

FARMER'S ADVOCATE

AND HOME JOURNAL

THE ONLY WEEKLY AGRICULTURAL PAPER IN WESTERN CANADA

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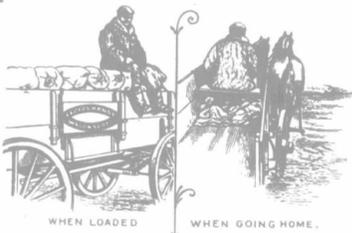
MAY 8, 1907

WINNIPEG MANITOBA

VOL. XLII, NO. 763

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Assets over Liabilities - - - - - 224,096.56

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(1) At least six months' residence upon and cultivation of the land in each year for three years.

(2) If the father (or mother if the father is deceased) of the homesteader resides upon a farm in the vicinity of the land entered for the requirements as to residence may be satisfied by such person residing with the father or mother.

(3) If the settler has his permanent residence upon farming land owned by him in the vicinity of his homestead, the requirements as to residence may be satisfied by residence upon the said land.

Six months' notice in writing should be given to the Commissioner of Dominion Lands at Ottawa of intention to apply for patent.

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Deputy of the Minister of the Interior.
N. B.—Unauthorized publication of this advertisement will not be paid for.

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Farmer's Advocate and Home Journal

The Only Weekly Farm Journal in Western Canada.

PUBLISHED EVERY WEDNESDAY BY THE FARMER'S ADVOCATE OF WINNIPEG, LIMITED. GENERAL OFFICES.

14 and 16 Princess Street, Winnipeg, Man. Branches at London, Ont. and Calgary, Alta.

BRITISH AGENCY—W. W. CHAPMAN, Mowbray House, Norfolk Street, W. C., London, Eng.

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REMITTANCES should be made direct to this office, either by Express or P. O. Money Order or Registered letter, which will be at our risk. When made otherwise we will not be responsible. THE DATE ON YOUR LABEL shows to what time your subscription is paid.

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WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned if accompanied by postage.

ANONYMOUS communications will receive no attention. LETTERS intended for publication should be written on one side of the paper only.

THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.

Address all communications to FARMER'S ADVOCATE OF WINNIPEG, LIMITED, WINNIPEG, MAN.

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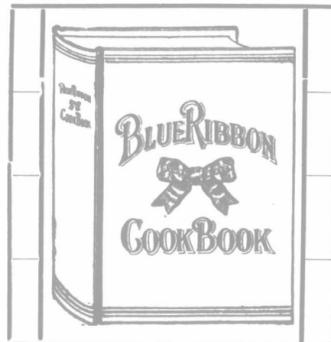
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Solicitors for Farmer's Advocate

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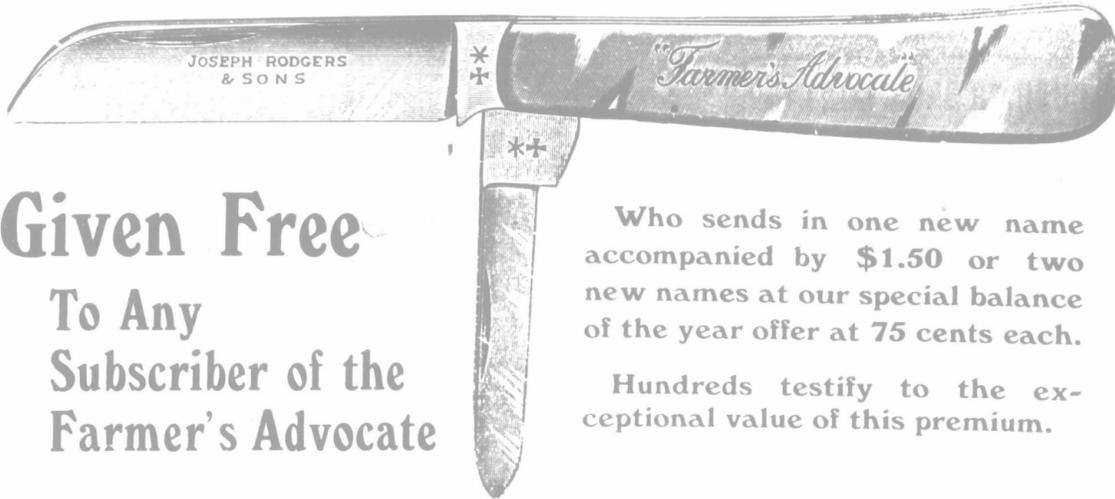
Toronto and Winnipeg

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Robson, B. C., 22-4-07

Messrs. McDermid & McHardy,
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People in the East, who are intending moving to some other part of the country, where they can enjoy a more favorable climate, and surroundings, would save themselves a great deal of expense and travel, if they would come to Robson. After they had thoroughly examined the property, and the location, they would undoubtedly conclude, "They could not possibly wish a better place to live."

I find, all prices for produce, and the general description of the property, exactly as stated in advertising matter, and not in the least exaggerated.

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(Signed,) H. Hedley.

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Illustrated Booklet Free on
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NELSON, B. C.

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That we may be able to supply the great demand for "Prairie Rose" Butter from the Great Lakes to the wide Pacific.

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You will always find our prices right, and the longer you deal with us the better you will be satisfied. GET READY NOW for the best of the season.

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BRANDON, Manitoba

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100,000 acres choice wheat land in the Goose Lake and Eagle Lake Districts.

Several choice sections on the main line of the Can. Northern Ry. at Humboldt, Quill Lake and Wadena.

Improved and unimproved lands in the Regina District and on the Prince Albert, Arcola and Soo lines.

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The coming two years will see an enormous increase in property values in Victoria.

BUY NOW. We have recently purchased two of the finest sub-divisions in the city and are offering lots for sale at prices and terms which cannot fail to appeal to you.

Farmer's Advocate

and Home Journal

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

May 8, 1907.

WINNIPEG, MANITOBA.

Vol. XLII. No. 763

EDITORIAL

The Arbor Day Spirit.

Our endorsement is upon the plans of the Western Horticultural Society in its endeavors through organized friendly rivalry to further the growing of trees, shrubs, flowers and grasses for the beautifying of homes and schools. In the knowledge that we have land in plenty upon which to build homes and to grow crops and stock for their maintenance, we have been too content to rest. Our standard of a home has descended to the low level of the necessary—the home and the land. The significance of the power of attachment possessed by woods, groves, lawns, flowers, vines, and a combination of natural embellishments is not sufficiently appreciated. The man or woman or boy or girl who spends his or her moments of rest and recreation on the dry parched brown grass on the sheltered side of a house exposed to the glaring sun and the blistering summer winds, cannot develop into so useful a citizen, cannot even be so capable of making money as he could have been if these moments were spent in spots where trees break the velocity of the winds and by filtering it through their moist leaves give it the benign influence of a soothing breeze where grasses sheltered from the action of evaporating winds grow fresh and green, where flowers lift their soft tints to relieve the strain of the monotony upon the eye and where creeping vines ramble over walls and fences, giving to the home a sense of seclusion and of privacy. The influence of surroundings upon character can only be measured by the alternate fitness of a people to direct its own and humanity's destiny, and so far such a people has never been produced upon a land where grass is practically the only vegetation.

The tenor of these remarks reflects upon the Arbor Day spirit, a spirit that should permeate every person during the month of May. Upon some farms nothing more can be done this year than the preparing of the ground; upon others trees and shrubs native to the country and indigenous to the district can be lifted from bluff and woods and transplanted about the farmstead; vines can be obtained and planted upon the sun-exposed side of a kitchen or living room; children at school can be interested in flowers and shrubs; in fact, there is an imperative need that everyone become infatuated with a vision of a country dotted with homes surrounded with trees, which in turn develops a people broad in intellect, sympathetic in character and versatile in ability. Plant trees!

Where a Little Professional Advice Would have been Helpful.

One of the most difficult and delicate pieces of work to be attempted by any Department of a Government is that of veterinary police work, such as is done by the Health of Animals Branch of the Dominion Department of Agriculture, dealing as it does entirely with the control and suppression of contagious diseases of animals. Such work, necessitating as it occasionally does, compulsion in the interests of the public health, may cause friction, especially in the case of hot heads or people lacking information of the significance of such diseases.

Conflict may, as already stated, occasionally arise, but one does not look for nor expect it from official sources, presumably working in the public interests and towards the same goal, but when such does occur we must put it down to lack of accurate information and not to any anxiety to

precipitate trouble. A case in point is furnished by a letter recently sent out by the Department of Agriculture at Edmonton, in which statements (all erroneous) were made reflecting on the Veterinary Branch, Ottawa, and another to the effect that the Dominion Contagious Diseases Act did not provide for the control of anthrax, a malignant fatal disease in animals and man. Such news came as a shock to us until we realized that the Department at the northern town had made the very serious mistake (for a Government office to make) of confusing anthrax with blackleg; and as a result of such a mistake had caused to be included in the Public Health Act of Alberta four clauses, 84 to 87, entirely unnecessary and liable to provoke a conflict of authority and hindrance to the proper method of carrying out attempts to stamp out animal contagious diseases.

Anthrax is a malignant, quickly fatal disease to animals and man; blackleg is a disease of young cattle, is not communicable to human beings and can be prevented by the use of vaccines. The Department at Edmonton has evidently been misled, but seeing the two Departments of Agriculture at Ottawa and Edmonton work together so well in the matter of live stock judges, seed fairs, etc., it is a pity that the junior Department had not consulted the senior before issuing the statements with a request for publication. Knowing such to have been made in error, the FARMER'S ADVOCATE refrained from doing so, and only draws attention now to put people on their guard against taking the statements seriously if such appear elsewhere. The extracts from the Public Health Act show a distinctly amateurish hand, for in section 85 the following words are seen regarding animals affected with anthrax, glanders or rabies: "Such are to be isolated until the animal dies or recovers"! (The italics are ours.) Once the diagnosis of either of the diseases mentioned is arrived at, no temporizing should be permitted, for recovery does not occur in such cases.

It Pays to be Straight in Registering Live Stock.

The basis of the purebred live stock business is honesty, for without that indispensable quality the whole fabric falls to the ground. Just recently the directors of the American Shorthorn Breeders' Association have found two breeders guilty of falsifying pedigrees, and as a result have expelled both breeders and will proceed against one in the courts, the penalty on conviction being a fine and imprisonment. One breeder was found guilty of registering spurious pedigrees in the herdbook and offering at auction sales cattle under false pedigrees. Another breeder was convicted of selling a cow under the name of one that was dead. Both breeders will not again be allowed to enter animals in the herdbook. It is to be hoped that warnings such as the above will be sufficient; the purebred live stock business must be conducted so that there is not a breath of suspicion raised, or all breeders suffer as a result. A short time since our attention was called to some horses said to be registered Clydesdales, and our opinion asked as to whether such animals appeared to be purebred. A question such as that cannot always be answered, beyond giving the information that if the animals were purebred, they were not typical specimens of the breed or at all high class. The querist (a horseman) then stated that it looked to him as if the animals in question might be travelling on borrowed pedigrees. It is thus evident that a breeder of purebred stock who will persist in marketing culls is leaving the way open for suspicion of the purity of the breeding of such animals. The example of the American Shorthorn Association and that of British breed societies we recommend to similar Canadian organizations.

We Need More Butter Manufacturers.

Just a short time ago announcement was made in the daily papers that butter was very scarce, that a certain big railroad contractor could not get the necessary quantities of this dairy product to butter the bread of the men in his camps. What is the reason of such shortage of supplies? The market quotations show prices which we are assured by those who know the manufacturing of butter from A to Z, as fairly remunerative. The output nowhere approaches the demand, and it would seem that there is abundant opportunity for more creameries in the country. Some people have an antipathy to the big central creameries, a feeling not shared in by us, yet for all we think there is plenty of room for both central and local creameries. The reluctance to engage in the work is largely due to lack of understanding as to the best methods to follow, both in production and in marketing. Dairying is the natural adjunct to bacon raising, another very profitable phase of modern farming to-day. The separator has rendered dairying a far more simple and therefore more perfect line of work than ever before, and to those who will engage in it it affords an opportunity to get a good return for their labors. Many people would support creameries if they thoroughly understood the ins and outs of the business. We would advise any of our readers who have any idea of going into dairying to consult with experts provided by the respective Departments of Agriculture for that purpose. In Manitoba, Prof. W. J. Carson, M. A. C., Winnipeg, Man.; Supt. W. A. Wilson, Regina, for Saskatchewan; C. A. Marker, Calgary, for Alberta. These men can be relied upon to give information necessary, and being disinterested parties, their only interest being the furtherance of dairying in their respective provinces, the information obtained from them will be instructive and helpful. The output cannot be increased all at once, but there is, we believe, a field for the man liking good stock, not too heavily engaged in wheat raising, to do good work and to recoup himself weekly, fortnightly or monthly as the case may be with creamery cheques.

Clodhopper or Farmer.

There is an old adage about the value of experience as a teacher; but even the best of teachers must have apt pupils and receptive minds. Each year's seeding is an experience that if approached and engaged in with an enquiring mind leaves a man better fitted to conduct his business in the future. The clodhopper watches for the land to dry; then with plow, seeder and harrow proceeds to the operation of seeding. Upon him the obvious demonstrations of nature in the effects upon the soil of certain conditions of moisture, temperature and aeration are entirely lost. To him plowing is simply turning up the ground and harrowing is levelling it off. Seeding is the scattering of the grain without regard to the fitness of the soil and climate for its growth. And the sooner it is all over the better luck he thinks he should have.

There is another class of men who observe the phenomena of nature and also the mental indigence of their neighbors and profit by them. Experience and observation teach such men that there are certain ideal conditions of soil moisture and temperature in which seed springs rapidly into the blade and that under these favorable conditions crops come best and quickest to maturity. In their operations these men endeavor to work in harmony with nature. In the fall their fields are packed to retain moisture and in the spring an effort is made to keep the land firm with the exception of the layer on top to protect from the drying winds. They have learned the effects of a rough surface in the fall and a firm, level one in the spring, and know each is to be avoided.

An acquaintance with the land is absolutely necessary to a man to make a prolonged success of farming, and the closer this acquaintance is the more fully a man realizes the importance of consulting the land and the more there is to be learned from it. Closer contact with it develops an instinctive knowledge of the amount of its resources of fertility and of the treatment that is calculated to distribute that fertility to the best advantage. Most of course is to be learned from contact with the surface, but neglect of the subsoil often develops a hard pan below the point of cultivation, whose effects may be mistaken for an exhaustion of the fertility supply. Instances are not wanting of men farming only that part of their soil which the plow turns over and of exhausting it, while others farm to the depth of their productive land, thus using the land below the point of the plow to reinforce the soil above.

The treatment of the land to obtain the largest possible supply of moisture is probably the most important lesson one can learn from the practical work of cultivation. Crops grow best in soils with small particles, fine tilth and mellow texture, for the reason that a film of moisture clings about each particle of soil and is passed on to the roots; the roots are also better able to reach out in a mellow soil to obtain this moisture; hence the more particles the more surface for water to adhere to and the more moisture that will be available to the crop.

The moral of all this is that the better a man studies his soil the better his crops will be. Soils are open books and bill boards to the observant farmer, but closed volumes to the clodhopper.

HORSE

Some \$37,500 is offered in prizes in 124 classes that have been provided for the International Horse Show to be held in London, Eng., June 7th to 13th.

Reginald C. Vanderbilt has purchased in England the Hackneys Merry Mathias and Gay Mathias, both winners at the London Hackney Show, the former this year and the latter in 1906.

At a joint auction sale of imported Clydesdale fillies held at Woodstock on the 16th ultimo, fifty-two head were sold at an average of \$277.50. The highest figure was for a Royal Favorite three-year-old, Royal Madge. The bidding was keen although the fillies were thin. W. A. Walker, of Carnegie, Man., purchased a pair of four-year-olds.

The Minnesota Agricultural Society has opened a futurity stake of \$5,000 open to trotters and pacers, foals of 1907, foaled, owned and raised and trained in Minnesota, Michigan, Wisconsin, Iowa, North and South Dakota, Nebraska, Wyoming, Oregon, Washington, Manitoba and the Canadian provinces west of Manitoba. The \$5,000 purse will be split in two divisions—\$3,000 for trotters and \$2,000 for pacers, to be raced for in 1910. Entries will close July 1st, with Secret-E. W. Randall, Hamline, Minn.

Enrolment Act Inopportune.

EDITOR FARMER'S ADVOCATE:
Re enrolment of stallions so much discussed, I have always looked upon the same as a farce. I bred a team of mares to a Shire at \$15.00 last season. In the fall the same team was sold to go somewhere in the neighborhood of the North Pole. Now is it worth while my hunting this team to see if I am entitled to \$30.00? I bred another mare to a Thoroughbred. The owner of the mare got on a "bust" and sold her to a stranger. Where do "I get off" in this case? If the service of the stallion constitutes a lien on the mares it would not be so bad, but the idea of a stallion owner being supposed to wait twenty months before "squeezing" for his fees seems to me to be a little too operose. And if a seizure were made I can picture a farmer having the colts all nicely halter broken and waiting in the corner for Mr. Sheriff. Oh yes! there may be an old "hunter" occasionally found who may say, "If you want them blankety blank colts you can hunt them on the prairie." Of course this would be an exception. I say license all graded stallions and cross-breeds; the registered ones will generally be well enough known and can be trusted to be left alone. If any "Muggins" buys a stallion with a bogus pedigree he deserves to suffer. At the fairs I would give prizes to registered stallions and their get, but nothing for cross-breeds or grades.
Alta. W. A. JACKSON.

Defective Action in Horses

Defective action in horses is usually due to undesirable conformation, and, in many cases, little can be done to correct it. The height of action can be greatly influenced by careful shoeing and driving, but these factors do not influence the line of action to any considerable degree. The true actor will fetch each foot forward in a straight line, neither paddling nor rolling the fore feet nor going wide, nor yet close enough to interfere with his hind feet. Any deviation from the straight line is defective. An exception to this may be made in respect to the roadster, which is allowed to go somewhat wide behind, although the "straight-line" trotter is preferred. The line of action a horse will show can, with reasonable certainty, be told by his conformation. This is especially true in regard to fore action. A horse with a breast of average breadth, with fore legs set well under the body, and descending downwards in a straight line, deviating neither outwards nor inwards, and standing straight, turning the toes neither outwards nor inwards, will, with few if any exceptions, go straight, while if there be any deviation in the direction of the limbs from the shoulder to the ground, or if he turn his toes either way, there will be a deviation from the straight line of action. If the limbs deviate outwards he will of necessity stand with his feet wide apart, and will usually stand out-toed. Out-toed horses usually roll

Probably rolling causing "speedy stroke" is the most serious defect in fore action. This is noticed in horses whose conformation from shoulder to fetlock or pastern joint is normal, those which stand with the feet the proper distance apart, but whose toes turn outwards. The malformation may be, and often is, from the fetlock downwards; the bones below the fetlock deviate outwards to a greater or lesser degree, and, as a consequence, when the foot is planted the toe turns outwards. In other cases the defect is from the pastern joint downwards. The danger of the horse injuring himself is influenced by the degree of deviation and the height of action. The tendency is to roll the foot and strike the opposite limb. The liability to strike can, in many cases, be lessened by careful shoeing. When the fetlock of the opposite leg is the seat of contact, a heavy shoe, with the toe rounded instead of having a calk, will in many cases cause the horse to lift the foot higher, and thereby prevent striking. When the knee is the seat of contact a light shoe will usually cause lower action and prevent wounding. When the defect in action is so marked that he will strike at all heights, prevention is very difficult. All manners of shoeing have been tried; such as shoeing with tips—that is, shoes covering only part of the lower border of the wall, reaching only partly around and leaving the heels bare; lowering the under side of the foot in order to

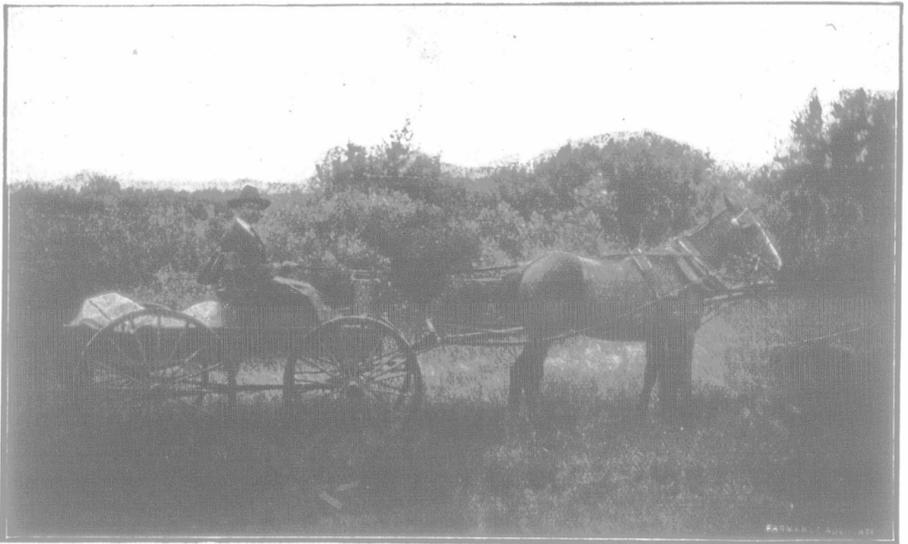


Photo by W. O. Baber, Moffat.
CARRYING HIS MAJESTY'S MAIL. THE WOLSELEY, ADAIR, MOFFAT STAGE.

their feet; that is, when the foot is lifted and brought forward the toe deviates inwards towards the pastern, fetlock, cannon or knee of the opposite limb, according to the height of action. In many cases the opposite limb is struck. (Wounds from this cause are called "speedy stroke.") In the case just mentioned there will probably not be speedy stroke, as the feet are planted at considerable distance apart, and though when lifted a foot tends to come inwards under the center of gravity, and at the same time the toe rolls towards the other limb, in most cases it will not strike it, because it, instead of being well under the body, deviates outwards from the line of probable contact with the shoe of the lifted foot. The opposite conformation is when the limbs deviate downwards and inwards from the shoulder to the ground (which conformation is usually accompanied by a very wide breast), the feet are planted close together, and in most cases the toes turn inwards. In-toed horses usually paddle or dish; that is, when the foot is lifted and brought forward the toe describes a segment of a circle outwards, requiring for progression a much wider space than for standing. At the same time, horses of the conformation under discussion will not show the paddling gait to a marked degree, as when a foot is lifted the tendency of the whole limb is to incline outwards under the center of gravity, and this removes from the foot the well-marked rolling motion. In either of the above cases there is practically no danger of the animal injuring himself on account of defective action, although such defects lessen his value, they do not greatly lessen his usefulness, and little or nothing can be done to rectify the defects.

correct the standing position, and to some extent turn the toe inwards. This, in our opinion, is dangerous as in order to keep the foot and limb sound it is necessary that the horse stand nearly or quite level, as any material deviation from this tends to put too much strain on certain tendons or ligaments, or to place the bones forming the joints in an unnatural position, and hence predispose to disease. Another method of shoeing is to put on a shoe the outside of which from the toe to the heel is light, being of the same thickness, but much narrower than the inside from toe to heel. The shoe must be of the same thickness in order that he may stand and plant the foot level, but the inside being much wider is consequently much heavier, and the theory (a mechanical one) is that when the foot is suspended in the air the weight on the inside tends to keep it down below the level of the outside, and thereby prevent the rolling motion. Some claim that the outer side of the shoe should be the heavier, but we have never known it to correct the action and cannot understand the principle upon which it is supposed to act. The rolling motion of some horses is more easily modified than that of others, and what will affect one will often have no beneficial action upon another. In many cases we find that the fault cannot be corrected by any manner of shoeing, and unless the animal can do his work without shoes, we are compelled to use ankle, shin or knee boots, according to the height of action, and as the height of action often depends upon the speed at which a horse is driven, and some horses will strike at any and all gaits, it is sometimes necessary to use both an ankle and shin boot and a knee boot.

WHIP.

Points of the Clydesdale

It is not easy to find language which will adequately convey an idea of the present standard of points in the Clydesdale, mainly because the terms employed are of necessity relative, and have different shades of meaning, according to the example of the breed present to the mind's eye of the writer or reader.

