded the calves. The court, however, preferred the statements of the witnesses for the prosecution, and held that such careless methods had been adopted by English that it was impossible for him to say with the requisite certainty what the breeding of these calves was, and in the face of this impossibility having made a declaration that they were all sired by "Cracker" constituted an offence under the Act.

Peter White, Esq., K. C., of Pembroke, Ont., was present at the trial on behalf of the Dominion Shorthorn Breeders' Association.

We understand Mr. English has appealed.

Dairy Special Train

Arrangements are being made by the authorities at Manitoba Agricultural College to send dairy special trains by C. P. R. and C. N. R. lines during June, to give advice and demonstrations along dairy lines. A passenger coach, from one end of which the seats will be removed to give space for the use of churns, butterworkers and other necessary equipment, and a refrigerator car for storing supplies, will form the special. Prof. J. W. Mitchell, head of the dairy department at the college, and his assistants will be in charge of the work.

The railway companies have lent every possible aid in perfecting arrangements that will aid this important industry in the province. On June 6 a start will be made on the Canadian Northern line, running on the Miami branch as far as Hartney. On June 13 the special will go on the Deloraine branch of the Canadian Pacific, returning from Napinka by the Souris line.

Saskatchewan Crop

The Saskatchewan department of agriculture, through its statistical and crop-reporting service, has completed its estimate of the acreage sown to wheat and oats in the province this year. The estimated increase in acreage sown to wheat is 557,000 acres, or 13.6 per cent. This compares with an increase last year of 381,000 acres or 10.3 per cent.

The estimated acreage sown to oats shows a decrease of 137,000 acres, or 6 per cent. In 1909 there was an increase of acreage sown to oats of 467,000 acres, or 26.3 per cent. There is a widespread tendency this year to neglect oats in favor of flax, wheat and barley. This movement is almost entirely a reflection of the prices that have been obtainable for the various grains during the past six or eight months. Other causes tending to a decrease of oats acreage are the early spring and the presence in many districts of large surplus supplies of oats of the crops of 1909.

Ninety-three per cent. of the wheat crop acreage, or 4,317,000 acres, was sown prior to May 1st this year. In 1909 only 62 per cent. was sown prior to May 10th. Of the acreage sown to oats, 45.5 per cent., or 956,000 acres, was sown prior to May 1st, 1910. In 1909 only 11 per cent. of the oats acreage was sown by May 10th. One acre in every 20 of the area sown to wheat was sown in March. The acreage estimated to have been sown in March is 257,000, or 5.5 per cent. of the whole.

The dates upon which seeding of wheat and oats was general this year were April 12 and April 26, respectively. These compare with May 3 and May 11, respectively, last year, and April 20, the average date by which wheat seeding has been general during the past 12 seasons. The above figures are compiled from the returns of a staff of 1,600 farmer crop correspondents.

Canadian Pacific stock has shown marked advances lately, and has been selling as high as \$195.00 per share for shares of one hundred dollars par value. Rumor has it that the company will shortly increase its capital stock, allotting the new stock to shareholders pro rata to the shares now held. This and expected increase in dividends is the cause of the sudden strengthening in the stock.

A deputation consisting of Colonels McCrae and McCrae, A. W. Smith, M.P., and John Campbell, waited on the Dominion government last week to ask that a duty of five cents per pound be placed on wool coming into Canada. The government made no definite answer to the request of the deputation, the probability being that they will adhere to the stand taken some time ago that increased duties on wool will be followed by requests for increased protection from the woolen manufacturers and that the sum total of results from increasing the wool duties will be to increase the cost of woolen goods to the consumer, while the wool raiser will only benefit to a limited extent and the manufacturer be placed in a position to unduly enhance the price of goods.



MODEST BARN AND PART OF STOCK BELONGING TO MICHAEL CSVERSKO OF THE MOUNTAIN ROAD DISTRICT.

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Extending Agricultural Service at Ottawa

The department of agriculture at Ottawa is administered on a more or less conservative basis. That is to say, lines of advancement are cautiously and safely pursued. Each year a small number of new acts and amendments to old ones are put through by parliament, and each session the vote for carrying on the work of the department is a little larger than that of the year before. The following table shows the amount of the vote sanctioned by parliament for the present year, and the increase for the present year.

	1909-10	1901-11	Compared with Est. of 1909-10 Increase
Experimental farms	\$ 98,000	\$110,000	\$12,000
Experimental farms, towards establishment and maintenance of additional branch stations	30,000	75,000	45,000
Printing and distributing reports and bulletins of farms	8,000	10,000	2,000
Exhibitions	75,000	100,000	25,000
For renewing and improving Canadian exhibit at Imperial Institute, London, and assisting in the maintenance thereof	8,000	8,000	.....
Grant to Dominion exhibition	.....	50,000	50,000
Grant to P. E. Island Exhibition	.....	10,000	10,000
Fumigation stations	5,000	5,000	.....
For the development of the dairying and fruit industries, and the improvement and transportation of, the sale and trade in, food and other agricultural products	90,000	100,000	10,000
Towards the encouragement of the establishment of cold-storage warehouses for the better preservation and handling of perishable food products	75,000	75,000	.....
For experiments in cold storage for fruit	7,000	7,000	.....
To encourage production and use of superior seeds, and for the enforcement of Seed Control Act	49,000	50,000	1,000
For the development of the live-stock industry	52,000	52,000	.....
Health of animals	250,000	250,000	.....
For the administration and enforcement of the meat and canned foods act	110,000	120,000	10,000
To encourage the production and sale of Canadian tobacco	5,000	5,000	.....
Contribution towards maintenance of, and expenses of representative at International Institute of Agriculture	10,000	10,000	.....

MORE BRANCH EXPERIMENTAL FARMS

The \$12,000 increase for experimental farms is needed for the carrying on of four additional farms, established a short time ago, at Lacombe and Lethbridge, Alberta; Rossland, B. C., and Charlotte-town, P. E. Island.

An item of considerable importance is that for the establishment and maintenance of additional branch experimental farms. Hon. Mr. Fisher has for some time been considering this question, and has decided that the varying character of the soil and conditions in the different provinces demand a considerable extension to the present farm system. In the House, Mr. Fisher stated that he had in mind some half dozen new farms, distributed from east to west. Already, one has been located at Scott, Sask., on the Grand Trunk Pacific, north of Moosomin. He mentioned that one or two farms may be established in the dry belt of British Columbia, in perhaps the Counties of Kootenay and Okanagan. Then, again, Vancouver Island is likely to have a farm; also Northern Manitoba, Northern Quebec, and Western New Brunswick. The locations for these, it is understood, have not been decided upon. The farm at Scott is now being broken, and ordinary farm buildings will be put up this summer, including a dwelling-house, granary and horse stable. It is not the intention to do much, if any, work with live stock at these farms, but to carry out experiments and demonstrations in the cultivation of the soil and the growing of grain crops.

EXHIBITION GRANTS

Displays at the great national and world's exhibitions have been found to give excellent returns in advertising Canada for industrial and immigration purposes. This year two great fairs are receiving attention, at Brussels, Belgium and the Festival of Empire, at London. Then it will be observed that the Canadian exhibit at the Imperial Institute, in London, is to be renewed and improved. It is hoped to make this a standing, fresh and telling advertisement of the resources of the Dominion.

Last year no Dominion Exhibition was held. This year St. John, N. B., is to receive the usual vote of \$50,000 towards the prize list and the providing of necessary increased accommodation. Prince Edward Island, in not expecting to hold a Dominion Exhibition, is taking advantage of the big show at St. John by asking a grant of \$10,000, so as to attract exhibits across the Straits. This is a repetition of what was done the year of the Dominion Exhibition at Halifax.

The government has five stations for fumigating nursery stock entering Canada. These are situated at Nelson and Vancouver, B. C., Windsor and Niagara Falls, Ont., and St. John, N. B. It is to carry on these that \$5,000 are required.

TO DEVELOP DAIRY AND FRUIT INDUSTRIES

An additional \$10,000, it will be observed, is provided for the development of the dairy and fruit industries, and the transportation of food products. This is for a general expansion of the work of the branch of the dairy and cold storage commissioner. Additional fruit inspectors will be employed at various points in British Columbia, Ontario and the Maritime Provinces. These men, when not inspecting fruit, are engaged in lecturing and giving demonstrations in spraying, pruning and other orchard work. A cheese inspector will be placed at Halifax for a portion of the season, to inspect Island and other Maritime cheese for export. Heretofore, a cheese inspector at Montreal only was employed.

Plans are being made to carry out experiments in creamery working various parts of the country. The

ice-cheese-car service will be put on two weeks earlier than usual, commencing June 20th. It will be continued for eleven weeks. The ice-butter-car and the ice-fruit-car services will be the same as last year. The amount available for bonusing cold storages for food products is the same as last year. Last year only some \$25,000 were taken up for this work.

The items for experiments in cold storage for fruit stand the same. This work includes the storing of apples in approved cold storage and in ordinary storage cellars, and the shipping of the fruit to distant markets. Shipments are made in the winter, early spring and late spring. Most shipments the past season went to Great Britain, but some to Calgary. The cold storages used are located at London, Ont.; Montreal, Que., and St. John, N. B.

SEED CONTROL ACT AMENDED

The seed commissioner commands an extra thousand dollars for his general work, which is taken advantage of by a very large number of farmers and others to determine the vitality of seeds of various kinds. One-quarter of this vote is applied to seed fairs and field competitions. The inspection of seeds exposed for sale in connection with the administration of the Seed Control Act is having a marked influence upon the cleanliness and vitality of seeds sold throughout Canada.

An amendment to the Seed Control Act was passed during the session. Its main feature is the provision of a standard of germination of seeds that may be lawfully sold. The amendment requires that the seeds of cereals, grasses, clovers, forage plants, field root and garden vegetables offered for sale must be capable of germinating in the proportion of at least two-thirds of the percentage standard recognized for good seed of the kind. Receptacles holding seed possessing a lower standard of germination must be so marked.

The amendment also provides a classification for alfalfa seed in relation to purity, the same as was previously given for timothy, red clover, alsike seed. Certain additional noxious weed seeds are also listed amongst those previously named.

LIVE STOCK AND VETERINARY WORK

The vote for the live stock branch remains the same as last year. This includes a grant of some \$7,000 towards the work of the National Live Stock Records. As heretofore, grants will be made towards winter fairs, co-operative provincial auction sales of purebred stock, and expert judges and lecturers will be supplied for fairs and series of agricultural meetings throughout the Dominion, more especially where the live-stock industry shows a tendency to lag behind. It is probable also, as last year, special attention will be given to the improvement of the sheep industry. The work of the official testing of purebred cows for the record of performance is extending and expanding, and is now going on in every province except Manitoba and Saskatchewan.

It requires a quarter of a million dollars to finance the branch of the veterinary director-general for the fighting of contagious diseases, and nearly half that much to administer the Meat and Canned Foods Act. In the former branch, in addition to the salaries and expenses of a large staff of inspectors, large sums of money are needed to compensate for animals destroyed, such as horses for glanders, and swine for cholera. The experience of the last few years leads to the conclusion that these diseases are being greatly reduced in Canada. The policy of testing horses for glanders at the United States boundary, and the tracing and destruction of affected animals in Canada, instituted by Dr. Rutherford, is year by year reducing the amount of money paid for compensation. As

pointed out by the minister to the house, only some \$40,000 was paid last year for compensation, as against nearly \$200,000 the first year compensation was paid.

An amendment was made to the Meat and Canned Foods Act. It is of a verbal character, and does not affect the principle of the bill. Game is added to the list of animals to which the bill applies. The act applies to some goods which have never been in what is technically called an establishment. The amendment, therefore, does away with the words defining an establishment. The act permits the slaughter and the sale of animals by farmers without inspection, and this called for wording which would define clearly what constitutes a farmer. The following definition was then incorporated in the amendment: "A farmer is a person whose recognized occupation is that of farming, and who slaughters only such animals as are fed by him on his own premises."

GLASSWARE MUST BE TESTED

An act, to be administered by the dairy and cold storage commissioner, to provide for the testing of glassware used in connection with milk tests, was passed. It provides for the sale and use for testing milk and cream of only such test bottles, pipettes, measuring glasses, as have been tested for accuracy and marked in a per cent. scale. It prohibits marking these glasses that have not been officially tested. The act will probably not come into force before January 1st, 1911, in order to give dealers time to get rid of present stock, and secure fresh, properly tested and marked supplies.

A bill which has attracted much attention throughout the country, and which is said by some to be likely to injure certain branches of the horse breeding industry, after a long fight, passed the two houses of parliament. The bill, as first prepared, was considered by the majority too drastic, and was defeated. A compromise measure was brought on, and passed with little discussion.

The Destructive Insect and Pest Act is a measure introduced by Hon. Sydney Fisher, and sanctioned by parliament, authorizing the governor-in-council to make prohibitory regulations in relation to importations or sale, inspection, treatment, destruction of plants, vegetable matter or packages, granting compensation not to exceed two-thirds the value; confiscation, appointment of officers, and providing penalties for contraventions. Previously, the operations of the act which this one supplants were confined largely to the preventing of the introduction of San Jose scale. It is now more general, and covers the Brown-tail and Gypsy moths.

Events of the Week

A Chinese loan of thirty million dollars for railway construction was successfully negotiated last week. Great Britain, France, Germany and the United States are providing the loan, which will be used in building railways in China.

* * *

The Canadian Pacific Railway have contracted for large extensions to their irrigated area in the Calgary district. A contract was let last week for five and a quarter millions dollars, which calls for the removal of some 28,000,000 cubic yards of soil and will provide irrigation for some 540,000 acres.

* * *

The United States government have taken steps looking to the negotiation of a trade treaty with Canada, and have invited tariff negotiations between the two countries at the earliest time agreeable to the Dominion. It is not expected that the Dominion government will be in a position to consider tariff proposals earlier than next September. The United States are anxious to secure more favorable treatment on wood pulp and pulp wood, and desire some understanding with regard to the killing of seals.

* * *

Halley's comet passed between the earth and sun on May 18, and astronomers are still trying to figure whether or not anything happened when the earth brushed through the tail. Reports from foreign observatories indicate that satisfactory observations of the phenomena were made and photographs secured of the nucleus of the comet as it crossed the sun's face, but little was seen in this country. Up to Monday the comet has been something of a disappointment, conditions not being favorable in this part of the world for observing this famous celestial wanderer.

* * *

Friday was observed as a holiday in all the British dominions. The King's funeral in London was carried out with all the pomp and solemn pageantry that accompanies the burial of monarchs. Emperors and kings from a number of European countries marched in the procession to St. George Chapel, where the body was interred, and the representatives from all the nations of the world took part in the obsequies. Canada was represented by High Commissioner Lord Strathcona and members of the Dominion cabinet now in England. Theodore Roosevelt and the American ambassador to England represented the United States. London was thronged with European royalty, and the funeral procession through the streets of the metropolis was one of the most impressive pageants that has been witnessed in England.

OUR WEEKLY MARKET REVIEW

Grain markets have been declining almost steadily since last report. Wheat is under bombardment of bear influence which threatens to send values for this cereal still lower. Livestock markets are steady.

GRAIN

Wheat markets opened under conditions that had a tendency to weaken the situation. Rams had been general in Western Canada and the spring wheat country of the United States; world's shipments were two million bushels over the previous week, the increase due almost entirely to the increase in Russian shipments foreshadowed last week.

VISIBLE SUPPLY.

Canadian—	Last week.	Previous week	Last year.
Wheat	7,134,895	7,142,911	6,756,464
Oats	6,403,230	6,652,944	3,427,382
Barley	1,303,538	949,770	433,761
Port Arthur	2,623,704	2,057,755	227,051
Meaford	2,555,102	2,598,610	431,606
Midland, Tiffin	24,597	8,602	13,227
Collingwood	506,779	511,967	10,438
Owen Sound	19,551	1,529	59,902
Goderich	131,000	156,000	23,000
Sarnia, Pt. Ed.	71,742	157,558	37,411
Pt. Colborne	66,886	94,809	12,017
Kingston	200,000	70,000	14,000
Montreal	81,000	251,000	70,000
Quebec	827,534	438,400	402,036
	27,000	57,000	2,100

AMERICAN VISIBLE.

	Last week	Previous	Last year.
Wheat	22,867,000	24,584,000	24,160,000
Corn	7,779,000	9,300,000	1,658,000
Oats	7,275,000	8,118,000	7,373,000

WORLD'S SHIPMENTS.

	1910.	1909.	1908.
America	3,808,000	1,952,000	2,656,000
Russia	5,088,000	3,168,000	3,416,000
Danube	312,000	576,000	1,032,000
India	728,000	536,000	1,096,000
Argentina	1,312,000	2,168,000	1,976,000
Australia	264,000	688,000	328,000
Various	40,000	80,000	136,000
Total	11,552,000	9,169,000	10,640,000

STOCKS IN TERMINALS.

Total wheat in store, Fort William and Port Arthur, on May 13, 1910, was 5,178,807.20, as against 5,321,469 last week, and 5,872,575.20 last year; two years ago 6,816,597.40. Total shipments for the week were 979,610, last year 1,660,564. Amount of each grade was:

	1910.	1909.	1908.
No. 1 Hard	32,633	5,873	1,063,157
No. 1 Northern	2,049,994	1,406,205	1,262,831
No. 2 Northern	1,635,555	784,355	295,026
No. 3 Northern	375,622	55,817	833,843
No. 4	195,341		
No. 5	55,817		
Other grades	833,843	1,055,126	
Stocks of Oats—			
No. 1 Extra	1,993		
No. 1 White C. W.	372,712		
No. 2 White C. W.	3,453,486		
No. 3 White C. W.	497,092		
Mixed	23,559		
Barley	4,656,365	2,826,952	
Flax	658,657	227,112	
Shipments—	379,666	905,442	
Oats	923,200		
Barley	19,027		

Quantity of breadstuffs shipped for orders included in above 632,000, last week 1,664,000, last year 1,872,000. Total wheat taken by continental countries 5,496,000, last week 4,184,000, last year 4,896,000.

On passage—Wheat 49,576,000, last week 50,088,000, last year 43,176,000; decrease 512,000. Corn 6,308,000, last week 4,786,000, last year 14,403,000; increase 1,522,000.

BRADSTREET'S VISIBLE

United States and Canada 42,576,000, year ago 38,748,000. Europe and afloat 86,500,000, year ago 64,100,000. Wheat decrease, 3,931,000; corn decrease, 2,453,000. Last year wheat decrease, 5,681,000; corn decrease, 731,000.

FOREIGN CROP CONDITIONS

United Kingdom—The growth of the wheat plant has been very slow recently as a result of the continued cold weather, but higher temperatures now prevail.

France—The growing crop shows further deterioration as a result of the continued cold weather. The present outlook is for about an average crop. The weather now shows some improvement, following very unfavorable weather conditions. Holders are firm.

Germany—The crop outlook is very favorable, although the crop is somewhat backward due to the cold, wet weather. The weather now is summerlike.

Hungary—The crop outlook is good, with the weather conditions favorable.

Australia—Drought still prevails, which hinders the sowing of the new crop, and also diminishing the acreage. Holders are firm.

Argentine—A good increase in the acreage under wheat is expected. The weather is less favorable for the harvesting of corn, it being cold and wet.

CHICAGO MARKET CONDITIONS

An American market authority, writing of the market situation in Chicago, has this to say:

The concentrated holdings in the wheat market at Chicago, continue to overbalance the bearish conditions surrounding the position of this speculative cereal. The May future as well as the September are in the iron grasp of giant interests. Prices may be changed to either a lower or higher level without as much an effort on the part of those who are long. The one word "manipulation" probably covers the situation in wheat better than would a column article. With the exception of six large wheat raising counties in Illinois, where losses are claimed, the reports showed marked improvement west of the Mississippi, and in the spring wheat states the conditions are reported as almost perfect. George M. LeCount, the crop expert, who is now in Kansas, says that the crop is improving daily and that with a spell of warm weather in that state further improvement will be seen. Some fields are expected to show a yield of thirty bushels.

CASH SITUATION POOR

No demand exists for cash wheat. European buyers under the promise of heavy Russian shipments are not anxious to get a line on North American wheat, and the fact that Liverpool was badly broken, owing to the King's funeral, and another public holiday falling in the week, so that the market did not get settled down to its pace.

OUTLOOK BEARISH

Review of the situation in grain at this juncture indicates the probability of lower prices. Conditions here and in Europe are indicative of declining values. With the crop of Europe coming along in fair order, and with good harvest prospects, with the American and Canadian crops as well reported on as they are, it seems highly probable that wheat has touched the highest price level it will attain during the present year. The outlook, generally, is for lower values, and it is difficult to see how the tendency to decrease values can be checked.

WINNIPEG CASH PRICES

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Wheat, No. 1 Nor.	97½	97½	96½	95½	94½	94½
No. 2 Nor.	94½	94½	93½	93½	92½	92½
No. 3 Nor.	93	92½	91½	91½	90½	89½
Oats, No. 2 white	32½	32½	32½	32½	32	32
Barley, No. 3	45	45				

LIVERPOOL

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
No. 1 Nor.	109½	109½	109½	109½	108½	108½
No. 2 Nor.	107½	107½	107½	107½	106½	106½
No. 3 Nor.	105½	105½	105½	105½	104½	104½
May	100½	100½	99½	99½	99½	99½
July	100½	101½	99½	99½	99½	99½
October	102	103	101½	101½	100½	100½

AMERICAN WHEAT OPTIONS

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Chicago, May	113½	112½	112½	112	111½	110½
July	103½	103½	102½	102½	102½	101
Sept.	101½	101½	100½	100½	100½	99½
Minneapolis, May	109½	109½	108½	108½	109	108½
July	108½	108½	107½	107½	108½	108½
September	100½	100½	99½	99½	99½	97½

DULUTH FLAX

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Chicago, May	226	221	220	208	210	215
September	171½	170½	169	170	169½	171

LIVESTOCK

Values were not much disturbed during the past week. Demand for good quality stuff is strong in all markets in America. Deliveries, generally, are about on the same basis. At Winnipeg, fair supplies have been received at prices close to those of a week ago. Outside markets report the same condition. At Toronto quality cattle are in strong demand, with an evident scarcity of stall-fed stuff offering.

The calf run at Chicago, which has been a feature of that market since January continues. It is difficult to explain why American stock raisers should be slaughtering the calf crop as persistently as they have been doing, but the fact is that calves have been in heavier delivery at Chicago than they are in the fat years. And this is a lean year in live stock.

CATTLE SHOULD GET DEARER

Now that shipments of winter-fed stock are waning, it is evident that there is a scarcity of choice grain-fed cattle, and unless packers have sufficient beef in storage to tide them over till grass-made beef comes to markets, cattle prices should go some higher than they are. This paucity of choice beef cattle is not confined to the West alone. Eastern

Canadian and American buyers complain that quality stock is not offering, and the logical influence is that prices for this kind of stock will rule higher.

Of course, there are several factors that may influence to lower values. American markets are easier than they were in mutton, and are deluged with veal. Hogs supplies are less strained, with some show of decline in prices, all of which may depress beef prices in the United States and may indirectly affect prices here.

MARKET QUOTATIONS

Receipts of cattle for the past week were fairly liberal, and quality fair to good. The market was steady this week on all classes of good killing cattle; plain and medium, 15 to 25 cents lower. Hog receipts were fairly liberal; quality fair to good, and market steady. Very few sheep or lambs are arriving. Very few calves were offered, and quality fair.

Choice export steers, freight assumed	\$5.75 to \$6.00
Good export steers, freight assumed	5.50 to 5.75
Choice export heifers, freight assumed	5.50 to 5.75
Choice butcher steers and heifers, delivered	5.50 to 6.00
Good butcher cows and heifers	4.50 to 5.00
Medium butcher mixed cattle	3.50 to 4.00
Choice hogs	10.25 to 10.50
" lambs	7.00 to 5.70
" sheep	6.50 to 7.00
" calves	4.50 to 5.00
Medium calves	4.00 to 4.50

REPRESENTATIVE PURCHASES

No.	Hogs.	Ave. weight.	Price.
196	Medium hogs	210	\$10.65
55	"	213	10.60
634	"	225	10.50
78	"	216	10.25
7	Light hogs	114	9.50
1	Stag hogs	300	8.00
Cattle.			
4	Steers	1175	\$6.25
2	"	1188	5.00
1	"	800	4.00
1	Cow	1250	5.50
3	"	1017	4.50
5	"	912	4.00
1	"	1000	3.50
1	Heifer	980	5.00
2	Bulls	1638	5.25
3	"	1043	5.00
2	"	1525	4.75
8	"	1148	4.00
14	Steers and cattle	1137	6.40
47	"	1170	6.35
15	"	1150	6.25
4	"	1127	6.00
20	"	795	5.65
14	"	943	5.50
4	"	900	5.25
37	"	993	5.00
2	Calves	150	6.00
32	"	117	5.85
2	"	125	4.50
8	Lambs	36	12.41
1	Sheep	80	6.25

TORONTO

Receipts, cattle, 5,274; calves, 779; sheep, 317; hogs, 618. Prices: Export steers, \$6.60 to \$7.50; export heifers, \$6.30 to \$6.75; cows, \$5.50 to \$6.00; bulls, \$5.00 to \$6.25; prime butcher cattle, \$6.75 to \$7.00; medium to common, \$5.50 to \$6.75; cows, \$5.00 to \$6.00; bulls, \$5.60 to \$6.00; calves, \$3.00 to \$6.50; feeders, \$6.00 to \$6.80; stockers, \$2.60 to \$5.00; sheep, \$5.00 to \$5.50; spring lambs, \$3.00 to \$6.50; hogs, fed and watered, \$9.65; off cars, \$9.90.