The old school of Clydesdale judges—that is, the school of thirty-five years ago—began to judge at the head, travelled over the back and quarters, finishing up with the limbs and feet. The new school, which began to assert itself about fifteen years ago, begin with the feet—"no foot, no horse"—and travel upwards. We follow their example. The ideal Clydesdale horse of modern days has large, round, open feet, with particularly wide coronets, and the heels are also wide and clearly defined. His pasterns are long, and set back at an angle which would be considered too acute in the Shire. His bones are wide, flat, thin and dense.

In approaching one, the ideal Clydesdale should carry both feet absolutely straight and level. He has a wide chest and low counter, but his limbs are planted well under him, and there is no tendency to what is called being wide at the shoulder—that is, having the fore limbs so coming out of the shoulder that the horse is compelled to walk in front somewhat after the fashion of a bulldog. The slightest inclination to this in a Clydesdale is regarded as unpardonable. The Clydesdale has an oblique shoulder, lying well back on high withers. A ewe neck—that is, a neck which carries the crown of the head at about the same level as the top of the shoulders—is not regarded with favor, and an arching, high neck, whether in male or female, is always an attraction. The head should be of medium length, and broad between the eyes and at the muzzle. A tendency to "dish-face" may be observed in some tribes, and this is generally accompanied by a small ear, and what, in the main, is characterized as a "pony head." Wherever this style predominates, there is probably a strain of Highland or old Galloway in the blood. On the other hand, the hard, narrow face and Roman nose are regarded as equally, if not more, objectionable. Such features are usually indicative of a strain of Shire blood, and, indeed, they are not otherwise to be accounted for in the Clydesdale. An open, level countenance, vigorous eye, and large ear, are greatly valued, and not readily sacrificed. The hard limbs of the Clydesdale have not nearly so much attention paid to them as the fore legs—and in this, we think, Clydesdale judges err. Especially in regard to entire horses, it is true that no part of their anatomy should be more carefully attended to, and broad bones, of the texture indicated as essential in the fore legs; broad, clean, sharply defined hocks, with the hams coming well down into the thighs, and the latter maintaining their strength and muscular development right down, almost to the hocks, should be more insisted on than they are. The truth is that we are disposed to regard weakness in the thighs as the most undesirable blemish on the Clydesdale at the present day. If Prince of Wales 673 gave us rather more of the hard, narrow head, with Roman nose, and the straight hock, than was desirable, Darnley 222 gave us too great a lack of muscular development in the thighs, and rather a sudden droop in the quarters. Thoroughbred quarters are not asked for in the Clydesdale, but, on the other hand, neither are the quarters of the Percheron. The tail should be well set on, by which we mean that it should be well set up, and the quarters and thighs should not be too sharply marked off.

Action is all-important in the Clydesdale. Even his most severe critic will not deny that in this particular he generally excels. He is never judged travelling round about the ring, but always up and down the center in front of his judges. Hence his limbs must be squarely planted under him; they must follow each other in an undeviating line, and it is an all-important requisite that the points of the hocks be inclined inward and not outward. A Clydesdale must stand with his hind legs in regulation military form—heels in and toes out. Any other arrangement is tabooed, and if perfection is not always attained it is always sought for, and many things are sacrificed to secure the prize for an animal which keeps its hocks well together. The consequence of the attention bestowed on action is that the Clydesdale, as a rule, is both a good walker and a good trotter. Some of the best show horses

have had trotting action almost equal to that of the best Hackneys, while there probably never was a stallion of any breed which could have excelled Darnley at the walking pace. The chief improvements effected in the Clydesdale during the recent years are, in our opinion, these: An increase in the quality, by which we mean the density and wearing properties of the bones; a marked advance in the direction of deepening the rib, shortening the coupling, and rounding the barrel; a gradual but quite discernible return to the old Clydesdale type of head, and a very distinct advance in general soundness and freedom from the diseases scheduled as hereditary unsoundnesses by the Royal College of Veterinary Surgeons. In proof of this, it is but necessary to refer to the results of the veterinary examinations at the Royal Agricultural Society's Shows since these came into force. None of the other draft breeds has come anything like so well through this ordeal as the Clydesdale. J. C. S.

The Glanders Question Worthy of Careful Thought.

From time to time this journal has endeavored to keep its readers in touch with the latest scientific work in the suppression of animal diseases, especially those communicable to man. Among those diseases, glanders has been most prominently before the public of Western Canada. In Manitoba the disease was rife until the policy followed by the Veterinary Branch described below was adopted. We are glad to state that there is a falling off in the number of cases, undoubtedly due to the vigor shown in handling the disease the last two or three years. In Saskatchewan and Alberta the disease was also very prevalent, but is now being dealt with vigorously. In British Columbia the disease has caused no end of trouble, people generally not understanding that horses may be affected with this serious disease and yet fail to show outward symptoms of the disease. Fortunately the B. C. people have not yet had a case of glanders in the human family, or they would be inclined to consider the disease as one not to be trifled with for the matter of a few dollars. In the special report on glanders sent by Dr. J. G. Rutherford to the Hon. Sydney Fisher, we find a lot of valuable up-to-date information, not available even in the best veterinary text books or works on sanitary police work. We have gleaned here and there because the disease is one of moment to Canadians, in its menace to human life, its cost of suppression gradually decreasing as a result of the same methods used, and its tendency to jeopardize the export trade in horses.

This disease has long been rightly looked upon as one of the most serious and dangerous of animal plagues, and even were there no recent striking developments, or rather circumstances, demanding special attention, a report of this kind would not be out of place.

As matters stand now, however, there are grave reasons for the careful summing up of the whole situation, and in my opinion for the serious reconsideration of the views held regarding the disease by a majority of the veterinary practitioners of this continent, and for a radical change in the attitude generally assumed by governmental bodies in dealing with it.

From August, 1902, until the present we have maintained a continuous effort to eradicate glanders in the Dominion, a work, I may say, of no small difficulty, when the size of the country, its climate and the conditions under which horses are kept in many districts are taken into full consideration.

MALLEIN DETECTS THE DANGEROUS LATENT CASES. The discovery of mallein in 1890 revolutionized entirely the views of veterinarians regarding glanders. Older veterinarians well remember the formidable chain of symptoms, which, in their student days, were considered essential to a diagnosis of glanders, as also the various ironclad rules to be followed in differentiating between it and that now somewhat dubious disease "nasal gleet."

It is now recognized that horses may be, and only too frequently are, seriously affected with glanders while presenting so far as outward and visible symptoms are concerned, an appearance of perfect health. The knowledge of this fact has, of course, necessitated a complete change in the methods of dealing with outbreaks of the disease. Whereas it was in former years, and in some countries is, even to-day, considered sufficient to slaughter animals showing clinical symptoms, while ignoring entirely those which may have been in contact, the conscientious modern veterinarian insists on the latter being submitted to the mallein test, and if found to react, either slaughtered or segregated for observation and further tests. In studs where clinical cases have occurred there is a strong likelihood that some of the

contact horses will be found to be affected, although for a time at least they may present no external symptoms.

Any system, therefore, which ignores this frequent condition is faulty and likely to cause a dissemination of the infection, particularly when, as is often done, studs in which glanders has been found to exist, are dispersed among innocent purchasers.

Under ordinary circumstances, especially when no provision for reasonable compensation exists, the problem presented by the condition outlined above is exceedingly difficult of solution. While horse owners, unless very poor, very ignorant or very unprincipled, are generally willing to have clinical cases destroyed, they quite naturally object to the slaughter of animals which may have reacted to mallein, but show no evidence of disease and remain in good working order.

In some countries the authorities overcome the difficulty after a fashion by leaving the contact horses severely alone, thus avoiding the responsibility which would have to be assumed if the animals, on being tested, were found to react. Untested, they are presumably healthy and are left free from restrictions.

As an illustration of the results of pursuing a policy of this kind the following figures from the returns of the Board of Agriculture for Great Britain are very interesting:

1898	1,385 horses destroyed
1899	1,472 " "
1900	1,858 " "
1901	2,370 " "
1902	2,073 " "
1903	2,499 " "
1904	2,628 " "

It is not, however, necessary to go to Great Britain for proof of the folly of ignoring the contact horse. Similar object lessons are furnished by the conditions prevailing in more than one district in Canada, and while, of course, I cannot presume to speak authoritatively on these matters, I feel confident that in some of the United States of America glanders is rapidly increasing owing to this cause.

The evil is greatly intensified by the fact that, where the proper authorities are inert, private testing of infected studs is continually going on, the reactors being subsequently sold as expeditiously as possible. Prominent veterinarians in Great Britain credit these private mallein tests, conducted by unscrupulous owners through equally unscrupulous practitioners, with the notoriously rapid spread of the disease in that country during recent years.

RANGE HORSES DISSEMINATE GLANDERS.

Perhaps the most dangerous agents in thus disseminating glanders are the Western range horses, which, during the last ten years, have been distributed in large numbers through the country. Glanders on the range exists to a considerable extent in a latent and often very mild form, but it rapidly develops when the animals are broken, stabled and put to work. Many of the most widespread and most serious outbreaks with which we in Canada have had to deal are directly traceable to importations of range horses. Mallein is, of course, seldom used on the range, but it is a common thing for owners to shoot down any clinical cases they may notice, the others, showing no symptoms, being sold as healthy, with the result above-mentioned.

Having made this digression in order to clear the way for what follows, I will, with your permission, revert to the time, when, in 1902, I was called upon to formulate a definite policy for the control of glanders in the Dominion. At that time there existed no provision whatever for the payment of compensation, and this, of course, rendered quite impossible the slaughter of non-clinical reactors, even if I had then been anxious to adopt this radical policy.

As a matter of fact, however, I was, like many other veterinarians, under the impression obtained from a number of reliable professional sources, that it was quite unnecessary to kill horses of this class, and that satisfactory results would follow the adoption of a policy of testing all contacts with mallein, and retesting from time to time such as reacted until they either ceased to react, or through repeated reactions, furnished conclusive evidence that they were incurable. For a period of slightly over two years this plan was carefully and conscientiously followed, but as time progressed it became evident that the results obtained were altogether disproportionate to the risk and labor involved. Not only did the number of horses on our hands keep constantly increasing, but in many cases individual reactors held among others for future tests developed clinical symptoms, and thus established fresh centers of infection. Such horses not only endangered the other reactors with which they were being kept, and some of which might have a possible chance of recovery, but indirectly threatened, through the various every-day channels which horsemen well understand, the health of other animals not actually housed with them.

As our opportunities for observation increased and further experience was obtained, serious doubts as to the conclusions previously reached by eminent veterinarians, both in Europe and America, as to the impossibility of glanders being transmitted by reactors not showing clinical symptoms

ceased reactors, began to assert themselves. As the work went on evidence gradually accumulated that many of the so-called ceased reactors were not only not permanently cured, but were properly to be looked on with grave suspicion as being likely to introduce glanders among healthy horses with which they might be brought in contact. Several outbreaks of more or less severity and extent can be traced directly to these ceased reactors, and before I conclude, I shall endeavor to demonstrate the advisability of dealing with animals of this class as possible future centers of infection. As the owners of ceased reactors are generally more than willing to dispose of them as soon as possible after their release from official control, the risk of bringing infection to the stables of their unsuspecting purchasers constitutes an added danger which cannot reasonably be ignored. The conclusion that neither non-clinical reactors nor ceased reactors could, with safety, be considered non-infective, having been thus forced upon me, there remained only two alternatives, either to follow the futile and already discredited policy of killing clinical cases and ignoring contact animals, or to face the situation and adopt the only intelligent course; namely, the destruction of all horses showing the typical reaction to mallein whether presenting any external manifestations of glanders or not.

I need scarcely say that this would have been absolutely impracticable without provision for the payment of liberal compensation. The question of compensation for the slaughter of diseased animals has always, and in all countries, been one of great difficulty, and the disinclination of those in authority to assume the financial outlay involved, has been one of the chief obstacles encountered by veterinary sanitarians engaged in dealing with animal plagues.

(Continued page 707.)

Straight Talk to Stallion Owners.

EDITOR FARMER'S ADVOCATE:

I read an item in the April 10th issue of my paper, page 525, upon a subject I have long thought about; namely, the fees for stallion service. It seems some stallion owners are not satisfied with what they get for service fees, but what about the owner of the mare? Take my own case: In 1900 I bred seven mares at a fee of \$9.00 each. That was the year that the stallion owners in my district made an agreement not to insure mares, but to charge for the season only, with the result that many farmers bred to any kind of a horse that would insure foals. Out of my seven mares I got two foals; one lived and one died. My live foal cost me \$63, rather a dear foal I should say. Last year I bred twelve mares at \$12 to insure, \$2 at time of service, and got one mare in foal, which she afterwards lost. Then I was out \$24 for a dead foal. Now I have decided to buy a stallion and work him as well as use him for breeding purposes.

I think a good deal of the dissatisfaction in the horse breeding business arises from importers bringing out horses that are no good for service, and then getting some salesman to pan them off on farmers. Such work should be prohibited or punished by imprisonment for three months for every \$100 the farmers were beaten out of.

Another thing: The stallion men do not get competent, intelligent grooms to handle their horses and about the first thing these fellows do is to overwork the horse the first day he is on his route. I have known grooms to breed seven mares the first or second day of the season. If a farmer followed such a foolish course with his work horses they would not be able to get him through his summer's work. I could say a lot more about the stallion business, but as my letter is long I will stop with the above protest.

SASKATCHEWAN.

Raising Motherless Foal.

It being almost certain that some of your readers will have a colt to raise by hand this year I give you our method. We had one which the mother would not own, but she was held for the colt to get a little of her milk for the first week, besides a little milk of a fresh cow; and it was fed nights the first two weeks. The second week it got a cup of milk with a teaspoon of brown sugar every two hours (no water). As the colt got older, it got a quart of milk with a tablespoon of sugar, and then three quarts with a handful of sugar. The colt was fed every two hours all summer—not nights, but the last thing on going to bed—and got a handful or two of oats as soon as it was old enough, and was kept in a little field handy to the house, and was put in the stable every night. It never was sick and has grown to be a fine large colt. ADVISER.

Unfortunately Far Too Common.

Re stallions I think the present enrollment ordinance is all right. It acts as a lien on the colts for the stallion owners' expenses. There are too many mongrels traveling the country round, and the farmer looks for the \$5 horse. He does not take into consideration the kind of colt he is going to get, but will take the cheap horse year after year. That is the way I see them doing the horses around here. T. C.

STOCK

Pig Raising Made Easy.

"One of the Crowd's" article in the FARMER'S ADVOCATE of April 17th, 1907, prompts me to give my own experience in this connection. During the past season I wintered from 75 to 100 young pigs, about 40 of which were May and June pigs of last year, as well as two older ones. The May and June sows and the two older ones have all farrowed and have all saved their young except in the instance of one short, extra fat young sow. These pigs and sows were all fed on oats and barley, which was dumped whole into a hopper and ground by the power of the pigs as they fed, turning round with their snout a cylinder inside of which were the necessary burrs for grinding. The machine in operation would feed about ten pigs at once and it would take about one hour until they had sufficient and would make room for others and so on. This machine can be used in sheds or in the open. Mine has been in the open most of the winter and the pigs would work it every day with clockwork regularity. In this machine I think I have found the clue to successful hog raising, for this reason:—The sows have to work to get their feed; they thus get necessary exercise, and are compelled to take their feed slowly instead of bolting it, and this is a great help to them in digesting. Further, the machine prevents any waste, and does away with cost of grinding.

I have applied for patent in Canada and the United States and patents will also be taken out in other countries in due course.

Any one desirous of testing my remarks can see one of these machines at work on my farm and the condition of my pigs is proof itself of the benefit.

ANOTHER OF THE CROWD.

The Day of Mixed Farming.

EDITOR FARMER'S ADVOCATE:

As so much has been said and written in support of wheat growing in this Western country and as an advocate of mixed farming a few words on behalf of the same may not be out of place.

"Wheat is king! Wheat is cash!" is the cry we hear on all sides. Now, is this correct? Wheat may be king, but certainly this last winter wheat was not cash, for you could have thousands of bushels, but not a cent from the banks could you get after Christmas, nor could you sell it or ship it because of the blockade (and this is not the first one we have experienced). Having ordered a car Nov. 21st last I was fortunate to get it spotted April the 15th, nearly five months without money and none available. How was one to live? Why, only by looking to the other branches of farming. Thus the contention that wheat is king is questionable. Now to the other branches, what have we? Horses, cattle, hogs, poultry, dairying. Horses we find in big demand at big prices, and cash at that. The farmer who goes exclusively into grain growing does not as a rule breed his mares, while the smaller farmer or one who engages in mixed farming finds that he can raise three or four colts each year and still do the work on his land, for while he is doing the other work, such as milking cows, feeding pigs morning and evening, he finds that he has not such a long day to put in on the land; therefore his mares are able to suckle a foal and do the work that is required of them without being harmful to either by so doing. Thus we find we have a team or two to dispose of each spring at good figures. Even one team shakes the price of a car of wheat pretty badly and does not cost so much to raise. Then again there are the much-abused cows. I find that with good milking cows one finds a ready sale in the fall and winter at fifty dollars apiece. I do not find it a good policy to sell heifers, but would rather keep them to see how they do. If they turn out all right after the second calf, a good figure is readily obtained. If they come in, in the fall or early winter by a little management a farmer can have at least a half dozen of these for sale each fall, thus saving the feeding of them all winter. He also can let his steers have a good straw stack to rustle at on fine days and by putting them in at night with a little extra feed of good hay and chop night and morning, have them in shape for spring beef, the price of which needs no comment. Then turning to hogs, poultry, and butter, the prices of these for the last few years have demonstrated beyond a doubt that in the winter a ready market with high prices and ready cash are always available and in sizing up the situation are likely to be for at least a few years to come owing to the influx of settlers that is now taking place. And now there is one more point on mixed farming that I should like to touch; that is, of growing hay and fodder. The time is past (at least in most parts) for the supply of native hay to be adequate to the needs of the country. Therefore, grow feed, with hay in the spring at from \$2.00 to over \$2.00 a ton. It means a good profit. The question arises what to grow, but by studying the report issued by the Department of Agriculture and the

wide variety of opinions found in the FARMER'S ADVOCATE one cannot go far astray. It is only a matter of choice, for it is fully proven that there are several grasses as well as fodder plants that are adapted to this country and can be successfully grown, and in conclusion mixed farming is another solution to the labor problem, for it finds employment for the men all the year round and men can be hired more easily the year round, also cheaper, than they can for a few months in the rush of the season of wheat growing. F. G. WHITING, Sask.

The Disposition of the Placenta (Afterbirth).

The best stockmen and veterinarians are in favor of the removal of the afterbirth from the vicinity of the dam as soon after the birth of the young animal as possible, and recommend its destruction. Occasionally we hear of a farmer that disagrees with this procedure, who advocates leaving the fetal membranes to be disposed of by the animal. The following translation from a noted German scientific periodical (*Berliner Tierärztliche Wochenschrift*) undertakes to explain the scientific reason for what many consider a distinctly bad method. Dr. Quinet says in this journal:

"It has been said that rabbits and guinea-pigs have revolting habits and cannibalistic tendencies and that they conceal a bad character, perverse instinct, and so on, under this seemingly good nature. It is said that the males of the young rabbits fight and pester the little females shortly after they are born; however, these are slight offenses common to all animals which must fight for their existence and try to break the monotony because they obey their instinct. However, rabbits and guinea-pigs have been charged with killing their offspring and even with eating them. We have long believed, with an appearance of justification, that even in the human family, the wretched and debauched are induced to acts of murder and infanticide, but that is a false interpretation of a natural phenomenon which is not peculiar to this species. Animals kill their young against their will.

(Continued on page 712.)

Milk Records made by Dual-Purpose Shorthorn Cows.

Shorthorns are only recognized in the showing when of the pronounced beef type. Despite this, which has a tendency to foster beef production at the expense of the milking qualities of the breed, a very large percentage of purebred and grade Shorthorn cows are excellent milk producers. The majority of cows used for milk production in this state are of Shorthorn blood; and while the advocates of the special dairy breeds declare that cows of this breeding are undesirable animals in the dairy, the fact remains that Iowa is in the top rank among her sister states in dairy products.

At the request of the editor of the FARMER'S ADVOCATE, the following official records, made by Shorthorn cows at the Iowa State College, are submitted:

College Huckleberry.—Red and white cow, bred on the college farm. Recorded in Vol. 36, page 57, of the American Shorthorn Herd Book. Tested in 1897, while in her tenth year of age. In eleven months she produced 7,464 lbs. of milk, testing 3.59% fat.

College Lady.—Recorded Vol. 40, A. S. H. B., page 638. Record for ten months, milk, 5,791 lbs., testing 3.85% fat.

College Belle 2nd.—Record for ten months, 7,554 lbs. of milk, testing 4.3% fat.

RECORD FOR COLLEGE MOORE FOR FOUR SEPARATE TESTS.

Recorded Vol. 40, page 638. Born Oct. 19, 1891; Calved October 21, 1896. From October 21st to Nov. 30th, 1897, 9,136 lbs. milk, 3.79% fat.

Calved February 26, 1898, from February 26th, 1898, to February 28th, 1899, 8,734.5 lbs. milk, 4.027% fat.

Calved October 4th, 1899. From Oct. 4th, 1899, to Oct. 31, 1900, 9,896 lbs. milk, 4.11% fat.

Calved Jan. 14th, 1902. From Jan. 14th, 1902, to Oct. 31st, 1902, 8,950.6 lbs. milk, 4.06% fat.

In the year of her last test, College Moore won second place in the Farmer's Cow competition at the International Live Stock Show. She was a massive, broad-backed, thick-fleshed cow, and produced some very good male calves, but never produced a daughter equal to herself.

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It is a well known fact that the milking qualities may lie latent in Shorthorn cows, requiring only proper feed and care to bring them out. No one will claim that cows of Shorthorn breeding will equal the special dairy breeds in milk production. They will, however, produce calves that will give a creditable account of themselves in the feed-lot and on the block; and when their own usefulness in the dairy is ended, they may be fattened and disposed of for a good price. For this reason many farmers in such states as Iowa prefer them to the dairy breeds.
Agr. College, Ames. WAYNE DINSMORE.

The Wail of the Stockraiser.

There seems to be no end to trouble with sows in this settlement this spring, fully 50 per cent of pigs either coming dead or dying in a few days. It does not seem to matter how the sows have been fed or cared for; they are all losing more or less. Several mares have lost their foals after carrying them from eight to ten months, without any apparent cause. At present the outlook for hogs and horses it is going hard with the stock grower.

DELMAR SMITH.

In some cases in which losses with pigs have been reported we have looked into the matter personally, and in every case have found either the young pigs were chilled at birth or were too fat and had thumps or else the sows had been penned up all winter, fed too heavily and had lacked exercise. With regard to the mares many causes have been suggested; such as lack of exercise, or when exercised being put through deep snow drifts, or the mares have had influenza which almost invariably cause them to foal prematurely or abort.

A Broad Minded Pig Breeder.

Sanders Spencer, the well known English breeder of Yorkshires, is quoted in the *Scottish Farmer* as a lecturer on the farmers' profitable pigs. Most people would expect that this authority would boom the particular breed he had, but such was not the case. He said in part that "the demand now was for a small joint of meat cut from a young animal, and in no class of stock was it more perceptible than it was in regard to pigs. The pig most in demand was a pig of 60 lbs. dead weight, which ought to be produced when it was eight weeks old; and the other which was in demand was a pig of 200 lbs. to 220 lbs., which would dress about 160 lbs., and which was to be brought about by the time the pig was seven months old. These were the pigs which fetched the highest price on the market, and he thought the smaller pig was the more profitable. In Denmark they had, by means of the pig, made butter-making profitable, and they used mainly the Large White pig, which was the native pig of the country. They had mixed these with other breeds, but had discarded all of them in favor of the Large Yorkshire. They could produce pork at a cheaper rate from a young animal than they could from an older one.
"The best pork pigs were, in his opinion, the Middle White and the Berkshire. For bacon the Tamworth, the Large Black, the Lincoln-

shire, and the Yorkshire were the best. If he started a farm to-day, he should breed a cross-bred, as he believed they fattened better and fed better. In crossing two breeds for bacon, he should take a Large White sow and a colored boar. He had bred all kinds of pigs, and had never found pigs that bred so many and suckled so many as the Large White. He knew of no breed which, as a dam, was so good for producing a bacon pig as the Large Yorkshire. After a pig reached a certain age, it required a certain amount of food merely to keep it alive. The result of that was that a certain amount of food was wasted. The lesson to learn from that was that young pigs paid best. He did not agree with forcing young pigs. There was a difference between forcing pigs and feeding them well. It was a great mistake, which was often made, to give young pigs food which they could not digest. Pigs could not digest an unlimited amount of separated milk."