MONTREAL

Receipts: Cattle, 1,500; calves, 525; sheep, 125; hogs, 1,560. Prices: Prime butcher, \$7.00 to \$7.25; medium to choice, \$4.25 to \$6.25; bulls, \$3.00 to \$5.30; calves, \$2.50 to \$6.00; sheep, \$4.00 to \$6.50; lambs, \$4.00 to \$8.00 each; hogs, off cars, \$10.50.

BRITISH

Latest London cables quote Canadian steers at 15½c.; American, 15¼c. Liverpool cables: Canadian steers, 15c. to 15½c.; American, 15c. to 16c.

CHICAGO

Receipts: Cattle, 63,246; hogs, 109,378; sheep, 70,011. There was a substantial increase in live stock at the principal American market last week. Prices were down on all but best quality cattle. Sheep continue in increasing delivery, and are declining steadily in values. Prices are as follows: Choice steers, \$8.00 to \$8.70; medium steers, \$6.00 to \$8.00; cows, \$3.00 to \$6.75; heifers, \$4.50 to \$7.00; bulls, \$4.75 to \$6.50; calves, \$6.00 to \$7.50; stockers, \$4.00 to \$5.75; feeders, \$5.65 to \$6.60; hogs, \$9.60 to \$9.80; sheep, \$5.00 to \$6.25; lambs, \$8.50 to \$8.90.

* * *

Don't forget the sales of purebred stock at Brandon and Lacombe on June 1, under the auspices of the Manitoba and Alberta Live Stock Associations.

Home Journal

People and Things the World Over

E. W. Day, of Daysland, Alta., has offered a valuable site of eighty acres upon which to erect the proposed Presbyterian Ladies' College in Alberta.

Dr. Mawson, who was with Sir Ernest Shackleton, on the famous journey to the South Pole, says that evidences of plant life were plainly visible there.

"We have the richest language that ever a people has accreted, and we use it as if it were the poorest. We hoard up our infinite wealth of words between the boards of dictionaries and in speech dole out the worn bronze coinage of our vocabulary. We are the misers of philological history. And when we can save our pennies and pass the counterfeit coin of slang we are as happy as if we heard a blind beggar thank us for putting a pewter sixpence into his hat."—Morals of Marcus.

On the occasion of celebrating his 81st birthday, General Booth sent the following message: The secret of long life and happiness lies in these rules: Eat little, drink water, work hard, keep warm, make God your friend, get your name into the Book of Life, keep a good conscience, do your duty to those over or under you, use your money, your time and your influence to help Jesus Christ to save the world from misery; do these things and your peace shall flow as a river, and you shall live as long as God wants you on earth, and then go to live with him in Heaven forever.

A scholar named Renshaw, aged 12 years, who attends the Wesleyan day schools at Ashburne, Derbyshire, was asked along with other lads to write a short essay on the budget. The following is his unaided production: The budget is a finance bill. It is drawn up by the premier and the chancellor of the exchequer to pay away part of the national debt, and all the officers engaged by the crown, such as judges, policemen, postmen and the army and navy. In the present budget the old age pension act must be provided for. The present budget (brought about by the Liberals) is known as the people's budget. First of all it leaves the food of the people untaxed; second, it lifts the burden off the poor; third, it unlocks the land to the people; fourth, it adapts the burden to the backs that are able to bear it; fifth, it is a triumph of justice; and sixth, it is the final unanswerable argument for free trade.

A Successful Waiting

Up at Saskatoon last week a school teacher, Miss Williams, was successful in filing on a half-section of South African scrip. She was so much in earnest about obtaining this land, which is in an excellent location though as yet unbroken, that for twelve days and nights she remained at the door of the land office, staying faithfully at her post until the homesteads were thrown open. Those twelve days and nights contained much of inconvenience and difficulty, but her friends, admiring the pluck of the girl, provided her with as much comfort and companionship as possible. Once she had to defend her position against a man who had ambitions to own that strip of land, but who was a little late in arriving on the scene. But he retired more or less ungracefully and left Miss Williams in possession

of the field and of the half section. She is going to do homestead duties upon it during the next three years, by the end of which time it should be greatly increased in value. There isn't much doubt, from what the lady has displayed of her character, but what those duties will be well and faithfully done. And if one girl can do it another can. Then why not allow women to take up homesteads on the same conditions as are allowed to men?

Proclamation of George V in Canada

By His Excellency the Right Honorable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Knight Grand Cross of the Royal Victorian Order, etc., etc., Governor-General of Canada. To all to whom these presents shall come—Greeting:

Whereas it hath pleased Almighty God to call

TEARS.

(By LIZETTE WOODWORTH REESE.)

When I consider Life and its few years—
A wisp of fog betwixt us and the sun;
A call to battle, and the battle done
Ere the last echo dies within our ears;
A rose choked in the grass; an hour of
fears;
The gusts that past a darkening shore
do beat;
The burst of music down an unlisten-
ing street—
I wonder at the idleness of tears.
Ye old, old dead, and ye of yesternight,
Chieftains and bards and keepers of
the sheep,
By every cup of sorrow that you had,
Loose me from tears, and make me see
aright.
How each hath back what once he
stayed to weep
Homer his sight, David his little lad!

to His Mercy Our late Sovereign Lord King Edward the Seventh, of blessed and glorious memory by whose decease the Imperial Crown of the United Kingdom of Great Britain and Ireland and all other His late Majesty's Dominions is solely and rightfully come to the High and Mighty Prince George Frederick Ernest Albert, Now Know Ye that I, the said Sir Albert Henry George, Earl Grey, Governor-General of Canada as aforesaid, assisted by His Majesty's Privy Council for Canada, do now hereby with one full voice and consent of tongue and heart publish and proclaim that the High and Mighty Prince George Frederick Ernest Albert is now by the death of our late Sovereign of happy and glorious memory become our only lawful and rightful Liege Lord George the Fifth by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the seas, King, Defender of the Faith, Emperor of India, Supreme Lord in and over the Dominion of Canada, to whom we acknowledge all faith and constant obedience with all hearty and humble affection, beseeching God by whom all Kings and Queens do reign to bless the Royal Prince George the Fifth with long and happy years to reign over us.

For Britons the World Over

The aims of the Victoria League are being set forth in Canada by Miss Talbot, the energetic and capable secretary of the organization. The object of the League is to promote mutual understanding, help and intercourse among all citizens of the British Empire. Half a world's distance cannot break the ties of common nationhood that hold together the dominions of the Empire, but the truest sympathy and loyalty must be based on knowledge. What real interest have we in a thing we know nothing about?

The membership of the Victoria League, which for nine years has been endeavoring to promote the happy project mentioned above, is composed of both men and women. The headquarters are in London, Eng., and there are many branches, both in and out of the home land. The actual work is divided among various committees. The education committee organizes meetings and lectures to labor unions, reading circles, societies of all kinds, on the geography, history and resources of the parts of the Empire; promotes the study of Imperial subjects in schools, gives prizes for essays and manages a lending library. The literature committee collects and despatches to the country districts of the colonies good English books; it provides colonial school lending libraries and sends books and newspapers to settlers in remote places. It arranges for the interchange of newspapers and magazines among the various countries. The hospitality committee does very important work. It welcomes visitors from any part of the Empire who arrive in any English town where the league is organized, and especially in London, if they present reputable introductions. They take pains to introduce these visitors to residents who can give them most help or information along the particular line they desire. This acquaintanceship is of mutual benefit. Help is also given when the difficulties that often accompany travel occur. Settlers going out to the colonies can obtain letters of introduction to the branch organizations in the country to which they are going. This is not so much for financial help as for the social privileges and friendly relations that can thus be almost immediately established by strangers in a strange land.

In Canada the intention is not to form branches which will conflict with other organizations doing a somewhat similar work. Where the Daughters of the Empire have societies established the league will carry on its work through these. But even if there is no Daughters of the Empire, or no Victoria League, anyone who is interested can get into touch by writing to the Victoria League, 2 Millbank House, Westminster, S. W., London, Eng. Teachers in country schools could do an immense amount of empire building by arranging with the league to have their pupils begin a correspondence with school children in other British possessions. The scholars are always intensely interested and absorb the history and geography of sister lands with avidity, and to keep up their side of the correspondence they will be eager to get more and accurate knowledge of their own country. Its value, especially among the children of foreigners who have come to this country in total ignorance of the Empire and its meaning, cannot readily be estimated.

EAT, O FRIENDS!

I am come into my garden, my sister, my spouse: I have gathered my myrrh with my spice; I have eaten my honeycomb with my honey; I have drunk my wine with my milk; eat, O friends; drink, yea, drink abundantly, O beloved.—Cant. v.: 1.

You say, "Unless a man shall work Right earnestly and never shrink, He may not eat"—Now look, the change is small, And yet the truth is plain to see, Unless man eats, and frequently— He cannot work at all.

—CHARLOTTE P. STETSON.

The Bible is full of invitations to the marriage-feast of the King's Son. In the beginning of Genesis we read how God prepared for His beloved friends "every tree that is pleasant to the sight and good for food; the tree of life also in the midst of the garden" (that tree from which man, by his own sin, barred himself). In the last chapter of the Bible, we read how the Spirit and the Bride continually call to the feast, and this world-wide invitation is respected by all who accept it for themselves—"let him that heareth say, Come." Over and over again, the servants of the King—Apostles and prophets, preachers and teachers, learned leaders and ignorant disciples—call to the hungry: "Come and eat!" to the thirsty: "Come and drink!" The cry resounded from east to west, and now it is echoed back from west to east again. "Ho, every one that thirsteth, come ye to the waters, and he that hath no money; come ye, buy, and eat; aye, come, buy wine and milk without money and without price. Wherefore do ye spend money for that which is not bread? And your labor for that which satisfieth not? Hearken diligently unto me, and eat ye that which is good, and let your soul delight itself in fatness."

And yet everywhere we see men and women devoting all their energies to the pursuit of "that which satisfieth not," growing careworn and weary from the toil of climbing up the hill of earthly greatness, paying little heed to the wonderful invitation of Him who is "altogether lovely," to feast with Him in His garden. He cares—what a wonderful thought that is. It is not only for our joy and profit that the Bridegroom awakes our careless souls with His pleading call: "I am come into my garden, my sister, my spouse . . . eat, O friends; drink, yea, drink abundantly, O beloved!" It is not only the necessities of life that He has provided for His bride. In the text are mentioned such luxuries as "spice, honey and wine."

When the disciples were overpressed by work, so that "they had no leisure so much as to eat," their Master—always watchful and considerate—said to them, "Come ye yourselves apart into a desert place, and rest a while." It is a wrong to our dear Lord to act as though He cared only to have us work for Him. Like any other bridegroom, He seeks out opportunities of quiet, refreshing communion with His beloved—and only He knows how often His voice is drowned or unheeded in the rush of business or pleasure. We love our Master, and we try to prove our love by working for Him. That is a good thing—in moderation. A wife should work to prove her love for her husband; but they drift apart if she is working too incessantly to be his companion. The sweetness of fellowship should not fade when the betrothal blossoms out into marriage, but should grow stronger and more satisfying all through the years. And marriage is the earthly shadow of our fellowship with God. He desired to eat the pass-over with the Apostles—"I have heartily desired" is the marginal rendering of S. Luke xxii.: 15—and He heartily desires also to keep life's feast of joy with us.

And what infinite loss we sustain if we pay no attention to His gracious invitation!

"Unless man eats, and frequently— He cannot work at all."

This is self-evident in the natural life. In order to do good work—either manual or brain work—it is necessary that sufficient nourishing food be eaten and digested. In many city schools, meals are provided for the poorer children,

Hope's Quiet Hour

because it has been proved so certainly that they can't learn their lessons properly unless they are properly fed.

And this rule holds good in the spiritual life. To do good work for God, and to grow in holiness, we must come to Him regularly and frequently. The attempt to live a Christian life without conscious communion with God is as foolish as to attempt to live the natural life without food and fresh air. And yet a practically prayerless life is only too common, even among those who are trying to follow Christ. Don't we all find that prayer is often a mere formality, hurried through as a duty, and forgotten very quickly in the day's rush? And yet there is no need for us to wrong ourselves and Christ in this way. Lack of time is not the real reason. If you love anyone, and only get a chance for a hand-clasp, or a smile, or a bright "Good morning, dear!" doesn't the sweetness of that

flash he answered: "It is in the houses where there are lots of books that I find it easiest to sell—the people there are readers." He was quite right, and my remark was proved a foolish one. The people who surround themselves with books will want more books, and will secure them—where there's a will there's a way. The people who pray, and read their Bibles, will grow more and more hungry for the food which is like the daily supply of bread from heaven in the wilderness journey—sweeter than honey and the honeycomb—and will more eagerly come to the smitten Rock to satisfy their continual thirst for God's perfect holiness. And the reverse is also true—let us note the fact, and act accordingly—if our prayers are formal, careless and hurried; as a natural, inevitable result, they will grow more careless, until they become as meaningless as the famous prayer-wheels of Thibet—prayers ground out by a ma-



"IT WAS THE TIME WHEN LILIES BLOW AND CLOUDS ARE HIGHEST UP IN AIR."

meeting fill the whole day? But love is strengthened by food, and dies of neglect. When lovers are parted, if they seldom meet in spirit, or neglect opportunities of sending messages, they usually drift apart. And, if we are careless about meeting with Christ, or hurry through the occasional talk with Him because—like Martha—we are too "cumbered about much serving" to enjoy sitting quietly at His feet, then we are starving our spiritual life. Little wonder if it is poor and thin and weak.

Do you think it is an unjust law that "to him that hath shall be given," more and more abundantly? It holds good always. If your mind is well stored with knowledge, it will continually reach out to grasp more; if your body is strong and healthy, it will find health everywhere, and thrive in cold and heat, on work and play; if your soul is eagerly accepting and assimilating the Life of God, it will find that Life in every environment.

A book agent was once trying to sell me a book, and I remarked: "Just look round this room and you will see that we have hundreds of books, already—what need is there for more?" The man knew his business. Quick as a

chance. We are invited to the marriage-feast. No one is too sinful to be included in the invitation; but the King provides a suitable robe for each guest, and anyone who refuses to wear it will lose his place—the pace especially provided for him. Over and over again in S. Paul's epistles, men are told to "put off the old man and put on the new man," to "put on Christ." What does that mean? How can we be "clothed with Christ?" One way, at least, of "putting on" another person is to be constantly in his company. Slowly, but surely, the weaker nature catches inspiration from the stronger. The high ideals of the leader become the ideals of his followers. If this life be a trysting-place with Christ, then it can no longer be a desert but a garden of spices, which "shall rejoice, and blossom as the rose . . . and the parched ground shall become a pool, and the thirsty land springs of water."—Isa. xxxv. Then the holiness and power of the Bridegroom shall purify and strengthen the soul that gazes ever into His eyes, keeping always close at His side. Then the character of the disciple shall be more and more transformed into the likeness of the

Master. Then the eager soul will joyfully accept the invitation to become one with the Beloved in the mystery of the Lord's Supper, saying, with George Herbert, in wondering faith:

"To me dost now Thyself convey;

By the way of nourishment and strength Thou creep'st into my breast, Making Thy way my rest."

DORA FARNCOMB.

"The Vision of His Face," by Dora Farncomb. The Farmer's Advocate, Winnipeg, Man. Price, \$1.00; 224 pages; cloth.

ANOTHER ENGLISH REVIEW OF "THE VISION OF HIS FACE."

"The purpose of the authoress is expressed in the preface; it is that she may help some who are weary and heartsick to see more clearly the Face of the King." Many will be grateful to Miss Farncomb for a most helpful book; a great deal of it, indeed, we do not hesitate to describe as beautiful. —Publisher's Circular.

THE HOME OF THE KING

Sandringham Hall was in an especial sense the home of the King, the place where he could forget, for the time, that he was a royal person and could follow his own inclination as a man.

The Hall is not a dwelling of great splendor. Its chief glory consists in its surroundings, and in this respect England can boast of few country seats that are better provided. The property was acquired by him when he was Prince of Wales, about forty years ago, and was largely rebuilt. The house is a long low pile of red buildings, faced with white stone following the Elizabethan style, but nevertheless frankly modern. Over the entrance door is the inscription: "This house was built by Albert Edward and Alexandra his wife, in the year of Our Lord, 1870."

The hour of breakfast at Sandringham was half-past nine. The meal was usually served in continental fashion at a number of small tables holding four persons each. After breakfast, in the shooting season, the men were out with their guns until about 2 o'clock, when luncheon was sent out to them. Tea was served indoors at the approach of darkness, the favorite place for the purpose being the entrance hall. When the meal was over, everyone retired to dress for dinner, meeting again in the drawing room. Dinner was a somewhat ceremonious function, lasting usually about an hour and a half.

Sunday was observed strictly as a day of rest. A rule was in force that no carriages should be used on that day except in case of necessity and the household went to church on foot. With a natural anxiety to catch a glimpse of royalty, the country people usually assembled outside the church gates to watch the royal party enter.

After the pronouncing of the benediction, the royal party would leave by a private door, the congregation standing during its departure.

The remainder of the morning was usually occupied by a stroll around the gardens or a visit to the stables. The afternoon was spent reading or walking in the grounds and a quiet dinner in the evening brought the day to a conclusion.

A BALLAD OF TREES AND THE MASTER

In to the woods my Master went, Clean, forspent, forspent. Into the woods my Master came, Forspent with love and shame. But the olives they were not blind to Him; The little grey leaves were kind to Him The thorn-tree had a mind to Him When into the woods He came.

Out of the woods my Master went, And He was well content. Out of the woods my Master came Content with death and shame. When Death and Shame would woo Him last, From under the trees they drew Him last.

'Twas on a tree they slew Him—last, When out of the woods He came. —SIDNEY LANIER.



Id Over

gue are being set ot, the energetic ganization. The note mutual un-urse among all Half a world's of common na- dominions of the thy and loyalty What real in- e know nothing

Victoria League, endeavoring to mentioned above, is men. The head, and there are out of the home divided among ation committee ; to labor unions, ll kinds, on the es of the parts of udy of Imperial es for essays and e literature com- s to the country English books; it ing libraries and settlers in remote erchange of news- the various coun- ee does very im- visitors from any e in any English nized, and espec- reputable intro- introduce these give them most e particular line eship is of mutual when the diffi- y travel occur. s can obtain letters ch organizations re going. This is s as for the social s that can thus ish'd by strangers

t to form branches her organizations work. Where the societies establish- ork through these. hters of the Em- anyone who is in- y writing to the ik House, West- Teachers in coun- se amount of em- with the league rrespondence with rish possessions. sely interested and y of sister lands their side of the ger to get more and own country. Its ildren of foreigners in total ignorance ng, cannot readily

MORE BOYS WANT HOMES

There are at present in the shelter of the Children's Aid Society, Regina, six boys ranging in age from three to eight years. Five of these are brothers, Edwin, Kaspar, Oliver, and Elmer and Ezekiel who are twins. These are fine, healthy boys in good condition; any father or mother would be proud of them. Their own mother is dead and the father is not able to care for them.

Applications may be made to Mr. Theo. Zeats, Sec'y Children's Aid, Regina, Sask.

SERVING A MEAL

Dear Dame Durden—What a pleasant surprise I had when I turned to the *Ingle Nook* in the *Advocate* of May 4! The subject of hospitality has been troubling me somewhat for the past few weeks.

Until the last two years we have always lived on the farm. Now we are living in the "city." It makes us Ontario people smile to hear a small place like this called a city. We are not very much acquainted as yet, but there are times when we would like to have one or two people perhaps, in to dinner or tea. The good man of the house sometimes wishes to bring a gentleman home to dinner and I would like to be able to entertain anyone properly.

Now, I do not feel at all badly because my house may not be furnished as nicely, or because my dishes and linen are less costly; it is the getting or having the table set properly and being able to serve the meal nicely. I am always quite contented so long as what we have is the best we can afford, but I do feel very sensitive about serving a meal. Will you help me? For a number of years I have been so closely at home that I have not been able to learn those things I wish to know by observation, and any menus I have seen printed are mostly elaborate. We have four children and I do my own work, except washing. I am not every strong and tire easily. Now, Dame Durden, if it is not asking too much, will you tell me how a table should be set for dinner and for tea, also what is nice to have for tea? On the farm our meals had to be so very substantial for laboring men that I am at a loss to know what to get here.

Are salads used for both dinner and tea? And when during the meal are they served, and how?

Are cold meats served at tea time, and if so are the tea plates removed after that course? Are bread and butter plates used now and are they used for both dinner and supper?

Perhaps I had better tell you that we are just in moderate circumstances, able to have things comfortable, but nothing elaborate.

If a couple or more, say, young people are in and spend the evening, should I always serve refreshments before they go away? What should one serve for refreshments?

We usually have for dinner, potatoes, roast meat, vegetables, pickles, then pie or pudding, bread and butter and tea. Would you think it would do to ask anyone in to dinner when it would be as simple as that? I think I may say that my cooking usually tastes good. I feel almost silly writing all this, but I am sure you will understand my difficulty.

I will send an addressed envelope as I have asked so many questions you may not wish to take up the space in the *Nook* to answer them all. You may put in any of my letter if you wish to. I would like you to ask the members of the *Ingle Nook* to send in some nice salad recipes, also recipe for salad dressing.

Now I will send you three recipes you may like to try yourself.

Banana Pie.—Bake a crust as for lemon or cream pie, make a custard of one cup sweet milk, one cup sugar, one tablespoon cornstarch and two eggs. Cook together until thick, stirring constantly. Cut up one or two bananas, according to size in the crust, cover with the custard and frost with the whites of two eggs beaten with two teaspoons sugar; spread on pie and return to oven and brown. The ingredients given in recipe only make one pie. I made one of these pies and we thought it delicious. It is best when real cold.

Fruit Salad.—For a family of two

Take two bananas, sliced thin, and one-half cup English walnuts chopped medium fine. Mix all together, add enough sugar to taste and leave standing two hours and serve. This makes a nice dessert.

Peanut Sandwiches.—Take a glass of fresh roasted peanuts after skins and shells have been removed. Chop very fine and mix with the following dressing until sufficiently moist to spread between buttered bread: Dressing—One heaping tablespoonful of cold butter, three tablespoonfuls of sugar, one teaspoonful of flour, two eggs, one-half cup vinegar, cook well and let cool before using.

ALEXANDRA.

(That paragraph on hospitality did not seem worth while when I wrote it, and I debated whether to put it in the paper or in the *W.P.B.* It has apparently justified its existence since it drew such a nice long letter from you. Your dinner menu sounds good to me, and I'd accept an invitation to it with cheerful alacrity.

Any guest who isn't entirely given over to the worship of his digestion would prefer a simple meal and an unworried hostess to the most elaborate feast and a tired, hot woman at the head of the table. And a formal meal without help is almost impossible if

dishes and platters warming. The bill of fare you give for your ordinary dinner is good enough for any guest, but if you want some extra touches there are several ways of accomplishing them without too much work. If it is a hot day serve half an orange (unpeeled and cut across) to each guest. A small-teaspoon is best to eat it with and it can be served in a small sauce dish. Let one of the children take away these while you bring on the roast and vegetables. Don't feel panic-stricken if your guests have to wait a moment between times. Such breathing spaces are good for conversation, and if they are accustomed to living in hotels or restaurants they are used to long waits.

Another change would be to start the meal with the roast and follow it with a salad, or celery or tomatoes, crackers and cheese, which can all be put upon the table to begin with and can be served on the bread-and-butter plates. In the meantime you can remove the dinner plates (taking the plates from the left side of each guest) platter, vegetables, gravy and pickles. Then pour the tea and remove the small plates and salad bowl, bringing on the dessert of pudding or pie and plates upon which to serve it. A jelly made from jelly powder with whipped



AN ALBERTA HOMESTEAD

the hostess is to have any pleasure out of the visitor's presence. I know just one woman who can accomplish it, and she is a genius in that particular line.

Let us begin with the dinner and use the menu you give as an illustration. Set the table with your prettiest dishes. At each place put a small bread-and-butter plate to the left side. The cutlery will be a fork on the left; on the right a steel dinner knife, a knife (tea-size) and a dessert spoon. In case pie is served instead of pudding have two forks, both on the left, and dispense with the dessert spoon. Put a perfectly clean table napkin either on the small plate or directly in front of the guest. If you have a centerpiece of flowers or a plant, let it be low so that the diners need not play hide-and-seek round it in order to see one another. The only linen necessary beside the tablecloth and napkins are a tray cloth for the "tea fixings" and another for the meat platter, with perhaps a doily in the centre, all being in white.

In a very formal dinner you get no small plates and no butter, only a little "chunk" of bread laid on your table napkin, but there aren't many people who wouldn't sooner see a pat of sweet butter and some good bread. Put these on the table when setting it, also peppers and salts, pickles, pitcher of water and glasses. Let a guest or one of the children look after the last named. Guests in a house were no help is kept feel that they have been given the freedom of the domestic city when they are asked to help something at the table. If the table is not crowded put the cups, sugar bowl, etc., on to give a home-like air. If crowded have them on a tray or a small table near by. Have the dinner plates, vegetable

cream makes a light dessert.