The advice to breed cross-breds is something our agricultural lecturers have not yet had the temerity to recommend. Albeit when questioned by farmers they have admitted that such crosses have been very profitable.

How to Prevent Losses in Spring Litters

Oliver King, the well known pig breeder of Wawanesa, writes as follows:—Re losses of spring litters received, I have lost about 30 pigs up to now caused chiefly by the sows crushing them. From years of experience I think it a great mistake to have pigs come before April. I have decided to have no sows bred to farrow any earlier in the future. You cannot raise the young pigs except in a perfectly dry place, and also an earth floor is of importance if you want the pigs to thrive. Have not found this spring to be any worse than other years as to loss of pigs. As to the cause of the general complaint of mortality among spring pigs would say this: First, breeding to immature stock. Nearly all the old sows were sold last summer because of the high prices. Farmers are mostly short-sighted enough to sell their best breeding sows because they would bring \$20 more for pork. Penny wise and pound foolish! Second, wrong method of feeding such as whole or chopped barley (dry feed), lack of exercise and change of feed.

"Mill screenings are a bad food for in-pig sows. A neighbor has lost all his litters, from six or more sows, through feeding chopped screenings all winter. The sows aborted when two to three months bred.

"Feed sows chopped oats, bran and a little shorts before and after farrowing. Keep the bowel open. Constipation is fatal to the young pigs sooner or later. Do not feed the weaned pigs on chaffy feed; such as chopped oats, screenings or spelts. Re earth floors for pig pens. Have had three A shaped coops with young pigs in them all winter (four months) and not a single crippled pig among them. While in my pig pen 20 x 40 had a hard time to keep the stock from being crippled, but lost four sows all the same.

I believe that pigs want a change of soil every two or three years. The yards get what I call pig sick and you will lose young ones by scours, thumps, etc. That does not happen on new soil. I shall be pleased to let you know later how my litters of pigs get on. At present have not a great number on hand."

The Dominion Government has purchased four hundred and fifty buffaloes from the state of Montana and will place them in Elk Park, twenty miles east of Fort Saskatchewan. The price paid for the herd was \$100,000.

Breeders Executives Decide on Brandon.

A meeting of the executives of the Manitoba Live Stock Associations brought the following breeders together at Portage la Prairie a few days ago:—Messrs. Andrew and John Graham, Walter James, Jno. G. Barron, Ellison; D. Thompson, Wishart; Hon. Walter Clifford, Jas. Bray, Alex Gamley, English, and Managing Director A. W. Bell. The discussion was quite animated and the voting close, chairman English deciding the tie vote in favor of Brandon as the location of the next Winter Fair.

Young Pigs Very Weak.

EDITOR FARMER'S ADVOCATE:

I too, like "One of the Crowd" in the April 17th issue, have had the worst luck this spring I ever experienced with young pigs. Last week three sows farrowed thirty-four pigs and I have just ten alive out of the thirty-four. Several were dead when farrowed, while others were so weak they just died in a few minutes. The sows ran out all winter with a stable to sleep in. The door was open all day and closed at night. I fed barley chop, dry, once a day, as I have fed for years, but the weather was so severe they took very little exercise. Sometimes they hardly stayed out long enough to feed. I am hoping for better success with my May litters.

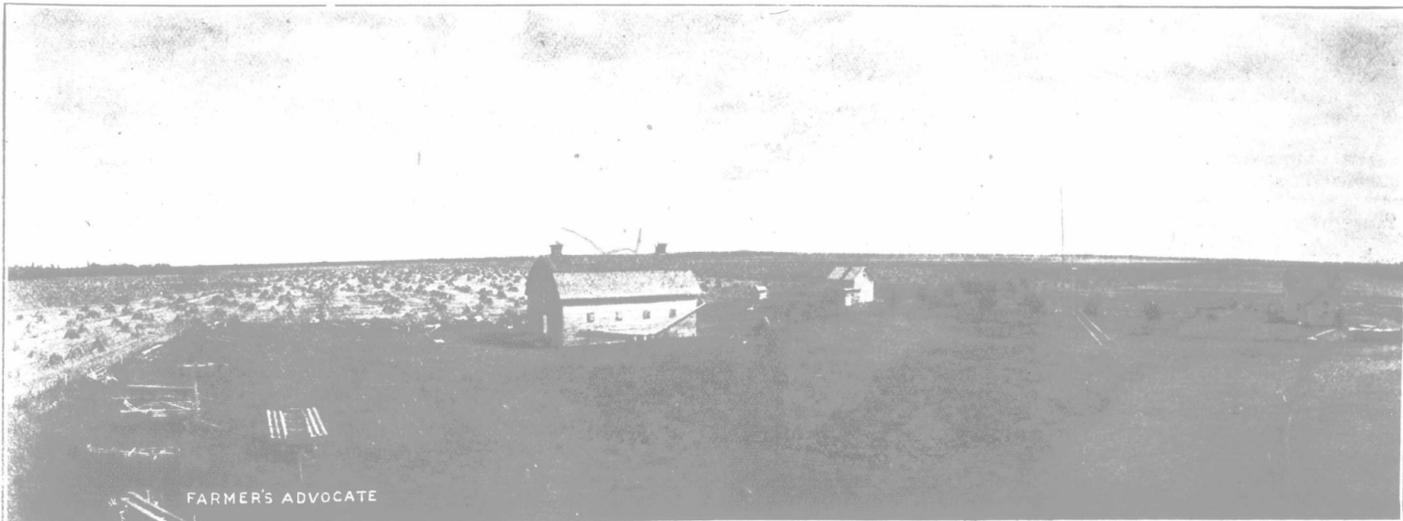
Beautiful Plains.

J. A. MCGILL.

Determination of Sex.

Many and strange are the theories put forth to explain the determination of sex in animals, man among the rest. Many of these conjectures are absurd on the face of them; others seem more or less plausible, but fail when put to the test. Casual observers often construe a few striking coincidences as cause and effect, and jump to unwarranted conclusions. The subject is, nevertheless, a legitimate one for speculation, and we were somewhat interested the other day to notice the following experience, related by one who calls himself "Spero," writing in the *English Live Stock Journal*. This man became interested about twenty-six years ago by a paragraph in the above journal setting forth the theory of an American rancher who claimed to have discovered that the sex of possible calves changes regularly every time the cow is in season. To test this theory, the English breeder selected nineteen of his pedigree Shorthorn cows, which had already produced cows, for an elaborate trial. The cows were served at the usual time after calving, the intervening periods of oestrus being carefully kept track of. As cows vary considerably in the time between calving and their first heat, it follows that some were served at their first heat and others at their third or fourth. The result was startling, for in every case, except possibly one, the theory panned out. The cows which produced bull calves, and were got in calf again at the first, third or fourth period, produced heifer calves, while those bred at the second, fourth and sixth periods dropped calves of the same sex as before.

Some years later he changed the breed of his herd and went in for Jerseys. It was then desirable to secure heifer calves, and the rule was



ON A. J. COLLON'S FARM, SWAN RIVER VALLEY, MAN.

applied with general success. As absolute certainty in selecting the odd or even numbered heats was not always possible; occasional disappointments were met with, but this happened rarely, and never when there was not room for doubt.

The correspondent does not remember of any other similar experiment with cattle, but mentions the case of a gentleman who tried it on poultry. Selecting a prolific hen, he placed her eggs in two baskets, alternately, as they were laid. One lot hatched all cockerels, the other all pullets. How this theory could be reconciled with the occurrence of both males and females in litters, we are not told.

The above theory is simple, and seems at least quite as plausible as most others we have ever heard relative to this interesting subject. If true, it is certainly remarkable that it has not been scientifically and publicly demonstrated long ago, but sometimes simple explanations long elude the attentions of investigators.

Pigs Coming Strong.

EDITOR FARMER'S ADVOCATE:

In answer to "One of the Crowd" re mortality among spring litters referred to in your issue of the 17th inst., I would say the cause to my mind is quite simple enough.

In my opinion no domestic animal is fonder of ease and comfort than the she pig, and if fed sufficiently to feel comfortable and has access to a good warm stable or straw stack she will simply eat and lie down and remain there in a half stupor until feeding time comes around.

Everyone knows that breeding animals require plenty of exercise and a sow in farrow will not take it unless compelled to do so. My sows all run out in the winter with access to an open shed and straw stack; are fed twice daily about half a gallon of oats per sow thrown in the yard amongst short straw and manure, and for drink they must go to the water trough or lick snow if they prefer.

I have six sows. From two I have ten in each litter and from a third I have eight, making twenty-eight for three sows. These are now four weeks. The others are due in a short time, and I have not lost a single pig.

I am of opinion there is no better feed for sows in farrow than whole oats thrown where they must work to get them.

The horticulturist says the secret for growing trees is *cultivate, cultivate, cultivate*. I think the secret for raising young stock, especially pigs, is *exercise, exercise, exercise*.

Man.

WM. MOFFAT.

The Holstein Ayrshire.

EDITOR FARMER'S ADVOCATE:

Thank you for your interesting reply (appearing in your issue of the 3rd inst.) to my query re crossing Holsteins and Ayrshires. I did not intend, however, to raise the general issue, pure versus cross breeds, about which I am entirely of your opinion. My object was to ascertain whether, if I intermingled the blood of the two breeds (I have a purebred herd of each) I should be likely to raise good milch cows as a result.

The special circumstances of my case are (1) that my Holstein bull is past his prime and I don't want to import a new one this year, the freight charges to this district being very heavy; (2) in this district the general public will give very little more for purebred than for grade milch cows where the individual milking capacity is the same; also there is no constant demand for young purebred males; (3) I am chiefly concerned at present in increasing the number and milking capacity of my home raised milch cows in order to obtain increased returns from butter-making and am not going in strongly for the business of raising purebreds for which the market here is at present inadequate as above stated.

Yours truly,

Wood's Lake, B. C.

M. P. WILLIAMS.

No one can speak with authority upon this subject, at it has not been tried to a conclusion, but the chances of producing heavier or lighter milkers are almost even, with probably some advantage in the first cross. With milking cows it is not so much a question of breed, nor even of strict adherence to ideal conformation that marks a cow as a profitable producer, but rather to the extent to which she produces the inherent power and dynamic force to produce. Some cows are imbued with the power to produce just as some horses are possessed with ability to strike a high rate of speed, while others of the same

breeding and almost identical in conformation are far below them in production. In crossing the general tendency is to intensify in the first cross the predominant characteristics of the parents, but in later crosses or grading these characteristics usually conform more to an average. Under the circumstances which our correspondent mentions we think most men would resort to the cross.

Threshing grain is the most important work to be done on the farm as well as the dirtiest, and there is too prevalent an idea that the man who will try to make a living at it is a little below the average, can be easily paid too much and is too dirty to be allowed in the house. Now in conclusion I would like to ask someone who can to send to the ADVOCATE a list of men that have retired on the profits of running a threshing machine.
Strassburg, Sask. IOWA HOMESTEADER.

Thinks Summer-fallowing Exhausts Fertility.

EDITOR FARMER'S ADVOCATE:

I have had no experience with grasses except brome grass, which I find suitable for this part of the country. If sown thinly say ten to twelve pounds per acre it can be cut for hay for about four years and then either plowed under or fenced for pasture. I might add that it should be sown at some distance from the buildings, as it seems to thrive anywhere on the prairie or wherever the seed can be covered; for instance, on any loose soil around the buildings or garden it has given me some trouble, but if cut before ripe I think there should be no danger in this respect. I am of the opinion that if sown on old land that needs cleaning, and sown in a drill with either oats or barley to be cut for green feed, it will clean the land and can be cut for hay the second year after sowing. I have sown it in this way and found it satisfactory. It will need two plowings and the cultivating with a disc harrow and drag harrow constantly.

Re rotation, I consider that after a crop of wheat on summer-fallow, then sown to wheat again the second year, and the third year sown to oats, and then sown down to brome grass, which may be cut for about four years for hay, and then fallow again, is the best. I am strongly of the opinion that summer-fallowing every third year will soon exhaust the soil and the time is soon coming when we shall be compelled to sow down to grass as I have outlined. I can hardly write from experience, but the above is my firm conviction.

Two years ago I had a heavy crop of wheat on summer-fallow. Last season I burnt the stubble and plowed directly after and had a light crop, say eighteen bushels to the acre, while on summer-fallow again last year I had a trifle over fifty bushels to the acre, so that this year I expect a much lighter crop. I have ever found it so. My rule is to take two crops of wheat off after fallowing and then a crop of oats and fallow again, but I am sure this exhausts the soil.
Rosthern, Sask. SEAGER WHEELER.

The Rated Power of an Engine not Actual Power.

EDITOR FARMER'S ADVOCATE:

In your issue of March 27th, "Reader" gives his experience with a gasoline threshing rig consisting of a fifteen horse power I. H. C. engine and a thirty-two Belle City separator with blower. Now although he may have bought that engine for a fifteen horse power, that same engine may have developed over twenty horse power on the brake. The International people claim that their engines must develop forty per cent. in excess of the rated power before they leave the factory; so that in reality, it must be at least a twenty horse power engine.

Now all the manufacturers do not allow their engines a forty per cent. margin, so that it would not be advisable for anyone to risk buying a fifteen horse power engine to run a thirty-two separator without first making sure it had a forty per cent. margin.

I believe from my own experience, that for the smallest size of separators with attachments (up to twenty-eight inches) it will require a twenty brake horse power engine at least to handle them under all conditions. It does not matter if they are called fifteen horse power, only make sure they have the forty or fifty per cent. margin. You have to pay for twenty horse power at any rate.

GEO. G. AXFORD.

Dr. Harry Luman Russell, bacteriologist at the College of Agriculture and Experiment Station, Madison, Wis., succeeds Professor Henry as Director of the Experiment Station. Dr. Russell is a Wisconsinian and a graduate of the University at Madison. He studied some years in Europe, part of the time in Germany. He has of late years given much attention to the question of tuberculosis, and in connection with this has worked out many valuable methods for the control of the disease. His term of office begins on the 1st of April, 1906, his term of office being March 12, 1866.

FARM

Manure Spreader a Great Labor Saver.

EDITOR FARMER'S ADVOCATE:

I have read the letter by "Hans" in the FARMER'S ADVOCATE of March 20th about the manure pile and manure spreading and have heard many people say that the manure spreader did not pay. I think that the manure spreader is one of the most labor-saving and profitable implements around the farm. Although I do not own one yet, my next neighbor has one, which I rent for \$1.00 per day. I find that, not only is the manure spreader an economy, as a man with a spreader can do as much as three men would do spreading it in the old way, but it spreads the manure evenly, and in a way that will bring larger returns, which will soon pay for the machine. I am quite sure that in a short time manure spreaders will be used as much as any other labor-saving implements about the farm.

In regard to the manure pile, I think that a great many farmers lose a great deal by not handling the manure properly. I am not in favor of spreading it direct from the stable to the field in winter, letting water wash most of the substance out of it in the spring. My plan is to haul it out to a pile in the field you want to spread it in, and then, after the hay is off, or before seeding to barley, you can spread it on with the spreader; and, besides, piling it kills a lot of weeds, which are getting to be a great nuisance. These are my views, and I should like to hear from others.
A. S.

Threshers, Read This.

EDITOR FARMER'S ADVOCATE:

Being a reader of your valuable paper I have taken much interest in noting what some have to say as to the threshing problem. I have spent some fifteen seasons at the business. Six of these operating my own rig, two for a syndicate, one for an individual owner and the rest employed as engineer. My idea of the most satisfactory way (for all concerned) to thresh in a neighborhood where each farmer has from ten to two or three hundred acres, is for the neighborhood to hire some good lively fellow with a good rig, that understands running it, and let him just furnish enough men to operate his machines and tank team and man. Let the farmers do all the other work by changing with one another. They will take more interest in each other's work and there can be more and better work done. Work in the house will be more pleasant, as the women will change about the same as the men. You just have your neighbors with you and they are there just for dinner and supper and stook teams just for dinner. If there comes a rain everybody goes home (except machine men) until ready to run again. Pay the owner of the rig about 3c. for oats and 4c. for wheat. Give him a good bed to sleep in and he will make more clear money than at 10c. furnishing the whole outfit and the farmer will be far ahead. That great long train of stook teams, caboose, cook car and all the gang picked-up strangers, is one of the worst things that can pull into a man's yard. Quite often they have no respect for property of any kind and their main object seems to be to feed their horses well, put in their time and draw their pay, and by the time they have stayed with you two or three days you will have to have a general clean up, and should it happen to rain the farmer does well if the grain he has left in the bin costs him less than twelve or fourteen cents per bushel.

Those big farmers are I think in a class by themselves and should own their own rig, and as you can buy any size you want, they can get them to suit. From what I have seen of syndicates, it is my opinion that the greatest number of men that can satisfactorily run a threshing rig is just one. There is such a mania for all wanting to thresh first and each has his good reasons for doing so. I ran an outfit one season for an individual owner that I must say was the only one that was a continued "round of pleasure." We furnished the stook teams, hired from the farmers we threshed for, ran forty-two days, threshed 92,000 bus., and did not hear a single "kick" of any kind, nor did we have a single break. It was an Avery rig, one of those "yellow fellows", but whether it was the rig or myself that made things go so smoothly I am unable to say. We had no caboose, either. I think if any man wants to get clear of the caboose idea, he should spend a few minutes in one 10 x 14 with 12 or 15 men, and perhaps get a company. It makes him feel so refreshed and anxious to "get to work" in the morning.

Publicly Owned Elevators

A correspondent, A. W. Price, Manitoba, writes: "Would you kindly inform me as to the success and failures of farmers' or municipally owned elevators in Manitoba, as it would throw considerable light upon a question which the grain growers' association of our municipality will bring forward at their next meeting to be held in June."

We are glad the people of this municipality have asked this question, and intend to discuss it thoroughly before deciding definitely upon it, for one of the chief reasons why farmers' elevators have failed in certain localities is because all the conditions surrounding the grain trade and transportation service was not duly considered before building. The history of farmers' elevators in Manitoba is valuable for many reasons, especially that it shows that because some of them were failures it does not follow that the principle is wrong. In Manitoba, the regulations and conditions surrounding the trade have been in a constant state of change and it was only natural that the farmers' elevators should suffer in some cases. One of the changes most direct in its effects is that of the extension of railway lines. Many towns have experienced a falling off of fully 50 per cent. in the grain marketed in them, by the advent of a new line which has given market facilities to districts outlying and resulted in the withdrawing of 25 per cent. of the elevator capacity from service. Another change has been in the facilities accorded farmers of loading over platforms. This has removed a large proportion of the demand for elevators; local mills have become more numerous and have taken in considerable wheat; and the railways have put in many miles of sidings, which tend to distribute marketing points more over the producing area. It is for farmers, therefore, to consider all these influences before deciding whether or not they will build, and not to say, because a farmers' elevator was a success here, or a failure there, we will, or will not build.

Farmers should also consider whether or not, they are likely to have a better freight service, as this should have considerable to do with the amount of available storage that our initial shipping point would require. Elevators may not always be so badly needed as they have been the past few seasons.

We are not aware that there are any statistics available that would indicate what percentage of the amount of grain marketed in a given locality, there should be made for the binding of each shareholder to market his wheat through the elevator, or to contribute a certain amount per bushel of his saleable grain to a maintenance fund of the elevator. The great trouble in the past has been that just when farmers' elevators have been completed and all the expense incurred the other factors on the local market have enhanced the price to such an extent that the farmers' elevator is abandoned by its owners.

We are not aware that there are any statistics available that would indicate what percentage of the amount of grain marketed in a given locality, there should be elevator capacity for. But the amount of grain an elevator should handle at 1½ cents per bushel in order to make a profit and pay off indebtedness can easily be figured up.

In going into such a proposition provision should be made for the binding of each shareholder to market his wheat through the elevator, or to contribute a certain amount per bushel of his valuable grain to a maintenance fund of the elevator. The great trouble in the past has been that just when farmers' elevators have been completed and all the expense incurred the other factors on the local market have enhanced the price to such an extent that the farmers' elevator is abandoned by its owners.

This question is also discussed here by Mr. E. A. Partridge, of the Grain Growers' Grain Co., and by Mr. F. J. Collyer, a member of a company of farmers who have been operating farmers' elevator at Welwyn, Sask.

HOW FARMER'S ELEVATORS ARE OPPOSED

EDITOR FARMER'S ADVOCATE:

Your correspondent wishes for an opinion as to the success or failures of farmers' or municipally owned elevators. I have before me a list of fifty-two farmers and municipal elevator companies. Only two are municipally elevators, while several are trader companies as well as elevator companies. Quite a number of these farmers' elevators have

proved unsuccessful as such and have been either sold to the line companies or leased to grain men.

The main difficulty encountered by farmers' elevators appears to be that the large elevator interests have in many cases reduced the storage charges at points where they are operating in opposition to farmers' elevators, from 1½c, which is a regular charge, to in some cases ¾c per bushel. They have also placed street prices much nearer the track prices than at points where there are no farmers' elevators. The reason for this appears to be a desire to discourage the erection of farmers' elevators by making an object lesson of failure of those already built. Indirect taxation has always been more popular than direct taxation because the payment escapes observation. So direct profit has always been more earnestly sought after than indirect profit. If, therefore, the grain interests can prevent the making of direct profits by the farmers' elevator companies, the indirect profits, though very large, will not be sufficiently appreciated by the thrifty farmer to secure his continual support after direct profits have ceased to be made.

The more successful farmers' elevators as a rule are those which have contented themselves with performing the work of storage. The common method of operating them is this: The elevator company special-bins their patrons' grain at a charge of 1½ cents with insurance or 1½ cents when the farmer decides to carry his own risk. Wheat is shipped direct from wagon to car, previously spotted at the elevator for one cent per bushel. Then a few thousand bushels space is allotted to a buyer who fills it with purchases of street wheat, paying the ordinary storage charges on this wheat to the elevator company. One of the most popular methods is to make an arrangement with a grain man whereby each pay a certain portion of the manager's salary on the understanding that he will represent both the interests of the grain man and the interests of the elevator company. As elevator manager he will take in special-bin grain for farmers, but he will try to buy the special-bin grain in store in the elevator or on track when it is loaded out. He also has allotted to him a certain amount of space in the elevator for storing the street wheat which he purchases for himself or the firm which he represents. Other farmers' elevators as a company special-bin wheat making the ordinary charges and also purchase all street wheat offered, which they sell to the regular trade.

The chief benefit of the farmer's elevator has been as a regulator of weights, dockage, grades, and preservation of the identity of stored grain. Experience at many points has indicated that the building of a farmers' elevator has resulted in the closing up of the spread between street and track price, and the lessening of the dockage taken by the elevators at that point and the giving of better grades and weights by the rival elevators.

The establishment of a system of Government elevators at initial points would give all the advantages of farmers' elevators with a number of additional ones.

The advantages of a Government system would be found in the fact that official weights and grades could be obtained as soon as the grain was stored by the farmer, enabling him to secure an advance of say 75% on the value of his grain at point of shipment at reasonable rates whether cars were available for it or not, thus enabling him to discharge his more pressing liabilities in the fall and hold his grain until transportation facilities were provided or until market conditions were such as to warrant sale. In the introduction of this system the Government would offer to take over the present storage facilities, paying a fair valuation and supplementing the present storage with sufficient additional storage to meet requirements at each point. Provided owners declined to sell to the Government, the Government would then be entitled to duplicate storage at that point, a threat to do which would undoubtedly induce the present owners to sell to the Government. The Grain Growers' Associations of Manitoba and Saskatchewan have pronounced in favor of the Government system of elevators and will no doubt send out literature to the various sub-associations and to the public generally with a view to influence public opinion and their Governments in favor of the project. This literature will contain detailed arguments in support of the undertaking. In the meantime farmers' elevators might be built and in case the Government took over the system, the cost of building would be returned to the farmer, while if the Government did not inaugurate the system the farmers' elevators would improve conditions at the point where built. The greater number of them built, the greater the safeguard against cut-throat competition being successfully employed for their extinction.

E. A. PARTRIDGE.

FARMER'S ELEVATORS

EDITOR FARMER'S ADVOCATE:

Although the right to load cars over the loading platform has been secured by the farmers of the country, yet the elevator (when properly conducted), with its efficient cleaning machinery, facilities for the loading of cars when placed and capacity for storage during times of car shortage, is a necessity for the transaction of the business of the country.

Where fair treatment from the user already existing cannot be secured and where the prospective share-

holders themselves grow sufficient grain to maintain them—say 100,000 bushels—the farmers should build an elevator for themselves.

A strong directorate (in quality not quantity, as five will be ample) should be secured and shares of not less than \$50.00 should be issued and the company organized under the Joint Stock Companies' Act of the province in which the elevator is to be built, and it is advisable to employ a lawyer for this purpose. It will also be as well that he should approve the contract with the party erecting the building (if that method of construction be employed) as cases have been known in which claims have been made under the Mechanics' Lien and other acts after the contractor has been settled with.

Owing to the fact that the railway companies will not sell sites for elevators—a yearly lease only being granted, the usual rent being \$10.00—any money other than that subscribed by the shareholders will have to be raised on a chattel mortgage, and loan companies do not usually touch that kind of security.

A dry site for the building should be secured if possible and special attention should be given to the foundation and pit. The former should be of stone the full size of the bins, planked or timbered over and the joists laid directly on the timbers; and the latter should be of ample size (10 or 12 ft. square) and water-tight. Stone laid in cement or cement concrete will generally be less expensive and more roomy than the steel pans frequently put in. The cost will be governed by the size and equipment. For ordinary purposes 30,000 bushels non-inal capacity, sub-divided into fourteen or fifteen bins, six of them shippers, and four or five others holding about 100 bus., the rest being of about 3,000 bushels each, will be large enough.

One short and one leg, a No. 6 Monitor cleaner, a 12 H.P. gasoline engine, dump hopper, Evans dump and scales will be necessary, and at present prices of lumber and labor the cost will probably be \$6,500.00.

The legs and gangway should be so arranged that the settling of the building will not affect their position. A ladder attached to one of the legs is just as convenient as a stairway and will occupy less valuable space. Care should be taken to have wide belting, positive dial connections and the bottoms and angles of hopper bins and the floors of wooden spouts should be ironed.

The elevator can be operated as a strictly shipping elevator, or the company can reserve part of its space for patrons desiring to ship direct and either buy on its own account or allow a grain firm a certain amount of space—say 5,000 bus.—who will appoint a street buyer; or they can allow their manager to buy for the grain firm, the elevator company being paid by them for the privilege.

In this latter event it is more than ever essential that a thoroughly reliable man be secured, who will retain the farmers' confidence, and it must be borne in mind that he must be the appointee and servant of the elevator company and not of the grain buying concern.

The usual charge to grain buyers, who carry their own insurance is 1½ cents per bushel and 1.0 additional storage, the undertaking being that grain is to be shipped as soon as cars are procurable. To farmers the charge is generally one and three-quarters cents per bushel for elevating, cleaning, shipping and storage for fifteen days, and three-quarters of a cent per bushel for each additional thirty days.

Under average conditions an elevator cannot be run for less than these figures and if the amount handled is less than 70,000 bushels any profit that may be made will be from the proceeds of the dockage, which is permitted under the Grain Act and is absolutely necessary for the businesslike operation of the elevator, as there is considerable wastage and shrinkage for which the company is responsible to the extent of delivering at the terminal the net weight of the grain as shown on the tickets issued.

The cost of operation will vary with the amount of business done, but if the shipping bins are judiciously used and the engine shut off when not in use and properly adjusted, the cost of gasoline will be from one-sixth to one-fifth of a cent per bushel. Very careful management will be necessary to keep the cost of labor down to four-fifths of a cent per bushel.

As competition from the line elevators will be very keen and rates probably cut to one cent and even one half-cent per bushel, it should be impressed upon the shareholders that they will have to stand by their company (either by giving them their business or by paying into its treasury sufficient to keep its doors open, and in view of this condition of affairs it is most advisable to have all or nearly all of the cost subscribed before commencing to build.

F. J. COLLYER.

An Ontario Indian named Thomas Longboat won the Boston Marathon road race, covering the twenty-five mile course in two hours, twenty-four minutes twenty-one seconds.

Farmers who have had experience in cultivating growing crops are invited to contribute their views upon the subject. Already several well known authorities and contributors to our columns have expressed their opinions upon cultivation of wheat to kill weeds and conserve moisture, and from all accounts the practice should have more general acceptance.

Flax Seeding Experiments

The Ontario Experimental Station has been conducting some tests with flax seed to determine what amount is best to sow to the acre and submits the following report upon the work:

"In 1905, and again in 1906, each of four varieties of flax seed were sown at the rate of one-quarter, one-half and three-quarters of a bushel, and also at the rate of two, three and four bushels per acre, making in all twenty-four plots in the experiment each year. Averaging the results of the four varieties sown with each of the quantities of seed per acre here indicated, we find that the yields of flax per acre, after the seed used was subtracted from the crop, produced as follows:

Amount of seed sown per acre	Average yield per acre (2 years)	
	Tons straw	Bus. seed
1 peck	1.4	15.9
2 pecks	1.9	18.8
3 pecks	2.2	19.0
2 bushels	2.7	19.2
3 bushels	2.7	16.9
4 bushels	2.7	13.1

"It will therefore be seen that the greatest yield of flax seed, less the amount of seed used, was obtained by sowing two bushels of seed per acre.

"It is generally understood that when seed production is the only object in view, a much thinner seeding is desirable than when the crop is intended for the production of fibre; therefore, when this experiment was commenced it was expected that the first three seedings enumerated in the above table would indicate the best quantity of seed to be sown per acre for the production of seed, and that the last three seedings would give similar information regarding the sowing of flax for fibre production. Up to the present time, however, the results of the experiment show that two bushels of seed per acre will give a larger yield of seed than any of the thinner sowings. When flax is sown quite thickly the stems grow slender and upright and do not branch, with the result that a much longer and better quality of fibre is produced than when thinner sowing is resorted to."

It is rather unfortunate that the experiment does not include seedings with four pecks and six pecks, as the results seem to indicate that a bushel or a bushel and a half would give as good yields as two bushels. On new breaking seeding would have to be thicker than that followed in the experiments, for the reason that the seed bed is seldom in such good condition as on old land and much of the seed would not be covered.

Harrowing Crops Has Proved Beneficial.

EDITOR FARMER'S ADVOCATE:

From experiments on the Experimental Farm here, covering several seasons, I am firmly persuaded that the harrowing of weedy grain early in the season has a very beneficial effect if conducted properly. The principal danger is from the harrows becoming choked with stubble and other trash. Should this occur, the young wheat plants will be torn out by the roots, leaving a vacant spot in the field throughout the summer. I do not think it is possible to satisfactorily harrow land filled with stubble, unless harrows are used with teeth sloping to the rear. The late Henry Nicoll, one of our best farmers in the Brandon district, was very successful in harrowing his wheat with a Hallock weeder, even when there was considerable trash on the ground.

I have noticed fields that were very weedy when the grain first appeared, become quite free of weeds from a thorough treatment with this machine. No farmer, however, who is unwilling to take pains and do the work properly, should attempt harrowing the growing grain. It must also be remembered that the harrowing is only beneficial when the weed plants are so small that they are almost invisible to the naked eye. In this stage they are generally red in color, and pull out readily, with a single scratch of the harrow.

To sum up: To successfully harrow the growing grain there should be no loose trash on the ground; the work should be done on the first appearance of the weeds and when the soil is dry. Less wheat plants are destroyed if the work is done lengthwise of the drilling. It is seldom of any benefit to harrow the growing grain unless it is weedy.

Brandon, Man.

S. A. Bedford.

Applying Farmyard Manure

EDITOR FARMER'S ADVOCATE:

It still remains a very practical question for the farmer to decide, whether the farmyard manure should be applied to the fields in winter while in the green state, the fields thus deriving the full benefit of the manure, or whether it should be applied in the summer or fall months after it has remained in the yard, subject to an extensive loss by heating which all manure undergoes in the heap, and the direct loss by leaking which has drained from the yard. Our manure is applied to the land throughout the stabling season just as it is made. We have practiced this system of handling for a number of years, and for many reasons we would not adopt a different system. By the application of farmyard manure we are in one way able to build up the store of fertility that our farms have been depleted of by the primitive methods of cultivation of the pioneer, and to supply the constant drain by the crops we are growing at present. By applying while green throughout the stabling season, I claim we offset many detrimental effects that would surely follow were it allowed to accumulate in a pile, and often we find this pile under the eaves of a large barn—which is so much the worse.

On the soil upon which the manure has been applied in winter, we find it easy to prepare a deep, mellow seed-bed, containing abundance of moisture, and a large amount of available plant food in soluble form. Such conditions as these are very favorable to the growth of plants. Seeds germinate more quickly, and the plants, owing to their growth, can endure drouth better. By applying manure while in the green state, a larger percentage of the liquid excrement is saved and applied to the land and as the liquid contains the most important ingredient; such as broken down animal tissue, slight traces of phosphoric acid and more nitrogen and potash than the solid excrement, it is very important that it should all be saved as far as possible, and right here winter manuring very strongly recommends itself.

When manure is placed in a heap, let it be ever so small, there is constant fermentation going on, and this is always accompanied by a loss of nitrogen in the form of ammonia.

Another advantage that should appeal to every farmer is the great saving of time, and consequently the great saving of labor; and, also, that this work can be done better in winter, when we are not so rushed as in seed time: and a greater area can be covered, and covered more evenly, than it could be with the same manure after it has remained in the farmyard all summer. By forking the manure directly into the spreader when snow is not too deep—and on the sleigh when it is, one handling is saved, and the manure is always out of the way, and if this advantage were all, it would be worth something.

When applying it in winter I would strongly advise spreading the manure on the snow instead of putting it in piles. It is true that green manure contains a large portion of unavailable plant food, but if it has been properly cared for, and contains all the liquid excrement of the animals, it will contain sufficient available plant-food for the present requirements of the crop, while the remainder will gradually ferment in the soil and become available for the succeeding crops.

As a result of investigation up to date, the eminent authority, Prof. R. Warrington, deduces the following conclusion: "The original voidings of the animals have a far greater manurial value than the final product of a manure heap, which the farmer carries to his fields. In the whole process from the stable to the field, the loss is going on. This loss is falling on the most valuable constituent of the manure, and resulting finally in a residue of comparatively inert matter." So we conclude, so far as economy of plant food is concerned, actual practice proves and science backs up the advisability of hauling manure as soon as practicable.

Man.

C. H.

DAIRY

Milk From Cow to Consumer

From a paper by Gilbert M. Gowell, Professor of Animal Industry at the University of Maine.

Of the elements which enter into the composition of milk—water, fat, casein, albumen, sugar and ash—casein is the most troublesome to preserve. It is easily affected by acids or by rennet, a little of the latter added causing it to coagulate. Albumen changes in taste if the milk is heated to 155 degrees; hence pasteurizing gives a flavor to which people object. The tendency of sugar is to change to lactic acid by the action of bacteria, causing the milk to sour, a condition that is healthy, and vastly different from putrefaction.

The sources of flavor in milk are from the food eaten, water drunk, air breathed, change of food, indigestion, time of lactation and individualism. While there is an individualism in the work of the cow, which stamps her product as peculiarly her own, and she will overcome objectionable conditions as regards food, water and air, which for a time change the flavor of the milk, she is doing more profitable work when these conditions are normal.

If the food of a cow is suddenly changed, even if it be from poor to good food, it will interfere with the quality of the milk. There is no food product which gives such a delicate flavor as corn meal, yet, if the cow is unaccustomed to it, if not in sympathy with the food, it will cause a disturbance. So, when the cow is turned on the aftermath, the liberal quantity of clover gives an objectionable taste to the milk at first, which disappears as the cow becomes accustomed to the diet. Hence, whatever changes made in the food, should be made gradually. At the College they are able to feed three pecks of turnips at once without detriment to the milk, but they began with a quart and worked up. The bowels of the cow should be kept just right, that there may be no tendency to indigestion.

Some cows have the peculiarity of making good milk all the time of lactation; others, in six or eight months, will give that which is unfit for use. Cases have been known where the milk became unfit for use when the cow was making a pound of butter a day. In the wild cow the milk after a time becomes bitter, and the calf weans itself. By domestication the milking period has been prolonged and this period of change has been delayed. Stop milking ten or twelve weeks before calving time and the cow will store up surplus flesh and energy, which she will give down in great quantities of milk after her next calving. Stripper milk is unfit for use; it is lacking in delicacy of flavor, and, mixed with milk from the herd, depresses the quality of the whole. The cow, then, must have the purest air and water, and the cleanest food.

The flavor is affected, also, by odors absorbed, by milkers and milking utensils. Not only is the milk contaminated by odors in the air, but it may be affected before being drawn by strong, rank odors in the stable. Dirt, from whatever source, once dissolved in the milk, cannot be gotten out. It is noticed in the butter, and even in cheese. The udder should be washed before milking, and it is a good plan to keep the under side of the cow clipped. The idea of the dirty milker touches a delicate point, but so much milk is taken uncooked that too much cannot be said upon this subject. The utmost care is exercised in the preparation of bread, which is cooked before being eaten; at the same time, the milk served with it, in a raw state, has been most carelessly handled.

Everyone ought to know how to wash utensils for handling milk. First use tepid water, then wash thoroughly in water with a little soda dissolved in it, and finish by thoroughly scalding with boiling water. At the College the utensils are steamed for fifteen minutes in a galvanized tank. Nothing will take the place of thorough washing; this must come first always. Straining is essential under existing conditions, but Prof. Gowell is hoping that the time will come when it will not be. The value of aerating is not fully understood. The volatile oils of the food give flavor to the milk. When it is aerated part of this flavor is lost, but enough is gained to make up for it, since air pumped in drives out obnoxious gases. As a test, a pail of milk was suspended over a pile of horse dressing for 24 hours, covered only by a cheesecloth, and it was thoroughly permeated with the odor; after aerating eight minutes, no smell could be detected. Milk should be passed over the cooler to get rid more quickly of the animal heat that causes acidity. Milk can be dropped at once to 40 degrees. The value of aerating and cooling cannot be over-estimated.

In making butter, pasteurizing the cream gives a product with no flavor, and this is especially desirable where cream is received from different sources. By planting in this neutral cream a flavor made from lactic acid, prepared by holding sweet milk, either whole or skimmed, at a temperature of 70 or 80 degrees for 24 hours, a butter of superior merit is made.

Mould on Butter.

A reader in Manitoba says: "Can you give any information re mould or mildew in butter. I made the butter fourteen days ago and to-day on undoing one of the pound blocks from its wrapper I found it spotted with green about the size of a large pin head. The churn was scalded and washed prior to making (although the churn is not new, it being purchased at a sale). I fancy I have seen in some pamphlet issued by you a treatise on mould in butter, but I cannot say for certain. I should be glad of any information you can give me.—F. W."

The growth of mould on butter has been attributed to various causes. It is produced by the development of a number of different varieties of moulds. The trouble appears most frequently in packed butter on the outside of the butter and parchment papers, and sometimes penetrates into the butter. In some cases the mould is due to the growth of the ordinary bread mould (*penicillium glaucum*); in other cases a black mould develops, due to *cladosporium butyri*.

Quite frequently trouble of this character is associated with the use of parchment paper. In fact a large number of buttermakers attribute it to the inferior quality of the parchment paper that is used in some cases.

Poor parchment will certainly encourage the growth of mould more than good, vegetable parchment, nevertheless. We find distinct cases of mould on pure parchment paper. In a great many cases I believe it is due to the lack of a proper place to keep the parchment and boxes. They are left in some damp place where they become infected with the spores; and although it will not show on the dry parchment before it is used, when it is placed on the butter the conditions are favorable for its growth; such as moisture, temperature, and then the mould appears in small, blue spots.

As mould is a tiny plant of fungus, it is important that all buttermakers should know by what means they can entirely prevent its growth on parchments or on the butter itself. Mould comes only from spores, which serve the purpose of seed of fruit for its reproduction. If we destroy the spores, mould cannot begin to grow. The conditions favorable for its growth are a certain degree of moisture and a moderate temperature.

Formalin is the most effective remedy known to destroy those spores. A good course for the buttermaker to follow is to prepare a strong brine of salt and add three ounces of formalin to one gallon of brine. The butter paper should be soaked in his solution for at least twenty-four hours before using; and while still wet with the brine and solution, line the boxes or tubs. If print butter is to be made and held for any length of time I would treat the wrappers in the same way. The brine solution can be used for a considerable length of time by adding some more formalin occasionally.

The above remedy has been used by the writer for a number of years in the Government creameries of Saskatchewan, and has always been found effective.

L. A. GIBSON,
Dairy Instructor,
M. A. C.

When the Salt is Too Much in Evidence.

"Gritty Butter" is a familiar phrase used by expert butter-scissors to indicate that part of the salt is present in an undissolved condition. To most consumers this condition of the salt in butter is objectionable. When properly incorporated, salt should be present in the form of a solution in the butter. The gritty condition of the salt in butter may be due to (1) poor condition of the salt before it is added to the butter; (2) adding so much salt that it cannot be dissolved by the water in the butter. The maximum amount of salt that butter will dissolve depends upon the amount of moisture present. The maximum amount of moisture permissible in butter, as limited by law, is 16 per cent. The condition of the water in butter prevents the water from being saturated with salt during the comparatively short time allowed for salt to dissolve during the manufacture of butter; (3) insufficient working. If the butter is not worked enough to distribute the salt evenly, some portion of the butter will contain more than the other portions. The portion that contains the excess of salt does not have enough moisture to dissolve the salt; while if the salt had been evenly distributed in the butter, all the salt would have been properly dissolved. When a gritty butter is caused by insufficient working, it usually mottles.

Mottled butter is butter which is uneven in color. This unevenness in color may be due to several different causes. It may be due to specks of curd (speckled butter), and it may be due to certain organisms (dappled butter). These causes of mottled butter are not very common in factories where the manufacture of butter is properly carried on.

The most common fault of mottled butter is the improper incorporation of salt and the presence of an excessive amount of buttermilk. Mottled butter caused in this way is common. It would be of much commercial importance if it were possible to prevent its occurrence. In case all the water had been saturated with salt, and there still is undissolved salt left, then the granular or undissolved salt will cause no mottles. The most important thing to observe in order to prevent mottles is: (1) to have the buttermilk well washed out; (2) to have the salt thoroughly dissolved; and (3) to have the brine properly distributed.

Recent work by Drs. Van Slyke and Hart show that if the proteids are thoroughly washed from the butter, mottles cannot be produced, no matter how unevenly the salt is distributed. Complete removal of the buttermilk by washing is one of the essentials in order to prevent mottles in butter.

The mottles caused by improper incorporation of salt assume two different forms; viz., mottles proper, and wavy butter. As has been mentioned before, the mottles result from undissolved salt. Whenever there is undissolved granular salt present, the moisture is attracted and the color deepened at that particular place. In case the water has already been saturated with salt, there is no danger of mottles, no matter how much gritty salt is present.

Wavy butter is caused by an uneven distribution of the brine. If a little salt is added to the butter and dissolved without working the butter sufficiently, the salt will go into solution in certain portions of the water. This water containing the greatest amount of salt will produce a high color in certain portions of the butter, while the portion containing water with less salt will have a higher color, thus causing streaks in the butter.

In case butter has become mottled on standing, the mottles can be entirely eradicated by working the butter. Though some of the moisture is lost during this reworking process, it is usually advisable to rework the butter rather than to place it on the market in a badly mottled condition. The mottles should, however, be prevented rather than cured. This can be done by sufficient working while the butter is in proper condition, and at the proper time.

POULTRY**All Poultrymen Do Not Play the Game Fairly.**

Just a short time ago our attention was called to the fact that a breeder and exhibitor of Barred Rocks in Manitoba was not dealing fairly with people purchasing from him. The buyers thought, were in some cases given to understand, that they were getting eggs or chickens from a certain pen made up of a cock scoring over 90 and a hen or pullet also a high scorer and winner, but the birds have since proved that their ancestry was inferior to what the purchaser was led to believe. In the poultry circle in which this breeder moves it is an open secret that this method of duping unsuspecting buyers, by substituting inferior birds or from flocks of other breeders, was being followed. Fortunately, and we are proud to make the statement, no such complaints have been made regarding any of our advertisers. It is safe to prophesy that dishonest methods such as are described above will soon wipe out the business of the enterprising(!) poultryman.

New Ground for Chicks.

Some poultry raisers make the coops in which their chicks are raised stationary. The coops are usually long with divisions in them, each division containing one hen and her brood. As these cannot be moved about the chicks live from the time they are hatched till the time they are placed in their winter quarters, always upon the same limited piece of ground. Others put each hen in a separate coop or two or three hens in a coop not too large to move and change its location frequently.

It is not impossible to raise chicks successfully in stationary coops when the chicks have free range, as they will cover a considerable space; yet there are decided advantages in moving the coops. In the first place, unless more time is given to their care than can usually be given on a farm, a great amount of the filth gathers under the stationary coops, while the movable coop can be changed to a clean place in two or three minutes. But the greatest advantage in the

movable coop is due to the fact that a chick's growth depends largely on the amount of animal food it can find—bugs, worms, etc. All the grain it can eat will not make a chick do its best without animal food. Anyone who has watched chicks has noticed that they are creatures of habit in a more restricted way than most animals. If the coop stands always in the same place the chicks get into the habit of hunting over about the same beat every day. If the hen is allowed to run with them the case is bettered somewhat, but she also develops her regular scratching places. If the coop is moved about from time to time they hunt over new ground and the bugs and worms are more numerous. The importance of this is not noticed till one tries raising some of the chicks without putting them upon new ground and another part by changing them about. If the chicks raised entirely on the same ground are well cared for they may do well, but they will not grow so rapidly nor become so large as those which are constantly given new ground to run over.

Crossfield, Alta.

W. I. THOMAS.

Geese—A Good Side Line for the Farmer.

EDITOR FARMER'S ADVOCATE:

I wonder how many farmers realize how well geese and hogs go together? Buy a pair or trio of geese and run them in the hog pasture and see if it isn't a good combination. There is lots of money in geese. Then again, you can provide yourself with a good Christmas and New Year's dinner at little or no cost, besides giving your wife a source of pleasure and profit. For geese are one of the most profitable of domestic fowl and are very easy to raise, even easier than ducks. We never lost more than one gosling through hatching weak and only two by accident. Our first prize pair of goslings at Killarney last year were only fed three days after being hatched on rolled oats, then turned loose with the gander and let run in the hog pasture. Frequently we hatch our earlier goslings under hens; then we take them from the hen and put them in a box and cover with a cloth or piece of warm flannel. You would be surprised how easy they are to raise and they soon become very tame and are great favorites with the womenfolk standing back and chattering away and they grow so fast it is a pleasure to raise them. The first gosling we killed last fall weighed sixteen and a half pounds the first week in October.

In mating geese always buy in the fall as they are very slow to make up and never put more than one gander in one pen with from one to three geese. A good plan is to have several little pens and let each trio go in at night into their own roosting place and when you let them out in the morning they will herd by themselves. This is practically the only way to get good fertile goose eggs when breeding from a number, as a gander is very savage as a rule in the hatching season.

I have been asked if the hogs are not apt to eat the little goslings. Did you ever see a gander fight? Well if you did that answers that query. I have seen a gander fly at a large Tamworth hog and fasten on to the bristles with his bill and while the hog ran squealing away, beat it unmercifully with his wings.