For tea in hot weather cold meat and a salad served on the same plate are very nice followed by fruit and cake or by pie. In cold weather, a hot dish is always relished for supper, such as macaroni with cheese or tomato, cream of corn soup, tomato soup, scalloped salmon. Hot biscuits, muffins or johnny cake always go well with any of these supper dishes. Remove the plates on which these are served, letting the bread-and-butter plates remain. Take off the dishes from which the first course was served, leaving bread, butter and biscuits, etc., and bring on the fruit and cake. If it is preserved fruit and served in small dishes, each dish should be set on another plate, but if the dishes are large the bread and butter plate is all that is needed. The jellies made from jelly powder and eaten with cream are suitable for tea also. The cutlery needed will be the same as for dinner, except that the large knife is not needed. Many people like to have their cup of tea at the beginning of supper instead of with the last course.

The serving of a meal always comes heaviest on the housewife, even though the good man does the carving and serves the dessert. Train the boys and girls to help, let them consider it a privilege and take it in turns. I go to a house here where the family are very fond of company, but the mistress has neither daughter nor maid. But she rarely leaves the table during a meal because her son, a grown man, does all the work that necessitates leaving the table. He has always done it and so does it gracefully without a shade of self-consciousness.

It is not necessary to serve refreshments to evening guests, though it is always appreciated, especially by those

who board. But they can be light and varied, such as a dish of home-made candy or popcorn, a plate of fruit, cake and lemonade, cookies and tea, or bread and butter, olives and cocoa—any one of these combinations is quite sufficient.

I'll make a list of salads for you for next issue if I have time and the members will be able to add their favorites to it. I hope I have helped. I put your letter in *Ingle Nook* in case some one else had experienced your difficulties, too. Used your addressed envelope to send a copy of a magazine that had some ideas in it. Hope you got it safely.—D. D.)

FROM BONNY SCOTLAND

Dear Dame Durden—Although I live in Scotland we get *THE FARMER'S ADVOCATE* and I enjoy reading the "*Ingle Nook*" very much. I think it is a very helpful corner and so I thought I would drop in for a talk with you all.

The following may be of some use: Alum, or common salt, dissolved in hot water, not only brightens a carpet but prevents moths.

Blood-stains of long standing will yield to soaking in salt water. Camphor among your silver will keep it free from tarnish.

Lemons may be kept fresh for weeks by floating them in a basin of clean water.

White furs may be cleaned by being sprinkled and rubbed with hot flour.

Zinc should be cleaned with paraffin oil and bathbrick.

Keep an apple in your cake box. This will prevent it turning dry.

A friend suggests that the milk used as a finishing polish for linoleum should be boiled. This makes it thicker and gives a glossier surface. It may either be sprinkled over the floor and then rubbed in with a flannel or the cloth may be dipped in the milk. Give a final polish with a soft dry cloth.

Now, I will close with best wishes to Dame Durden and the *Ingle Nook* friends.

BLUEBELL OF SCOTLAND.

(You are as welcome as the flowers whose name you took, and we are glad to welcome you to our *Ingle Nook*. Tell us something of Scottish rural life, will you?—D. D.)

A PLEA FOR THE CHILDREN

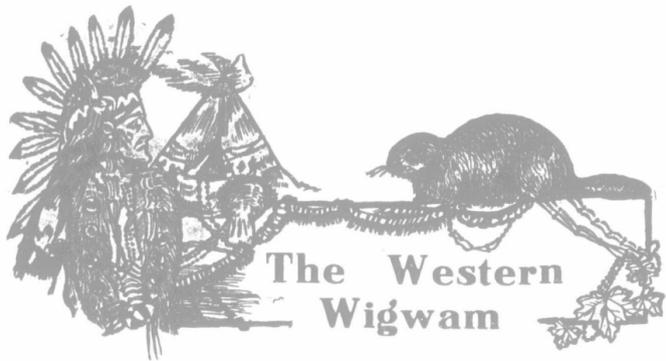
Dear Dame Durden—I have been sorry to see the *Ingle Nook* letters growing fewer and fewer every week, but until now have not been sorry enough to get to work and do something to mend matters. Of course we are all busier than in the winter, but after all, surely none of us are so rushed that we can't spend the necessary half-hour in sending a message to Dame Durden's *Ingle Nook*, which we all find useful and entertaining.

I noticed how many enquiries came for children to adopt and was interested in watching them. My hands are full with my own girls and boys, but I think every childless couple should have an adopted child in their home. If you think only of what you are going to get out of the experiment it may turn out badly; but if you think of giving a chance to a child who hasn't had a chance you will be doing a good act. I know a woman whose own children are grown up and she adopts a little girl every few years, and gives them a good home. Another odd case came to my ears. A girl was taken from a bad home by the Aid Society and adopted by good people. She had a bad temper and had been taught to steal, but her foster-parents were patient with her. She grew into a fine, capable young woman and married well. Her own baby died when a few months old and she came straight to the society that had given her a chance and adopted a baby to fill the vacant place. I was glad to hear about that.

I wish some of the members would tell more about their gardens. May I come again?

THERESA.

(Come often. We are glad to have you. I am always a little bit disappointed when the letters grow few, but have learned not to expect many during the busy season. They all come trooping back when the hard work is done. I hope the girls will make their reunion a success on June 1st.—D. D.)



The Western Wigwam

LIGHTS THE FIRE

Dear Cousin Dorothy:—I am a ten-year-old boy and live on a farm. My father has taken the FARMER'S ADVOCATE for some time. I go to school and light the fire there. I get ten cents a morning for it. There is a river flowing past our door, and it also flows past the school. It is very nice here in the summer.

CECIL JONES.

DESTRUCTION AMONG BIRDS

Dear Cousin Dorothy: This is my first letter to your club. I would like to become a member, and I would like to get a button. I go to school and I learn arithmetic, reading, grammar, geography and some others. Our teacher's name is Miss R. I go to the Ashfield school. We all like our teacher very well. Since this cold weather came all the little birds are seeking shelter. We caught a flicker in our stable. A few days after it ceased snowing we could catch birds outside, because they were so numbed with the cold. Something ate a little bird, so we brought the other one in the house and gave it something to eat, but it put its head under its wing and went to sleep. After a while in the evening it died. I think it was too sudden a heat that killed him.

Man. MARY CORRIGALL (14)

NO SCHOOL NEAR

Dear Cousin Dorothy:—I have come again to visit you after a long absence. You have improved the Wigwam very much since last time I wrote. When I wrote you did not have a new name, nor did we have pen-names. I think it has made a great improvement to the Wigwam.

I do not go to school now, as we are too far away to go, but hope to have a school near us some day soon. I am very fond of riding and we have a little white pony. She is a little hard for riding, although I ride her all the same. We call her Fannie. We have two other horses besides, and we had another black pony that we used to ride most, but dad sold it. I think I have called long enough this time, but I will call again if I may. I am sending an addressed envelope and a two-cent stamp for a badge.

Please, Cousin Dorothy, when you draw for the Wigwam can you paint it? I would like to correspond with any girl of my own age (thirteen) if they will write.

CANADIAN SCOTCH LASS.
(Had to change your name a little. Don't paint your drawings for the Wigwam. C. D.)

INTERESTED IN FLOWERS

Dear Cousin Dorothy:—It has been over a year since I have written to your club. Well, the crocus and buttercup are out again. We have all our grain planted and most of the garden. I must now make up lost time by trying to write an interesting letter. I am much interested in The Boys' Club as well as the Western Wigwam. How many of my Western Wigwamers take

botany? I do and I think it is fine. It is so nice to take a flower and learn all about it.

I will tell you about some Indians. One day my father went to Lacombe and hired some Indians to chop brush for us. Then they came and camped in our hay field. On Sunday, Miss B., Lizzie and two of my sisters, my brother and myself, went to see them. We combed our hair in two braids and let it hang over our shoulders as they do. We went and sat down on a brush pile in front of the tent. They seemed to be holding some kind of a meeting. A man with one arm was reading. He would read some and pass the book around to the others and when it came to him again they would sing a song, and so on. When the meeting was ended one came out and asked us what we wanted. We told him we came to see them and talk to them, and he said: "My squaw is twenty-one and I am thirty-seven." He said, "We have been married five years and have a boy four years old. I had one baby die when it was three months old." He said the man with one arm was his sister's son. He got shot. Two men were out shooting chickens with him. He was in front of one and he shot at a chicken and hit his arm. Then the doctor cut the arm off above his elbow. They have beautiful long hair. He said they were going to see his brother, so we didn't bother him any more.

Ah, here is one now for milk!

SHOOTING STAR.

(Won't you tell us something about the flowers in your part of Alberta? The only ones I have seen yet round Winnipeg, are the anemone and the sweet coltsfoot. I like your pen-name.—C. D.)

A BIG DOLL

Dear Cousin Dorothy:—I have not been going to school for a long time. I have a big doll with a china head and a rag body. She has my baby clothes on her. One day a woman was here and her baby was not as large as my doll. I am writing this letter with my fountain pen. I like reading the Western Wigwam. My father is away and he is going to bring me a Chinese handkerchief. I wish the club success.

ANNIE WOOSNAM.

A PAIR OF BANTAMS

Dear Cousin Dorothy:—This is my second letter to your club, and not seeing my others in print I thought I would write once again. My father has taken the Advocate for a long time. I go to school almost every day. My teacher's name is Miss M. I only missed four days in 1910. I have four kittens, two old cats, and a Bantam hen and rooster.

Man. PRAIRIE MAID.

INTERESTING LETTERS

Dear Cousin Dorothy:—This is my first letter to your club. My father takes THE FARMER'S ADVOCATE, and has been taking it since New Year's. I like to read the letters of the club, because they are interesting. I have three sisters and two brothers. My father lives on a farm, and he has five head of horses, six head of cattle, and about seventy-five chickens. My school teacher's name is Miss S., and I like her very much. I am ten years of age and am in the VI. grade.

Sask. LUELLA G. LEWIS.

DOES HER BEST

Dear Cousin Dorothy:—This is my first letter to your club, so I do not know much about it. I will do my best. I go to school every day. I am in the third grade. The school is just a mile away. We are three miles from town. We have thirty-six horses and twenty-one cattle.

Sask. HAZEL HAYLOCK.

GOOD FOR SIX YEARS

Dear Cousin Dorothy:—I go to school and study arithmetic, reading, spelling and writing, and I am six years old. There are twenty-one going to our school.

We have fourteen horses, counting my pony and the four colts. I have a dog called Joe, and a cat called Tan, but the little pups and kittens died and I was sorry. It rained all night, and this morning you cannot step any place without getting your feet wet.

Our teacher is very nice, but she works us hard. We catch gophers at our school.

ARTHUR HENDERS.

A NICE VISIT

Dear Cousin Dorothy:—I have written once to your club, but as I did not see my letter in print I thought I would write again. I read the letters most every week, and enjoy them very much. My sister and I have been home from school two weeks with the measles; al-



GATHERING FLOWERS.

most all the children in our school have had them. We spent the past season visiting our grandma in the States, and friends in Winnipeg, and had a fine time.

Sask. EDITH M. WADGE.

A FINE CALF

Dear Cousin Dorothy:—As I have not written to the Western Wigwam for a long time, I thought you would think I was not a very good member. I have been away to Ontario with my mamma and papa for a visit. We had a nice time, but think we would rather live in the West. We have seven horses now. I have a red calf, a year old, which I can hitch up to my wagon and drive. I can also ride on its back.

Sask. CHARLES METCALFE.

WILLING TO TRY AGAIN

Dear Cousin Dorothy:—This is my second letter to your beautiful club. I received my button all right, and many thanks for it. I did not see my first letter in print, but will hope to see this one.

I was very much pleased to see as many letters on the page this week as there was after you put that note in not to write till April, so I thought that I would try once more. I guess I will close as it is late, and please excuse writing as my pen is spoilt.

Man. FRED DODGE.

TRAPPING WEASELS

Dear Cousin Dorothy:—As this is my first letter to the club, I hope it will escape the waste-paper basket. The snow all went away weeks ago, and the farmers are working on the land. I go to school. I am in grade VII. My favorite studies are history and geography. I am a bookworm, and have read a great number of books. My favorite authors are: Mary J. Holmes, G. A. Henty, Wm. G. H. Kingston and Charles Dickens. I like adventurous stories best. How many of the members have read Mark Seaworth? I would like to exchange post cards with any of the members. Would the editor please send me a button? I enclose a stamp.

Sask. CLEARY J. MURPHY.

A BUSY GIRL

Dear Cousin Dorothy:—Am I a welcome Wig for the "wam"? I have never written before, but enjoy very much reading the letters of other Wigs. I do not go to school as I am at service, but I went to school a little last winter. I like schooling very much. I am in the third grade at school. It will be seven years next July since I came to Canada from Somerset, England. I was thirteen years old on the 1st of March, and have four brothers and two sisters. Can any of the Wigs bake? I can, a little.

Man. BUSYBODY.

A NEW MEMBER

Dear Cousin Dorothy:—I have been a constant reader of the Western Wigwam and enjoy reading the interesting letters. My father has taken THE FARMER'S ADVOCATE for over five years, and thinks there is not another paper to beat it.

I have four sisters and one brother. My oldest sister is married and has a little baby boy. My brother, sister and I go one mile to school. My brother and I are in the fourth book. My studies are arithmetic, reading, spelling, geography, Canadian and English history, and oral work. Spring has come now, and we have had our first thunder storm. The crows, hawks, geese, ducks, meadow larks and other birds are here. The farmers are working in the fields out here now. Our teacher's name is Mr. R. H. F., and we like him fine. I hope this letter will escape the waste-paper basket, as I would like to see it in print. I am enclosing a two-cent stamp for a button. We get nearly forty eggs a day now. I would like very much to receive a post-card shower. Now, as my letter is getting long, I will close and leave room for more.

Man. EMMA ATCHISON.

A FINE BROTHER

Dear Cousin Dorothy:—I live on the farm, eleven miles from Edmonton. My papa has 320 acres of land. I have a dog named Benny, and I trained him to drive. I raised 9 bushels of potatoes last year, and I sold 8 bushels. I am to put the money in the bank. I have a brother, Vernon, and a sister, Mildred, and a dear little baby brother Russell, ten months old. I have two miles to go to school, but the school is closed now for the measles.

Alta. ALTON JOWIN.

WHO WILL WRITE TO CARRIE?

Dear Cousin Dorothy:—As I have never written to your corner since it has changed its name, I thought I would write a short letter. My home is in Saskatchewan, but as I have the misfortune of having a curvature I am in the Orthopedic hospital in Toronto. I have been here since Christmas, and will be here until the end of June. I will be thirteen years of age on the fourteenth of this month, and if you get this letter I would be very much like to have a post card shower on my birthday.

Well, Cousin Dorothy, I would like to correspond with any of the readers who would like a correspondent. I think I will close for this time.

From your cousin,

CARRIE HORNE,
100 Bloor St. W., Toronto.

THREE CATS

Dear Cousin Dorothy and Wigs:—This is my first letter to your club. I enjoy reading the Wigs' letters, so I thought I would write. The name of our school is Ravine. It was called after a big ravine four miles west of it. I go to school every day I can, and I am in grade V. I study arithmetic, reading, spellings, geography, history and drawing. I have half a mile to go to school. Where I live it is nearly all level ground. There is a range of hills at the north, and there are a few bluffs around. I have two sisters. One lives in Ontario; she is the youngest; her name is Sadie, and the one that live with me is Alice. I am the eldest, and I have no brothers. We have a dog, whose name is Tige. We also have three cats. One cat is mine; its name is Tottsy. One is Alice's; its name is Duffer. The other cat's name is Flossie.

Man. BLUEBELL.

can be light and of home-made ate of fruit, cake es and tea, or ces and cocoa—inations is quite

dads for you for e and the mem- id their favorites helped. I put ok in case some- ed your difficul- -addressed en- y of a magazine n it. Hope you

SCOTLAND

—Although I t THE FARMER'S joy reading the much. I think orner and so I n for a talk with

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ig standing will ater. Camphor ill keep it free

t fresh for weeks a basin of clean

cleaned by being with hot flour. ed with paraffin

your cake box. rning dry. at the milk used r linoleum should s it thicker and . It may either e floor and then nel or the cloth e milk. Give a 'dry cloth. with best wishes the Ingle Nook

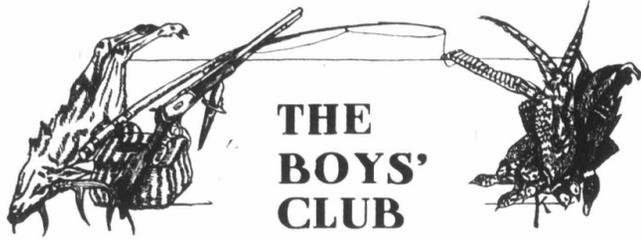
OF SCOTLAND. e as the flowers and we are glad our Ingle Nook. scottish rural life,

CHILDREN

—I have been vook letters grow- every week, but eon sorry enough do something to ourse we are all rinter, but after re so rushed that necessary half- essage to Dame which we all find

y enquiries came nd was interested ly hands are full and boys, but I uple should have their home. If at you are going periment it may if you think of child who hasn't be doing a good nan whose own p and she adopts years, and gives Another odd case A girl was taken the Aid Society people. She had been taught to ter-parents were grew into a fine, an and married died when a few me straight to the en her a chance to fill the vacant hear about that. members would gardens. May I

HERESA. are glad to have little bit disap- pers grow few, but pect many during y all come troop- rd work is done. I make their re- ne 1st.—D. D.)



THE BOYS' CLUB

NOT SUCH A BAD TOWN

Dear Editor:—This is my first letter to the Boys' Club. I have always been just going to write all the time, but have always put it off till now. Look out for wrong grammar and spelling, for I am not very good in either, especially grammar, which I do not like. My father has taken THE FARMER'S ADVOCATE for eight or nine years.

Our town is what Mark Twain called a one-horse town. I like it pretty well anyway though, because we have ducks and all kinds of shooting and in the winter there are lots of prairie chickens, and sleigh-riding, skating and all kinds of games.

I think I will keep up a correspondence with the Boys' Club. I am thirteen years old and go to school. I will now have to close, but before I do I would like to tell that farming is one of the highest occupations, because if it was not for the farmer we would all starve to death, because "the farmer feeds them all." I will end with a question or two.

1. Which side of a tree does the most moss grow on?
2. If fifteen cows are on a hill feeding how many face the same way?

PRAIRIE BROTHER.

(I was in your town once and can testify that it is very hospitable and kind to strangers.—Ed.)

A PASTIME AND PROFESSION

Dear Editor:—I must write again to your interesting club and I hope this letter will escape the waste paper basket. I am also fond of taxidermy and think it a pleasant pastime as well as a profitable profession. I would like if the editor would send me E. J. A.'s address, as I wish to correspond with him.

There are not many ducks around here so I will not attempt to answer Pat's question, but I have heard that they can be caught by fish-hooks with frog baits placed in water where ducks alight to feed. I have never got ducks any way but with a gun, which I think is the best and fairest way.

I think the horse is the most profitable animal on the farm. It can do more work, and if used right will do it willingly, where an ox has to be urged in. And there is profit in raising colts at the price horses are now. Also a horse is a pleasure to drive.

Now, boys, write up, and make this club the leader!

Man. GRAYDEN WOODS (14).

THE FIRST DEFENCE

Dear Editor:—I am pleased to have the opportunity in your valuable paper in the Boys' Club of defending myself and everyone who loves to trap, hunt and fish.

You say that some say that you are not to encourage hunting, fishing and trapping in your columns, as it encourages a boy to be cruel and savage in his nature.

He will be doing nothing but taking the life of what our Great Creator put upon the earth for us to use. Did not our Saviour once catch fish to eat? Then why not we follow His example? It also affords one much pleasure to hunt, fish and trap.

Why do the governments protect this game if they do not want them caught again? Because they do not want them extinguished. Some of them go so far as to buy fish to put in the pleasure resorts just to be caught again in the summer months.

The hunter kills thousands of birds that destroy crops, such as geese, and many different kinds of small birds. They also kill many hawks that otherwise, if they had lived, would kill the poultryman's fowls. Therefore it would take all of his profit.

Then there are the wary coyote and wolf, which take the stockman's calves and the poultryman's chickens. The weasel, mink and skunk also come at night and kill the chickens and suck their blood. Sometimes the daring badger will visit the hen-roost at night and not have enough for a start. He will sometimes dig a hole in the bottom of the coop and live there on the chickens.

At the same time we are getting rid of these animals they are increasing in numbers and they seldom get any fewer. The beaver and buffalo are exceptions. They also bring the trapper and hunter some profit and help him to get a livelihood, which all human beings and animals must have.

But as far as cruelty and savagery goes, I think it is an instinct in all mankind to kill birds and trap animals.

I have done a good deal of hunting, fishing and trapping. It is cruel to trap the way that some trap. Some that are careless and do not go to their traps often enough to take the animals that are caught and get them out of misery. I cannot see I am any more



READY FOR THE RUN

savage or cruel now than I was when I started. I do not kill them because I hate them, but because I want to take their fur. It may be that the more we kill these animals the more we want to kill them. I don't think for a minute that we will get any more cruel to our fellowmen.

We can get much valuable information how to catch these animals in your columns of the Boys' Club. If we get too cruel and savage I hope the officers of the law will put a stop to it. I hope we will continue to correspond through your paper, and wishing the Club every success, I will close.

Alta.

JOHN BURNS.

THE TRUE SPORT

Dear Editor:—I am not very good on spelling and grammar but perhaps you will fix this up if you think the ideas are any good. I was thinking about what someone told you of hunting making people cruel, and I guess that is true of a great many. I have seen lots of fellows who get hold of a gun and go out and kill everything they see just because it is alive. Just to kill something is all they want, and it seems to me that is ignorant and cruel. The real hunter will save his skill for something worth while using it on, and he will not leave his game to suffer a minute longer than he can help. Just to have a gun and be able to load and fire it is not enough to be a hunter—a man must have common sense and not be ignorant or greedy.

Alta.

TWENTY TWO.

(Correct spelling and grammar are fine things but ideas are finer, and for the sake of your good idea I was glad to correct all the mistakes. I wish somebody could write something about the shooting of birds. —Ed.)

ANOTHER TAXIDERMIST

Dear Editor:—Being an interested reader of the club I thought I would write a few lines. I notice by E. J. A.'s letter that he is interested in taxidermy. I have taken this course also and find it very interesting. But I think if E. J. A. was to read Lesson 31, Book VIII, he would find it reads: A grotesque object and deserves a better (not "bitter") fate." A first-class course in this art can be obtained for the sum of twenty-five dollars.

I think Arthur Wright would have better success skinning a bird if he was to make the cut from the end of the breast bone to the vent. Powdered alum makes a good preservative.

I will now close, hoping Arthur makes a success of mounting.

Man.

TAXI.

(I could not put the name and address of the firm you mentioned on our page, or the advertising department would be after us, but I am keeping it so that if any boy wants it he has only to drop me a postcard and I'll send the address to him. The error in E. J. A.'s letter was not of his doing; it was the printer's mistake.—Ed.)

TO TELL A HORSE'S AGE

Dear Sir:—I see in the issue of May 4th, one of your youthful correspondents wishes to learn how to tell the age of horses by their teeth. The following old English rhyme will be useful:

To tell the age of any horse,
Inspect the lower jaw of course;
The six front teeth the tale will tell,
And every doubt and fear dispel

Two middle nippers you behold
Before the colt is two weeks old;
Before eight weeks two more will come,
Eight months the corners cut the gum.

The outside grooves will disappear
From middle two in just one year.
In two years from the second pair,
In three years "corners" too are bare.

At two the middle nippers drop;
At three the second pair can't stop;
When four, the third pair goes;
At five a new full set he shows.

The deep black spots pass from view
At six years from the middle two;
The second pair at seven years;
At eight the spot each corner clears.

From middle nippers upper jaw
At nine the black spots withdraw;
The second pair at ten are near
Eleven finds the corners clear.

As time goes on the horsemen know
The oval teeth three-sided grow;
They longer, too, project before,
Till twenty, when we know no more.

Sask. FRED STAFFORD, P. M.
(It is very kind of you to take an interest in the boys and their young club and the enquirer will be delighted to have his answer in rhyme.—Ed.)

IN LONDON TOWN

BY THOMAS JONES, JR.

The road leads straight, the road leads far,
To London town;
And there the knights and ladies are
And brave renown.

But here with you I watch each pair
Pass up and down,
And wonder what they find so far
In London town.

—Everybody's Magazine.

After the Wedding

Mrs. Kirby sat in an easy chair with her hands idly folded on her lap. She was a comfortable looking matron, who carried her years remarkably well and that she was over fifty and had grown-up sons and daughters was a constant surprise to strangers. But to-day she seemed to have suddenly grown old and tired. Life had proved disappointing to her, and she was feeling depressed and wretched. The fire burned cheerily on the hearth and a well polished brass kettle stood in the fender.

On a little table at her elbow was a daintily arranged tea tray.

There was an air of comfort and repose pervading the room; the furniture was old-fashioned, but handsome, and the Turkey carpet looked warm and cosy, despite the fact that in places it showed unmistakable signs of wear; for many feet had trodden it in days gone by when this room had been Sanctuary for all the children.

She was thinking of them now as she waited for her husband's step outside.