Some people have the idea that water is absolutely necessary for geese to swim in. This is a mistake. I have known lots of people yard geese off from swimming water, give them lots to drink and a good pasture and they will grow and thrive. We prefer the large grey Toulouse goose as I think birds of this breed are better in this respect; are very tame and lay a good number of eggs. One of our geese so far this year has laid eighteen eggs and is still at it. We frequently have them lay from twenty-five to thirty eggs. Geese are like elephants—they live to a ripe old age and in fact it is supposed the older they get the better they are as breeders.

Some pluck the ganders alive in the moulting season, which in geese is very early. One goose can provide a feather bed in this way very nicely, if you keep her long enough; but it is really astonishing the amount of valuable feathers on one goose. The reason I mention plucking the gander is, those not familiar with the ways of geese will probably not know that the mother goose pulls all the feathers and down out of her breast to line her nest with.

Here at least is one line of poultry in which you need not be bothered or confused about balanced rations, etc. In the winter they will do well on a few roots, small potatoes, etc., along with a

little screenings or any other rough grain. They are like sheep someways; a very rough, even cold building as long as the floor is warm or covered with straw will bring them through. The feet are the only parts about them which get cold. Always provide them with lots of coarse gravel in the winter time. Some are bothered with eggs which are fertile not hatching. We never have this difficulty. If we set under a hen we take the hen once in a while and dip her under feathers in water. With the goose we sprinkle the eggs two or three times with warm water. Always set near the ground.

H. E. WABY.

Horticulture and Forestry

Strawberry Culture in the West.

Perhaps less success has attended the attempts at growing strawberries in Manitoba and other parts of our prairie country than has been the experience with other small fruits. This, however, does not prove that strawberries cannot be grown to fair advantage here, but rather that the mode of cultivation best adapted to this country was not known to the planter. The writer has given much attention to this fruit and has worked out a system of cultivation which has proved quite successful. Others have been quite successful in growing strawberries in Manitoba, even on quite a large commercial scale, and have been able to ship in considerable quantities to the Winnipeg market. When the best plan of growing strawberries is understood, this delicious fruit will no doubt be much more extensively grown.

More care is necessary in selecting a location and preparing the soil for strawberries than for most other fruits. It is absolutely necessary that the plants should be sheltered from the wind. Planting the strawberry rows between rows of raspberries or some bush fruits, affords some protection, but in addition to this a good wind-break is desirable. It will be very difficult to secure a good setting of young plants in an exposed location. The soil for strawberries should be very carefully prepared. Many varieties do best on a loamy soil, but on the heavy land of the Red River valley the plants seem to thrive. The land should be plowed deeply the previous year, and if not very rich should be well manured. Only land in a high state of cultivation should be used, free from weeds and sod. Harrow the ground well in the spring and it will be ready for planting.

A great many inquiries come to us every season as to the best time to plant strawberries. I will answer these here, as I have so often done in private correspondence, by saying that spring is the only time to plant strawberries in this country. In our short season the young plants are not sufficiently developed to permit of early fall planting, but even if good plants could be obtained, we would advise against planting in the fall. Late fall planting would be ever more likely to lead to failure. In our climate, weather and soil conditions are seldom favorable for the fall planting of strawberries. Fairly early spring planting is desirable, but in case of dry ground in the early spring, planting should be deferred for a time.

Strawberries are most frequently grown on what is known as the matted row system. Nearly all large growers follow this plan. The rows are marked out about four feet apart, and in these rows the plants are set from one foot to eighteen inches apart. This is closer than is usually recommended, but it is not too close for our climate, as the plants do not set as freely here as in moister climates where the season is longer. The lesser distance is safer. The space between the rows should be kept well cultivated at frequent intervals, for which the one-horse cultivator is used always cultivating in the same direction after the runners start so as not to drag the runners forward or backward by cultivating in opposite directions. Cultivation must be kept up until fall, or toward the end of August. In addition to the horse cultivation, it is advisable to go over the rows several times with a hand implement, and throw a little earth over the runners here and there, to hold them in place. If the runners are shifted about with the wind the young plants will have a slim chance to take root. This work is very important in our dry

and windy climate. Weeds growing between the plants, not reached by the cultivator, should be removed by hand. It is also necessary to go over the rows the first season and pinch off the blossom stems as soon as they are sufficiently developed. It is not fruit, but healthy, strong plants that are wanted the first year. The parent plants should not be allowed to exhaust themselves in producing fruit but should give all their energy to producing new plants. It is these new plants that will give the fruit crop the following year. If the work has been a success, by the fall of the first season a solid row of plants, eighteen inches wide should completely cover the ground.

Strawberries are sometimes grown on the hill system. The plants are usually set somewhat closer together and all runners are kept hoed off as soon as they appear. In that way very large individual plants are produced, and larger and finer fruit is secured, but in less quantity in proportion to the labor bestowed upon them. The hill system is only followed in small garden plantations. There are other systems which are more or less of a modification of the matted row plan, or, we might say, a compromise between the matted row and the hill system. The principle followed in these modifications is to limit the number of runners allowed to each plant, curtail the number of new plants and keep the matted row within narrow limits. These modifications of the matted row system, of course, entail more labor. It is sometimes advised to cut off the first runners that start on the theory that stronger runners will follow. In our climate at any rate, this practice would be objectionable. It is advisable to have the young plants established as early as possible, owing to possibility of dry weather later, rather than to put them back by hoeing off the early runners.

HANDLING PLANTS.

Strawberry plants require careful handling before planting. Plants should not be kept in a dark place, or packaged up any longer than can be avoided. If plants have been received from a distance, they should be unpacked at once, but should not be immediately exposed to strong light. Heel in or plant temporarily in a shaded location, until the plants have recovered a good color. They can be planted closely in a slight trench and watered easily. If plants are received when the ground is very dry, the same plan may be followed. Only young plants that have never fruited, should be used for starting new beds.

Special care in planting should be followed by those who wish to succeed with strawberries. Broken or withered leaves should be picked off before planting. The blossom stem, if sufficiently developed, may also be pinched off, otherwise this will have to be done shortly after planting. It is also desirable to shorten up the roots. In planting the roots should be spread out and the soil well pressed around the roots. Care must be observed to plant just the right depth. Strawberries require more care in setting than most other plants, particularly as to depth of planting. The crown must be just even with the surface. If planted too deep, so that the crown is covered, the plant will slowly die. If too shallow, the roots will dry out. The plants must not be exposed to the sun or wind while the planting is being done. Keep them covered and moist. Select a cool, cloudy day for planting. If the weather should turn very warm and bright, or windy, soon after planting, shading may be necessary for a time. This may be accomplished by scattering light straw or hay over the plants, or shading with boards.

It is a difficult matter to select a brief list of varieties to recommend for general planting. The number of varieties offered is so great as to be bewildering, many of them excellent sorts. Scores of new varieties are offered annually, and some of these are "boomed" energetically as something better than older sorts, and find buyers at fancy prices. It rarely happens, however, that these new varieties are better than a score or more of well known sorts. In purchasing strawberry plants, the buyer should know that there are two classes of plants, known respectively as staminate or bi-sexual, and pistillate, or imperfect flowered sorts. The staminate plants have perfect flowers, the male and female organs being contained in the one blossom. Varieties having perfect blossoms will produce fruit when planted alone. The varieties which produce only imperfect or pistillate blossoms (that is, blossoms having the female organs only) must not be planted alone or considerable failure will result. These pistillate varieties should be

planted along with a staminate sort, to ensure fertilization. They may be planted alternately row in the same row, or in alternate rows. Sometimes two or three rows of pistillate are planted to one of staminate. The best pistillate sorts are generally regarded as more productive than the staminate plants, hence the desirability of planting more of them, with only a sufficient number of staminate plants; to ensure fertilization. Where only one variety is planted it should, of course, be a staminate sort. In nursery catalogs staminate varieties are usually distinguished by the letter S (staminate) placed after the name of the variety, while pistillate sorts are distinguished by the letter P or I (imperfect).

It is further well to remark that different varieties of strawberries succeed best on different soils. It is, therefore, advisable to try several varieties. About one hundred to two hundred plants would be sufficient for the home use of a small family, if good results were obtained from that number. We will only give a limited list of a few favorite varieties.

Crescent.—A vigorous, healthy variety. Productive. Fruit fairly large, bright red, firm. Grown extensively as a market berry. Season early.

Warfield.—An exceedingly productive pistillate sort. Healthy, strong grower. Fruit medium size, dark red, firm. A fine market variety. Season early.

Haverland.—Another very productive pistillate sort. Fruit better flavor than Warfield, but not so firm, and, therefore, not so desirable for marketing. Plants healthy. Season later than preceding.

Bederwood.—Perfect strong healthy plants. A variety that has been in favor to a considerable time, and used largely for planting with pistillate sorts.

Senator Dunlop.—Vigorous and healthy, perfect variety. Fruit medium to large, firm. Good quality. Mid season.

Sharpless.—An old, perfect flowering variety. Not so largely grown as formerly, but one that seems well adapted to our soil and climate. Fruit very large, light red. Mid season. Other favorite varieties are: Enhance, S; Lovett, S; Splendid, S; Mary, S; Clyde, S; Sample, P; Gandy, S; The last is a good late variety.

D. W. BUCHANAN.

St. Charles' Nurseries, Man.

FIELD NOTES

Events of the Week.

CANADIAN.

The population of Winnipeg has been estimated at 111,350 by the city assessment commissioner.

* * *

Rural lumber dealers in the West have advanced the prices on lumber from one to ten dollars per thousand.

* * *

The Dominion Government has prohibited the sale of liquor in an area of twenty miles along the trans-continental railway. The Ontario Government has promised to help to enforce the law in that province, but the attitude of Manitoba is not yet made known.

* * *

Moosejaw and Calgary are to be headquarters for railway mail inspectorship in the West.

* * *

The total number of immigrants reaching Canada in the year ending March 31st was 126,667, being an increase of 37,859 over the previous year. The United States sent 34,657 people to Canada.

* * *

John F. Grant died in Edmonton early in May. He was born in old Fort Edmonton seventy-six years ago.

* * *

BRITISH AND FOREIGN.

The Stromboli volcano in Sicily is in eruption and earthquake shocks have been felt.

* * *

The United States Government will withdraw from control in Cuba in September, 1908.

* * *

The State of Minnesota passed an act fixing railway rates at two cents a mile within its boundaries. The railroads have replied by doing away with the special rate, including excursion rates of 10 cents for return tickets and reductions to 15 cents for tickets of Congress.

Japan has ordered a new 21,000 ton battleship to be built in England. * * *

In the rowing match at the Jamestown exposition between the crews of the warships, the Americans won over the British tars. * * *

The sum of \$400,000 was sent from the United States in one day to the relief committee of the Chinese famine districts. * * *

The Dublin Exposition, the greatest thing of its kind ever held in Ireland, was opened on the first of May. * * *

Serious rioting has been going on in Guatemala, one of the little republics of Central America. A bomb was thrown at the President, but he escaped injury. The Mexican and American legations in Guatemala City were attacked, and, as a consequence, the Mexican Government is equipping thirty thousand men and sending them to the Guatemalan frontier.

Agricultural Colleges Retain Boys on the Farm.

EDITOR FARMER'S ADVOCATE:

As to my opinion of the First Year Course in the Manitoba Agricultural College for the young farmers of Manitoba, I may say I am unfamiliar with the conditions of farming in that province. There are many Manitoba students in a better position than myself to give an opinion as to the practical value of the course to resident students. I am fully convinced, however, that the course is well suited to the needs of the young men for whom it has been planned.

But there is one aspect of the course which does not require a knowledge of local conditions to express an opinion on, and that is the opportunity it affords the student for development and self-improvement.

and will afterwards look into conditions in Manitoba. Mr. H. A. Craig of the Department of Agriculture at Edmonton, has been appointed secretary to the commission.

A Canadian Percheron Registry Mooted.

It has been proposed by a number of those interested in breeding and importing Percheron horses to organize a Record Society for this breed under the Dominion act respecting the incorporation of live stock record associations.

Nearly all the pure breeds of stock in Canada, including Clydes, Shires, Hackneys, Thoroughbreds, Shorthorns, Aberdeen-Angus, Herefords, Ayrshires, Sheep, Swine, etc., are now organized under the National system, whereby the Dominion Department of Agriculture supervises the administration of the work and places its stamp of authenticity upon every pedigree certificate issued from the National Record office. Those interested think that the work of registration could thus be done at less expense to the Canadian breeder, and that with Canadian association the interests of the breed could be promoted much more effectively.

At the request of a number of those interested in Percheron horses I am corresponding with all known breeders and importers in Canada. It is suggested that a meeting for the purpose of discussing such an organization might be held at a place and date to be agreed upon by the majority of those replying to this communication. I should be glad to have your opinion as to the advisability of taking action along the lines suggested, also when and where you think a meeting might be most conveniently held.

Regina at the time of the Summer Fair, July 31st, Aug. 1st, and 2nd, has been mentioned as a suitable

GEORGE H. GREIG.

Western Representative Live Stock Branch, and central place. Yours very truly,

MARKETS

It took all the bull news, the late season, the green bugs, and some revival of European demand, to raise the price of wheat ten cents over close of navigation prices last year, but from all appearances there will be this difference in a day or so if indeed it is not the case by the time this reaches our readers. During the past week the market became very strong under influences from all quarters. The green bug continues to do damage; the season continues late; the export demand is more lively; navigation is opened and dealers have scented high prices;—any one of which conditions would be sufficient to raise prices, but where all are operating at they did last week, big gains cannot fail to be made.

In the States certain elements are already talking dollar wheat, and everything considered their expectations are not unlikely.

The police court trial of the president of the Canadian Stock and Grain Company has been withdrawn, Mr. Woods having settled with all his creditors and left the country. This week the case of the Crown vs. the Grain Exchange is being continued, with Mr. Bonnar as leading counsel for the prosecution.

At the close of last week Thompson, Sons & Co. reported as follows of the Winnipeg market:

Manitoba wheat has been steady to strong according to the fluctuations in market sentiment. Prices have been steadier than in the U. S. markets, our prices being based more on the export value than governed by speculation. Lake navigation at Fort William opened April 30th., two weeks later than last year. A large fleet of vessels has been chartered and in a few days the stock in terminal elevators will be greatly reduced. The opening of navigation and the advance in prices tend to make the trade more active than for some time. Prices closed at 1 Hard 82½c. 1 Nor. 81½c., 2 Nor. 78½c., 3 Nor. 75½c., spot or enroute, and futures May 81½c., July 83½c.

OTHER GRAINS.

Oats white No. 2	37½
Barley, No. 3	45
Flax	1.25½
Liverpool—No. 1 Nor., Manitoba spot, 6s. 11d. to 6s. 11½d. per cwt., or \$1.00 1-5 to \$1.01¼ per bus.; No. 2 no stock.	
MILLFEED, net per ton —	
Bran	17.50
Shorts	18.50
CHOPPED FEEDS—	
Barley and oats	24.00
Barley	20.00
Oats	26.00
HAY, per ton (cars on track,	
Winnipeg)	10.00 @ 11.00
Loose loads	13.00 @ 15.00
BUTTER—	
Farm dairy in pound prints, No. 1, per lb.	24
No. 2, per lb.	23
Farm dairy in rolls, No. 1, per lb.	22
No. 2, per lb.	20
Farm dairy in tubs, No. 1, per lb.	20
No. 2, per lb.	18
EGGS—	
Strictly new laid, per dozen	24
POULTRY—	
Chickens, dressed, per lb.	12½
Ducks, dressed, per lb.	12½
Geese, dressed per, lb.	12½
Turkeys, dressed, per lb.	15 @ 17

LIVE STOCK.

The stall fed cattle in Manitoba came forward with a rush last week and caused somewhat of an easy tone to the market in Winnipeg for a few days. Deloraine branch sent up 35 car-loads in one day of cattle that were in pretty good fit. Of course the loads were mixed and prices ranged from \$2.50 to \$5.25 per cwt. Prospects of short supplies in June are bright and buyers freely admit that the man who has cattle then will be able to dictate prices. Already some extra choice lots carry a bid of \$5.25 per cwt., but there is no certainty that this will be the highest figure. Outside of butcher stock, dealers are not looking for a very active season, but exporters would sell fast now at \$5.25.

A rather singular thing is occurring in the hog trade. The continuous rule of \$7.75 has proved too much for the packers, who have turned to the Toronto market where they have bought hogs at \$6.30 to \$6.40 and by paying 58 cents freight have got their hogs for less money than Winnipeg quotations.

TORONTO.

Export cattle quiet at \$4.75 to \$5.25; butchers \$4.75 to \$4.90, with \$5.25 paid for a few choice. A few heavy feeders sold up to \$4.75, with a bunch of light stockers selling around \$3. Hogs, \$6.40.

CHICAGO.

Cattle—Beeves, \$4.25 to \$6.40; good to prime steers \$5.35 to \$6.40; stockers and feeders, \$2.90 to \$5.15. Hogs—Market easy, light \$6.35 to \$6.55; mixed \$6.20 to \$6.55; good to choice heavy, \$6.40 to \$6.50; bulk of sales, \$6.45 to \$6.50.



SCENE ON DR. LA BAU'S RANCH, IN THE KOOTENAY COUNTRY, NEAR NELSON, B. C.

We hear a great deal these days about the young man leaving the farm, and we are told that he has become dissatisfied with farm life and has taken up lines of work which require greater ability, and offer greater opportunities. This may be the case in some instances, but in most cases it is himself, not his occupation, that he has become dissatisfied with. He leaves the farm, not because he finds it unworthy of his best efforts, but because in his environment there he finds it impossible to develop into that kind of a man which he desires to make of himself. Now if a means is provided whereby he can realize his ambitions, he is saved to the farm. During the past winter I have found that the Manitoba Agricultural College provides this means. In the lecture room the student not only receives a knowledge of the principles of Agriculture, but he also acquires the habit of coming to correct conclusions, of coming to them quickly, and of expressing them clearly and forcibly. In the College literary society he becomes accustomed to speaking out his opinions and defending them. On the executives of the various student organizations he gets some foretaste of responsible citizenship, and in his contact with his teachers and fellow-students he attains to some degree of that self-confidence which is so necessary to success in life.

Apart, then, from the practical value of the subjects taught in the college, the course has an educational value which makes it particularly desirable to the young man from the farm, and I have no hesitation in recommending it to any who feel their need of the benefits to be derived from it.

Regina, Sask. R. D. COLQUETTE.

Meat Commission to Work.

The long delayed work of the commission of enquiry into the meat trade of Western Canada is about to begin. The Alberta and Manitoba Governments have appointed commissioners, but Saskatchewan has declined to take part. Mr. A. M. Campbell of Argyle, in place of Mr. Scallion who resigned. The commission will begin its work in a few days in Alberta

To Encourage Horticulture.

The Western Horticultural Society has inaugurated a competition among Winnipeg citizens in the care of lawns, home grounds, school grounds, and for the best beds of flowers. The object of the scheme is to encourage the growing of flowers, shrubs and ornamental trees and to work up a rivalry in the practice. The society is prepared to assist others in the same work on the following conditions:

1. Cities, towns, or municipalities holding a horticultural competition will be expected to appoint a committee whose duties will be to assume the management of the competition, attend the enrolling of competitors, give necessary assistance to the judges, and attend to the awarding of prizes.

Any committee in any city, town or municipality of not more than twenty miles square in the province of Manitoba, by guaranteeing six competitors in any competition outlined by the society, will be recognized as holding a competition and will be entitled to the assistance offered by the society.

2. Any city, town or municipality holding horticultural competitions will be supplied free of expense with competition judges by the Western Horticultural society. The duties of the judges will be to visit the homes of the competitors or school grounds entered in competition at stated times during the summer to make reports on the work being done by each competitor.

3. The awards in these competitions will be based on the periodical reports sent in by the judges. A list of the winners in each of the competitions may be published in the local daily at the close of the competition. Suitable rewards could be given in each competition by the city, town or municipality holding the competition.

4. Competitors in a horticultural competition must be resident in the city, town or municipality in which the competition is being held. Professional nurserymen or gardeners will not be eligible for competition. No entrance fee will be required to become a competitor.

HOME JOURNAL

Life, Literature and Education

IN THE WORLD OF LITERATURE AND ART.

Mark Twain has a double in the person of Professor Borzi of Florence, Italy. The humorist lived for several months in that city and was continually addressed by the name of his counterpart. The resemblance is said to be remarkable.

* * *

The Canadian National Council of Women has elected officers for the year and planned for their annual meeting, which is to be held in Vancouver this year. Lady Edgar is the new president of the council.

* * *

Robert A. Falconer, M. A., B. D., LL. D., has been appointed president of Toronto University. To accept this appointment he resigns the position of principal of the Presbyterian College, Halifax, N. S.

* * *

Archbishop Bruchesi of Montreal has asked the city fathers to establish a committee of theatrical censorship to examine the plays to be presented in the local theatres. Two of the French theatres agree to accept a censorship of their plays.

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A movement is on foot to raise a subscription fund for Longboat, the winner of the Boston Marathon road race, to assist him in gaining an education, the lack of which he feels keenly.

* * *

Rudolf Girard, president of the French Canadian Institute of Ottawa, has been awarded the decoration of an *officier d'academie* by the Government of France, in recognition of his literary work.

* * *

Rev. John D. Fleming of Scotland has accepted the invitation to occupy the chair of systematic theology in Manitoba College, Winnipeg. He will arrive sometime in August.

* * *

Madame Schumann-Heink, the famous German contralto, sang in Winnipeg on April 20th. Her previous engagement was in Lincoln, Nebraska, but between the two appearances she went home to New York to see her two children for whom she was homesick.

* * *

Western students at Queen's University Kingston, obtained the following standing:—Degree of B. Sc.—A. S. Campbell, Lashburn, Sask. (civil); G. H. Herriot, Souris, Man. (civil); J. L. King, Fairfax, Man. (civil); W. J. Woolsey, Phoenix, B. C. (mining); R. O. McCulloch, Souris, Man. (civil). Degree of B. A.—S. J. A. Branion, Wolseley, Sask.; G. W. Mackinnon, Revelstoke, B. C.; W. Stott, New Westminster, B. C.; Degree of M. D. and C. M.—A. E. H. Bennett, Vancouver, B. C., (also the Barber prize in mental diseases).

TALKING SHOP.

To begin with, we all do it. The teaching profession is held to be the most guilty, but that is a popular fallacy. The tendency to talk shop is a human weakness confined to no single profession, but common to all. Wherever two real estate men foregather the air is full of such words as frontage, values, titles, prices. When sports-

men meet there is heard the almost unintelligible jargon of the world of athletics. When farmer meets farmer deep calls unto deep to the tune of soils and crops and breeds, and the homemakers find common ground in servants, houses and babies. It is natural that we should like most to talk of what we know most, for then we are conversationally at our best and when we meet a comrade of like mind talking shop is the proper thing to do. But when the companion is one whose interests lie along another direction the hobbies of both should be only used as topics for conversation in so far as the already acquired knowledge of the least interested enables him to comprehend and enjoy what he hears. When he hasn't any knowledge at all the man who insists on talking in the language of his own profession is looked upon as an intolerable bore to be escaped as speedily as possible.

Since silence, though golden, has rapidly depreciated in value during the last years, and men fancy they *must* talk if there is another human within the range of hearing, it is a necessity that a man shall have other resources for conversation than his own particular life work, unless he wants to be regarded as an unmitigated nuisance and avoided accordingly. Every individual should have some mental side lines which will recommend themselves to his acquaintances in general. A farmer of more than the average intelligence will often appear to great disadvantage in a crowd of people who are not farmers, simply because he has confined his mental activities to the main line of his own work and has built no branch line that will connect him with others not of his calling. He misses a great deal by so confining himself and they also are deprived of the good he might have been to them. There is a time for everything—a time to talk shop and a time to refrain from talking shop, and it is the popular man who never confuses the seasons.

PRACTICE LAUGHING.