He had promised to come home and join her in what would else be a solitary meal.

A tear slowly found its way down her cheek. This is what she dreaded, this loneliness, and a fierce rebellion rose in her heart against the men and women who had taken her children from her.

First it had been Kathleen, her bright and bonny Kathleen, who had loved a soldier, and gone away to India with him. She was happy, certainly, and wrote home glowing accounts of her life as an officer's wife, but the mother had missed her sorely and had pined in secret for her first-born who had left her so blithely.

Fred had been the next to go. She remembered how he had brought his little sweetheart to her with pride and love shining in his honest brown eyes, and she had tried to be kind and to love the little doll-like creature for her boy's sake, but the girl was so unsuitable. Mrs. Kirby shook her head sadly as she thought of them both. They were absurdly gone of one another, but how could any girl help loving Fred—her handsome, clever son? And the mother sighed.

Three more had left homestead one after another and gone to homes of their own, and never by word or deed had the brave little mother, who felt her heart was breaking, shown to the world what the wrench had cost her. And the day had arrived, the day that had loomed dark and threatening on the horizon, the day which she had dreaded ever since children had first played about her knee.

Molly, her darling, her baby, had gone, too!

Yesterday with wedding bells and bridesmaids, and everything that helps to make a wedding day successful, Molly had left her, too.

How sweet she had looked in her simple satin gown with the wreath of orange blossoms trailing on her shining curls.

Admiration for the bride had been heard on all sides, and the mother's heart, despite her agony at the parting, could not but feel proud and pleased at the praise which her darling's beauty called forth. She had even smiled when one of her friends, who had four daughters of uncertain age who were unmarried, came up and congratulated her on getting her family off her hands so quickly and well. The good lady would have been considerably surprised if she had known that Mrs. Kirby almost envied her—that what she considered a trial, her friend would have welcomed as a blessing.

In the excitement and bustle of the wedding the mother had contrived to put away from her that awful fear of loneliness which she dreaded so much, but now, the day after, it came to her with an overwhelming rush, and with Molly far away, the lonely mother sat and brooded over her sorrow.

She had been an exceptional mother, who had simply lived for her husband and children. They had been every-

Wedding

easy chair on her lap, smiling matron, probably well, and had tears was a sign. But she suddenly had proved she was feeling. The fire earth and the fire stood in

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The good lady

thing to her, and their home life had been almost ideal. Yet they had left the home which she had spent her life to make comfortable and happy for them, and they had left her. She had not been sufficient for them, as they had been for her, and the thought was very bitter.

And the years of her life which she had sacrificed for them they did not consider. She had tended them, nursed them, given them all her youth and energy and now they were strong and healthy they left her. They were ungrateful—she gave them all, but they only gave her part. She fumbled in her pocket for her handkerchief and dabbed her eyes with it.

A slight movement at the door which slowly opened arrested her attention.

On the threshold stood a little old lady. She walked with the aid of a stick, and she stooped slightly. She wore an old-fashioned silk dress of very good quality, and a large, old-fashioned bonnet. Her face was very wrinkled, but her eyes were bright and clear.

Mrs. Kirby hastily concealed her handkerchief and composed her features. To be found in tears was most annoying; she would not have the world know that she was ever other than perfectly happy.

All her life she had kept her troubles to herself and had the satisfaction of knowing that many women envied her.

As the old lady came towards her, Mrs. Kirby started up in surprise.

"Mother!" she cried, "Mother!"

The little old lady sank into a chair almost exhausted; his daughter knelt beside her.

There was a very tender light in the old lady's eye, which were as bright and keen as her daughter's. She noted the signs of agitation on Mrs. Kirby's face with a mother's eye, quickened by love.

"Are you pleased to see me?" she asked, somewhat wistfully.

"Can you ask, mother? How did you manage to get here?"

"I came in a taxicab all the way," said the old lady, with a touch of pride in her voice. "It cost me seven shillings and eight pence, and very comfortable it was, too."

"Oh, mother, it was very risky," said Mrs. Kirby, shaking her head.

The old lady fumbled with her bonnet strings with trembling hands.

"I am a silly old woman," she said in a quivering voice. "You were always so practical, just like your poor father. I daresay you'll think I'm foolish, but I couldn't keep away. I was so afraid you might feel lonely without Molly, and I wanted to comfort you."

The trembling voice was very sweet and eager, and Mrs. Kirby's eyes filled with tears in spite of herself, and she bowed her head.

She felt the frail, trembling fingers caressing her hair as they used to caress it when she was a child, and somehow it didn't seem so very many years ago.

"I could not sleep last night," the trembling voice went on. "I kept thinking about you and wondering. I daresay you think it is silly, but you were my only child," she added apologetically, as if excusing herself for her weakness.

"After your wedding, my dear, when I had seen you and your husband drive off so happy and contented with one another, I crept back into the empty house, and felt my life was ended. Ah! the dear Lord was very good and kind to me then, for he gave me many friends, but even they are not like your own," she went on wistfully.

"Oh! mother," cried Mrs. Kirby, looking up with the tears raining down her face. "Do not speak like this, I never meant to neglect you and leave you alone. I really loved you dearly. It was only that Fred and the children took up so much of my time, and I never seemed to realize that I had other duties."

"No, no, dearie," said the mother, passing her thin, transparent hand over the daughter's scant grey hair. "You must not reproach yourself. You have done your duty to father and children. Does not our dear Lord say that a man shall leave father and mother and cleave to his wife? So also

shall a wife to her husband. It is fulfilling God's words."

The tired old voice died away, and Mrs. Kirby looked up in alarm.

The old lady was leaning back in her chair with a smile of ineffable sweetness on her wrinkled face, but she opened her eyes and tried to rouse herself when she saw the frightened look on her daughter's face.

"I am all right, dear," she said, reassuringly. "I'm only tired. I am seventy-nine this year, and can't expect to run about as I did when I was young, can I?"

"Oh, you shouldn't have come. It had been too much for you," cried Mrs. Kirby in distress.

"I shall be all right when I've rested a bit, and have a cup of tea," said the old lady, bravely.

"I am a silly old woman to come and worry you like this, but I couldn't sit quiet at home without seeing you. As each one of your children has married, I wanted to come, and then I thought to myself, 'No, she still has her Molly; when she flies away to her own nest, then I will go to my girl and perhaps I shall be welcome.'"

"Oh, mother, dear!" was all that Mrs. Kirby could say, as she caught the frail old figure in her arms, in an agony of remorse.

She dimly realized the tragedy of her mother's life. Here was she—reproaching over the ingratitude of her children, she who had been so careless and thoughtless of her mother who had no one to lean on but her.

There was a step outside the door, and Mr. Kirby entered. He was a tall, soldierly-looking man of sixty, with a kind, benevolent-looking face, and deep, honest, grey eyes.

His wife rose hurriedly to meet him, and he kissed her tenderly, and then turned to greet his mother-in-law.

"Well, this is a surprise!" he exclaimed. "I am pleased to see you. Why? It is years since you were last here!"

"Yes," said the old lady, brightly; "I've got my little interests in life, so that I don't visit much, but I thought I'd like to see my Ellen again, and so I've given her a surprise visit."

"Well, you are a marvel," said her son-in-law, admiringly. "I hope I shall be as energetic as you when I'm your age. You must tell us the secret, mother; mustn't she, Ellen?"

Mrs. Kirby was busy pouring out the tea which the maid had just brought in, and she only smiled.

"There is no secret," said the old lady, beaming happily on her children. "I just thank the dear Lord for everything that He sends, and I'm a very grateful old woman to-night," she added tremulously. "So many people are all alone in the world, and have no children who love them."

Mrs. Kirby did not move from her seat, her heart was too full, but her husband bent over to the old lady and kissed her affectionately.

"Yes, mother, you have Ellen and me," he said tenderly, while a feeling of remorse for neglecting her so long made him feel vaguely uncomfortable.

An hour later when the mother had been helped to her room, the room that had so recently belonged to Molly, the husband and wife stood alone in the sitting-room together.

"Well, little mother," said Mr. Kirby, as he drew his wife close to him, and kissed her tenderly. "We are Darby and Joan now, you know."

"Yes," said Mrs. Kirby softly, as she played nervously with a button of his coat; even as she had in the old courting days so long ago. She was naturally reserved, and to talk about herself at any time cost her an effort. "Yes," she said thoughtfully. "Oh! I am so grateful I have you. This afternoon I was sitting alone feeling so sore and angry that my children should have been so ungrateful as to leave me. Then mother came in, and although she did not reproach me, I realized how terribly she must have felt when I left her all alone and came to you, for she had no Darby to comfort her as I have."

Mr. Kirby bent his head and kissed his wife's flushed face.

"Children are not ungrateful, dear," he said softly. "They are but fulfilling their destiny, praise God."—*Christian Globe.*

Selected Recipes

CREAM SPONGE CAKE.

Beat the yolks of four eggs until light-colored and thick, the whites until dry. Beat into the yolks the grated rind of an orange or lemon and one cup of granulated sugar. Add three tablespoonfuls of cold water. Sift together one level cup of flour, less one tablespoon; one teaspoonful and one-half (measured level) of cornstarch, and a slightly-rounding teaspoonful of baking powder; cut and fold this mixture into the yolk mixture. Fold in the whites of eggs. Bake about fifty minutes in a sponge-cake pan.

FIG OR DATE LAYER CAKE.

Cream, one-fourth of a cup of butter, and beat the yolks of two eggs until light-colored and thick, then beat half a cup of sugar into the butter and half a cup of sugar into the yolks, and then beat the two together. Add, alternately, half a cup of milk and one cup and one-half of flour, sifted with half a teaspoonful of soda and a slightly rounding teaspoonful of cream of tartar. Lastly, add the whites of two eggs, beaten dry. Bake in two layers. Put the layers together with half a pound of chopped figs or dates, cooked smooth in two or three tablespoonfuls of water. Cover the top with cream frosting.

CHEESE CAKES.

Beat two eggs, then gradually beat into one cup of granulated sugar, the grated rind and juice of one lemon, two tablespoonfuls of ground almonds and one-fourth a cup of melted butter. Turn into individual tins, lined with rich pastry, and let bake in moderate oven about twenty minutes, or until firm in the center. Brush the top of the mixture with a little white of egg, reserved for the purpose, dredge with granulated sugar and return to the oven to color the top delicately. Re-heat, if they become cold, before serving.

WELLESLEY FUDGE CAKE.

Two-thirds a cup of butter, one cup of sugar, one-quarter cup of chocolate, melted over hot water, two yolks of eggs, one cup of milk, two and one-half cups sifted flour, one rounding teaspoonful of baking powder, two whites of eggs. Mix the ingredients in the order enumerated; bake in a loaf and cover with the following frosting: One tablespoonful butter, one-half cup of chocolate, one and one-quarter cups of sugar, one-quarter cup of milk, one teaspoonful vanilla. Melt the chocolate over hot water; add the butter, sugar and milk and let cook about ten minutes; let stand until cooled a little, then add the vanilla and beat until of a consistency to spread.

TRADE NOTES

FREE SAMPLE OF AMATITE

This new type of roofing came upon the market a few years ago and has found wide favor on account of its mineral surface, which needs no painting. This mineral surface is embedded in pitch, which grips the stone firmly and makes a kind of pitch-concrete surfaceable to withstand all sorts of weather year after year without any painting.

Next time you paint your roofs remember that painted roofings are no longer the only kind you can buy. In the meantime it is a good idea to look up amatite. You can get full information and a free sample from the manufacturers on request. Address the Paterson Manufacturing Company, Ltd. Toronto, Montreal, Winnipeg or Vancouver.

DIFFERENT ABODES OF MAN

Far off in the Frigid Zone, the Esquimaux builds his house or *illoo* from blocks of snow. When the short Arctic summer arrives and the sun's rays melt the roofs, the Esquimaux abandons his home. In the South Sea Islands the natives thatch their mud huts with reeds and cane brake. This affords protection from the in-

terest heat of the tropic sun, but when the heavy rains set in it is frequently necessary to build several new roofs in a season. Among civilized people where permanent and substantial homes are established, it was necessary to get a roof for the home that would withstand the changes of temperature and weather and fury of the elements.

Various materials have been tried for this purpose, but perhaps none meet the demands as well as Genasco Ready Roofing. This roofing is made from natural asphalt taken from Trinidad Lake on Trinidad Island, off the coast of South America. The fact that for hundreds of years it has withstood the ravages of time and the elements proves its absolute durability. It was only after years of careful study and experiment that The Barber Asphalt Paving Company, Philadelphia, finally placed Genasco Ready Roofing before the public and its success was so remarkable that it is now found in almost every quarter of the globe. But strange to say, despite the advantage of modern progress and the perfection of Genasco Ready Roofing, there are many otherwise progressive and up-to-date farmers who, every year, are doing much as the savage in the South Sea Islands—going out mending leaks and repairing the damage done by faulty and defective roofs.

It is estimated that half the waste and expense caused by defective roofs would cover the cost of a good, sound, permanent roof of Genasco. Write this firm for further particulars.

CONFIDENCE RESTORED IN LIGHTNING ROD PROTECTION

There is a genuine renewal of interest in the matter of protecting buildings from lightning. Lightning rods on houses and barns are becoming the rule instead of the exception. Confidence is being restored. People are rodding their buildings who wouldn't have thought of it a few years ago. Unquestionably this restoration of confidence in lightning rod protection is due to the fact that the men have made lightning a study for many years, and have perfected a complete system for the protection of buildings.

Prof. West Dodd has not only perfected a system for controlling lightning, but he actually demonstrates that he does control it and that he can and does prevent the lightning stroke. Years ago he perfected electrical apparatus, now known as the "Dodd Thunderstorm," with which these demonstrations were made. It reproduced on a small scale the actual conditions in a real thunderstorm. Many thousands of people, individuals, conventions and assemblies, have witnessed the demonstrations. They have seen just how and with what precision he does control lightning. They have been made to see with their own eyes that Dodd Lightning Rods are effective and they have been made to understand the reasons for it. Among those convinced were the fire insurance companies.

Some 2,000 mutual fire insurance companies have honored Prof. Dodd and have strongly endorsed him and his system; many of them grant low rates of insurance on buildings protected by his system. The following resolution by the Central National Fire Insurance Company of Chicago shows the position of the fire insurance companies in the matter.

"We believe that lightning rods properly installed effectively protect buildings against lightning, and where a property owner has so protected his property he should be entitled to a reduction in rate. While there are many firms manufacturing lightning rods and putting them up, yet so much depends upon the manner in which they are erected that we do not believe it would be proper to make a general reduction of rate regardless of whose rods were used.

"Having gone into the matter by way of investigation we have decided to make a reduction of 20 per cent. from the regular fire and lightning rate where buildings are rodded with Dodd & Struthers' rod and system, manufactured at De Moines, Iowa, this firm having studied the subject thoroughly and taking real pains and care in the erecting of their rods, that we give them

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ALFALFA: This book deals on its production, qualities, worth and uses—especially in Canada. Cloth bound, 161 pages and illustrated. Will be sent to any subscriber sending us one new subscriber and \$1.50 to pay this subscription for one year.

HORSE SENSE: Contents of this book are as follows: Breeding, selection of stallions and brood mares, care and handling, different types and uses, road to improvement, government ownership of stallions, feeding of horses, natural laws governing action, correcting bad habits, receipts, veterinary questions and answers, by J. C. Currier, M. D.—a ready reference book in every sense. Cloth bound, illustrated, 245 pages. Only one new subscriber at \$1.50 is all that is required for this book.

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FRUIT GROWING: Cloth bound, 221 pages, profusely illustrated. Covers fruit-growing from A to Z. Those contemplating fruit-growing should have the benefit of this book. One new subscriber at \$1.50 is all that we require for this book, sent postpaid.

FARM BLACKSMITHING: A handy book to have and of especial worth to the beginner. Cloth bound, 100 pages and well illustrated. Sent free upon receipt of one new subscriber to the Advocate with \$1.50 to cover subscription.

CANADIAN DAIRYING: An exceptional book dealing with farm and co-operative dairying; cloth bound; well illustrated. Has 269 pages, also blank pages suitable for remarks. A most complete book in every detail. Two new subscribers, with \$3.00 to cover their subscriptions to the Advocate, is all that we ask for this book.

JUDGING LIVE STOCK: Cloth bound, 193 pages, and one of the season's best sellers. Finely illustrated. This popular book sent free to any subscriber who will send us two new subscriptions to the Advocate, with \$3.00 to cover their subscriptions.

LIGHT HORSES: To those interested in light horses this book on the Breeds and Management is of exceptional value. 225 pages in all, and cloth bound. Also treats on the diseases and injuries to which light horses are liable. Sent free and postpaid upon receipt of two new names and \$3.00 to cover their subscriptions to the Advocate for one year. This book on the Breeds and Management of Light Horses should be at hand for the use of every man interested.

Kindly bear in mind that these subscriptions must be new ones and not renewals.

ADDRESS ALL COMMUNICATIONS TO

FARMER'S ADVOCATE OF WINNIPEG LIMITED

this endorsement in the way of a reduction in rate."

The Dodd System of lightning protection and control is operated by Dodd & Struthers, a company years ago organized in Des Moines, Iowa, for that purpose. Their advertisements, to which readers may well give careful attention, are now running in this paper. Look up the advertisement and write to the firm for their "Lightning Book," giving all particulars.

BUYING WIRE FENCES

Realizing the increasing demand for wire fences in the Canadian West, progressive fence firms are making an effort to introduce their goods and hold the enormous business that is bound to develop within a very few years. E. L. Dyer, manager of the Crown Fence Supply Company, 47 Wellington Street, East Toronto, on another page of this issue has an attractive offer of gates in which he agrees that purchasers can send them back if they are not satisfactory. Prices quoted on guaranteed gates are worth considering. A fine wire gate adds greatly to the appearance of a place. Write this firm for catalog and prices.

Questions & Answers

GENERAL

Questions of general interest to farmers are answered through our columns without charge to bona-fide subscribers. Details must be clearly stated as briefly as possible, only one side of the paper being written on. Full name and address of the enquirer must accompany each query as an evidence of good faith but not necessarily for publication. When a reply is required by mail one dollar (\$1.00) must be enclosed.

WEEDS IN ALBERTA

I enclose herewith a plant having a very large jointed root stock. This plant is giving the farmers in some parts of the province a lot of trouble. Will you kindly let me know the name of it and the remedy?—W. G. W., Alberta.

Ans.—The plant you enclose is Vein Dock (*Rumex venosus*). It is a perennial and belongs to the Dock family. Owing to its extensive root system it is very difficult to eradicate. I know of nothing better than thorough summer-fallowing for this purpose, where the plants are numerous. Where there are only a few scattered plants they should be dug up bodily, taking care to remove the tuber on each root end. Otherwise this tuber will start afresh and give trouble. This plant is not common in Manitoba, but possibly it is more plentiful in Alberta.

M. A. C. S. A. BEDFORD.

MANURE ON GROWING CROP

Have you had any experience in spreading well-rotted manure on a crop of grain? I think of giving it a trial if you think it is safe.—B. H., Cartwright, Man.

Ans.—About ten years ago I tried spreading well-rotted barnyard manure on a field of fall wheat. It apparently had very little effect on the grain one way or the other. If properly spread I imagine it would prove a benefit on light land by acting as a mulch. About ten loads to the acre would, I think, give the best results. Manure spreading machines do much better work than can be done with forks.

M. A. C. S. A. BEDFORD.

LIMBER-NECK

My hens are dying they seem to be all right and appear healthy, and then all of a sudden they sit down for about a day and die, with no other apparent symptom than to have their heads twisted down over their breasts.—J. S. A.

Ans.—The symptoms point to limber-neck, a peculiarly fatal disease. It is usually the result of intestinal irritation, and this irritation may be the result of several causes. A frequent cause is acute indigestion, caused by indiscretion in feeding. Sometimes a ration will be continued, without variation, or the birds may have been eating impure animal or vegetable food, which all tend to bring on the disease. The most effective and easily-administered treatment is to give one or one and a half teaspoonfuls of oil of turpentine, mixed with equal parts of sweet oil. Half an

hour afterwards give a tablespoonful to each fowl of the following mixture, viz., one teaspoonful of finely powdered ginger, thoroughly mixed into a half cup of hot milk. This may be repeated in two or three hours. Give a generous ration of soft food, with green stuff, or raw potatoes cut up fine. An improvement should quickly follow, if the ailment is not due to brain affection, for which there is no cure. But give the treatment a trial.

Questions & Answers

VETERINARY

Enquiries dealing with matters of a veterinary nature are answered through our columns by a competent veterinarian free of charge to bona-fide subscribers. Details and symptoms must be fully and clearly stated on only one side of the paper. Full name and address of the writer must accompany each query, as a guarantee of good faith but not necessarily for publication. When a reply is required by mail one dollar (\$1.00) must be enclosed.

BREEDING MARE WITH TORN PASSAGE

Would it be safe to put a mare to a horse if she was torn behind? She is a Clydesdale and I would like to get her in foal if it is safe to breed her.—P. H.

Ans.—It depends entirely upon the extent of the tear. If it is only on the external genital organ, possibly no bad results would follow; but if the laceration is extensive, trouble may be expected if the mare should become pregnant.

COLT DIED FROM ENTERITIS

Had a fine large colt foaled; appeared to be weak in legs, but could walk after being helped up. He would hold nose against mare's teats but would not open mouth; would suck tongue. After about ten hours fed him mare's milk, which he drank greedily out of dish. Next morning he appeared sick; gave him soda in milk and a little sweet oil. He gradually got worse, heart palpitating fast and hard; appeared to be in a good deal of pain, turning nose towards flank, gave injections and applied hot fomentations to bowels. Nothing came through him, but he did not bloat; died that night. On opening him I found greater part of oil in stomach, large intestine and greater part of small intestine discolored and containing thick, bloody matter. There was no hard substance. Castors on legs came off before he died. What treatment should have been given?—M. W.

Ans.—Your colt died of enteritis (inflammation of the bowels). It is doubtful if any treatment would have been successful in a colt so young. The cause was likely a congenital infection of the intestinal tract by virulent micro-organisms. Or the infection may have gained entrance to the abdominal visera through the umbilicus (navel). The umbilicus should always be well disinfected with pure carbolic acid, or tincture of iodine, immediately the cord is broken. Much trouble may be averted if these precautions are taken.

CONTAGIOUS ABORTION IN MARES

A large percentage of the mares in this district which were in foal the last year, have slipped their foals from some unknown cause. Mares apparently well one day, would lose their colts the next, and if one mare in a bunch lost her colt, the others invariably went too. Sometimes all the mares in a ranch lost their foals in a few days. Kindly advise as to treatment of mares. Is it safe to breed mares again this year? Is the stallion likely to spread the disease?—R. B.

Ans.—This is contagious abortion, and appears to be a very bad outbreak of the disease. It is difficult to tell the source of the outbreak without being in possession of certain data. But the cause is infection, possibly brought into the district by an animal previously infected. If a stallion was used on an infected mare, he would carry the disease to healthy mares and they would abort. Abortion in the mare usually takes place either at the fourth or the ninth month. It is impossible to detect the affected mare prior to abortion, as she does not show any symptoms of disease, but may present the appearance of perfect health, and yet be a serious danger to a whole district. By

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way of prevention, if a newly acquired pregnant mare is kept by herself until parturition, and her uterus and vagina irrigated daily for a week with some mild disinfectant (after foaling), then delay having her served for a month may prevent the spread of the disease. The horse should be thoroughly disinfected after service. If these precautions were taken there would be very few outbreaks of contagious abortion in either mares or cows. The dead foetus, together with the membranes, should be destroyed by fire. The loose box in which the mare foaled should be thoroughly disinfected with a strong solution of carbolic acid, and the floor covered with air-slaked lime. The bedding must be burned, also the manure. The external generative organ of the mare, together with the tail, hips and thighs, must be washed twice daily with a three per cent. solution of either carbolic acid or creolin. The uterus should be irrigated once daily for a week with a one per cent. solution of the above disinfectant. Internal medication is useless in contagious abortion. The disease must be prevented and overcome by disinfection.

GOSSIP

McGREGOR'S IMPORTATION

Not satisfied with gathering in the lion's share of prizes at leading shows in the West from his present holdings, J. D. McGregor has made an importation from Scotland that contains a few specimens that are said to be select individuals from choice breeding. Violet 3rd of Congash is said to be the best of the breed since Waterside Matilda. A heifer, Our Pretty Rose, a two-year-old heifer, is branded as the best of the age; while a yearling, Edith Rose, is placed in the same class. Other five are animals of merit. George Sinclair, manager of Lord Rosebery's farm, did the purchasing. Three of the heifers are from the Dalmeny herd. With this addition to an already strong herd, Mr. McGregor should be in a position to carry high honors at next fall's Chicago International.

MINNESOTA STATE FAIR

The management of the Minnesota State Fair give special boosting in the form of *The State Fair News*. Due prominence is given to attractions and educational features. Live stock departments promise to be stronger than ever. The Navassar Ladies' Band, last year at Winnipeg, will provide music, and Wright Bros. are billed to give an exhibition of flying in an aeroplane. A Curtiss aeroplane also will give daily demonstrations. The dates are September 5 to 10.