The art of looking pleasant is being lost in the rush and hurry of the twentieth century. Get on a street car at an hour in the morning when people are going to shop and office and you can ride for blocks and never see a smile or hear a cheerful word. The conductor thrusts his fare box at you as if it would please him to do you a deadly injury with it instead of collect your fare. The man who gives his seat to a lady does it with no apparent graciousness and she accepts it with no apparent gratitude. The mildest expression on any face is serious, and most frequently the drooping mouth corners and perpendicular frown wrinkles on the brow indicate more than gravity—worry, anxiety, discontent and above all, the feeling of being rushed. Board a train and you witness the same gloomy melancholy on almost every countenance. One would think the railroad company in carrying passengers from one point to another was actuated by the keenest feeling of revenge. The children are the only joyful members of the party and their hilarity usually succumbs to nagging and reproof. The wretched service, the slow rate of travel, the meals, the hotels along the route—anything will do to nourish the aggrieved spirit and print a record of its emotions on the face.

If this cast of countenance were put on as a mask to wear out of doors it might perhaps be justifiable, but it isn't removed with the overcoat and hat. It is worn in the house, kept on at meals and not even discarded at bed-time, and the meals, the bills and the children serve as pretexts for its constant wear within the walls of home.

What we need is to limber up our stiffened faces with smiles whether we have any particular reason or not for smiling at the time. The way to correct a bent spine is to straighten up every time we think of it, and the habit grows until the erect position becomes natural and mechanical. The way to break up a gloom-bound face is to smile every time we can remind ourselves of it, even if it is no smiling matter we have on hand at the time. There are plenty of good and funny things to smile over, but in the past we have passed them by because it was too much trouble to wrinkle our stiffened features.

UNREST IN INDIA.

From Lahore in Northern India came a despatch the other day stating that there was among the Hindoo students unrest, so marked that volunteers were being recruited as a precaution. It is more than probable that these reports are exaggerated, but that disturbed conditions should prevail in the schools is not surprising. Higher schools and universities on the plan of Western educational institutions have long been established in India, and thousands of young men of all classes have taken advantage of the easy terms to secure a general education. But when they have graduated there is nothing for most of them to do. A few are wealthy or can go into mercantile pursuits—for the others there is open only the civil service or the law and the applicants for these positions far outnumber the vacancies. A little learning is a dangerous thing when there is no use to be made of it. It has a tendency to ferment in the brain and cause trouble.

Of course the remedy for all the ills to which India is heir—famine, disease, ignorance—is an independent responsible Government, according to the students, whose studies have taught them the dignity of such a rule. But India is in no condition yet for fully responsible Government and will not be for many years. For one thing there is no Indian nation. If there were or had ever been, there would be to-day no India of ours. What force could overthrow a united nation of two hundred million people? But the house was divided against itself and it fell once—Bengalis against Sikhs, Rajputs against Ghoorkas, and the Mahrattas against them all. In language, customs, religion, everything, these tribes are still almost as diverse as if an ocean separated them, and if the strong controlling hand of their military masters were removed the pieces would fall apart again as hopelessly as before.

Lord Curzon, the value of whose work in India is not easily estimated, holds out this future for the Indian empire:

"If our empire were to end to-morrow, I do not think we need be ashamed of its epitaph. It would have done its duty by India and justified its mission to mankind. But it is not going to end. It is not a moribund organism. It is still in its youth, and has in it the unexhausted purpose. I am not with the pessimists in this matter. I am not one of those who think that we have built a mere fragile plank between the East and West which the roaring tides of Asia will presently sweep away. I do not think our work is over or that it is drawing to an end. On the contrary, as the years roll by the call seems to me more clear, the duty more imperative, the work more majestic, the goal more sublime. I believe that we have in our power to weld the people of India to a unity greater than any they have ever heretofore dreamed of, and to give them blessings greater than any they now enjoy. Let no man admit the craving for those who have won India cannot hold her fast, we have only made India to our own undoing. That is not the true reading of the signs. That is not my forecast of the future. The message is carved in granite on the face of the rock of doom—our work is not done and it shall endure."

WALKING WITH GOD.

Jesus Himself drew near, and went with them. But their eyes were holden that they should not know Him.—St. Luke xxiv.: 15, 16.

"Come Thou as Guest within the breast

That burns to follow Thee.
Within our heart of hearts,
In nearest nearness be;
Set up Thy throne within Thine own,
Go, Lord; we follow Thee."

There is a wonderful biography contained in one short verse in the Book of Genesis. It is the story of a life which shines still in radiant beauty, though 6,000 years have passed since it was lived on this earth: "Enoch walked with God; and he was not; for God took him." He was translated that he should not see death, but that is not the fact which makes his record so splendid; but, as we are told in the Epistle to the Hebrews, he "pleased God." Anyone who is ambitious to achieve greatness should study that short biography and discover the best kind of greatness to aim at. Let us all aim at the highest; and the highest greatness is not reserved for a few, but is open to old and young, rich and poor, educated and ignorant. We can—each one of us—walk with God and please God. Then let us do it—NOW.

Though God may seem very far away, yet He is really close beside us. We may know this as a matter of theory and yet fail to realize His Presence, and so miss the gladness and strength of walking consciously with Him. We may, in the "darkness of a half-belief," grope for His heart, like a child blindly seeking its natural resting-place, as Margaret Deland says:

O distant Christ! the crowded, darkening years
Drift slow between Thy gracious face and me;
My hungry heart leans back to look for Thee,
But finds the way set thick with doubts and tears.
My groping hands would touch Thy garment's hem,
Would find some token Thou art walking near;
Instead they clasp but empty darkness drear,
And no diviner hands reach out to them.
Sometimes my listening soul, with bated breath,
Stands still to catch a footfall by my side,
Lest, haply, my earth-blinded eyes but hide
Thy stately figure, leading life and death;
My straining eyes, O Christ! but long to mark
A shadow of Thy presence, dim and sweet,
Or far-off light to guide my wandering feet,
Or hope for hands prayer-beating against the dark.

O Thou! unseen by me, that like a child
Tries in the night to find its mother's heart,
And weeping wanders only more apart,
Not knowing in the darkness that she smiled.
Thou, all unseen, dost hear my tired cry,
As I, in darkness of a half-belief,
Grope for Thy heart, in love and doubt and grief;
O Lord, speak soon to me—"Lo, here am I!"

But let us think of our text! Two men were walking along the road between Jerusalem and Emmaus, talking sadly about the tragedy of the first Good Friday, and feeling utterly hopeless and disheartened. Suddenly they noticed that a Stranger was walking with them. As they listened to His quiet words they learned that life had a grander object than just the attainment of present glory or happiness. They began to dimly understand the great mystery of the perfecting wrought through suffering. They saw that an easy, painless victory was a very small thing compared with patient, heroic endurance and self-sacrifice for love's sake. Their hearts burned within them as the mysterious Stranger explained their own Scriptures, showing that

all through the ages God had, been leading up to His grand revelation of Love; preparing men by types, sacrifices and prophecies, so that they might understand that it was no new thing for glory to be won through suffering and shame.

That walk to Emmaus was indeed a bright spot in their lives, an hour which would stand out in memory as long as they lived. They had walked with God, though they did not drink in all the sweetness of the experience because their eyes were holden that they should not know Him.

How we should have liked to have made one of that little company. Think what it would have been like to have heard the words of Him who had passed through death as Conqueror and yet lingered in the world He loved. Divine tenderness must have thrilled in His tones, and His face must have been beautiful as He pleaded with them to trust God in spite of the downfall of their hopes.

But what is the use of wishing we had been there, when we know quite well that we have never had such an opportunity. Have we not? Then the great Christian faith, which can transfigure the dullest lives and sweeten the most bitter trials, cannot be founded on truth. He who is the Truth has said that where two or three are gathered together in His name He will always be present, and that He will be with His own until the end of the world.

We can, to-day, walk with God as truly as those disciples did that Easter afternoon; and if our eyes are holden so that we do not know Him, it is entirely our own fault.

Think of the joy of walking hand-in-hand with our Lord! Perhaps we are living through a time of perplexity and cannot see how the tangle is to be straightened out. We can look up in His face and tell Him simply and trustfully that we put our affairs into His hands, that we are willing to do what He commands, and to accept whatever He gives, knowing that He is able and willing to make all things work together for our good. We can, as has been said, tie our lives to God at the center, and so remain fixed in the midst of turmoil and unrest because our anchor is sunk deep in the Heart of God.

To walk with God all the time, conscious of His presence and leaning on His strength, is to drink in joy and peace with every breath and to press on eagerly in spite of rocky road and stormy weather.

We are worried and anxious, careful and troubled about many things, just because we forget or doubt His presence. It cannot be that we doubt His power. The universe in which we live—from the wonderful, blazing, life-giving sun, down to the tiniest insect whose life is beyond our powers of understanding—testifies with millions of voices to His power. We can hardly doubt His love—the Cross witnesses to that with a voice which grows louder all through the centuries as we see more and more that no other ideal of love can compare with that once for all revealed on Calvary. No, what we doubt is not God's power to love, but His near presence. We could not murmur and complain if we felt that He was close beside us, for if we walked always with Him we must know certainly that all is well. Then the pressure of daily work could not crush out all freshness and spring. Why does it fret and chafe us until we grow cross and impatient? Is it not—partly at least—because it is piling up ahead of us and we see no way to get it done? There is always more work than we have time or strength to do? Yes, there is more work that we can see, but in reality God never requires of us more than we can do. To walk with God means to take duties straight from His hand, one at a time; not to stay awake at night wondering how we can ever get through all there is to do. There is a wonderful gladness in the remembrance that our days are planned out for us, down to the smallest

THE QUIET HOUR

"This one who died an hour ago,"
He smiled, "She is not dead!"

"Asleep, then, as Thyself did say,
But Thou can'st lift the lids that keep
Her prisoned eyes from ours away."
He smiled, "She doth not sleep!"

"Nay, then, tho' haply she doth wake,
And look upon some fairer dawn,
Restore her to our hearts that ache:
He smiled, "She is not gone!"

"Alas! too well we know our loss,
Nor hope again our joy to touch,
Until the stream of death we cross!"
He smiled, "There is no such!"

"Yet our beloved seem so far
The while we yearn to feel them
near,
Albeit with Thee we trust they are."
He smiled, "And I am here!"

"Dear Lord, how shall we know that
they
Still walk unseen with us and Thee;
Nor sleep nor wander far away?"
He smiled, "Abide in Me!"

HOPE.

There is not any benefit so glorious in itself but it may yet be exceedingly sweetened and improved by the manner of conferring it. The virtue, I know, rests in the intent; the profit in the judicious application of the matter; but the beauty and ornament of an obligation lies in the manner of it.—Seneca.

HEART O' ME.

Heart o' me, the world is sweet, the
violets are blooming,
All the tender, greening things are
laughing in the sun;
Sad, my heart? Be glad, my heart!
Summer time is coming!
Bird and brook are singing for the
joy-days now begun.

Oh, the weary, weary days, and nights
that followed after,
Oh, the bitter tears we shed, and oh,
the mist of pain!
Sad, my heart? Be glad, my heart!
Listen to the laughter!
How the sunshine glimmers on the
blossoms wet with rain!

Heart o' me, the world is sweet!
Remember not thy sorrow,
Follow after running brook, and
bloom, and bird, and bee!
Sad, my heart? Be glad, my heart!
Greet the good to-morrow!
Wist ye not the golden world was
made for thee and me?

NEVER AGAIN.

I wish the kettle would sing again,
Just as it used to do—
I wish it would sing of a lion slain—
Of a pirate crew on the Spanish Main—
Of a clipper-ship on the sea-way high,
With a cabin boy and the Boy was I—
Just as it used to do.

I wish the kettle would sing again,
Just as it used to do.
Of a little girl in a bonnet red,
Saved by a prince from a hydra-head
That lurked in the corn that towered
high,
And the girl was She and the Prince
was I—
Just as it used to do.

I wish it would sing of war's alarms,
The booming of cannon and clash of
arms—
Of a blue-clad boy where the strife
ran high,
With face to the steel and willing to die—
Just as it used to do.

I wish the kettle would sing again,
Just as it used to do.
The lyrics it crooned and the tales it
told—
But the hearth is chill and the years
are old,
The fancies it whispered have all taken
wing,
And never again the kettle will sing
Just as it used to do!

—JOHN D. WELLS, in *Kansas City Post*.

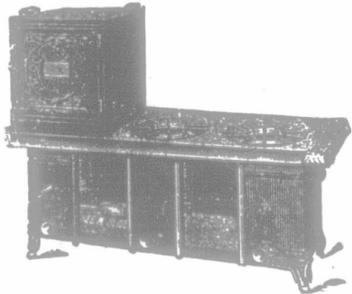
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INGLE NOOK CHATS

A SUPPORTER OF B. S.

Mr. Editor:—After reading the letter from B. S. and your comment on the same in issue of March 27th, I felt impelled to express my approval and confirmation of all her letter contained. When a man has lived to be fifty-eight years old, and has not reached the conclusion that, in order to have a variety of food, a garden is a necessity, I fear the editor has another guess if he concludes that all a wife would have to do to obtain one would be to ask. I am the son of a "cannot afford it" man, and I have heard my mother use every argument in favor of a garden for years, until she gave it up in despair and submitted without a whine or scold to being deprived of what she knew the health of herself and children required. What argument she could have used to obtain her wish I know not. But the argument I would have liked to use would be no milk-and-water one. There is no closet on our farm, neither is there a well or a drain. My mother knows the need of all those things, yet she has failed to find the argument suited to his intellect, that is capable of drawing the necessary money out of his purse. When I have a home of my own I will have a garden fenced and a well. By the way, Mr. Editor, if you could let the women around these parts know how to get those things I am sure if ever you run for any office where women have a vote you will get this entire community. If I am allowed another, next time I will give my opinion of Dr. Davidson's lecture. In the meantime I remain a reader of your valuable paper.

J. H. J.

(The Editor said, and maintains that a man of average mental ability will be persuaded by quiet arguments of the desirability of having a garden. A man who refuses to be convinced of what common sense makes plain has something seriously wrong with his mental processes; his intellect is warped and the eyes of his understanding darkened.)

We are glad that our correspondent has mapped out a totally different course for himself when he has a wife and home of his own. Would it not be a good plan for him to practice a little and do some experimenting on a garden for his mother to get his hand in?)

WHAT CAN BE DONE WITH A BOX.

An Ingle Nook member has asked to be told how to make "rough things out of boxes," to help furnish the new settler's home. Letting ingenuity take the place of dollars, one can make some pretty smooth (that isn't slang) things out of boxes, and there are so many of them that it is hard to tell where to begin.

With two boxes, each three feet long,

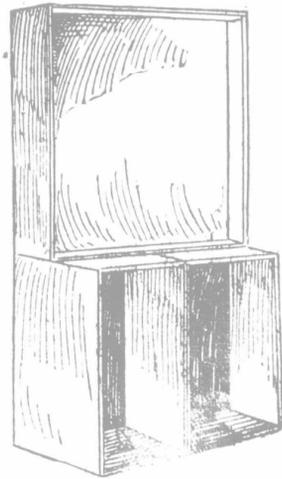


FIG. 1. A CUPBOARD IN THE MAKING

two and a half feet wide and sixteen inches deep, you can make a very good couch, by screwing them tight together end to end, and putting on a padded cover of bright chintz or cretonne with a frill the depth of the couch tacked on with brass tacks around the front and ends. If the tops are put on with hinges and fit well, it makes an excellent place to store bedding when not in use.

Very serviceable washstands can be made from boxes, and made to look quite dainty too. Choose a box about two feet and a half high and with an end large enough to hold the toilet articles. Remove the front and the end that is on the floor. Use that end to make a shelf a foot from the top to hold your shoes and bedroom slippers. Cover the top with a piece of white blotting paper fastened down smoothly over the edge with tacks. The box may be provided with a skirt of flowered cretonne, or with white dotted muslin over glazed lining of a favorite

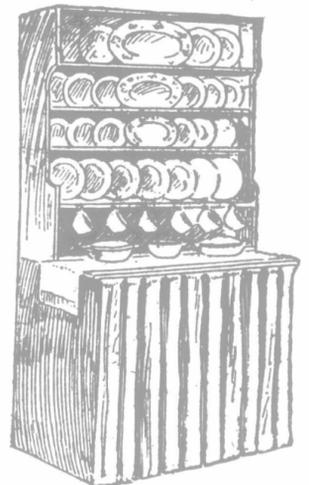


FIG. 2. THE FINISHED PRODUCT

shade, pink, blue, yellow or green, with a cover on the top to match. If space is not plentiful try your hand on a three-cornered washstand by leaving only two adjacent sides on a square-ended box one and a half feet to the side, and cutting the top diagonally across. Push it back into a corner, cover the top, and drape the front as before.

A wardrobe can be made in the same fashion by fastening securely a larger triangular piece in the corner of the bedroom at a height of about six feet, putting in a shelf for hats a foot down from the top, and placing a row of hooks round the two sides. Then hang a long curtain before it to keep out the dust.

With three boxes of the proper dimensions can be made a piece of furniture that will do equally well as a kitchen cupboard or a book-case. Two of them should be of the same size and shape, two and a half feet long, a foot and a half wide and two feet deep. Stand them on end side by side with the open faces toward you and screw them tightly together. (Screws are better than nails, and use half-a-dozen.) On top of them place another box, not more than eight inches deep if for a book-case, and not more than twelve if for dishes. Have it the same size across as the other two boxes together. make it even from the back and screw it down to them. In this upper part put three shelves, fixing them beyond chance of slipping with any weight put upon them. Nail the whole thing a light oak or cherry or some color that will match the rest of your furniture. If you are making it for a cupboard, get a strip of wood along the outer edge, and nail it so that dishes will not slip off. If for a book-case, that is, a book-shelf, use a piece of muslin, covered with a favorite patterned paper. In the

bottom compartment on one side put little shelves for holding tin cans and packages, and on the other drive nails to hang up kitchen utensils. If you can have glass doors for the top and wooden ones for the bottom, so much the better, but if not, curtains will do, or better still, a roller spring blind of the right size put on with the proper fasteners. It will keep out the dust better and is easily handled. If you design it for a book-case cover the top of the lower boxes with heavy blotting paper, keep the lowest of the upper shelves for writing materials, and fill the upper part with books. You can use one of the two lower compartments for papers and magazines and keep the work basket and stocking bag in the other, hidden by a curtain of pretty scrim which is hung on a brass rod over the lower half of the book-case.

There are numerous other things to be done with boxes, but I'm taking up too much space, and would like to hear from some of the rest of you what uses you have discovered for these articles.

DAME DURDEN.

AN IDEA FOR YORKSHIREMAN.

Dear Dame Durden:—I am writing again to your lively corner. You all seem like old friends to me, for I read your letters carefully every week. I wish to thank you and the members for your kindness in sending me so many recipes for lemon cheese. I am taking the liberty of sending two recipes for "Yorkshireman" if he is fond of Irish stew or soup. For the soup, take pieces of boiling meat and cut up fine; add salt and cover with water; let boil until tender. For Irish stew take

a hole in them. I was told this the other day as a sure cure and thought it might prove useful.

MOTHER OF SIX.

MORE GARDEN PLANS.

Dear Dame Durden:—I had a pleasant surprise from a bachelor last week. I had been intending to send for rhubarb roots, but dreaded the trouble their delivery would occasion. We live so far out, and the roads are simply shocking about the time they would be delivered. I was lamenting to one of our bachelors friends and he said, "I have a few dozen roots that I don't need, which you can have." I did not embrace him, but my gratitude was none the less sincere and maybe his was increased. Might it not afford a little pocket money to someone to plant the seed, as this man did, and sell the roots for 20 cents apiece? I was glad to get them at that price near at hand. I shall plant a large number of seeds this year and gladden some newcomer by the gift of a few roots. Some of these fine days I shall be out overlooking the planting of my rhubarb roots and thinking kind things about the giver. I have cabbage and tomato seed planted and am going to try squash and cucumber; also corn and beans. They may be a failure, but I delight to try what I can do. I have lilac seed planted in cans in the house, and a large number of seeds to plant outside in spring. I intend to raise enough to go all around our garden fence. It will seem like a breath from Ontario to smell their fragrance. I may not live to see them bloom, but they will gladden the heart of someone else. The snow is melting



PRINCE RUPERT, B. C., TERMINUS OF GRAND TRUNK PACIFIC.

This is the beginning of a town in a part of the Dominion of whose resources little is known as yet

any meat you have on hand and cut into small pieces. Cover with cold water; add a little salt and pepper; and when nearly cooked put in small slices of potatoes and onions. Add dumplings, too, if you care for them; 2 cups flour; 1 large tablespoon of butter or lard rubbed into the flour; 2 teaspoons baking powder; and milk or water enough to make a nice dough that will not stick to the fingers. Roll out thin, cut into small pieces and add to the stew about five minutes before taking from the fire. When done pour it boiling hot into glass sealers that have been warmed, and seal up tight at once. Be sure the glass tops and rubber rings are in good condition. You may also put away fruits by the same method, always being sure that it is boiling when put in the sealers and always seal tightly.

May I tell "Athreb" a way to keep her vegetables from going sour? Take corn, peas, beans or tomatoes; put in cold water and wash them nice and clean; then put into a large granite kettle and just cover with water. Add salt and let boil just a few moments and then seal up tight, the same way as for the stew or soup. Done this way there is no danger of their spoiling. I have tried it for years and always had success. Be sure the sealers, rings and glass tops are all in good condition. You can finish boiling the vegetables when you want to eat them. They then seem fresher. A good way to keep hens from eating the eggs is to touch a match to the end of the upper bill. A little ball will form on the end of the beak. She can roll the eggs around, but cannot pick

very rapidly to-day, and has formed a small river just a short way from our door. I can hear its pleasant murmur where I sit. It is lovely to look upon; it is so busy and happy. Should it interest the Ingle Nook I will let you know of my failure or success in my garden operations. B. S.

A QUESTION OF YEAST.

Dear Dame Durden:—I feel awfully mean and small coming this way, but I think you can help me out of a difficulty, and perhaps help some others at the same time.

How much of the putty-like yeast that they use in England (you know the stuff; it will only last about two or three days) is equivalent to a yeast cake of ordinary size? I want it to make up the following recipe for "Pop," which I think is quite innocent:—Put the thinly peeled rinds of four lemons in a large crock with 2 ounces bruised ginger; 2½ pounds sugar, (loaf preferably), ¼ ounce cream of tartar. Pour over 2½ gallons of boiling water and when warm add 2 table-spoonsful of yeast (the putty kind in question). Stir and let stand till next day. Skin the yeast off the top, pour the liquid off without disturbing the sediment and bottle. It will be ready in two days.

ERRATA.

(I do not know what amount of yeast cake you would have to use instead of the other variety. Perhaps some of our members who have used both kinds can tell us. You needn't have those sad feelings any more. Come any time.—D. D.)

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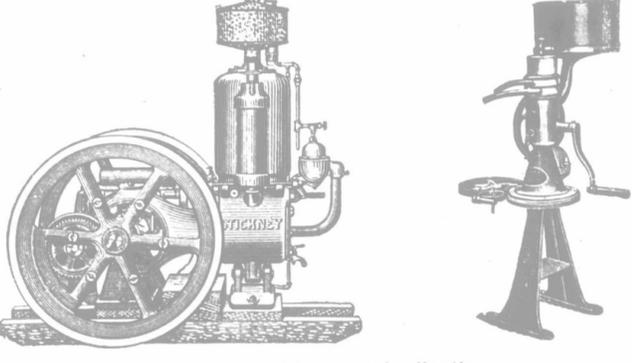
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WINNIPEG, Man.

LEMON CURD.

Dear Dame Durden.—I saw in the FARMER'S ADVOCATE someone was asking for a lemon cheese recipe. I have got one for lemon curd, that someone may like to have.

Lemon Curd.—Take one quart of milk and let it just come to a boil. Then add one cupful of buttermilk and let it simmer a few minutes. Take out the curd and strain the whey from it. When that gets cold heat one or two eggs well; add the eggs to the curd and also one half cupful of sugar, juice of half a lemon, little nutmeg grated and a few currants. Mix altogether and this will make filling for two pies. Make a good pie crust, but just the bottom crust is needed.

LEEDS YORKSHIRE LASS.
(We shall be glad to have other recipes from you. I left out the first one you gave, because it has been given several times, but the lemon curd is new.—D. D.)

KEEPING AHEAD OF THE WEEDS.

Dear Dame Durden.—I am just running in a moment to give a suggestion to the garden-makers or promoters who may come against the stone wall of "no time." It is this. Try planting the garden in rows far enough apart to allow of horse cultivation. If taken in time when the first weeds appear and continued at proper intervals (once a week) it saves untold worry and work. And often a horse and big boy can be got for an hour or two or the man won't mind a little extra work after supper.

I pity from the bottom of my heart the woman who has to live with the kind of farmer "B. S." describes. Don't you think it is more the man than the farmer. Though I do believe a man has more scope for being either good or bad, tyrannical or pleasant, on a farm than anywhere else in the world.

But to come back to the garden. It is a very real feeling on the farmer's part that he can't spare time for a garden. The way people have to hurry in the West leaves very little time to breathe and eat, let alone anything else. But at the same time all hands should turn in and do what is possible. And as I said before, a garden planted in rows three or four feet apart to allow of a horse cultivating it, saves much valuable time.

I must go, I really oughtn't to have dropped in, for the bread is 'nt baked yet, but I wanted to contribute my mite towards helping someone with a garden this spring.

HELMET OF RESOLUTION.

ANYONE FROM SUFFOLK?

Dear Dame Durden.—I have had so much help from the Ingle Nook that when I read your request for lemon preserve for cheese cakes I felt obliged to do my share. I enjoy reading the chatterer's letters and whoever sent the "quick yeast" recipe about three years ago I am sure would be pleased if she knew the boon it has been to me. Although she said freezing would spoil it, I find it doesn't hurt it in the least, and everything freezes in our house at night, so am not able to set bread overnight.

There seem to be quite a few Lancashire lasses writing to you, but I never hear of a Suffolk girl in this country. As I am a native of Suffolk (*Maather*) myself I should be interested to know if there is another among your many readers.

I am looking forward to your furnishing talk and hope you will tell us how to make some tough things out of boxes, etc., as the dollars are mighty scarce with us new settlers.

SUFFOLKITE.
(Your idea about using the boxes was such a good one that I want to work at it at once. I hope you will be able to use some of the suggestions, and perhaps others will find them useful too.—D. D.)

ENGLISH MUFFIN MACHINE WANTED.

Dear Dame Durden.—I am very much troubling you by asking for the Ingle Nook. I enjoy reading the letters so much every week.

**Are You The Man?**

For an Ideal Home in the glorious
KOOTENAY FRUIT LAND

Have you been dreaming of a home in an environment where you could live by the way as you journey through life?
Let your dream come true.

The Opportunity

The famous Cold Spring Ranch, the most extensive improved property in the Kootenay, is now being subdivided. It is on far-famed Kootenay Lake, eighteen miles from Nelson, the capital of the Kootenay, on a Canadian Pacific transcontinental route; rail and water transportation at the door. Wild land, cleared land, orchard land from which to choose. Any size lot from three acres up. Abundance of water—springs and running streams. Prices average about \$100.00 per acre. Easy terms. Orchards will net \$200 to \$500 an acre within three years. No worry from coal strikes—unlimited supply of wood. A big income from vegetables and berries while the orchards are growing. Poultry, too—eggs 75c a dozen in Nelson.

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Cold Spring Ranch makes a splendid location for a colony or neighborhood group. The ranch home is the most comfortable, convenient and modern farm home in the Kootenays. Piped with spring water, good plumbing, large rooms, wide verandas. It has a slightly location overlooking Kootenay Lake. Trains stop at the gate and steamboats land right in front of the house. Large greenhouses. Plenty of water for forcing vegetables.

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Ideal Climate

is claimed for the Kootenay country of British Columbia. Just winter enough for a tonic and to give quality to fruit. Just altitude enough to escape excessive moisture. Warm summer days, cool nights. No blizzards, no mosquitos, no sandstorms, no cyclones or terrifying thunder storms. Grand mountain lake scenery. Freedom from fruit pests. Irrigation unnecessary.

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Apples, pears, peaches, cherries, prunes, plums, strawberries, raspberries, gooseberries of this district unrivalled. First place in competition with all the British Empire.

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Stiff duty on U. S. fruit, rigid inspection of importations, and an area to supply of a million square miles that cannot raise fruit and into which 300,000 people are going annually. High prices, quick sales. Excellent transportation facilities. Very limited area of good fruit land. Big demand, small supply.

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Choose your piece and "get busy" at once. Don't put off the day of your happiness or lose the first section of the famous Cold Spring subdivisions.

At present all applications for a subdivision of this property will be received subject to preference for applicants for the farm house piece and their friends and associates. If you and your neighbors are thinking of a new money-making location in a mild climate with streams and beautiful natural surroundings, write at once for particulars.

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y country st winter to give altitude moisture. l nights. itos, no terrifying mountain om fruit try.

Fruits cherries, es, rasp- s district competi- Empire

World d inspec- n area to files that o which nually. Excellent ery lim- nd. Big

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ubdivision subject to arm house iates. -If g of a new d climate s surround-

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There's nothing like a test in your own oven to prove the Strength, Purity and Value of Gold Standard Baking Powder.

Just buy a tin from your grocer, take it home and try it yourself.

Gold Standard is a pure, wholesome Baking Powder and is in every way the equal of those sold at more than twice the price.

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of ground, growing Ginseng. Another is making hundreds of dollars per year growing Mashooms in an ordinary cellar. Others are making big money growing Golden Seal and other medicinal plants, of which the wild supply is fast becoming extinct and prices rapidly advancing. YOU CAN DO THE SAME. Our new monthly magazine, PROFITABLE HOME INDUSTRIES, tells you all about it; full details; letters from successful people. If you want to make money, write us to day. Price \$1.00 per year, 3 months trial 25 c, sample copy 10 c.

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Right on Time Right on Quality Right on Price Farmer's Advocate of Winnipeg, Limited

could give me a good recipe for English muffins, the kind we used to toast before butter. I am sending a recipe for cake that I think "Todding" and the others will like. In spite of its name there is no coffee in it.

French Coffee Cake.—Cream together a quarter pound of butter and half a pound of sugar. Add half a cup of sweet milk, 1 egg well beaten, 1 1/2 cups of flour, 1 teaspoon baking powder and the desired flavoring. Bake in a moderate oven.

I have quite a number of other recipes. May I come again?

NORTHUMBERLAND. (Here is one recipe for muffins, but whether it is of English brand I do not know. Take 2 level cups of flour; 1/2 teaspoon salt; 2 eggs; 3/4 level teaspoons baking-powder; 2 tablespoons melted butter; 1 cup milk. Mix dry ingredients together. Mix all wet materials in a separate dish. Add wet to dry. Add melted butter last of all. Bake in a hot oven from fifteen to twenty minutes.—D. D.)

SORRY FOR LONESOME.

Dear Dame Durden:—I have been a silent reader of the Ingle Nook for some time, but must come at last thanking you for the help it has been to me, and to bother you for that bread recipe which so many are praising. I am greatly pleased with the Ingle Nook and would not like to be without it. I feel sorry for "Lonesome" if he tries to live on those sour-dough sinkers of which he speaks. I should advise him to try living on something with a little less weight in it. I was much pleased to read the letter written by "B. S." on the farm garden, for I think it is a thing much needed. Working in the garden is just what suits me, and I would not be without one if I possibly could help it. I think that a garden is a person's chief living. Well, I must not stay too long or you will not want me to come again. I will close by sending a couple of recipes which I hope will be of use to someone.

Drop Cookies.—Cream 1 cup of butter and 1 1/2 cups of sugar together. To it add 4 well-beaten eggs; 1 teaspoon of soda dissolved in 4 tablespoons of sweet milk; 1/2 nutmeg; 4 cupfuls of flour in which have been sifted 2 teaspoons of cream of tartar. Drop from a spoon on a buttered pan; place three or four raisins on each cookie, and bake in a quick oven.

Cake.—One cup of sugar; 3 eggs; a piece of butter the size of an egg; 4 tablespoons of baking syrup; 1/2 cup of sour milk; 1 teaspoon each of nutmeg, cinnamon and cloves; 1/4 of a cup of raisins; 1 teaspoon each baking powder and soda. Dissolve the soda in a little warm water and add enough flour to make rather a thick batter. Bake in layers.

E. H. (We are glad that your silence is broken at last, and hope that it never will be mended. Did you notice that I dropped your pen-name? "Morning Glory" was chosen by one of our members a long time ago. She has not written lately, but perhaps we shall hear from her now that she has been in danger of losing her name. Will you choose another and let me know? The directions for that popular bread are as follows:

The Yeast.—Six potatoes peeled and boiled, then mashed without straining. Put one cup of flour in a bowl, mixing to a smooth paste with a little cold water; then stir in a pint of boiling water, until the mixture is like starch. Add the potatoes, a cup of sugar and a handful of salt and let cool until lukewarm. Then add two yeast cakes which have been soaked. This yeast should stand three days before using, but will keep indefinitely and a new supply can be made from a cup of the yeast instead of using yeast cakes every time. To make the bread allow 3 cups of the yeast to 4 loaves of bread. To the 3 cups add a quart of water and a little salt; then mix in flour until stiff. Let rise in a warm place for two hours. Shape in loaves, place in bread pans and let rise again for an hour and a half or two hours. Bake in a moderate oven. Bread mixed in this way at eight in the morning will be baked before two.—D. D.)

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Never Saw Better Skimming Than was done by the

Magnet Cream Separator

This is the verdict of the experts engaged by the Crescent Creamery Co.,



Winnipeg, Man., Apr. 20th, 1907. The Petrie Mfg. Co. Limited, Winnipeg, Man.

Gentlemen:—I have this day made two tests from the MAGNET Cream Separator No. 1.

Test No. 1. Per cent. of fat in milk 3 to 4 Temp. 85 " " cream 23% " " skim milk 1/2 space in skim milk bottle

Test No. 2. Per cent. of fat in cream 33% " " skim milk 1/2 space. I find the MAGNET as close a skimmer as any separator I have tested, also find it easy to turn.

Yours truly, Fred. Lutely, Milk and Cream Tester for the Crescent Creamery Co., Winnipeg, Man.

The test shows only about 3 ounces butter-fat left in a ton of milk. This shows the wonderful perfection attained by the MAGNET.

No special machine was built for this test. It was made with the regular and only machine that we make. Every buyer of a MAGNET Separator gets one that will do good work as the one tested at the Creamery. Note the remarks about easy turning? on these two points the MAGNET has no equal viz:—

Close skimming and Easy Turning. Add to these great points the square gear, double support to the bowl with one piece skimmer, so easily cleaned. These five points are only found in the MAGNET, which places it in a class by itself. Write for our 1907 Catalogue.

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No loss, no inconvenience.

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Ship us a few cans on trial and you will become a regular customer.

WRITE ABOUT IT TO-DAY

The
National Creamery & Produce Co.,
Limited.
Winnipeg, Man.

Household Sanitation.

BY MARY E. ALLEN-DAVIDSON M.D.

CHAPTER IV.

(Continued from page 661.)

our sleeping rooms, children, even a greater proportion of their time. Because the vitality of the body is low at night. Every organ is relaxed and often extreme weariness is present. Because the resisting power against disease is lessened. Because we are helpless during sleep, inert, do not move from place to place, so as to change faulty conditions or impure air. Because the body, to be healthy, must have health-giving sleep, must be rested, refreshed and re-invigorated for the new day's work; and this is impossible in a close, stuffy, over-crowded, unventilated sleeping room.

Mothers who are extremely careful of their children in other ways will crowd several of them into a small room, carefully close every window, perhaps the door, and leave them to breathe over and over again the poisonous exhalations from their own lungs, also the odors and organic particles from their bodies. Is it any wonder that they toss, grit their teeth, cry out and spend the whole night in a fitful slumber and at last wake up irritable, limp and unrefreshed, without a healthy appetite for breakfast? also that they contract coughs, colds, bronchitis and other throat troubles so readily? It is now conceded that consumption is caused largely through lack of plenty of pure air, and this occurs mostly at night, by breathing air that is contaminated by the respiration and transpiration of human beings. There is always an army of tubercle bacilli encamped around us ready to storm the breaches. If the resisting power is normal, they are thrown out or destroyed. Our numberless vigilant body-guard of "little corporals" the leucocytes or white corpuscles, patrol all the liquid highways of our body; in the minutest blood-vessel there they are guarding the gateways of life and destroying or throwing out every microbic enemy. If these corpuscles are well nourished by pure blood their work is always well done. But if the blood be poisoned its food value is lessened, it loses its tonic and recuperative life-giving properties. The tissues are starved and poisoned, the resisting power is lessened and consumption gets a hold on the weakened system. To foul air, darkness and dampness the great white plague owes its power. We have all gone into bedrooms especially where several occupied the same room where the air was so fetid as to cause nausea after coming from the pure outside air. See to it that a free access of pure air is secured to your sleeping room's day and night. Use the ventilating board, previously described. Do not close the windows except to prevent direct drafts. Moderately cold air is good for the lungs, as it expands in the air cells by being heated to the body temperature and so causes expanding and contracting movements, that tone up the cells and aid them in their work of throwing off waste material and taking in food—the purifying oxygen.

Every morning the bed coverings should be removed—not just thrown back, all blinds sent to the top, every window and door opened and the room thoroughly windswept. Shake your coverings and leave them in the sun and wind.

The bedroom should be used only as a sleeping room. No clothing should be hung on the walls, no trunks or boxes stored in it.

Never use the same underwear at night that is worn during the day. Put your day clothes where they can be aired before morning—not in a heap beside your bed. Hang the night dresses in the air and sunlight, while the bed clothes are airing. When doing up the room don't roll the night dresses into a bundle and shove them under the pillows or under the spread, but hang up in an airy closet, never let the closet doors shut. If you have a ventilator in the room, use it. If you haven't one, hang a window blind over the bed where they can be opened to create air currents.

Empty slops as soon as possible. This should be done

breakfast, as the foul the air. Be sure to wash out and dry with a cloth kept for this purpose. Wash cloth and hang outside when through. Drop a little carbolic acid in your slop pail after emptying the slops. Pour in boiling water cover and let stand for a while; then empty and leave outside in sunlight. This will keep slop pail that it will be clean and not a source of contamination. Never leave slop pails standing, but empty at once and never keep them in the house when not in use.

Don't be in a hurry to make up the beds. Give them plenty of time to air. Carry bedding outside frequently for a good freshening up.

The next and last talk will be on food contamination and personal cleanliness.

PRIZE ESSAYS FOR THE LAST COMPETITION.

Not so large a number took part in the discussion of the "Distribution of Wealth," but from the essays sent in we have selected the two that seem to us the best for reproduction in these columns. The writers are A. W. McClure, Saskatchewan, and Geo. Armstrong, Manitoba. If these two gentlemen will let us know their preference in the matter of prizes they will be forwarded at once. They may select a Literary Society pin, a book, or a year's subscription to the FARMER'S ADVOCATE.

THE DISTRIBUTION OF WEALTH.

If I have caught the meaning correctly of Mr. Campbell's speech on Agricultural Economics, our boasted civilization has brought farming, as a means of obtaining a livelihood, to a very low pass indeed—compared with the grain dealers for example. It seems, according to Mr. Campbell's view, that the corporations, including the railways, the grain market, the cattle market, and the business community in general, have absorbed between them the profits of farming, and left the farmer only the wages of a day laborer in case of a good crop, and a mortgage debt in case of a bad one. Some may think he has drawn rather a doleful picture of farming, but I fear there is a lot of unpalatable truth in his remarks. I may mention that personally I have been an eye-witness of the evolution which has been going on in farming methods during the past 50 years. From the grain sickle to the modern self-binder is a far cry, but I have been through it all. When these improvements began to come in farmers welcomed them as a relief from hard toil, but I fear we have been relieved from more things than we bargained for. However, I don't think anyone would desire to move civilization back 50 years. But, by the same token, I am bound to say that the average farmer was better off morally and financially, although perhaps not intellectually, than he is to-day.

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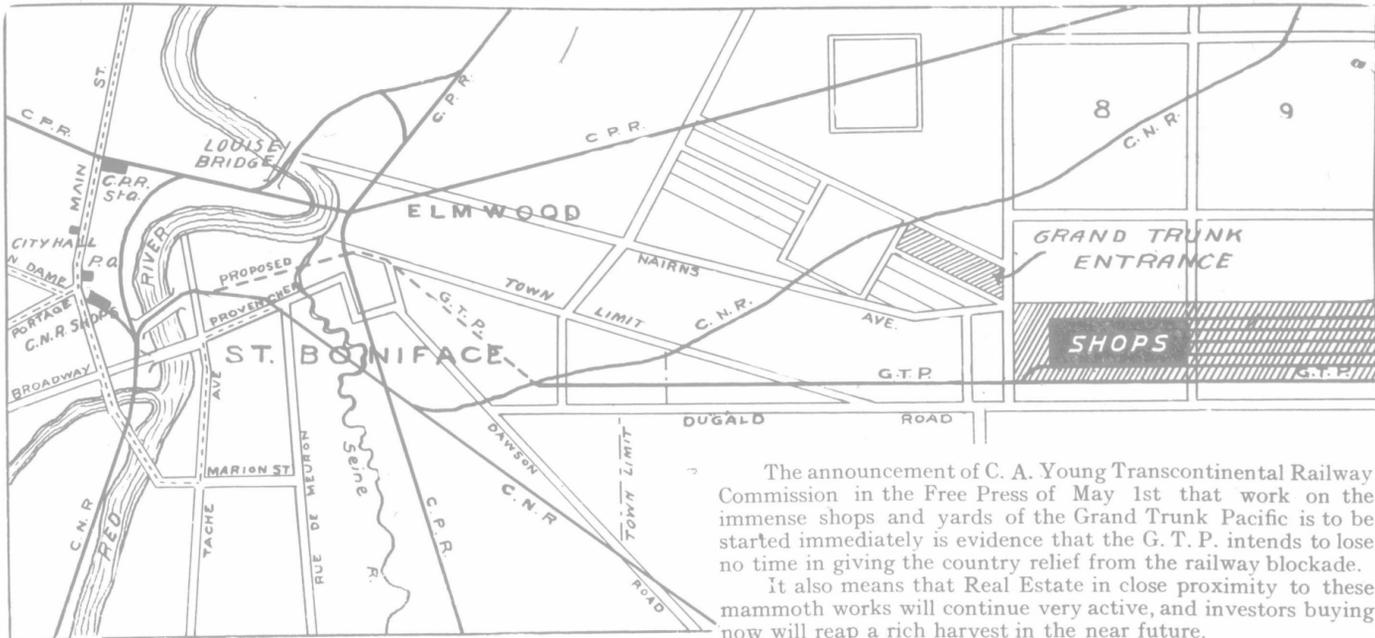
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GRAND TRUNK ENTRANCE



The announcement of C. A. Young Transcontinental Railway Commission in the Free Press of May 1st that work on the immense shops and yards of the Grand Trunk Pacific is to be started immediately is evidence that the G. T. P. intends to lose no time in giving the country relief from the railway blockade.

It also means that Real Estate in close proximity to these mammoth works will continue very active, and investors buying now will reap a rich harvest in the near future.

Grand Trunk Entrance is adjoining both the shop site and the main road to the city along which the street car will be extended in the near future. The property is high and dry, with wide streets and lanes, and is in every way suitable as a home site for the hundreds of men that will be employed by the railway.

Investors in lots similarly located to the C. P. R. shops are now finding a ready sale at \$350 to \$400; they bought from us two years ago at \$125 to \$150.

There is every indication that lots in Grand Trunk Entrance will make as much money for investors during the next two years.

MESSRS. STANBRIDGE REALTY CO.

Gentlemen.—Send me plan and full information of your G. T. E. property without delay.

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Prices: \$125 to \$150. Terms: \$10 cash and \$5 per month, or \$25 cash, balance \$25 every 6 months. Write us to-day for plans and full information.

Stanbridge Realty Co., 247 Notre Dame Ave.,
 Winnipeg, Man.

Mr. Campbell's views are probably correct in relation to the tendency of many of the boys and girls to leave the farms for the towns and cities. He says: "I would advise that this favorite topic of keeping the boys and girls on the farm be wiped off the agricultural slate, and its place taken by: 'Keep the wealth and produce on the farm.'" There is this to be said in favor of the farmer: It is well known that in past times the cities have always been regenerated by new blood from the country. The more sophisticated communities ate of the tree of knowledge, and they became corrupt, but society as a whole was purified and saved by the constant inflow of fresh vigor and life from the ranks of innocence and simplicity. It is idle to attempt to stop this movement, and he who preaches against it draws but a meagre audience. Regarding the latter quotation as to how to keep the wealth on the farm, it opens up a wide field for thought. To my mind the real trouble is that the farmer has been dwarfed as a result of the concentration of the business of the country in the hands of a few people. So before you can bring about any deep-seated reform in your business methods, you must find some way to counteract the forces which stimulate the evils aimed at. Statistics prove that the farmers are only able to retain for their own use one-sixth of all the wealth they create; the other five-sixths are absorbed by various bodies which for brevity's sake may be termed middlemen.

I think it will be admitted by any reasonable thinking person that the amount coming to the farmer out of the proceeds of his labor is not sufficient to meet his demands, and to say the least is not a fair division of wealth. Every thinking farmer has three objects in view:—First, to be able to pay his way as he goes along; second, to lay by something for "the lang day and sair

foot"; lastly, to keep up the fertility of his land. I think most readers will admit that the farmer should be in a position to return something annually to the soil. There is no reason why a farm should wear out if it is given a fair show. Go to the crowded foreign countries when the farms and gardens have been worked for centuries, and you will find they have improved with use instead of retrograding. Our system of farming is wasteful; we are actually robbing the soil because we are not able to return to it those elements which serve as plant food and nourishment for bacteria, which in turn convey food to the plants. We now have come to the point where the question naturally suggests itself, "What are you going to do about it?" Well, as Kipling would say, "That is another story." And herein I must disagree with Mr. Campbell who appears to be rather sceptical regarding the usefulness of farmers' associations. I believe the solution of all farmers' problems should be left for those associations to deal with. Individual remedies will not avail in this warfare. There should be deliberate united action all along the line if any lasting reform is to be brought about. Mr. Campbell appears to go for government ownership of utilities. Of course he has not said that, but reading between the lines I take that to be his meaning. There may be something in it and it might be worth a trial. At present we have a certain amount of government control which cannot be said to be any great success. Under government ownership the question might arise "Would that also include the population?"—I fear it might. Our political parties to some extent have fostered the idea that the farmer's troubles are political, and can be got rid of by political action. I think it will be a step in advance when the farmer awakes from his self-complacent dream. It was an unlucky day for temperance when it was made an issue in party politics. That cause has not made so much headway as should have done under politics; nor as much as it would have done under a purely moral and social movement.

The policy of the politicians towards temperance has been one of compromise—neither one thing nor another—and the results have been full of bitterness for all concerned.

A. W. McCLURE.

(Mr. Armstrong's paper will be given next week.)

Book Reviews

A neat, medium-sized book of sixty pages, containing short sentence facts about Canada has been published by the Canadian Facts Publishing Co. of Toronto, and is being widely distributed. It is a useful and interesting compilation for business men and municipal corporations. Its price is 25 cents.

COMPLETE BOOK ON VEGETABLES.

Most timely in its appearance is "The Book of Vegetables," by Allen French, a noted American authority, and published by the MacMillan Company of Canada. This new volume contains a complete treatise on the growing of every imaginable variety of field and garden vegetable, is printed in large type on heavy paper and is bound in cloth. It is a volume not only valuable as a text and reference book, but is an acquisition of beauty in any library. We especially commend it to all amateur gardeners and to the consideration of agricultural societies which keep libraries for the use of their members. The price is \$1.75, through this office, or from the publishers, the MacMillan Company of Canada, 27 Richmond St., Toronto.

Hyker—"My hearing is unusually keen." Pyker—"Is that so?" Hyker—"Yes. For instance, at the distance I am from you now I can hear your watch ticking." Pyker—"Marvellous! My watch is six blocks away, but I have the tickets for it in my vest pocket."

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Lands selling at \$125 to \$150 not to be compared with what we offer at \$100 per acre.

We have Water Front property, immediately adjoining the C. P. R. siding, where trains stop for passengers or produce.