FARMERS' CO-OPERATIVE SOCIETIES IN SOUTH AFRICA

Co-operative societies to the number of 28 registered in the Transvaal in 1908, for the purpose of disposing of the agricultural produce of their members. Of these societies the majority deal in agricultural produce, such as maize, wool, fruit, cattle, sheep, etc. Two are creameries, two confine their operations to fruit, one purposes to deal with tobacco, and another is a stock farmers' society. A central agency has been established in Johannesburg to dispose of the produce of societies generally.

A co-operative agricultural society may be organized under the act for all or any of the following objects: (a) Disposing of the agricultural produce and live stock of any of its members in the manner most profitable to the association; or, (b) manufacturing or treating on joint account the agricultural produce of its members and of disposing, in the manner most profitable to the society, of the produce so manufactured or partly manufactured; or, (c) initiating schemes of irrigation or water boring or furthering and developing existing irrigation and water boring schemes; or, (d) purchasing, hiring, or otherwise acquiring and working on behalf of its members, agricultural implements or machinery; or, (e) purchasing, hiring, or otherwise ac-

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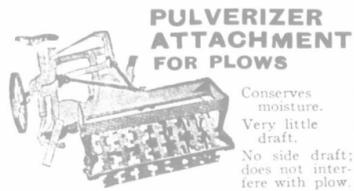
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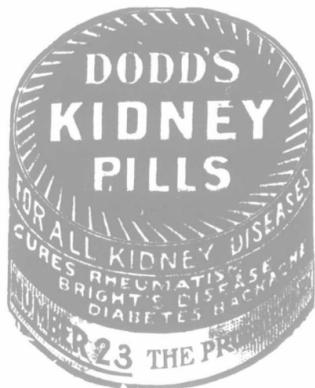
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Gang	\$15.00	\$18.50
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quiring, and using and controlling on behalf of its members, breeding stock; or, (f) purchasing or otherwise acquiring on behalf of and supplying to its members agricultural implements and machinery, stock, feeding stuffs, seeds, fruit trees, manure, and other farming requisites; or, (g) commencing, acquiring and carrying on supply stores under a co-operative system for disposing of and supplying agricultural produce; or, (h) commencing and carrying on insurance societies for its members under a co-operative system; or, (i) acquiring and distributing information as to the best manner of carrying on farming operations profitably; or, (j) acquiring by lease, purchase, or donations, and holding, and immovable property in the colony for the better carrying on of any of the objects of the society; or, (k) raising money on loan for any of the lawful objects of the association; or, (l) any other lawful object which the minister may from time to time permit for furthering the interests and development of agriculture in the colony.

Financial assistance is afforded by the government in the form of loans from the land and agricultural bank for any one or more of the objects in respect of which that society, has regulations registered under the Co-operative Agricultural Societies Act, 1908, or any amendment thereof. A co-operative society may also obtain a loan from the bank for any one or more of the objects aforesaid, upon the security of the joint and several liability of the members of the society, and of such additional security as the board may acquire. A loan made upon this security shall bear interest at the rate of five per cent. per annum, payable periodically on such dates as the board may prescribe. It shall be repayable with any interest due thereon within five years, unless the board for good reasons extends the period. No such loan exceeding £5,000 shall be made without the approval of the governor.

The co-operative associations of farmers in the Transvaal are duly registered as unlimited liability societies. It is, however, a condition of membership of every society that all its members shall be jointly and severally liable for payment of the obligations of the association, provided that the liability of the estate of any person who has died, or any person who has resigned his membership, or has been expelled from the society shall cease, in respect



of any of its obligations incurred after his decease or after he has ceased to be a member and, in all respects, as soon as the financial statements of the association, signed by its auditor, disclose a credit balance in favor of the company.

MEETINGS IN MANITOBA

Forty-six agricultural extension meetings have been arranged to be held in Manitoba during June. Following is a list of speakers and subjects and places and dates of meetings:

Circuit 1.—Prof. C. H. Lee, of the Agricultural College, on "Identification and Control of Weeds" and J. B. Ring, of Crystal City, on "Soil Cultivation": Deloraine, 2.30 p. m., June 2; Deloraine, 8.00, June 2; Boissevain, 2 p. m., June 3.

Circuit 2.—Prof. F. G. Churchill, Agricultural College, on "Alkali, Its Cause and Control," and Prof. L. J. Smith, agricultural college, on "Use of Concrete for Building": Cartwright, 2.30 June 6; Mather, 8.30, June 6; Pilot Mound, 2 p. m., June 7; Marringhurst, School, 8 p. m., June 7; Manitou, 2 p. m., June 8; Manitou, 8, June 8.

Circuit 3.—A. Rigby, farm foreman Manitoba Agricultural College, on "Breeding Care and Feeding Live Stock," and W. R. Clubb, of Morris, on "Growing of Cereal and Fodder Crops": Birtle, 2 p. m., June 7; Strathelaine, 8 p. m., June 8; Minnedosa, at A. Grant's farm, 3 p. m., June 9; Minnedosa, C. Meadow's farm, 3 p. m., June 10; Bethany, 3 p. m., June 10.

Circuit 4.—Jas. Murray, superintendent Experimental Farm, Brandon, on "Growing Meadow and Fodder Crops," and J. A. McGregor, Manitou, on "Soil Cultivation": Arrow River, 2 p. m., June 6; Hamiota, in town, 2 p. m., June 7; Hamiota (Scottia School), 8 p. m., June 7; Harding, afternoon June 8; Oak River, 3 p. m., June 9; Rapid City, 2 p. m., June 10.

Circuit 5.—T. J. Harrison, of Carman, "Soil Cultivation," and W. W. Thomson, Agricultural College, on "Alkali, Its Cause and Control": Glenboro, 2 p. m., June 14; Treherne, Indianford Orange Hall, 2 p. m., June 15; Treherne, Matchitville School, 7.30, June 15.

Circuit 6.—J. C. Noble, of Brandon, on "Stock Judging Demonstration," and W. W. Thomson, Agricultural College, on "Alkali, Its Cause and Control": Swan Lake, 3 p. m., June 16; Miami, 2 p. m., June 17; Miami, 7.30 June 17.

Circuit 7.—E. W. Jones, of Carman, on "Breeding Care and Management of Stock," and J. C. Smith, of Cartwright, on "Demonstration in Judging Stock": Roland, 2 p. m., June 10; Macgregor, 2 p. m., June 14; Meadow Lea, 2 p. m., June 15; Woodlands, 2 p. m., June 16.

Circuit 8.—Prof. F. G. Churchill, Agricultural College, "Alkali, Its Cause and Control," and R. A. Storey, of Franklin, on "Soil Cultivation": Plumas, 2 p. m., June 15; Kelwood, 2 p. m., June 16; Kelwood, 8 p. m., June 16.

Circuit 9.—Prof. W. H. Peters, Agricultural College, on "Breeding Care and Management of Stock," and A. Campbell, of Hanlan, on "Soil Cultivation": Morris, 2 p. m., June 11; Emerson, four meetings under the auspices of this society, June 15 and 16.

Meetings not in circuits will be held as follows: Jas. Murray, Brandon,

and G. A. Todd, of Hillview, at Oak Lake, 3 p. m., June 3; J. C. Noble, of Brandon, and G. A. Todd, in Reston district, 7.30 p. m., June 7, 2 p. m., June 8; at Morden, 3 p. m., June 10; Prof. W. H. Peters, and I. J. Charlton, assistant agricultural engineer at Agricultural College, at Sanford, 2.30 p. m., June 14; Jas. Murray, Brandon, at Virden, June 17; Prof. Bedford, at Hartney, June 22.

WILL IMPORT SHEEP

The Saskatchewan Sheep Breeders' Association decided at their annual meeting in March that the great scarcity of sheep for breeding purposes and the unprecedented demand for them makes it desirable that two or three car loads of pure-bred sheep should be imported from the East and sold by auction in November or December next at a number of important points in Saskatchewan. Before engaging in so important an enterprise it is desirable that the farmers who are in the market for breeding stock should express an opinion as to their requirements, the breeds they favor, and whether or not they would be prepared to endorse this action by the Sheep Breeders' Association. Correspondence has been invited from persons desirous of purchasing sheep for breeding purposes as well as from those in the province that have them for sale. The association does not wish to take any step that will prejudice the interests of sheep breeders. The secretary of the Sheep Breeders'



ENOUGH HORSES FOR A THREE DISK PLOW ON THE FARM OF H. T. S. SMITH

Association, F. Hedley Auld, Regina, will be glad to hear from Saskatchewan farmers in regard to this question. Interested persons would do well to write today and tell the secretary what they want or what they can supply.

At Saskatoon's summer fair this year, August 9, 10, 11 and 12, \$20,000 are offered in prizes and attractions. The manager, David Douglas, hopes to make this one of the biggest fairs in the West.

HOW FARMERS CAN PRACTICE CONSERVATION

Canada, being a nation of farmers, has to pay a very large seed bill each year. Last year our crops called for 33,000,000 bushels of seed grain—wheat, oats and barley—and we are constantly increasing our agricultural acreage. This being so, the economy of sowing good clean seed is at once apparent. The advantages to be derived from it are like the proceeds of a sum of money laid out at compound interest—they are cumulative in their effect and grow in every increasing ratio. Some years ago a competition was carried on in some 150 places in Canada to see just what the actual results of using clean pure seed would be. If we reason from the results obtained from it, we find that our grain yield last year would have been increased by 100,000,000 bushels had clean, vigorous seed been sowed on every acre under cultivation. Now, 100,000,000 bushels of grain would fill 1,500 miles of railway grain cars. It is such a large amount that it is hard for the mind to comprehend, but, at any rate, it goes to show that it would pay our farmers to be particular about the kind of seed they sow.



COURSE AT SASKATOON

The calendar of the University of Saskatchewan at Saskatoon for 1910-1911 recently sent out, clearly outlines the courses offered at that institution. The college of agriculture has the following staff: Dean and professor of animal husbandry, W. J. Rutherford, B.S.A.; professor of field husbandry, John Bracken, B.S.A.; professor of agricultural engineering, A. R. Greig, B.A.Sc.; secretary and assistant professor of natural history, T. N. Willing, director of extension work, F. Hedley Auld. A professor of agricultural chemistry is to be appointed.

It is the intention to have arrangements made for a three-year course to open next fall. This course will be adapted to the young man who purposes making farming his life work. As soon as the demand warrants it, a course leading to the B.S.A. degree will be established. Successful completion of the three-year course brings a certificate in agriculture. Short courses of two or three weeks' duration, will be given from time to time. These courses will include one in winter for general farmers who cannot remain long away from home; one in July for threshermen; one in winter for creamery workers; one for weed inspectors; one for extension workers and fair judges, and, in connection with the course for farmers, one for women in which subjects pertaining to woman's work in the home, on the farm and in the community will be dealt with.

Referring to the college of agriculture, the calendar says:

The college of agriculture is an integral part of the university; it stands in the same relation to the university as does the college of arts and science. It will have almost a complete outfit of buildings planned and equipped for carrying on its particular work. It will also have a staff of its own for the purpose of giving instruction especially in the technical subjects and elementary work in English, mathematics and the sciences. Its laboratories and equipment will, under certain limitations and restrictions, be available to students in the other colleges of the university for the purposes of scientific research.

The aim of the college will be at all times to give the students under its care a good practical training in the different technical subjects applied to the various phases of agriculture.



Bicycle Ball-bearings and rigid stand make the "LEADER" easy running—and there is nothing to interfere with pail being placed beneath bar to drain off the butter-milk.

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can be used either by foot or hand—sitting or standing. Made of strong white oak—sweet and clean—won't crack or chip like glass and crockery—and will last for years.

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such as animal husbandry, field husbandry, farm mechanics, farm engineering, dairying, horticulture, tree planting and others; to give them a good all round education in various other branches, such as will enable them to adapt themselves readily, without great loss of time and energy, to new and varied conditions, and at the same time fit them for their duties as citizens.

The college will carry on its work along three lines—investigation, teaching, extension work. It will endeavor by means of its staff, laboratories and equipment of various kinds, such as lands, crops, animals and machinery, to make its contribution to agricultural science; to test old methods and devise new ones for putting agriculture on a sane, safe basis. Regular courses of instruction and laboratory practice will be provided for students enrolled in the university. The college, through its extension department, will compile useful practical information; will summarize in simple form the results of investigation in soils, crops, live stock, including poultry, dairying, meat curing, horticulture and other matters pertaining to agriculture; and will disseminate this in the form of bulletins through such organizations as agricultural societies, farmers' clubs, women's clubs, grain growers' associations, live stock associations, boards of trade and schools. It will endeavor, by means of well informed speakers, with illustrated lectures and charts, to carry practical and helpful information into the most remote parts, and thus bring the people of these districts into close relation with the work that is being promoted and carried on by the university. Summer and fall fairs, stallion shows and judging demonstrations, good farming and standing grain field competitions, winter poultry and seed grain fairs, plowing matches and demonstrations at fairs and on farms are a few of the various activities which will be undertaken and looked after by the extension department of the college.

LAND AND BUILDINGS

The university estate consists of the campus, about 293 acres, and the college farm, 1,040 acres. The college farm proper consists of 880 acres. Its soil is a clay loam with clay sub-soil. Here and there patches of heavy hummocky clay appear. The main farm will be devoted to diversified farming; quite a large acreage of wheat will be raised each year. A rotation of crops will be planned such as will tend to maintain the fertility of the soil and make for a permanent system of agriculture on the prairies. Another quarter-section lying close to the campus will be devoted to demonstration and investigation work in field husbandry, plant breeding, methods of tillage, etc. This quarter-section is virgin prairie and on this account will be very valuable from an investigation standpoint. A portion of this quarter-section which lies close to the barns, will be used for pasture purposes. On the southeast portion of the campus a plot of ground comprising about fifty acres will be used for the farm buildings, including the judging pavilion and barns. The part not occupied by the buildings will be laid off in yards, paddocks, lanes and small pasture fields.

The college building at first will be used by the college of arts and science as well as the college of agriculture. Provision is being made in it for offices for members of the staff, class rooms and laboratories for animal husbandry, veterinary science, field husbandry, horticulture and tree-planting, testing and curing. An auditorium with seating capacity for about six hundred is being provided. There will also be accommodation for grain judging and other work in connection with field husbandry.

In the agricultural engineering building the lower floor will be given over to blacksmithing, cement work and engine construction; the second floor to wood-work, carpentry, pumps and farm-lamp equipment; the third floor will be devoted entirely to farm implements.

In the live stock pavilion there will be two class rooms, separated by steel curtains. In these rooms, which will be capable of seating about five hundred, provision has been made for holding farmers' short courses and live stock

conventions during the winter season. This part of the pavilion is being provided with an arena, suitable for demonstrating the action of horses indoors. This building will be lighted naturally from the roof, thus affording the very best conditions possible as far as light is concerned. In another portion of the building facilities will be provided for slaughtering, cooling, cold storage, cutting and curing rooms and smoke house, so that students may receive demonstrations in the meat producing capacities of the different animals. Tracks will be hung from the slaughter house into the arena in the judging pavilion proper, so that carcasses may be brought there from the slaughter house for demonstration.

Four barns will be provided, one each for horses, cattle, sheep and swine, with suitable and adequate provision for yards, paddocks, sheds and housing for one hundred and fifty head of poultry. It is planned to have these out-buildings suitable in structure, equipment and lay-out, for any well-appointed farm in Saskatchewan.

LIVE STOCK AND MACHINERY

Good specimens of purebred horses, cattle, swine and poultry will be purchased. In horses it is not intended to maintain at first a large number of breeding animals, but to have good specimens of the leading draft breeds, as well as typical animals of the different classes, such as roadsters, carriage and saddle horses, and ponies, with the other market classes well represented, especially draft and agricultural horses.

The leading beef and dairy breeds will be represented by good specimens of the utility breeds. It is planned to have a well equipped dairy stable, with good milk producing animals. It is planned also to have a representative herd of about one dozen cows of the dual purpose or the western farmer's type. A number of steers of the various market classes and grades will be kept, fed and slaughtered at the college, in order that the students may study not only the methods of production, but also the quality of the meat produced by these various types of animals.

One of the important duties of the college is to foster the sheep industry in this province, and to this end there will be maintained representative flocks of the more important mutton breeds, especially Shropshire, Oxfords, Hampshires and Leicesters, all of which are suited to this country. A number of range-bred wethers will be kept to be used in the live stock class-room and afterwards slaughtered for carcass demonstration work.

The piggery will contain good specimens of Yorkshires, Tamworths, and possibly other breeds suited to western conditions.

In order to promote the poultry industry there will be maintained representative flocks of the different utility fowls such as Rocks, Wyandottes, Orpingtons, Rhode Island Reds, Leghorns and turkeys.

The college will endeavor to keep abreast of the times in the use of up-to-date machinery. The size of the farm will admit of using a gasoline traction engine, and at the same time provide sufficient work for a large number of horses. The buildings, too, will be equipped with the most modern appliances for farm buildings in the way of elevators, feed cutters, grinders, grain cleaners, etc., while the farm mechanics' building will be equipped with all the types of farm machinery, including road-making machinery, cement work, gasoline and steam engines, as well as the different implements for tillage, harvesting, threshing and cleaning grain.

CROP CONDITIONS MAY 1

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of correspondents and agents of the bureau, as follows:

On May 1 the area of winter wheat to be harvested was about 29,044,000 acres, or 714,000 acres (2.5 per cent.) more than the area harvested in 1909, and 4,439,000 acres (13.3 per cent.) less than the area sown last fall (33,483,000) acres.

The average condition of winter wheat on May 1 was 82.1, compared with 80.8 on April 1, 83.5 on May 1, 1909,

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Say you are interested, and we will gladly send you **Free** and post-paid a sample of the only **Practical** culvert and a handsomely illustrated book telling all about it. For drainage, road repair, and a score of farm-uses there is no culvert so economical as this. Made of heavy **Billet Iron**; carved cold into half sections. Then deeply corrugated—makes it five times stronger than smooth surfaced pipe. Heavily galvanized with **lead and zinc** to make it proof against rust, dampness, decay, corrosion, and other material.

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400 acres of good land, 16 miles east of Cranbrook. The Crow's Nest Pass Railway forms the northern boundary, and a station is on the land. The soil is a gravel loam, well suited for fruit growing. All merchantable timber has been removed, and apart from a few stumps scattered over the land, it is ready for breaking. 100 acres can be put under cultivation at once. Price \$10 per acre, on easy terms.

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LOCAL AGENTS—We have some very good openings in Saskatchewan and Alberta for good live men, willing to give their whole time or part of same in doing subscription work for the ADVOCATE. Good commission paid to reliable people. When writing enclose references as to character, etc. Address FARMER'S ADVOCATE, Box 3089, Winnipeg.

SOUTH AFRICAN WARRANTS—I will sell two at bottom price. I will buy any number at market prices, subject to confirmation. E. B. McDermid, Nelson, B. C.

VANCOUVER ISLAND FARMS—Comox district. For information in good farming land, mines, fishing, timber, write F. R. F. Biscoe, Real Estate Agent, Comox, B. C.

FOR SALE—Trotting bred stallion. Will sell cheap, or will take one or a pair of drivers on him. Reason for selling, six years on same route. Apply to M. P. McClellan, Grenfell, Sask., P. O. Box 203.

FARMERS—Write me for prices on fence posts in car lots, delivered at your station. Get the best direct from the bush. Fruit land for sale. J. H. Johnson, Malakwa, B. C.

VANCOUVER ISLAND OFFERS sunshiny, mild climate; good profits for ambitious men with small capital in business, professions, fruit-growing, poultry, farming, manufacturing, lands, timber, mining, railroads, navigation, fisheries, new towns; no thunderstorms, no mosquitoes, no malaria. For authentic information, free booklets, write Vancouver Island Development League, Room A, 34 Broughton St., Victoria, B. C.

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AGENTS—\$5.00 a day easy. No experience needed. Sells on sight. Absolute necessity to farmers. Does work of 30 men. Pays for itself in one hour. Write to-day. C. W. Adams Co., Sarnia, Ont.

ENGINES FOR SALE—We have on hand ready for delivery a number of Portable and Traction Engines, simple and compound, from sixteen to thirty horse-power, rebuilt and in first-class order, which we will sell much below their value. Address P. O. Box 41, or the John Abell Engine and Machine Co., Ltd., 76 Main Street, Winnipeg, Man.

C. McG. SANDERS, Fortier, Man., breeder of Yorkshire hogs and Pekin ducks. Young stock for sale. Eggs, \$1.50 per setting.

GASOLINE ENGINES—1½ horse power \$65.00 complete. 2½, 4½, 6, 8, 12 horse power, at proportionate prices. Pumping and Sawing outfits. Get our catalogue. Bates Motors, Petrolia, Ont.

EXCHANGE OR SALE—Good second-hand traction, steam threshing and plowing outfit, near Winnipeg. Want land or registered cattle or draft mares and a stallion. Address Box 14, Lake Wilson, Murray County, Minnesota.

FOR SALE—Twenty head choice Berkshire pigs, age three to five months. Will be sold close. All registered as sold. Satisfaction guaranteed. W. N. Crowell, Napinka, Man.

WANTED—Nation's Custard Powder, now sold by all grocers; 5-cent packets, 1 lb. and 1 lb. patent measure tins, wholesale. W. H. Escott, Winnipeg.

WESTERN RYE GRASS SEED for sale at 8 cents per lb in bran sacks, f. o. b. Virden. W. Dillon, Box 657, Virden.

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This department is for the benefit of paid-up subscribers to the FARMER'S ADVOCATE, each of whom is entitled to one free insertion of a notice not exceeding five lines. Over this two cents per word.

LOST 4 WEEKS AGO brown mare, 9 years old hind feet white; also black mare, eight years old. Both had halters on; branded I. K. Good reward. Joseph Zacharias, Wilkie Bay P. O., Sask.

POULTRY AND EGGS

RATES—Two cents per word each insertion; cash with order. No advertisement taken less than fifty cents.

REDUCTION ON ROSE-COMB RHODE ISLAND RED EGGS, \$1.50 and \$2.00 quality, new \$1.25 per fifteen, \$2.00 per thirty. Exhibition pen, \$3.00. 100 egg lots, \$5.00. Henry H. Pearson, Stonewall, Man.

WHITE PLYMOUTH ROCKS EXCLUSIVELY—Winnipeg at Winnipeg Poultry Show on six entries, five firsts, one second and all specials offered. Birds and eggs for sale. Correspondence solicited. W. J. Currie, Lauder.

S. C. BLACK MINORCA EGGS \$1.50 per 11, \$3.00 per 300. Also Collie Pups & Yorkshire Pigs for sale. R. D. Laing, Stonewall, Man.

PUREBRED S. C. BUFF ORPINGTON eggs \$1.50 for 13; also Bronze turkeys eggs \$1.50 for 12. Mrs. W. H. Read, Nanton, Alta.

PUREBRED BUFF AND COLUMBIAN WYANDOTTES, Brown Leghorn and Buff Cochins eggs; equal to most three dollar eggs. Fifteen, \$1.50; thirty, \$2.50. Jas. E. Sinclair, Stonewall, Man.

SETTING EGGS—Buff Cochins, scoring 95 points; bouncers, imported from prize stock, \$3.00 for thirteen; B. P. Rock, massive, \$2.00 for thirteen. C. Taylor, Dominion City, Man.

E. P. EDWARDS—South Salt Springs, B. C. Now is your time to buy Cockerels for next spring. Buff Rocks, Rhode Island Reds, Black Minorcas, Blue Andalusians, Speckled Hamburgs; also a few early pullets.

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EGGS FOR SALE—Purebred R. C. Rhode Island Reds, \$2.00 per setting of fifteen. Also Hawkins' prize strain of White Wyandottes. From pen No. 1, \$1.50 per setting of fifteen; pen No. 2, \$1.00 per setting. Only tested eggs sold. Rev. W. Bell, Abernethy, Sask.

ROYAL WHITE WYANDOTTES—The best strain in Western Canada. Eggs, \$2.00 for 15; \$5.00 for 45; \$10.00 for 100. F. W. Goodeve, Stonewall, Man.

BARRED ROCKS—Bred to lay, \$1.50 and \$2.00 for 15 eggs. Mrs. Montague Vialoux, Littleton Poultry Yards, Sturgeon Creek, Man.

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D. SMITH, Gladstone, Man., Shires, Jerseys and Shorthorns, Yorkshire hogs and Pekin ducks.

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McKIRDY BROS., Mount Pleasant Stock Farm, Napinka, Man., breeders and importers of Clydesdales and Shorthorns. Stock for sale.

D. P. WOODRUFF, Caldwell, Alta., breeder of Kentucky Saddlers; young registered stallions of best breeding for sale.

H. C. GRAHAM, Lea Park, Alta., Shorthorn Scotch Collies and Yorkshires for sale.

C. G. BULSTRODE, Mount Farm, South Qu'Appelle, Sask. Breeder of Berkshire Swine.

HEREFORDS—Pioneer prize herd of the West. Good for both milk and beef. **SHEPHERD PONIES**, pony vehicles, harness saddles. J. E. Marples, Poplar Park Farm, Hartney, Man.

BROWN BROS., Ellishoro, Sask., breeders of Polled-Angus cattle. Stock for sale.

J. MORRISON BRUCE—Tighduin Stock Farm, Lashburn, Sask., breeder of Clydesdales and milking Shorthorns.

WALTER JAMES & SONS, ROSSER, MAN.—Young Yorkshire and Berkshire boars and sows ready for shipment about first week in June. Price \$10.00 each, including registered pedigree.

K. McIVER, VIRDEN, MAN.—Shorthorns, a few two and three-year-old heifers for sale at a little over beef price. Three-year-olds in calf or calved. Write for particulars.

H. W. BEVAN Duncans, Vancouver Island, B. C., breeds the best strains of registered Jerseys. Young stock for sale.

and 86.7, the average for the past ten years on May 1.

The average condition of rye on May 1 was 91.3, compared with 92.3 on April 1, 88.1 on May 1, 1909, and 89.4, the average for the past ten years on May 1.

The average condition of meadow (hay) lands on May 1 was 89.8, compared with 84.5 on May 1, 1909, and a ten-year average on May 1 of 89.5.

The average condition of pastures on May 1 was 89.3, compared with 80.1 on May 1, 1909, and a ten-year average on May 1 of 87.6.

Of spring plowing 80.3 per cent. was completed up to May 1, compared with 64.1 per cent. on May 1, 1909, and a ten-year average on May 1 of 66.

Of spring planting 65 per cent. was completed up to May 1, compared with 51.9 per cent. and 54.7 per cent. on May 1, 1909 and 1908 respectively.

REALIZING WHAT'S WHAT

The United States are waking up to the fact that Canada is fully competent to conserve her natural resources for the use of her own people. Time was when popular opinion in the United States tended to regard Jack Canuck as a heaver of wood and a drawer of water for Uncle Sam. But certain expressions of opinion of a contrary sort that are now continually cropping up in the American press show that this attitude towards Canada is fast giving way. Here is a sample from the editorial columns of the *American Forest Review*:

"Canada is measuring her timber resources and preparing to protect them by progressive and drastic measures against exploitation for the benefit of wasteful foreign countries, including her next door neighbor. We cannot look to the north for our salvation. We must husband all our remaining resources and plant trees wherever they can be grown more profitably than other crops, in order that our own future may be assured. This is the only way. Canada has not the resources for her own needs and ours too, and she is sufficiently wide awake and intelligent to guard her own. The only way that our timber resources and Canada's can be made inexhaustible is by the application of the highest scientific knowledge and the broadest common sense."

RECENT HOLSTEIN RECORDS

During the period from April 20th to April 29th, 1910, records for 167 cows have been accepted for entry in the Holstein-Friesian Advanced Register; four of which were extended to fourteen days, eleven to thirty days and one to sixty days. The averages by ages or classes were as follows:

Sixty-one full aged cows averaged: age, 6 years, 11 months, 4 days; days from calving, 24; milk, 458.1 lbs.; per cent. fat, 3.56; fat, 16.315 lbs. Ten senior four-year-olds averaged: age, 4 years, 9 months, 29 days; days from calving, 39; milk, 422.3 lbs.; per cent. fat, 3.49; fat, 14.738 lbs. Nineteen junior four-year-olds averaged: age, 4 years, 2 months, 26 days; days from calving, 22; milk, 424 lbs.; per cent. fat, 3.53; fat, 14.966 lbs. Thirteen senior three-year-olds averaged: age, 3 years, 9 months, 13 days; days from calving, 19; milk, 383.3 lbs.; per cent. fat, 3.41; fat, 13.052 lbs. Twenty junior three-year-olds averaged: age, 3 years, 2 months, 25 days; days from calving, 17; milk, 393.9 lbs.; per cent. fat, 3.62; fat, 14.276 lbs. Thirteen senior two-year-olds averaged: age, 2 years, 10 months, 5 days; days from calving, 20; milk, 354.9 lbs.; per cent. fat, 3.61; fat, 12.823 lbs. Thirty-one junior two-year-olds averaged: age, 2 years, 1 month, 20 days; days from calving, 26; milk, 320.1 lbs.; per cent. fat, 3.40; fat, 10.895 lbs.

The herd of 167 animals, of which two-fifths were heifers with first or second calves, produced in seven consecutive days 67,622.5 lbs. of milk containing 2386.634 lbs. of butter-fat; thus showing an average of 3.53 per cent. fat. The average production for each animal was 404.9 lbs. of milk containing 14.291 lbs. of butter-fat; equivalent to 57.8 lbs. or nearly 28 quarts of milk per day, and over 16½

lbs. of the best commercial butter per week. Considering that the herd period is older, the averages do not quite equal those given in the last issue of these reports; yet the averages are very large, and no other breed has ever been able to show such results.

In this issue of the official reports, I have the pleasure of announcing the greatest of the short-time records since Colantha 4th's Johanna made her sensational run—a record of the sort that has given the breed the commanding position that it now holds, and such as all owners of Holstein-Friesians may well look upon with pride. Blanche Lyons Netherland produced in seven consecutive days 746.7 lbs. of milk containing 27.489 lbs. of butter-fat; in thirty consecutive days, 3,084.1 lbs. of milk containing 112.142 lbs. of butter-fat; and in sixty consecutive days, 5,473.7 lbs. of milk containing 206.569 lbs. of butter-fat. Her average per day was almost 107 lbs. of milk for the seven-day period, and almost 103 lbs. for the thirty-day period; while it was over 91 lbs. per day for the sixty-day period.

The attention of critics is specially called to this test; and they will note that the seven-day period began 34 days after freshening, while the thirty-day period began 19 days after. They will also note that these great quantities of milk showed no abnormal per cents. of fat, but just plain, normal Holstein-Friesian averages of 3.68 per cent., 3.64 per cent., and 3.77 per cent. fat. Note the uniformity, and that another Holstein-Friesian cow has produced much over 100 lbs. of butter-fat in 30 consecutive days, while averaging over 100 lbs. of milk per day. In displacing Colantha 4th's Johanna and taking her place as holder of the 30-day record, Blanche Lyons Hengerveld gains very high honor.

M. H. GARDNER,
Superintendent

KING GEORGE ON EMIGRATION

On his return from a tour of the Empire the present King, George V., at the Guild Hall, on December 5, 1901 expressed his sentiments as follows:

To the distinguished representatives of the commercial interests of the Empire, whom I have the pleasure of seeing here today, I venture to allude to the impression which seemed generally to prevail among their brethren across the seas that the old country must wake up if she intends to maintain her old position of pre-eminence in her colonial trade against foreign competitors. (Hear, hear.) No one who had the privilege of enjoying the experiences which we have had during our tour could fail to be struck with one all-prevailing and pressing demand—the want of population. Even in the oldest of our colonies there were abundant signs of this need. Boundless tracts of country yet unexplored, hidden mineral wealth calling for development, vast expanses of virgin soil ready to yield profitable crops to the settlers; and these can be enjoyed under conditions of healthy living, liberal laws, free institutions, in exchange for the overcrowded cities and the almost hopeless struggle for existence which, alas, too often is the lot of many in the old country. (Hear, hear.) But one condition, and one only, is made by our colonial brethren, and that is: "Send us suitable emigrants." (Hear, hear.) I would go further, and appeal to my fellow-countrymen at home to prove the strength of the attachment of the motherland to her children by sending them only of the best. (Cheers.) By this means we may still further strengthen, or at all events pass on unimpaired, that pride of race, that unity of sentiment and purpose, that feeling of common loyalty and obligation which knit together and alone can maintain the integrity of our Empire. (Prolonged cheers.)

ENQUIRY INTO HOG-RAISING

(Continued from Page 772)

in the way of producing the thick fat hogs of the corn belt states without the aid of skim milk or whey in liberal quantities, it is questionable whether the industry of producing hogs of pronounced bacon type, such as Canadian markets in general call for, can ever reach large dimensions apart from the dairy industry.

HEADACHE

AND Burdock Blood Bitters.

The presence of headache nearly always tells us that there is another disease which, although we may not be aware of it, is still exerting its baneful influence, and perhaps awaiting an opportunity to assert itself plainly.

Burdock Blood Bitters has, for years, been curing all kinds of headaches, and if you will only give it a trial we are sure it will do for you what it has done for thousands of others.

Mrs. John Connors, Burlington, N.S., writes:—"I have been troubled with headache and constipation for a long time. After trying different doctors' medicine a friend asked me to try Burdock Blood Bitters. I find I am completely cured after having taken three bottles. I can safely recommend it to all."

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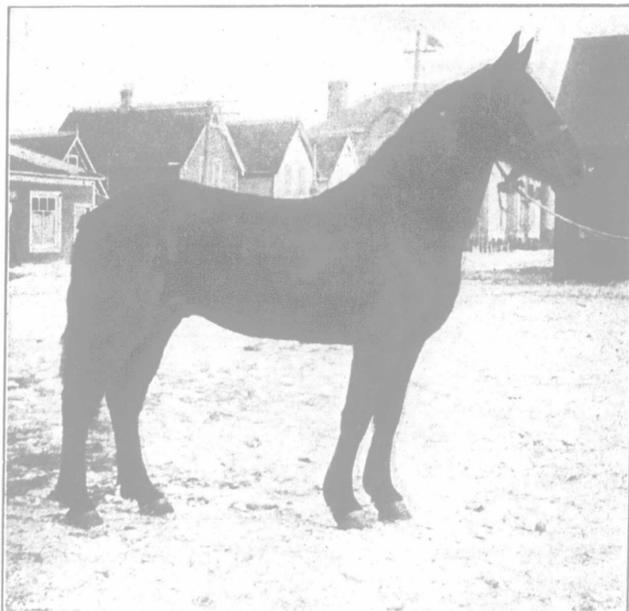
The testimony of the Canadian commission recently appointed to discover the reasons underlying the success at present attending the hog-raising industry in Great Britain, Ireland and Denmark on these points is of interest and value. This report says: "Roughage in the form of roots or other green fodder is considered an essential part of the successful pig-raiser's food supply. These, it is generally believed, help materially to maintain thrift in breeding and growing stock. Nowhere can these be cheaper grown than in Canada, and no pig-raiser can afford to be without them." The hog-raisers of Saskatchewan confirmed that statement as above set forth. But the commission also reports: "The value of milk and whey in pig feeding was everywhere exemplified. The commission saw very few pigs being fed without one or the other, and no where were these foods fed without a care for the greatest profit."

The experience of the countries in which the producing of bacon hogs has longest and most successfully been carried on is that, as a general rule, the produce of the pig-pen will be in proportion to the products of the dairy. It does not follow that because dairy production is large, hog production will be proportionately heavy; there are other uses to which the by-products of the dairy can be put than the feeding of pigs. But it does appear that the industry of producing bacon hogs is not likely to reach large proportions on many farms where dairying is not also extensively carried on. Therefore it would appear that an excellent method of stimulating hog production is to first stimulate dairy production. Then, if market conditions are at all equitable, or on a par with those existing in connection with other kinds of stock in the production of which the skim milk or whey might be utilized, increased activity in the bacon hog industry may be looked for. When such a basis for swine-raising exists, too, another condition of affairs alluded to by the swine commission above referred to is more likely to obtain. Says the Commission: "Everywhere was there found a tendency to intensive methods which demand careful attention to details. Nowhere was haphazard work associated with satisfactory results. Swine rearing as examined in Europe is a highly organized branch of agriculture secondary to, and almost always associated with, dairy farming."

But it has been abundantly proved in the last few years that the marketing end of the business re-acts upon pro-

duction fully as much as do any questions of greater economy in production or available supplies of feed. Once let a man get the feeling firmly lodged in his mind that he is not receiving a due share of the price for which his product ultimately sells, and he will soon drop out of that line of production if at all possible. This is exactly what has occurred in Eastern Canada, and is what is today tending to keep down hog production in Saskatchewan. The cure for this state of affairs which the commission found in England was co-operative selling on the part of farmers, and an attitude of sympathetic and far-sighted co-operation with the producers upon the part of the best packers. In Denmark the cure was found in co-operative packing houses. There is little in the present outlook throughout Canada to encourage the belief that stability in the industry can be secured, and confidence in the packers re-established, without the aid of a co-operative movement of some kind. In conclusion, a study of the returns received to this enquiry confirms the impression that the question of hog-raising merges into, and is only one form of the whole problem of live stock production and dairying in Sas-

katchewan, and how they may be stimulated. It is evident that no era of high prices for hogs alone has much effect in increasing production. A certain number of men keep more live stock than their own immediate needs demands, because they are fond of live stock and prefer to be surrounded with horses, cattle, swine or sheep. To such men the financial aspect of the question is of secondary importance; they will keep live stock in any case. The larger number of the farmers of Saskatchewan are not live stock farmers by temperament or training. They will only keep live stock as they are tempted to by favorable market conditions, or driven to by decreasing grain yields. At the present time conditions of soil and grain markets are such that a farmer in most parts of Saskatchewan need not keep live stock unless he so desires. He can do well and make money by exclusive grain growing. But the change from this state of affairs, though it is likely to be gradual, is certain. The influence of education, the force of circumstances, and the allurements of better markets are likely to be the factors most prominent in effecting this change from a transitory to a permanent system of farming.



STYLISH COACHER BROUGHT WEST

Butter per... herd port... do not quite... last issue of... ages are very... as ever been

ial reports, I... ouncing the... ime records... na made her... of the sort... re command... ds, and such... ristians may... he. Blanche... ed in seven... of milk con... -fat; in thirty... lbs. of milk... f butter-fat;... days, 5,473.7... 6,569 lbs. of... per day was... or the seven... 3 lbs. for the... was over 91... day period... s is specially... ey will note... d began 34... le the thirty... after. They... great quanti... bnormal per... lain, normal... s of 3.68 per... 3.77 per cent... and that an... ow has pro... of butter-fat... ile averaging... day. In dis... Johanna and... of the 30-day... Hengerveld

RDNER,
perintendent

EMIGRATION

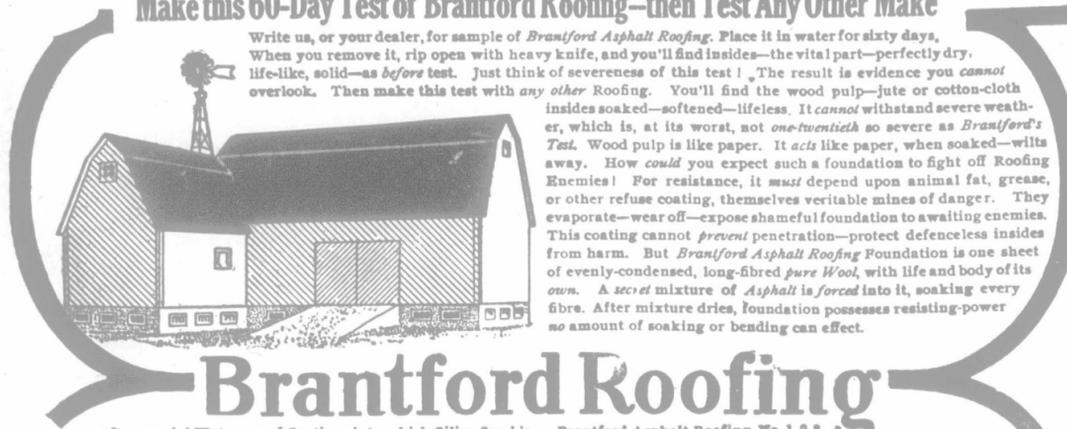
tour of the... 3, George V... mber 5, 1901... as follows:
representa... interests of the... re pleasure of... ture to allude... seemed gener... heir brethren... old country... ends to main... pre-eminence... gainst foreign... r.) No one... enjoying the... ve had during... s struck with... ssing demand... Even in the... there were... need. Bound... t unexplored... calling for de... of virgin soil... crops to the... e enjoyed un... living, liberal... exchange for... nd the almost... stance which... of many in the... ar.) But one... s made by our... at is: "Send... (Hear, hear.)... appeal to my... ome to prove... chment of the... en by sending... (Cheers.) By... rther strength... on unimpaired... unity of senti... at feeling of... ligation which... can maintain... npire. (Pro-

G-RAISING

age 772)
g the thick fat... les without the... hey in liberal... nable whether... ucing hogs of... uch as Canadian... for, can ever... apart from the

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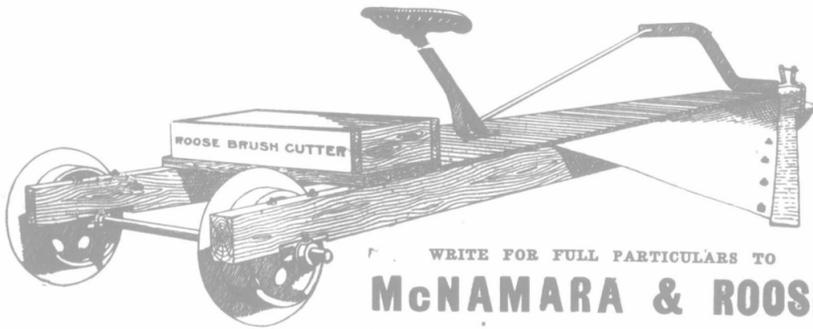
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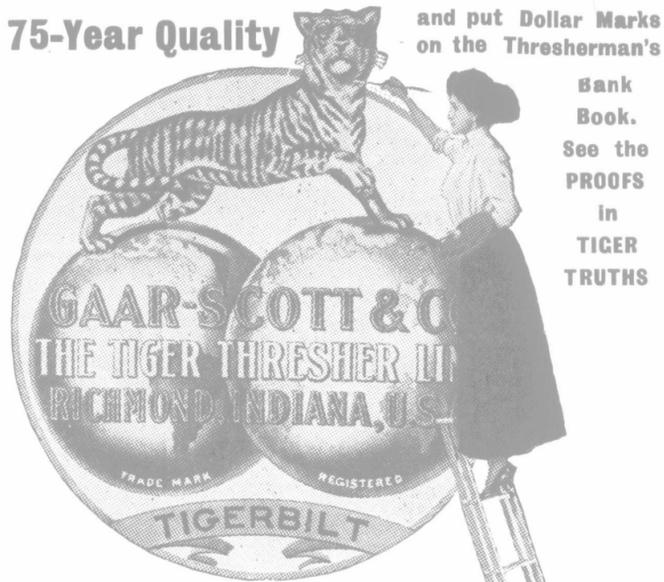
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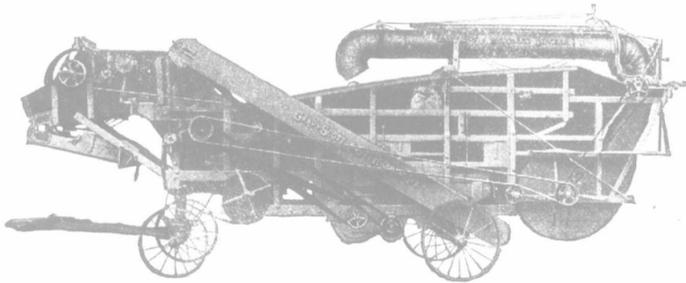
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BULLETIN REVIEW

Bulletin 394, of the United States department of agriculture, deals with the use of windmills in irrigation. The bulletin was prepared as a guide to settlers entering the semi-arid regions of the West and contains useful information on irrigating by well water windmills being the power used to raise the water to the surface, where it is available for distribution over the area to be irrigated. Advice is offered on sinking wells, both by boring and digging on casing and curbing and arrangement of the machinery necessary. The work contains many suggestions on erecting windmills, sizes of mills and pumps required, quantity of water that will have to be pumped to irrigate given areas, construction of reservoirs to hold reserve supplies of moisture, maintenance of windmills, etc.

The object of the bulletin is to give some practical suggestions to those who are now using or are contemplating the use of windmills for pumping water for irrigation. Windmills are used quite extensively for this purpose already, and there is a wide field for extending their use. The data given for plants on the Great Plains show, however, that the windmill is not a cheap source of power, and that it will not, as is often claimed, run without attention. A windmill should be looked after as carefully as any other piece of machinery, and if this is done it will provide power for the irrigation of considerable areas at an expense which will be justified by the crops grown.

SANITARY COW STALLS

This is a bulletin issued by the Agricultural Experiment Station of Wisconsin. It discusses and describes the various forms of sanitary cow stalls that have been introduced from time to time. The models illustrated offer suggestions that should be useful to farmers contemplating building or rearranging dairy stables. All the leading so-called sanitary stalls are described, in addition to which information is given regarding sanitary stable floors, types of mangers, etc.

A careful study of this bulletin will convince the reader that the principles involved in the construction of a home made stall are equal to those of the patented stalls, and in many ways they are more satisfactory. Some of our more prominent dairymen are using such stalls in preference to those which are patented. The cost of the stalls described in the bulletin run from \$4.40 to \$6.00 per stall.

THE MUSKRAT

This is a bulletin of the United States department of agriculture which discusses the habits, economic relations and value of the muskrat, or musquash (*Fiber zibethicus*). While this animal does considerable damage in some place its harmlessness throughout most of its range and its increasing value as a fur and food animal justify its protection generally. Its wide distribution, prolific breeding and hardiness, together with the fact that the areas it inhabits are not available for agriculture, make it a resource whose value may be greatly increased by careful husbanding.

The muskrat is not generally regarded as a human food, though its flesh was highly esteemed by the aborigines of North America, and is said to have been used freely by the earlier colonists. Present-day opinion is divided as to the palatability of the flesh, and it is probable that it will require more than the excellence suggested for the flesh in this work to popularize it. Muskrats are, however, of much economic value, and as is pointed out should be protected by proper laws. Sparring and shooting should be prohibited. Muskrat houses should be protected at all times.

Protective laws should contain provisions allowing corporations and individuals whose property is being damaged by muskrats to destroy the animals in the closed season, under the supervision of game wardens or other officers, but not for profit.

If properly protected the muskrat will continue to inhabit our rivers and ponds for an indefinite period, and to furnish a stock of furs for our own and future generations.

United States deals with irrigation. The following is a guide to arid regions as useful in well water used to raise where it is over the area offered on ring and digging and ar- ry necessary. suggestions of mills and of water that l to irrigate of reservoirs of moisture, etc.

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STALLS d by the Ag- ation of Wis- describes the cow stalls that rom time to strated offer be useful to ulding or re- All the lead- ls are describ- information is stable floors.

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United States are which disom- ic relations t, or musquash ile this animal age in some roughout most using value as a y its protection tribution, pro- nness, together reas it inhabits riculture, make e may be great- usbanding. ially regarded h its flesh was b- aborigines of id to have been rlier colonists. ived as to the and it is prob- more than the the flesh: in this Muskrats are, mic value, and be protected by and shooting Muskrat houses all times. ld contain pro- ations and in- y is being dam- destroy the an- ison, under the rdens or other fit. d the muskrat our rivers and period, and to for our own and

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ANY person who is sole head of a family or any male over eighteen 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 of 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.

M. B.—Unauthorized publication of this advertisement will not be paid for.



COST OF PRODUCING EGGS

On most farms it is impossible to arrive at a very exact estimate of the cost of caring for the fowls kept on it, because this work is a part of the general routine, but when it comes to estimating the "feed-cost of eggs" we have some very reliable figures on which to base estimates.

In the Australian laying competitions the accounts kept show exactly how many eggs were produced and how much the feed consumed by the hens cost. In the several competitions from 300 to 600 hens were entered and kept in confinement for a year, strict account being kept with them.

In one there were 300 hens in the annual contest. These were divided into 50 pens of six hens each, no males being kept with them.

These 300 hens produced during the year 54,070 eggs, about almost exactly 180 eggs each, or 15 dozen average to each hen. The cost of keeping them one year was as follows, counting the English pound sterling at \$4.86: Bran and shorts, \$194.40; grain, wheat and corn, mostly, \$321.70; meat, largely ox livers, \$14.58; green feed, chopped alfalfa, \$19.44; shell, \$19.44; sundries, \$4.86; total feed cost, \$549.18.

The average price of eggs in Australia for the year was about 30½ cents per dozen, the total receipts being \$1,397.70. The feed cost of these eggs was almost exactly 12.6 cents per dozen, the price of feed not being very much different from prices for the same feeds in this country.

A series of experiments in this country, where two flocks were used during a period of four months showed somewhat different results. In this experiment each flock contained twelve hens and a cock. One flock was purebred by Plymouth Rocks and the other was purebred Andalusians.

The Plymouth Rocks produced eggs at an average cost of 6½ cents, and the Andalusians at an average cost of 5 4-10 cents per dozen.

It is quite probable that the farmer who feeds his hens properly and regularly produces eggs at a cost of about 8 to 10 cents a dozen. All he receives above this price he must reckon as profit or as pay for his time in caring for his hens.

CROOKED BREASTS

A British poultry expert writing of this subject in one of our English exchanges, has this to say:

"A crooked breast-bone is a great deformity either to a turkey or a chicken, and destructive to each from its marketable value. In order to prevent this, all young stock should be compelled to sleep on the floor, and on no account should growing chickens or turkeys be allowed to get into the habit of sleeping on thin branches of trees. The explanation is not difficult to find. During the time that chickens and turkeys are growing their bones are comparatively soft and flexible, and to allow them to sit on narrow perches during the night simply tends to encourage a bending of the breast-bone, with the result that the breast becomes permanently crooked, and consequently the bird with such a deformity is not likely to have so fine a breast of meat when it comes to be killed. What may be said in this way of chickens applies even more forcibly in the case of turkeys, because their bodies are heavier, and it is easier for a turkey to get a crooked breast-bone than it is for a chicken, though both of them are very susceptible to the same thing. There is, however, no objection to chickens roosting on big beams, such as appear in barns and other buildings of this description; the mischief lies in allowing them to roost on thin, narrow pieces of wood or branches of trees, round which they have to clasp their claws. Whilst

Hyslop Bicycles \$25

Everybody knows the Hyslop reputation when it comes to Bicycles. Last year we thought perfection had been reached, but this season we go it one better, with more of quality and value in

\$50 Wheels for \$25

than heretofore seemed possible. Buying in enormously large quantities and selling on the closest possible margin enables us to discount our own best efforts with the best Bicycles ever offered for the money. You can order by mail with assurance of entire satisfaction. Send your name and address for Bicycle Folder.

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"Bissell" Disk Harrows have greater cutting capacity than any other. All the weight falls on the rear, where the work is being done, taking it off the horses' necks, making it easier for them. The plates are so shaped that they go further under the soil, making an even, clean cut, turning the soil better than others, and pulverizing it thoroughly. Because the plates cut the surface clean off, the draft is relieved. In stiff, hard ground the "Bissell" does its work wonderfully, without the need of Pressure

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Every wire in our heavy farm fence is No. 9 hard steel, with uniform strength and lasting qualities in each strand. A fence with any small or soft wire in it is short lived. A chain is no stronger than the weakest link. Then PEERLESS Fence made from specially galvanized wire is rust-proof—that withstands more than double the endurance of other makes.

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THE DANWELL HOSIE WIRE FENCE CO., LTD., DEPT. M, HAMILTON, ONT., WINNIPEG, MAN.

The following are some of the lines we are constantly printing

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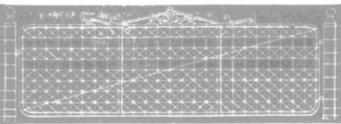
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AGENTS WANTED IN UNREPRESENTED DISTRICTS

The electrically-welded, solid-piece frame gives strength and stiffness to

Peerless Farm and Ornamental Gates

We build Peerless Gates to last a lifetime—handy, convenient and attractive. They remain staunch and rigid through all kinds of rough usage. The frame is

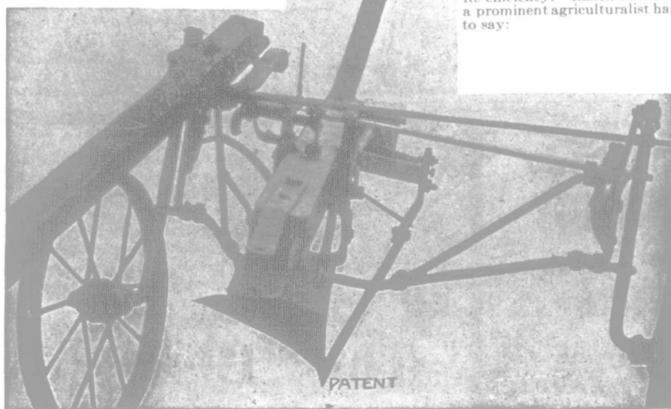
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made of heavy steel tubing electrically welded into one solid piece. The Peerless Gate, like the Peerless Fence, saves expense because it never needs repairs. We also make poultry, lawn and farm fences of exceptional strength. Write for free book.

The Van Slyke Breaking Plow

is especially constructed for Western prairie conditions and its merits are commendable. The important points are patented. These include the left hand coulters at an angle of 30 degrees.



the under-cutting shear from the landside and the unique steering device. Numerous practical farmers testify as to its efficiency. Listen to what a prominent agriculturalist has to say:

Dr J. W. Rowntee, President Van Slyke Plow Co., Red Deer, Alta.

Dear Sir:—

Referring to demonstration which was given by you of your breaking plow, a few days ago, I noted the following conditions which recommended it to me very strongly.

The undercut shear or fin on the landside, which prepared the next furrow for turning, would leave no possibility of any portion of the next furrow being turned without being cut loose from the adjacent sod. There seemed to be very little friction on the share and moldboard, it having so small an angle with the landside and the long sweep of the arms or rods back of the moldboard seemed to turn the sod with perfect ease and little friction, although turning the sod 20 inches in width, and a depth of not less than 4 inches, the draft was so light that it would appear one good team could handle it without very great effort. The coulters set at an angle and attached to the point of the share seemed to be a very good device, as it not only stiffened the coulters and kept it in exact position, but also cut the sod at an angle so it could less easily stand on edge. This assisted turning very much.

Owing to the soil which we have in the irrigation block, I believe you will find it to your advantage instead of cutting a furrow 20 inches in width to cut two furrows 12 inches in width. This will have a tendency to join the edges so as to leave flat the surface and where the sod varies as to its toughness, as it does here, it will turn the sod unbroken and leave a surface best suited for cultivating and would require less disking than it would if turned in wider furrows and not laid as regular.

If a few details are worked out I consider you have a plow that will eclipse anything that is now on the market and will work a revolution in breaking sod on this Western prairie.

With these few suggestions permit me to say, that any assistance I can give you in working out this point, I will gladly do at any time, and when a plow turning 12-inch furrows such as can be evolved from the plow shown in the present demonstration, has been made and is on the market, I want you to put me down for one for use on my farm. I understood that this company are going to make such plows. For scrub brush land an 18-inch furrow plow works better than the narrower furrow.

I remain, Yours very truly,
F. W. CRANDELL,
Superintendent of Department of Irrigation and Colonization Dept. Can. Pac. Ry.
Others likewise testify, while hundreds are sending in their orders. We guarantee it to work in all brush or gumbo soils.

WRITE FOR FULL PARTICULARS

THE VAN SLYKE PLOW COMPANY,
RED DEER, ALBERTA.



Anti-Trust Prices Freight Prepaid To You—No Duty

on FARM and TOWN Telephones and Switchboards

Poles, Wire, Brackets, Insulators, Tools, Lightning Arresters, Ground Rods, Batteries, Insulated Wire, and everything necessary.

NO CHARGE for our experts' letters of advice, drawings, explanations, instructions, telling you in any language, non-technical, just how to build, own and operate your rural, town or long distance lines in a good but economical way and at a profit, thereby getting your own telephone free.

We are the largest, exclusive and the only bona fide Independent Telephone and Switchboard makers in Canada or Great Britain. Our Telephones are extensively used in Canada, England, France and by the U. S. Government.

Our great illustrated book on the Telephone sent free to anyone writing us about any new Telephone lines or systems being talked of or organized.

We have a splendid money-making proposition for good agents.

The Dominion Telephone Mfg Co., Ltd. Dept. Q, Waterford, Ont., Canada.

on this subject, it might be well to point out the importance of having broader, stouter pieces of wood than are generally to be found in poultry houses. Nothing is more dangerous than to have the thin broomstick type of perch that one sees so often. A good, solid, broad block of wood should be used for a perch, so that the poultry can sleep in comfort, which they cannot do unless they are able to balance themselves properly. No piece of wood is fit for



MAKING ADVANCES

an ordinary poultry-house perch unless it is quite some three and a half inches broad with a half-round surface, so that the feet can rest upon it without having to grasp it—a process which commonly accounts for crookedness in the toes.

RUSSIA'S EGG EXPORTS

Russia sends huge quantities of eggs to the United Kingdom, by far the largest exporting centre being Riga. Of the enormous quantity of 23,472,658 "great hundreds" (a "great hundred" being 120) of eggs exported from Russia, in 1909, 9,858,333 great hundreds were shipped from Riga. Of these the United Kingdom took 6,044,448 great hundreds.

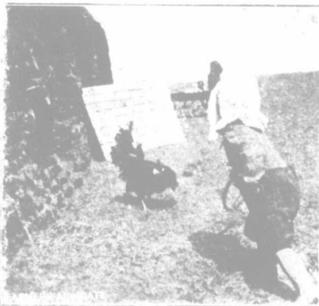
In 1909 the export of eggs from Riga amounted to nearly three-fourths of the total export from Russia to England, or over one-third of the total import of eggs into England.

GROWTH IN HEN'S BEAK

Hen is unable to close its beak. There is a slight but firm swelling at both corners of beak. This is natural color. She eats and drinks very little, but makes every effort to do so.—A. N. Ans.—Small growths, or cysts, frequently occur under the tongue and protrude between the beaks of fowls. Take a sharp pair of scissors and snip them off and stop the bleeding by touching the raw surface with a piece of alum.

CAPONIZING

I was thinking a few remarks on this subject might be of interest to some of our farmers who are interested in the raising of poultry, and who are subscribers to your valuable paper. I have performed this operation on



THE FIGHT IS ON

different breeds of fowl for a number of years, with very favorable results. The larger breeds, of course, are the ones from which the greatest profit may be derived. The majority of birds I have operated on were Barred Plymouth Rocks. However, some of the cross-bred birds do very well. For instance, a cross between the Indian Game and Brahma, or any of the Plymouth Rocks and Brahma, produces excellent birds for capons, as they grow

BANK SHARES BOUGHT AND SOLD

AMERICAN SECURITIES CO.
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Nervous Women

will find that Nature responds promptly to the gentle laxative effects, and the helpful tonic action of

Beecham's Pills

Sold Everywhere. In Boxes 25 cents.

GLORIOUS KOOTENAY

Creston Fruit Lands offer greatest inducements of any in Province.

Soil and climate unexcelled. Irrigation unnecessary and no summer frosts.

Nearest to Markets. Look at your Map. Fruit shipped at noon reaches Alberta before midnight.

Prices Reasonable.

Improved, partly improved and unimproved lands for sale.

For further information apply to

OKELL, YOUNG & CO.
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MILK FEVER OUTFITS, Dehorners, Test Syphons, Sitters, Dilators, Etc. Received Only Award World's Fairs, Chicago, St. Louis. Write for Illustrated Catalogue.

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RESPONSIBLE MAN with team and wagon wanted who can give bond, as salesman for our Extracts, Stock, Poultry, Powders, Liniments, Spices, Talcum, Soap, etc. Write for permanent work in your own county. George Hassall, Sec., 221 Main St., Keokuk, Iowa.

Make Him SQUIRM

These 52 disks were in a comparator sold on discarded for a Tubular facts

It is very easy to make agents and makers of common cream separators squirm. If they claim their disk filled or otherwise complicated machines are simplest or easiest to clean, just you smile and remind them that

Sharples Dairy Tubular Cream Separators

have neither disks nor other contraptions. If they claim their common machines skim closest, smile again and remind them that Sharples Dairy Tubulars develop at least twice the skimming force, and that skimming force does the work. If they claim their many piece machines are most durable, smile some more and remind them that many parts mean rapid wear. When you see how common sense and smiles make cents for common separators squirm, you'll not want a common machine.

Tubulars are The World's Best. The manufacture of Tubulars is one of Canada's leading industries. Sales exceed most, if not all, others combined. Probably replace more common separators than any one maker of such machines sells.

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SEPARATOR CO.
WINNIPEG, MAN.

Was All Run
Down. Weighed 125 Lbs
Now Weighs 185.

Mrs. M. McGann, Debec Junction, N.B., writes:—"I wish to tell you what Milburn's Heart and Nerve Pills have done for me. Three years ago I was so run down I could not do my own work. I went to a doctor, and he told me I had heart trouble and that my nerves were all unstrung. I took his medicine, as he ordered me to do, but it did me no good I then started to take Milburn's Heart and Nerve Pills, and had only taken one box before I started to feel better, so I continued their use until I had taken several boxes, and I am now strong and well, and able to do my own work. When I commenced taking your pills I weighed 125 pounds, and now weigh 185 and have given birth to a lovely young daughter which was a happy thing in the family. When I commenced taking Milburn's Heart and Nerve Pills, I could not go upstairs without resting before I got to the top. I can now go up without any trouble."

The price of Milburn's Heart and Nerve Pills is 50 cents per box, or 3 boxes for \$1.25 at all dealers or mailed direct on receipt of price by The T. Milburn Co. Limited, Toronto, Ont.

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Artificial
MARE IMPREGNATORS
We GUARANTEE you can get from 2 to 6 mares in foal from one service of stallion or jack. Increase the profits from your breeding stables by using these impregnators. No experience necessary to use them successfully. Prices, \$3.00 to \$5.00 each prepaid.
Popular SAFETY IMPREGNATING OUTFIT, especially recommended for impregnating so-called barren and irregular breeding mares, \$7.50 prepaid.
Write for CATALOGUE which illustrates and describes our Impregnating Devices, Breeding Hobbles, Stallion Bridles, Shields, Supports, Service Books, Etc. CATTLEDEN & CO., Dept. 35, Cleveland, Ohio, U.S.A.

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The first remedy to cure Lump Jaw was
Fleming's Lump Jaw Cure
and it remains today the standard treatment with years of success back of it. Known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy.
FLEMING BROS., Chemists,
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KENDALL'S SPAVIN CURE

Sure Cure for Spavin
Seattle, Wash. Nov. 1st, 1909
"I have used your Spavin Cure and find that it is a sure cure for Spavin and Ringbone."
Yours truly, A. T. Lynch.
Equally good for Curb, Splint, Sprain, Swollen Joints and all Lameness.
Hundreds of thousands of horse owners have used it in the past 40 years. Today, it is the world's standard remedy. Good for man and beast.
\$1 a bottle—6 for \$5. Buy at dealers and get free copy of our book—"A Treatise On The Horse"—if you write us.
DR. B. J. KENDALL CO.,
Enosburg Falls, Vt.

FLEMING'S VEST-POCKET

LEASING OF LANDS

The company is prepared to lease for hay and grazing purposes all reserved quarters or half sections. For particulars apply the Land Department, Hudson's Bay Company, Winnipeg.

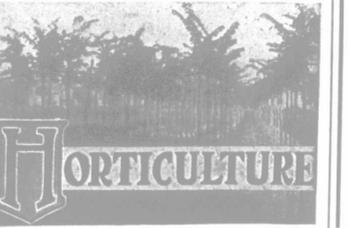
to be very large, and are plump and richly colored when dressed for market. I have not operated on the Wyandotte or Orpington birds to any particular extent, but I can see no reason why they would not produce excellent capons.

There are advantages in caponizing, viz.: The price which they bring on the market, as compared with ordinary birds; they are worth from five to eight cents a pound more when dressed, and probably more, when people learn the difference between the flavor of their meat and others, they being more tender, sweeter and more juicy.

The increase in weight is considerable. It is not difficult to have a capon weigh from eight to twelve pounds. The heaviest I have yet known was sixteen pounds, being a cross with a Brahma. They grow for a few months longer than ordinary birds, and for this reason may be kept later in the season, when prices are better and fowl scarce.

They should be operated on at two to three months of age, just before they commence to crow. The operation is simple, and only takes from one to two minutes after the bird is caught and held in position. They must be fasted for at least twenty-four hours, then fed warm, soft feed for three days following. My fatalities have been less than one per cent. If the operation has been successful, the birds will commence to grow rapidly, sit around, become pale in the head, and have no desire to roam with other birds. Their combs do not grow, and a great many of them never crow. However, if the smallest portion of the testicle is left intact, it will grow to quite a size, and the bird crows, and is little different from a cockerel. They should be kept where they can be fed by themselves, for they will not push in and feed with the other fowl, the other birds all bossing them. Their inclination is to eat, sit around and grow, but will not search for food.

W. J. R. FOWLER, V.S.
Note.—Ordinarily, caponizing does not pay, for the reason that it is difficult to get any more for capons than cockerels, when they are fattened for market. If one were into the poultry business where a house-to-house trade could be built up and where customers would pay a premium on quality, it might be an advantage to caponize. Capons can be housed more closely than cockerels can, or even laying pullets, and they are very quiet; in fact, in many respects, are much the same as our correspondent writes. For home use, they are certainly worth a trial, and the same would apply to the first-class retail trade.—EDITOR.



HORTICULTURE

STRAWBERRY GROWING
Of the long list of luscious small fruits grown to such perfection in Eastern Canada, none equals the strawberry in general popularity. Though readily fruited under almost all sorts of conditions, the demand for home use, city and town markets, and canning factories, is such that there never seems to be enough to go round. Many new plantations will be started this season in farm gardens, and readers of THE FARMER'S ADVOCATE who are beginning, or who wish to improve, will appreciate some practical suggestions, based on twenty-one years' experience at the Central Experimental Farm and elsewhere, given by W. T. Macoun, the horticulturist, in his 50-page bulletin on strawberry culture. The usual method of propagating is from runners. Those selected from the best plants year after year, and grown under favorable conditions, should show improvement over those not selected, but the claims of superiority of so-called "pedigree plants" have not been borne out by trials made by Mr. Macoun. The principle of selection is good, however,

AUCTION SALE

OF
200—HORSES—200
TO BE HELD AT
GLENDOR RANCH, 4 miles east of Calgary
on **FRIDAY, JUNE 10th**



These horses are the property of Patrick O'Sullivan, and they weigh from 1100 to 1500 pounds; besides a big proportion of them are mares.

All must be sold. No reserve. Implements to be disposed of.

—TERMS CASH—
A. LAYZELL, Auctioneer
CALGARY, ALTA.



HORSES
Shires and
Percherons

In looking for stallions or mares, don't buy until you have seen what W. W. Hunter is offering, as he buys and sells every stallion himself.

Your first purchase at this establishment means another life-long satisfied customer. Some of the best stallions and mares that were imported to Canada are in the importation which arrived November 20, 1909. Address all correspondence to—

W. W. HUNTER
OLDS, ALBERTA



Lord Guthrie in Action
CARBERRY, MANITOBA

JOHN GRAHAM
THE LARGEST IMPORTER
IN CANADA

A few good stallions at attractive prices to clear before the season closes.

A fresh importation will reach Carberry the first week of May, mostly mares, and I will be pleased to hear from my old or new customers contemplating buying such. They will be up to the usual high standard.



JACKS FOR SALE
Imported Spanish and mammoth American Jacks, at reasonable prices. I have also on hand some Imported Percheron, Belgian and Clydesdale stallions, a number of prize-winners.
NOTICE—A guarantee goes with every stallion sold, the buyer taking no chances. My prices are right and my terms are reasonable. I will take land or any kind of stock in exchange. All Jacks and stallions have first-class pedigrees.
Write me what you want. **L. K. PARR, Stavely, Alta.**

PURE BRED YORKSHIRES FOR SALE



12 November sows, when bred, \$25.00 each; 20 April pigs, \$12.00 each. This stock is descended from the sow **Snowflake**, first at Dominion Exhibition, Winnipeg, 1907, and from an excellent sow bred by D. C. Platt. These prices are f. o. b. Neepawa. Can ship via C. N. R. or C. P. R. Write for further particulars.
S. BENSON - NEEPAWA, MAN.

Horsemen

Now is the time to prepare a catalog of your stock. Write to us for prices, giving size and number you require.

Melrose Stock Farm
SHORTHORNS
CLYDESDALES
 Sold out of sheep. Six young bulls, a few heifer calves for sale; five young stallions, from one to three years old.
GEO. BARKIN & SONS
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SHORTHORNS
Great Private Sale
 Special prices and terms for choice breeding Shorthorns to make room for winter. Come and see them, or write for particulars, also prize-winning Barred Plymouth Rocks. Eggs for sale in season.
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 C. P. R., C. N. R., G. T. P.

ORMSBY GRANGE STOCK FARM
 Ormstown, P. Que.
 Importation and breeding of High-Class Clydesdales a specialty.
 Special importations will be made for breeders at minimum cost. My next importation will arrive about 1st June.
DUNCAN McEACHRAN

Glencorse Yorkshires

ALSO FOR SALE
 Holstein-Friesian bull calf, nine months old, sire Duke Varcoe Beryl Wayne (7718), dam Duchess de Kol (7158) and litter of registered Sable Collie puppies.
Glen Bros., Didsbury, Alta.

The J. C. Ranch
 Breeder and importer of high-class Clydesdales. Young stock always for sale. Male and female. A car load of young stallions just arrived. I can supply you with a show ring champion or range stallion.
JOHN CLARK, JR.
 Gleichen, Alta.
 Box 32.

CHOICE SHORTHORN BULLS, \$35 to \$70.
 All stock registered. These are a nice lot, six to twelve months old. Also a few young SHORTHORN COWS of Dairy strain.
CLYDESDALE COLTS FOR SALE
 Yorkshire pigs, both sexes, ready to wean.
J. BOUSFIELD, Prop., MACGREGOR, Man.

Messrs. Hickman & Scruby
 Court Lodge, Egerton, Kent, England
EXPORTERS OF PEDIGREE LIVE STOCK
 of every description. Owing to the rapid increase in business, Mr. L. C. Scruby has been taken into partnership. During the spring months the export of horses of the light and heavy breeds will be a specialty. Write for prices, terms and references.

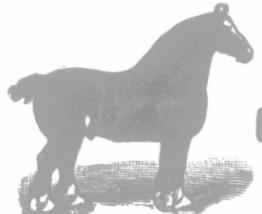
J. C. POPE
 Regina Stock Farm
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 Breeder of
 Ayrshire Cattle and Improved Yorkshire Swine—Stock of both Sexes and all Ages for Sale.

McDonald's Yorkshires

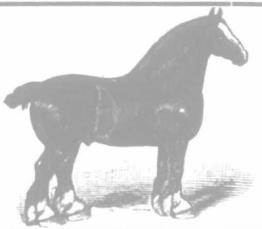
 A few fine long pure-bred Yorkshire boars on hand. Parrowed April from prize-winning stock. Price \$20.00 each.
 Also three young Shorthorn bulls. Apply for prices on bulls.
A. D. McDONALD, Nap of a Man.

BRAMPTON JERSYS
 Canada's Greatest Jersey Herd
 in prizewinners in numbers of sales, in dairy quality, in breeding cows, in breeding sires, in importation, in home-bred animals, in breeding results. Jerseys of all ages and both sexes for sale.
B. H. BULL & SON
 BRAMPTON, ONTARIO

Glenalmond Scotch Shorthorns
 I have for sale some great, thick, robust, young stock bulls and some grand young heifers ready to breed. I can supply ranchers with bulls of a serviceable age at very reasonable prices. My herd won many prizes at the leading exhibitions in Alberta last season. Imported Baron's Voucher, a champion bull in Scotland, heads my herd. Write me for prices.
G. F. LYALL
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VANSTONE & ROGERS
 Importers and Breeders of
CLYDESDALES, PERCHERONS AND HACKNEYS

 Our sales this year have been double any former year, but we have twenty-two stallions in our barns yet to sell. These are from two to five years of age; have nearly all been winners in the Old Country, and will be winners here, and we will give you a bargain now to clean out. We intend importing a large number of Clydesdale and Percheron mares this July, and will give you a bargain if you will write and tell us what you want before we go. We can get just what you need cheaper than you can buy in the ordinary way, and if it does not suit you are under no obligation to buy. Write now.
Branch at Vegreville, Alta.
JAS. BROOKS, Manager.
VANSTONE & ROGERS
 Head Office and stables,
WAWANESA, Manitoba

It Pays to Advertise
 To prove this assertion we have on our files letters of hundreds of satisfied advertisers and a great number of them are stockmen. A small ad. placed now may be the first step to a great business. TRY IT. Write for rate card and any advertising information you may require to
Farmer's Advocate of Winnipeg
 14-16 Princess Street Winnipeg, Manitoba



and, if thoroughly carried out, will result in an improved strain. He points out, also, that the success of the so-called "ever-bearing" berries is largely a matter of climatic and weather.

Very often berries grow ill-shaped and worthless, because the flowers of the variety are "imperfect"; that is, with female organs only, and not provided with stamens, on which the fine dust or pollen forms, and which, falling on the pistils, causes fertilization and



Perfect Imperfect
 BLOSSOMS FROM "PERFECT" AND "IMPERFECT" VARIETIES.

formation of fruit. Insects, like bees, and the wind, carry the pollen from "perfect" to "imperfect" flowers, and cause fertilization. By a reference to the illustrations, the difference between the two kinds of flowers is readily seen. It is not necessary to buy imperfect flowering varieties, as there are plants of good sorts with perfect flowers, but if for some reason a grower wants the former, they should be planted with the rows alongside the latter, but they should bloom at the same time.

ENRICHING THE SOIL.

The site of a strawberry bed should be where the snow will lie in winter, and be well drained. The latter is essential. Warm, sandy soils produce early fruit, but friable loams the best crops. The richness of the soil is the great factor. Land that will grow good root crops will produce good berries. A root crop heavily manured, the previous season, or a clover sod fall plowed, will give satisfactory results. Nothing beats well-rotted stable manure, thirty tons to the acre being a fair application, put on early in spring, so as to get it thoroughly incorporated in the soil by tillage. Fresh, strawy manure makes the land too loose, causing the young plants to dry out. Twenty-five to one hundred bushels of wood ashes as a top-dressing, when harrowing, will show beneficial results. An application of 100 to 150 pounds nitrate of soda, broadcasted before the flowers open, is sometimes desirable, if plants are not making vigorous growth. Ground bone, applied at the rate of 200 to 300 pounds per acre, will supply phosphoric acid, before planting, and potash may be furnished by using 200 to 300 pounds muriate of potash, if wood ashes cannot be obtained. By way of preparation for next year's planting, if barnyard manure cannot be obtained, nitrogen and humus may be obtained by plowing down clover, peas, or other leguminous crops, and then using the artificial as suggested. The main thing is to have a rich, mellow soil ready early for spring planting.

CHOOSING VARIETIES.

In the choice of varieties one must be guided by circumstances, the purpose for which the berries are to be grown, kinds that do well in the locality and the best perfect-flowering plants available. In the past 21 years, 596 named sorts have been tested at the Experimental Farm. Only fourteen of those on trial during the first two years are yet under test. Better kinds have taken the place of the others. Of eleven varieties considered very promising twenty years ago, three are still considered most promising, Bubach, Warfield and Daisy. The Daniel Boone, after twenty-one years' trial, still does well, and the Williams, tested for eighteen years, still ranks as one of the best commercial shipping berries. The bulletin suggests the following lists at present:

- Commercial — Bederwood (per.), Splendid (per.), Warfield (imp.), (not suited to light soil), Williams (per.), Greenville (imp.), Bisel (imp.), Sample (imp.), Buster (imp.), Pocomoke and Parson's Beauty.
- Domestic — Excelsior (per.), Splendid (per.), Senator Dunlop (per.), Lovett (per.), Ruby (per.), Bubach (per.), Wm. Belt (per.).

Order your plants early and plant soon after arrival. If that is not con-

Horse Owners! Use
GOMBAULT'S
Caustic Balsam
 A Safe, Speedy, and Positive Cure
 The safest, Best BLISTER ever used. Take the place of all liniments for mild or severe sores. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUSTIC OR BURNING. Impossible to produce scar or blisters. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or by express, charges paid, with full directions for its use. Send for descriptive circulars. The Lawrence-Williams Co., Toronto, Ont.



Ringo-Bone

 There is no case so old or bad that we will not guarantee
Fleming's Spavin and Ringbone Paste
 to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of
Fleming's Vest-Pocket Veterinary Adviser
 Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable bound, indexed and illustrated. Make a right beginning by sending for this book.
FLEMING BROS., Chemists,
 46 Church St., Toronto, Ontario

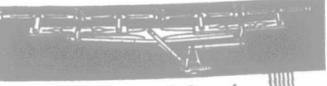
You Can't Cut Out
 A BOG SPAVIN, PUFF OR THOROUGHPIN, but
ABSORBINE

 will clean them off permanently and you work the horse same time. Does not blister or remove the hair. Will tell you more if you write. \$2.00 per bottle at d'lors or dolly'd. Book 4 free.
ABSORBINE, JR., for mankling. \$1 bottle. Reduces Varicose Veins, Varicocele, Hydrocele, Ruptured Muscles or Ligaments, Enlarged Glands. Allays pain quickly.
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LYRANS Ltd., Montreal, Canadian Agents.
 Also furnished by Martin Holt & Wynne Co., Winnipeg; The National Drug & Chemical Co., Winnipeg and Calgary; and Henderson Bros. Co. Ltd., Vancouver.

SAVE THE HORSE'S SPAVIN CURE.
 REG. TRADE MARK

 The most perfect and superior remedy or method known, with greater power to penetrate, absorb and cure than anything discovered in veterinary medical science or practice. Besides being the most humane, "Save-the-Horse" is the most unfailing of all known methods. It is effective without flogging up the leg, making a blister, or leaving a particle of after effect.
 Armstrong, Mo. — Enclosed \$5. Please send me bottle of "Save-the-Horse." I used your medicine on three different occasions with the results hoped for. I gladly recommend it. Ship at once and oblige. Yours truly, GEORGE W. LINDGREN, Route 2, Atlin, B. C. — Last year, with one-half bottle only of "Save-the-Horse" Spavin Cure, a customer of mine treated a sprained tendon of four years' standing—the horse had practically come useless. Many other remedies had been applied without results. "Save-the-Horse" effected a complete cure.
 Yours truly, C. R. BOURNE, Drugs and Stationery.
 \$5.00 a bottle, with signed guarantee or contract. Send for copy, booklet and letters from business men and trainers on every kind of case. Permanently cures Spavin, Thoroughpin, Ringbone (except low), Curb, Splint, Capped Hock, Windpuff, Shoe Bull, Injured Tendons & all Lamenesses. No scar or loss of hair. Horse works as usual. Dealers or Exp. sold. TROY CHEMICAL CO. 148 Van Horne St. Toronto, Ontario, and Binghamton, N.Y.

A Great Heider Invention
Heider Eveners
 Made for 2, 3, 4, 5 or 6 horses. The HEIDER 4-horse PLOW EVENER works four horses abreast on gang, sulky or disc plow. one horse on furrow, three on land. Works free, no side draft, all horses pull equal. We make clevises to attach our Eveners to all plows. HEIDER 3-horse WAGON EVENERS for wagon, manure spreader, grain drill or any other implement with pole. GO TO YOUR DEALER, if he can't supply you don't accept any other. Write us for catalog and we will tell you where to get them. We also make Wagon Doubletrees, Single-trees, Neck Yokes, etc. Insist on getting HEIDER'S if you want the best in EVENERS.
MADE BY THE Heider Mfg. Co. Carroll, Iowa. U. S. A.
 The Stewart-Nelson Co., Ltd., Gen'l Agents, Brandon, Winnipeg, Regina, Saskatoon, Calgary.



THE CHILLIWACK VALLEY

is the most fertile spot on the American continent. The temperature is extremely even and the climate is ideal.

Three new railroads in course of construction, two of these are trans-continental, the Canadian Northern and the Great Northern, and the other is the British Columbia Electric Railway, now practically completed, connecting us with Vancouver and New Westminster within a two hours' ride of our beautiful valley.

All the large farms are being cut up into five and ten-acre fruit, vegetable and chicken ranches.

We have a large list of these small farms to sell on the very easiest of terms. For instance, we have the very best of fruit land, all cleared, to sell at \$200 to \$300 per acre, one-fifth cash, balance in four years.

We have one of the finest lists in the province and we are making our terms to suit your circumstances.

As from \$350 to \$700 per acre can be realized from fruit and vegetables in this valley, we can recommend these small farms to anyone who wishes to engage in this most remunerative and pleasant vocation.

No farm in the valley is more than ten miles from the city and the new railroads will establish stations throughout the district, so that there will be ample shipping facilities for all branches of farming, etc.

Write us about what you want in the way of a home and we will quote prices, terms and descriptions by return mail.

Come and see the valley for yourself or send a representative, and we feel sure that you will never want to live elsewhere.

Address a postcard or letter to **T. J. POLLEY & CO. to-day.**
P.O. Box 247, CHILLIWACK, B.C.

WALL PLASTER

When figuring on that new house do not overlook the interior finish.

Ask for Sackett Plaster Board and the Empire Brands of Wall Plaster

Write for Booklet.

MANITOBA GYPSUM COMPANY, LTD
WINNIPEG, MAN.

MEN! BE STRONG!

TAKE THIS BELT FOR WHAT IT IS WORTH—WEAR IT UNTIL YOU ARE CURED—THEN PAY ME MY PRICE.



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

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

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

GET SOME LIFE INTO YOU

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

Dear Sir:—After using your Belt for pains in the back for one month, I find it has cured me. I think it is the cheapest investment I ever made, as I have paid out more money for doctor's medicines which did me no good than would have paid for the Belt. Thanking you for your valuable service and wishing you success, I beg to remain, **FRANK HOWARD, Woodbend, Alta.**

Dear Sir:—I thought I would write to let you know that my back is much better since wearing your Belt. My back used to feel as if it would burst open. I used to be in agony sometimes. I never had anything wrong with my back until I met with my accident. I fell into a concrete dry tank and thought it was all over with me. Your Belt is the only thing that did me any good. You can make what use of this you wish.—**W. CROW, Virden, 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.

FREE TO YOU

Get my 80-page book describing my Electric Belt, with illustrations of fully developed men and women, showing how it is applied.

If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon.

Consultation free. Office hours, 9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

DR. M. D. McLAUGHLIN,
112 Yonge St., Toronto, Can.

Please send me your Book, free.

NAME.....

ADDRESS.....

when the weather is really warm. This matter of conserving the heat of the hive in spring is of the utmost importance.

About the middle of May it will be seen that some colonies require more room. These hives are full of bees from corner to corner, or those which have been contracted in the fall may need to have the division board removed, and more combs added. On the other hand, some colonies will be quite weak, occupying only two or three spaces between combs. I have found it an advantage to remove a strong colony and make it change stands with a weak one. By the field bees returning and entering the weaker hive the forces are equalized.

When fruit bloom opens, and bees are getting honey, it is safe to open hives freely. The combs are then carefully examined for indications of disease. Anyone who does not understand the symptoms and treatment of brood diseases of bees should write to the department of agriculture, Toronto, for a free bulletin on the subject. This watch for disease should never be relaxed. If taken in time, it can be cured without very seriously loss, but if neglected, it will ruin the whole apiary, going from one hive to another, and will also jeopardize the other apiaries in the neighborhood.

During this spring examination the combs should have their frames scraped free of all propolis and superfluous wax, and be transferred, bees and all, to a clean hive. Be careful to keep them in the same order. Do not transfer combs from one hive to another, unless necessary to feed a needy colony, and then not unless you are perfectly sure you have no foul brood.

Watch out for the queen to clip her wing, and when all is in the fresh hive, and it is closed, thoroughly scrape the inside of the empty hive, preparing it for the next colony.

The record kept of each queen should show her age and apparent value, judging by appearance of the queen and the appearance of the brood and eggs, also the strength of the colony.

When all colonies were all nearly alike in the fall, and received the same treatment in the winter, the queen may be held largely responsible for the very weak condition of some colonies in spring. The eggs of a good queen are uniform in size, and stand evenly in the cells, one in each. The brood is uniform as to age of larvæ. Where eggs or very young larvæ alternate with capped workers, or, worse still, where drone brood appears in worker cells, interspersed with worker brood, the queen is failing, and should be replaced.

At any time bees are short of stores in spring, they can be fed by filling the cells of empty combs with syrup, and hanging these combs in the brood chamber. This should be done in the evening, to avoid robbing.

All the old honey should be converted into bees before the opening of clover bloom. This is done by uncapping some every week, and placing next to the brood, so the bees will handle it over and use it. It stimulates the queen to greater action, and gets rid of dark honey in the hive. Do not spread brood in the spring. When clover comes in bloom, every vestige of dark honey must be removed from the hives. This is one of the most important things in the production of white honey.

Ontario. MORLEY PETTIT.

CANADA'S FOREST PRODUCTS

The forestry branch of the department of the interior has just issued its eighth bulletin, entitled "Forest Products of Canada, 1908." This gives the result of the first year's work by the branch in the collection of statistics regarding the annual production in Canada of lumber, pulpwood, poles and other wood products. The figures have been compiled by H. R. MacMillan and G. A. Gutches.

These statistics have been compiled from answers to circulars sent out by the branch to manufacturers in the different wood-working industries. While it is not claimed that they are complete, yet the figures they give seem to be the most comprehensive yet published.

The work was new, both to the manufacturers and to the officials of the forestry branch. The work is to be

ONE WOMAN'S STATEMENT

Tells Her Suffering Sisters to Use Dodd's Kidney Pills.

They Proved a Blessing to Her When Her Pains and Weakness Were Almost More Than She Could Bear.

St. George, Man., May 23—(Special).—Hoping to save her sister women in the West from pains and aches which come at the critical times in a woman's life, Mrs. Arsene Vinet of this place has given the following statement for publication:—

"I have brought up a large family and have always enjoyed good health until the last two years. I am fifty-four years of age and at the critical time of life that comes to every woman, I had pains in my right hip and shoulder. I could not lie down two minutes at a time without suffering the greatest agony. Sometimes I awakened with a feeling as if some one had laid a piece of ice on my head. Another time it would be a burning pain under the left shoulder.

"I took many medicines but could get no relief, till reading of cures of similar cases to my own by Dodd's Kidney Pills, led me to try them. They did wonders for me.

"I want all women to know what Dodd's Kidney Pills did for me."

Dodd's Kidney Pills cure the Kidneys. The woman who has sound Kidneys is safeguarded against nine-tenths of the suffering that makes life a burden to the women of Canada.

continued, and increasing familiarity with the work, both on the part of the manufacturers and on that of the branch will doubtless bring about greater accuracy and completeness in the returns.

The total value of the production of lumber, lath, shingles, cross-ties, poles and pulpwood during the year was \$67,425,044. British Columbia easily leads in the production of shingles, producing 724,652,000 of the value of \$1,391,306. Its nearest competitor is Quebec, which produced 406,440,000, valued at \$849,787, and, then follow, in their order, Ontario, with a production of 223,533,000, valued at \$461,155; New Brunswick, 109,913,000 worth \$325,865; Nova Scotia, making 33,141,000, valued at \$69,370; Manitoba, turning out 1,125,000, worth \$3,150, and Saskatchewan, which produces 592,000 valued at \$1,363. The total production for the Dominion was 1,499,396,000 shingles, the aggregate value of which was \$3,101,996.

Baby Eczema Skin Irritations

Splendid results obtained by using **DR. CHASE'S OINTMENT** the greatest of healers

Thoughtful mothers are forsaking pore-clogging and unsanitary powders for the use of Dr. Chase's Ointment and find there is no treatment so effective for chafed and irritated skin, scald head and eczema.

This ointment makes the skin soft and smooth and ensures healthful natural action of the pores of the skin.

A trial of Dr. Chase's Ointment is usually enough to convince anyone that there is nothing like it as a beautifier of the skin and as a means of overcoming painful and annoying itching skin diseases.

It is so pure and clean, so delightfully soothing and healing and so pleasant to use that it soon finds a permanent place in every home where its merits become known. 60 cts. a box, all dealers, or Edmanson, Bates & Co., Toronto. Write for a free copy of Dr. Chase's Recipes.

IRRIGATION OF SUGAR BEETS

A bulletin of the United States Department of Agriculture, prepared by the official in charge of irrigated experiments, is a practical manual, giving methods pursued throughout the irrigated beet-growing sections. Furnishing as it does information to new settlers in irrigated districts, as well as suggestions to beet growers as to the practices in districts other than their own, should be of value in introducing the growing of beets and improving the methods of handling this crop. As the matter now stands, each community where this industry has found favor is proceeding along lines suggested by local conditions, which are more or less peculiar, and this bulletin is designed to be a compilation of the practices throughout the West, to which are added the results of experiments conducted by the department of agriculture in irrigation of sugar beets during the past four years.

The results of these experiments all point to the advantage of the control of the flow to furrows by lath boxes or pipes. The slowness with which the water moves permits of its deep penetration into the soil, prevents waste at the lower end of the field, and the use of the boxes saves considerable labor after they are once installed. Yields are better also, due to confining the water to the furrows and not permitting it to wet the top soil next to the beets. The thorough saturation which it gives is far better and less costly than a number of lighter irrigations, which are given in some of the localities. The number of irrigations needed depends largely on the season and whether the beets are paid for on a flat-rate basis or according to the sugar content. If on the flat rate, more water is required, but it must be remembered that keeping the soil continually wet will reduce the tonnage instead of increasing it, as the results at Loveland during 1906 clearly show, while there is the danger of ruining the land by raising the water table and producing a swamp. The beets under such conditions will be slow to ripen, and there is the liability of their refusal by the factory, due to too large size and low sugar percentage.

If a contract calls for percentage payments it will require a more thorough and careful understanding and study of conditions, so that both good tonnage and high sugar content may be secured. As has been shown, the beets must ripen at the time of harvest so as to contain their greatest values in sugar, and the application of water must be such as to cause a continuous healthy growth throughout the season, so that the tonnage is not sacrificed. A contract of this kind is equally beneficial to the factory and the grower who exercises care and judgment in the handling of the crop, which results in better returns on the average than the flat rate contract. For example, a 17-ton crop at \$4.50 per ton on a flat rate would bring \$76.50, while if the same crop contained 17 per cent. of sugar it would bring, on the percentage rate, \$4.50 for 15 per cent., and an increase of 25 cents for each 1 per cent. over \$5 a ton, or \$85, which is equal to 11 per cent. more than the flat rate.

DODDER ON CLOVERS

Occasionally dodder is procured in clover or alfalfa seed. This parasitic weed causes considerable loss and special care should be taken to avoid introducing it in imported seeds. Discussing this weed in relation to farm crops, G. M. Frier, assistant in agricultural extension work at Purdue University Agricultural Experiment Station, says: "So injurious is dodder to clovers and alfalfa that the presence of dodder in these crops or in the seed of them, even in small quantities, should be a matter of much concern. Of the red clover seed examined to date in the seed laboratory of this station, 5.6 per cent. of the samples contained dodder; of the alfalfa, 61.5 per cent. contained dodder. It is not unusual to find dodder in American-grown white clover or alsike clover. None was found in the samples analyzed here. As might be expected from the results of analyses made, dodder is positively known to exist as a pest in a number of Indiana clover and alfalfa fields. The character of dodder seed is such, that where the pest exists in the fields and is allowed to mature, the seed of it is sure to be in the clover seed crop, if the clover should be so fortunate as to survive the effects of the dodder living upon it. The existence of dodder in clover and alfalfa seed and of the dodder plants in the fields will prove, if unchecked, a gradually increasing menace to clover and alfalfa growing in the state. Dodder seed matures about the same time as clover seed. Much of it reaches the ground. The seed germinates, at first getting nourishment from a supply stored up in the seed. A slender, delicate shoot appears. This little stem sways about looking for a support, or a host, as it is often called, for its habit is to twine and climb about other plants, especially clover or alfalfa. When it reaches a clover or alfalfa plant it sends out little suckers which enter the host wherever the dodder touches stem or branches, and extracts therefrom ready-made food materials. Here is where the damage from dodder comes in. The dodder once attached to a suitable host, branches extensively, thus sending suckers in large numbers into the juice-conveying tissues of the clover or alfalfa. As soon as the food stored in the seed is exhausted, the dodder plant becomes a complete parasite, living wholly on the host plant. It dies at the ground, thus cutting off all connection with the latter. The trouble begins in circular "spots" which gradually spread out. Examine a "spot" and there will be seen in, around, and among the clover or alfalfa, a much branched, tangled mass of lemon yellow, orange, or pink threads attached to the clover at many points by suckers, much as ivy is attached to a wall, only the suckers of dodder not only cling, but extract the juices, and hence the vitality from the clover or alfalfa. Dodder is wholly destitute of leaves and is incapable of manufacturing food for itself. Hence it is a plant parasite. The flowers are usually many, and crowded in dense bunches. As a rule, dodder is a heavy seed producer. As the season advances these "spot" centers and the clovers and alfalfa do little by little.

SHARPEN YOUR TOOLS AT MY EXPENSE

Mail the Coupon for full explanation of our great ten days' free trial offer.

I will send you a Harman Special Alundum Farm Tool Grinder, with eight Genuine Alundum Grinding Attachments, right to your farm for an absolutely free trial lasting ten days.

I will guarantee that this Alundum Grinder will not draw the temper from steel.

I don't want you to send me any money—not a cent. I want to make you an offer so liberal that you simply cannot afford to refuse it. I will give you the use of this magnificent outfit for ten days absolutely FREE—no red tape, no papers to sign, no obligations of any nature. Just get the outfit, use it for ten days just as though it were your own, on your own work, sharpen your sickles, plowshares, cultivator blades, scythes, axes—anything that is dull—then, if you wish, return it to me at my expense.

Now, I want to tell you why I am making this offer

We know that every progressive, up-to-date farmer realizes the advantage of always having sharp, bright tools to work with. You know how much work can be done with tools which are always in good condition. You know how much easier your work is and how much longer your tools last. You know all these things and yet—you DO sometimes work with dull tools, don't you? I want to prove to you that you can easily keep all your farm tools in good condition, all the time, with this wonderful, simply wonderful outfit which I send to you free.



Grind your tools better and 25 times quicker than with grindstone. Makes 4,000 revolutions a minute.

- 8 MACHINES IN 1
1. SICKLE GRINDER 5. POLISHING WHEEL
2. FINE GRINDER 6. RUST REMOVER
3. ROUGH GRINDER 7. HONE
4. SAW GUMMER 8. DISK ATTACHMENT
(No. 8 Not shown in illustration.)

GENUINE ALUNDUM (Hard Enough to Scratch the Diamond) GRINDER—NOT an Emery Wheel

And Alundum is the most wonderful abrasive in the world, even harder than the diamond. It is really manufactured precious stones, for it is made of the very same substances which go to make up the sapphire and ruby. Alundum is the most perfect grinding substance known. It is just as much harder than emery as emery is harder than chalk. A grinding wheel made entirely of pulverized South African Diamonds would not grind one bit better or faster than the genuine Alundum wheels which we furnish with this superb machine.

Alundum is manufactured in the most terrific heat that man has been able to produce. A heat so great that it will actually burn up a common brick like so much gunpowder. And in this incomparable heat is produced Alundum. It is the heat in which the worlds were formed. Every one of the beautiful iridescent, needle-like crystals is so hard that it will actually scratch the diamond itself. It is these crystals which are crushed up and made into the grinding wheels. It is these INCALCULABLY HARD AND SHARP CRYSTALS which cut through the hardest steel more easily than the finest emery wheel will cut through soft copper.

Saves Time—Effort—Money Lasting—Binding—Guarantee

You do the same work in two minutes on an Alundum wheel that would take you at least a half an hour to do on a grindstone, and do it better. And you can operate the Harman Special Farm Tool Grinder for half an hour with less effort than would be required in running a grindstone for two minutes. Alundum will grind 25 times faster than the grindstone and 8 times faster than the emery wheel.

Alundum wheels are so much harder than the hardest steel that no amount of grinding seems to have the slightest effect on them. Alundum will cut the biggest steel file you have in two in five seconds. We give a lasting, binding guarantee with every tool grinder.

SEND THIS FREE COUPON



Alundum WILL NOT draw the Temper From Steel

Alundum wheels will positively not draw the temper of the finest tool. The reason for this is that Alundum does not heat the article which is being ground as does an emery wheel or grindstone. Alundum cuts and cuts quickly—so quickly the steel does not have time to heat.

Remember, 10 Days' Free Trial!

Sign the FREE Coupon Today and Send it to Us.

If you want to get the Grinder on Free Trial right away, sign the upper half of the coupon. If you want to know more about the Grinder before asking for the free trial, sign the lower half of the coupon—we will send our free literature at once.

Remember, if you sign the upper half of the coupon, it is not an order for a Grinder—merely a request for a Free Trial. You may try the machine for 10 days and then return it to us at our expense if you do not want it. There won't be a word said, so if you are in a hurry for the machine we advise you to sign the upper half of the coupon. But whether you sign the upper half or lower half of the coupon, sign one or the other right away. Don't delay. You will be amazed at the wonderful sickle attachment that will enable you to sharpen your sickles better and faster than you ever dreamed it could be done before. Some of our customers have sharpened six sickles during the noon hour and have had plenty of time to rest. So send the coupon today—don't wait! Sign either upper or lower half—sign the upper half if you would like the machine right away, or the lower half if you want our free literature. Whichever you sign, don't send any money—just the coupon.

HARMAN SUPPLY CO., 160 Harrison St. CHICAGO Dept. 5025

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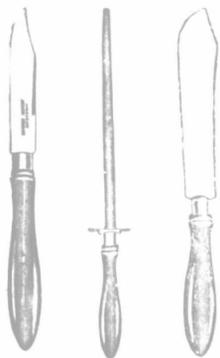
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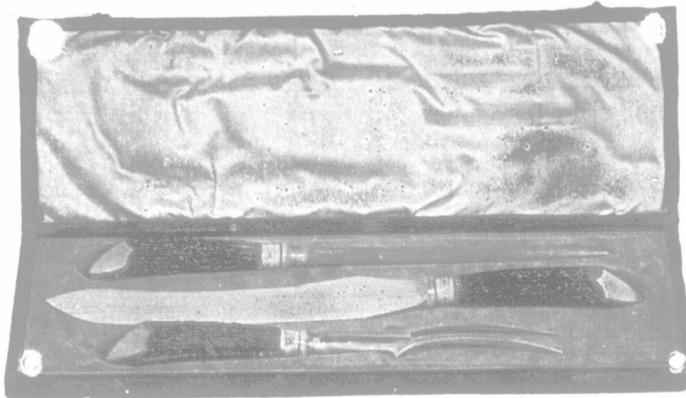


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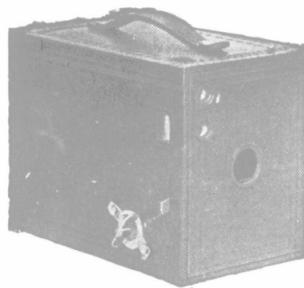
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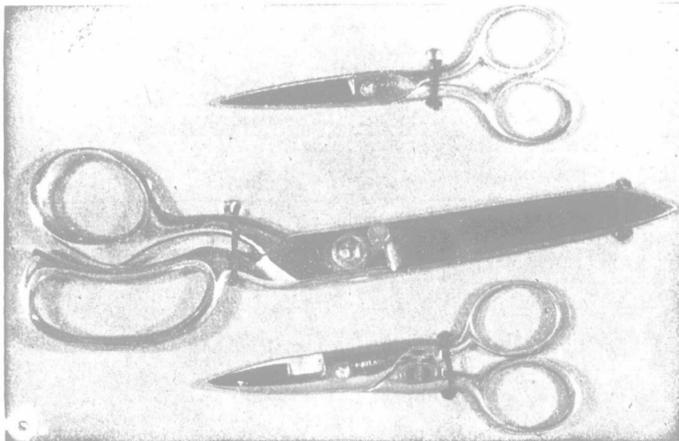
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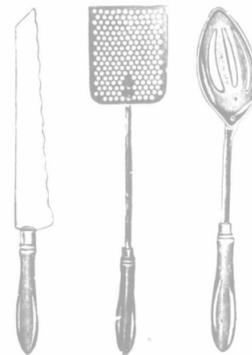


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