Just a few more 10 acre blocks at these prices. Terms easy. Might consider exchange for City Property on this.

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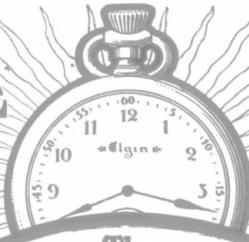
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Consumption



This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of anyone suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case was hopeless.

Write at once to the Yonkerman Consumption Remedy Co., 27 Rose Street, Kalamazoo, Mich., and they will gladly send you the book by return mail free and also a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Write today. It may mean the saving of your life.

Don't Hang Behind Like an Old Cow's Tail

Be up-to-date. If you have no TELEPHONE LINE in your locality, build one, it's not a difficult proposition. Get about ten men together with a small amount of capital, organize a TELEPHONE company and build a line.

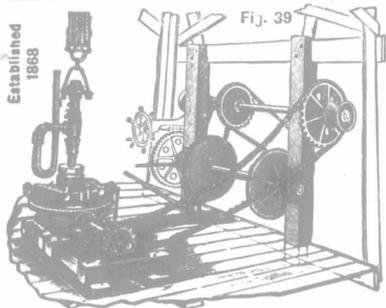
Write for our Bulletin No. 2 to-day. It tells all about organizing TELEPHONE companies and constructing the lines.

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CHILDREN'S CORNER

TWO NICE PONIES.

Dear Cousin Dorothy:—I am writing my first letter to the Children's Corner. We get the FARMER'S ADVOCATE at our home every week. I have two sisters and one brother. My brother and I ride five miles to school. We have two nice ponies, Pat and Whitey. I am in the part second and I am eleven years old

ETTY GRIFFITHS.

A WORD WITH THE MEMBERS.

Dear Boys and Girls:—Are some of you who wrote letters for the Children's Corner getting tired of waiting to see them appear? Don't get too impatient for they are all coming—every one, just as fast as there is room for them. But because there are so many we are going to have a new rule. The first letter that any member writes will be printed whether it is long or short, interesting or uninteresting. But if the second letter is not so good as the first, or tells the same things over again, it will stand a pretty good chance of visiting that place you all dread—the waste paper basket. Don't you think that is fair?

Some of you last year gave me a good deal of information about the wild flowers of your neighborhood. This year in your letters will you tell me if you can how your nearest town got its name? Some of those with peculiar names must have a little story connected with them and I should very much like to know it. For instance there is a story about Qu'Appelle that I am sure someone could tell me. Will you do this to oblige

COUSIN DOROTHY?

CLEVER FINGERS.

Dear Cousin Dorothy:—We are at grandmother's now. Grandpa takes the ADVOCATE. I like to read the Children's Corner. I am seven and have a little sister that is four. Grandpa gave us a big collie dog and harness and a toboggan. We have lots of fun riding. Grandma gave us two kittens. We named them Jack and Jill. Mamma has a homestead close to little Manitou Lake. We have an organ and a piano. I can play several pieces and like to draw and embroider. I draw my own designs for doilies. I should like to have Fiona A. Scott's address. Do you think she would write to me?

THELMA E. CHAMBERLAIN. (7)
Manitoba. (b)

A CONTENTED LASSIE.

Dear Cousin Dorothy:—Seeing all the lovely little letters in the FARMER'S ADVOCATE, I thought I would write one too. I have a lovely pair of pigeons that my brother gave me. I have a sweet little baby sister aged three years. Her name is Della Violet. I love to go to school. I also love my teacher. Old Santa Claus was good to me at Christmas, and I hope he was good to all the little girls and boys that write to Cousin Dorothy.

SARAH ROSE BOYSON. (9)
Alberta. (a)

A LITTLE HOUSEKEEPER.

Dear Cousin Dorothy:—We live on a farm eight miles north and one and a half miles west of Deloraine. Papa owns a half section of land here. We have nine work horses and two colts twelve head of cattle and one cat and two dogs. We have two little calves, and we call them Mary Jane and Buster. We call the cat Tom and the dogs Jip and Colly.

I am fourteen years old and am keeping house for my brother this winter as my mamma, papa and little brother went to Ontario for a visit. I cannot tell you much about our school as I do not go. We have a very nice teacher. She reads with us, so you see I am not all alone.

GRACE V. HAYDEN.
Manitoba. (a)

ANOTHER VISITOR.

My Dear Cousin Dorothy:—One day as I was over at my friend's house I happened to pick up the FARMER'S ADVOCATE, and looking through it I came across the Children's Corner. So when I went home I thought I would write a letter to you too. I have six sisters, three older and three younger than myself. I have two brothers, one of whom has been on a mission. But he is now working in Butte, Montana. I go to school and like it fine. My teacher's name is Mr. B—. He is the principal. There isn't any school just now on account of small pox. It has been very cold weather here, but is now getting very sloppy.

EMMA BOYSON. (11)

Alberta. (a)

KEEP GOOD HORSES.

Dear Cousin Dorothy:—We started the New Year by going to school. We have a new teacher and I like him, and like to go to school. We have lots of snow here now. On our last day of school we had a nice Christmas tree. We all spoke pieces; that is, the school children and teacher. There was a large crowd at it. I recited three pieces. Santa Claus didn't forget me. He left me lots of things on the tree. I counted all the letters in the list of children's names and there were 416 writing at that time.

My father has some nice last year's colts. One of them took first prize for general purpose, and first prize for best out of a bunch of Clydes, and sweepstake over all classes of colts of the same age. The colt's mother took first prize, and another mare took second for brood mares. My mother rides horseback at the show every fall. Last year she took first prize as best lady rider and special prize given by Mr. McN— of Carrot River. She drove the same horse in the buggy, single, and took first prize as best lady's turn-out. Our hens are laying four and five eggs a day. We have two little pigs three days old. We have them in the hen house and I keep on a fire to keep them warm.

GEORGE WILFORD TAYLOR. (11)
Saskatchewan. (b)

A SPLENDID PLACE TO LIVE.

Dear Cousin Dorothy:—I am very much pleased with the result of my first letter, for I have made the acquaintance of a friend out in Alberta, and am expecting another letter from Bessie Peters. I shall be pleased to hear from her at any time. We have one horse, three head of cattle, two pigs and a few chickens. I have lots of fun here in the summer. I catch fish and go boating. There are berries of all kinds here, so we get plenty to preserve for winter use. In winter I go hunting and trapping and we generally have about a month of glare ice so we get real good skating. Our farm is situated on the south shore of Lake Nipissing, which is ninety miles long and about forty miles wide in some places.

BELLE SWEETING. (12)
Ontario. (a)

(I had your name correctly in my book, but in spite of that it got wrong in the paper. I'm sorry.—C. D.)

WISHES US HEALTH AND HAPPINESS.

Dear Cousin Dorothy:—I was reading Inez Boomhower's letter and thought it was very nice for so young a scholar. I have five cats, and two dogs for pets. I have a pony named Laddie which I ride three and a half miles to school. My mother has taken the ADVOCATE as long as I can remember, and we think it is a splendid paper. I will close wishing Cousin Dorothy and all who read the Children's Corner health and happiness.

CARRIE OSBORNE. (12)
Manitoba. (c)

PRINCE--A WOMAN-HATER.

Dear Cousin Dorothy:--My brother has a camera. He has taken some of the cattle's photos, and on Christmas Day he took the Christmas cactus. It's a beauty. He is quite an artist and can draw anything he sees. He has a great liking for horses, and has trained his team so that they will follow him anywhere. Their names are Prince and Tom. Prince does not like any one with skirts on and one day my brother went into the house to get his overcoat and left them standing outside. My mother went up to them; Prince snorted and away they went. The more she said "whoa" the harder they galloped away over the wire fence, but they never hurt themselves. Prince always shies when he comes near the house.

CLARENCE OLIVER MANSFIELD, (12) Manitoba. (b)

A DOG FOR A DRIVER.

Dear Cousin Dorothy:--I have three sisters and three brothers. We all go to school in the sleigh. I am thirteen years old and in the fourth reader. There are about seventeen scholars going to our school, which is two miles from our house. We have eight horses and one colt, seven cows, about sixty hens and five pigs. We have only one cow milking. My pets are two dogs and one cat. The dogs names are Collie and Billy; the cat's name is Tabby. My sisters and I hitch Collie in the hand sleigh and ride after him.

BEULAH L. MAINS. Manitoba. (b)

SCHOOL BEGAN IN MARCH.

Dear Cousin Dorothy:--We live on a farm four miles west of Craik. Papa has got a farm of three hundred and twenty acres. We have got four horses whose names are, Prince, Billy, Fanny and Willie, and we have got fourteen head of cattle. There was no school here in the winter because it was too cold, but it began the first of March. There has been nice weather for about two days here and the snow has been melting.

ALBERT MOE. (13) Saskatchewan. (c)

A GOOD CHECKER BOARD.

Dear Cousin Dorothy:--As I have never written before I will do my best. The school was closed on account of the weather being so cold last winter. At first I thought time would seem so very long on account of not going to school, but it seemed to have gone before I knew it. I made a nice red scarf for myself, and worked some lace for a yoke and cuffs to wear over a white dress. We made a checker-board. First we took some cardboard and marked it in squares, and then I colored every other one. Papa sawed some pink spools in two and as many more black ones--they were the men. It makes a fine checker-board, just as good as any one would want. I have made a mat. At first I could not do it very well, but after a while I got to do it better and better. I wanted to do the first part over again, but mamma told me to leave it, that I could put it in my own room and when I would see it, I would remember that practice makes perfect. I have one sister named Ruby. She was seven on the eighteenth of February. We have two pet cats. One is black and white, the other a pretty black. The black and white one's name is Kitty, the black one's, Tommy.

ETHEL DOWNHAM. (10) Saskatchewan. (a)

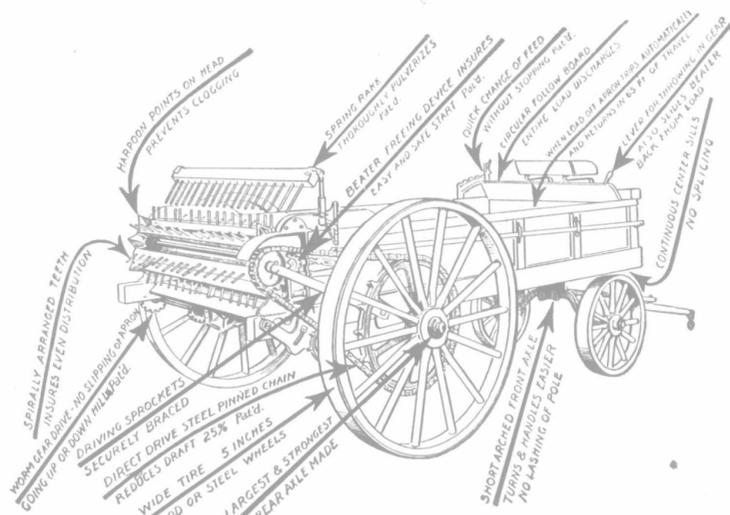
THE RABBITS'DIED.

Dear Cousin Dorothy:--I go to school every day. My teacher's name is Miss L. I like her very much. We have church and Sunday school every Sunday. My brother keeps a general store and also the post office. I had some pet rabbits but they all died last fall. We live three miles from Chain Lake. I like to fish there in summer and gather berries along the banks. But this winter we have a lot of snow and it is very cold. I would like to correspond with some of the members.

SOLON HEATH. Alberta. (b)

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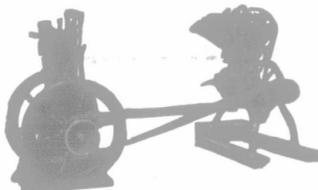
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DEAN SWIFT,

Dear Cousin Dorothy:—We have the post office. When the mail comes I always read the letters of the C. C. first, and am always sorry when I have read them all. Mamma and I came out to our ranch in May, but papa kept two men on it about a year before, building. Our ranch is very pretty. We have a beautiful lake, nearly three miles long and seventy feet deep. The G. T. P. have been grading it nearly all winter. We have two dear little ponies. One is just a year old. His name is Dean Swift. Dean, as we call him, was so small that my brother, who is thirteen, could carry him. Now he is nearly as large as his mother, who is eleven and a half hands.

Last winter mamma and I were out to the coast. The scenery was beautiful. We stopped at Field and at Glacier. We spent Christmas with grandma, at Vernon, B. C. Vernon is a very pretty little city in the Okanagan Valley. The mountains are very high; sometimes the peaks can not be seen, as the clouds hang so low. The 29th of last December, I picked buttercups on the sides of the mountains. When we went up on the mountains on clear days we could see Okanagan Lake, which is five miles from Vernon, and the steam boats in which the passengers go to Peachland and Summerland. Mamma and I are going to Minneapolis next summer and if we stop at Winnipeg I may be able to call and see you.

Saskatchewan. (a) A. L. (I'll be expecting a call from you next summer, so do not forget.—D. D.)

PLEASANT RANGE SCHOOL.

Dear Cousin Dorothy:—I do not know if I am a good enough writer as yet for it to be put in print as I just started to go to school a year ago last March. But I passed at Christmas out of the first book into part II. I have one sister going to school every day. She is seven years of age and is in part I. We had a very nice Christmas tree and I got a book called "Black Beauty." My sister got one for regular attendance for the fall term at day school. My father has thirty-six head of cattle and eight horses. I have two black rabbits, six pigeons and a collie dog called Carlo. My mother has forty chickens and three geese. My father is head trustee of our school, which is on the end of his land. We call the school Pleasant Range and our ranch is called Pleasant View.

EDITH MARION JONES. (9)
Alberta. (b)

THE OWNER OF A NUGGET.

Dear Cousin Dorothy:—We live four miles west of Innisfail. Papa has a fine herd of cattle. My sister and I help to milk the cows. There is a creek for them to drink out of whenever they want to. Papa has a few horses, but it is hard to believe that two of them will be twenty-six years old in the spring. Papa is very good to horses and also to cattle and poultry. It is nearly two years since my sister and I started for school for the first time. Have you ever seen a nugget? Papa and I have one each. Aunt Clara has been four years in Alaska and it was auntie who who gave us the nuggets this last fall.

CHARLES H. CARTER. (10)
(Your letter brings to my mind this verse:

"He prayeth well, who loveth well
Both man and bird and beast.
He prayeth best who loveth best
All things both great and small;
For the dear God who loveth us,
He made and loveth all."—C. D.)

FROM EAST TO WEST.

Dear Cousin Dorothy:—I will tell you of our trip from Berlin to Carstairs. We had a fine time. We were on the train ten days and when the time came to get off we were all sorry. My chum and I had lots of fun. We were always together. At Mountain Hat we stopped from six o'clock in the morning till eleven o'clock at night. We got up and played hop the handkerchief and all the games we could think of. We had a gramophone and lots of

music. One night when the train stopped about two hours, why the men folks went off and caught some gophers and showed them to us. That was the first time that we ever saw a gopher, but since coming out here I have caught lots of them. We saw a lot of Indians on the way. Some wanted to sell beads, etc.,. When we came to Carstairs nearly all our freinds were at the station to meet us. It was about twelve o'clock at night and then we drove five miles to my uncle's place.

DOROTHY V. SHANTZ. (13)

A PLEASANT HOLIDAY.

Dear Cousin Dorothy:—My father takes your paper and we all like it. When it comes in I look for the letter and story pages. We live on a farm three miles from the town of Swan Lake. I went to Nesbitt for my last summer holidays with my mother and my sister Ruby. We left home at one o'clock and drove about fourteen miles to the town of Holland. On the way we saw hops, cranberries, raspberries, and Saskatoons, and the red cherries were beginning to get ripe. Part of the road was bushy and the other part was not. It was a very hot day and though we drove slowly the horse was all foam and we were very hot. When we got to Holland station it was half past five o'clock.

It was half past six when my brother started for home and eight o'clock when the train left Holland. We were all safe in my sister's house at twenty minutes to ten. It rained the day after we got there and the day after that Ruby and I walked out to see some of our friends who lived about a mile and a half out of town. We all went out there again the next Sunday, after Sunday school. We had a fine time though we only stayed a week. The train left Nesbitt at seven o'clock in the morning. We got up at half past five and when we were putting on our hats the train came in, but as we were in town we had not far to go. We ran and got there just in time. We got to Holland again a little after eight and about noon my brother got there to take us home. We left there about an hour after dinner and got home about five. They started the binder that afternoon. I go to school and I am in the third grade. My teacher's name is Mr. F.—They are putting up a new four-roomed school here.

GLADYS THOMPSON. (10)

A KIND AUNT.

Dear Cousin Dorothy:—I think I will introduce myself to you. I read the Children's Corner quite a bit. Papa has taken the FARMER'S ADVOCATE for a year or so. My brother has told you about the nuggets. I did not get one, but I got a fine pair of moccasins, they are beaded and edged with unplucked beaver. The squaws in Fair Banks, Alaska made them. They can do much fancier work than the Indians around here. Aunt Clara gave me the moccasins that I am telling you about. She also gave mother a nice pair of gauntlets made by Indians. I baked a chocolate cake the other day all by myself and it turned out good. I have a set of dishes of my own, and also five dolls. I am going to repeat—"Lord Jesus I love Thee, and I want to love Thee more" as "Hope" has asked the readers of the FARMER'S ADVOCATE to do.

MAY M. CARTER. (12)

CANADA THE BEST.

Dear Cousin Dorothy:—This was the coldest winter we have had since we came to Canada. There is no school now, as it is stopped on account of sickness.

My brothers Harold and Allen and sister Laura had the whooping-cough. Seeing Margaret's riddles I will try to answer them. The first one is a pair of tongs, and the second one your name. I went to Utah with my father and had a good time, but I did not like it. I will close with a riddle. What fruit does a newly married couple represent? I would like to hear you answer it.

GERMA CHRISTENSEN. (9)

Bob, Son of Battle

(Continued from page 662.)

CHAPTER XXVII. FOR THE DEFENCE.

That night a vague story was whispered in the Sylvester Arms. But Tammias, on being interrogated, pursed up his lips and said: "Nay, I'm sworn to say nowt." Which was the old man's way of putting that he knew nowt.

On Thursday morning, James Moore and Andrew came down arrayed in all their best. It was the day of the squire's annual dinner to his tenants. The two, however, were not allowed to start upon their way until they had undergone a critical inspection by Maggie; for the girl liked her mankind to do honor to Kenmuir on these occasions. So she brushed up Andrew, tied his scarf, saw his boots and hands were clean, and titivated him generally until she had converted the ungainly hobbledehoy into a thoroughly "likely young mon."

And all the while she was thinking of that other boy for whom on such gala days she had been wont to perform her offices. And her father, marking the tears in her eyes, and mindful of the squire's mysterious hint, said gently: "Cheer up, lass. Happen I'll ha' lews for you the night!"

The girl nodded, and smiled wanly. "Happen so, dad," she said. But in her heart she doubted.

Nevertheless it was with a cheerful countenance that, a little later, she stood in the door with wee Anne and Owd Bob and waved the travellers Godspeed; while the golden-haired lassie, fiercely gripping the old dog's tail with one hand and her sister with the other, screamed them a wordless farewell.

The sun had reached its highest when the two wayfarers passed through the grey portals of the Manor.

In the stately entrance hall, imposing with all the evidences of a long and honorable line, were gathered now the many tenants throughout the wide March Mere Estate. Weather-beaten, rent-paying sons of the soil; most of them native-born, many of them like James Moore, whose fathers had for generations owned and farmed the land they now leased at the hands of the Sylvesters—there in the old hall they were assembled, a mighty host. And apart from the others, standing as though in irony beneath the frown of one of those steel-clad warriors who held the door, was little M'Adam, puny always, paltry now, mocking his manhood.

The door at the far end of the hall opened, and the squire entered, beaming on every one.

"Here you are—he, eh! How are you all? Glad to see ye! Good-day, James! Good-day, Saunderson! Good-day to you all! Bringin' a friend with me—eh, eh!" and he stood aside to let by his agent, Parson Leggy, and last of all, shy and blushing, a fair-haired young giant.

"If it bain't David!" was the cry. "Eh, lad, we's fain to see you! And yo'm lookin' stout, surely!" And they thronged about the boy, shaking him by the hand, and asking him his story.

'Twas but a simple tale. After his flight on the eventful night he had gone south, drovering. He had written to Maggie, and been surprised and hurt to receive no reply. In pain he had waited, and, too proud to write again, had remained ignorant of his father's recovery, neither caring nor daring to return. Then, by mere chance, he had met the squire at the York cattle-show; and that kind man, who knew his story, had eased his fears and obtained from him a promise to return as soon as the term of his engagement had expired. And there he was.

The dalesmen gathered round the boy, listening to his tale, and in return

telling him the home news, and chaffing him about Maggie.

Of all the people present, only one seemed unmoved, and that was M'Adam. When first David had entered he had started forward, a flush of color warming his thin cheeks; but no one had noticed his emotion; and now, back again beneath his armor, he watched the scene, a sour smile playing about his lips.

"I think the lad might ha' the grace to come and say he's sorry for temptin' to murder me. Hooiver!"—with a characteristic shrug—"I suppose I'm onreasonable."

Then the gong rang out its summons, and the squire led the way into the great dining-hall. At the one end of the long table, heavy with all the solid delicacies of such a feast, he took his seat with the Master of Kenmuir upon his right. At the other end was Parson Leggy. While down the sides the stalwart Dalesmen were arrayed, with M'Adam a little lost figure in the center.

At first they talked but little, awed like children: knives plied, glasses tinkled, the carvers had all their work, only the tongues were at rest. But the squire's ringing laugh and the parson's cheery tones soon put them at their ease; and a babel of voices rose and waxed.

Of them all, only M'Adam was silent. He talked to no man, and you may be sure no one talked to him. His hand crept oftener to his glass than plate, till the sallow face began to flush, and the dim eyes to grow unnaturally bright.

Toward the end of the meal there was loud tapping on the table, calls for silence, and men pushed back their chairs. The squire was on his feet to make his annual speech.

He started to tell them how glad he was to see them there. He made an allusion to Owd Bob and the Shepherds' Trophy which was heartily applauded. He touched on the Black Killer, and said he had a remedy to propose: that Th' Owd Un should be set upon the criminals track—a suggestion that was received with enthusiasm, while M'Adam's cackling laugh could be heard high above the rest.

From that he dwelt upon the existing condition of agriculture, the depression in which he attributed to the late Radical Government. He said that now with the Conservatives in office, and a ministry composed of "honorable men and gentlemen," he felt convinced that things would brighten. The Radicals' one ambition was to set class against class, landlord against tenant. Well, during the last five hundred years, the Sylvesters had rarely been—he was sorry to have to confess it—good men (laughter and dissent); but he never yet heard of the Sylvester—though he shouldn't say it—who was a bad landlord (loud applause).

This was a free country, and any tenant of his who was not content (a voice, "'Oo says we bain't?')—"thank you, thank you!"—well, there was room for him outside. (Cheers.) He thanked God from the bottom of his heart that, during the forty years he had been responsible for the March Mere Estates, there had never been any friction between him and his people (cheers), and he didn't think there ever would be. (Loud cheers.)

"Thank you, thank you!" And his motto was, "Shun a Radical as you do the devil!"—and he was very glad to see them all there—very glad; and he wished to give them a toast, "The Queen! God bless her!" and—wait a minute!—with her Majesty's name to couple—he was sure that gracious lady would wish it—that of "Owd Bob o' Kenmuir!" Then he sat down abruptly amid thundering applause.

The toasts duly honored, James Moore, by prescriptive right as Master of Kenmuir, rose to answer

(To be continued.)

WINNIPEG FAIR

July 13th to 20th, 1907

The annual outing for Western Canada's agriculturists.

The display of live stock unexcelled.

Largest prizes ever offered by any Fall Fair for Clydesdales, Heavy and Agricultural teams of horses.

Splendid programme of races.

Entries close July 1st.

GEO. H. GREIG,
President.

A. W. BELL,
Manager.



A
**REMARKABLE
INVENTION
FOR THE
Culture
of Hair**

THE EVANS VACUUM CAP is a practical invention constructed on scientific and hygienic principles by the simple means of which a free and normal circulation is restored throughout the scalp. The minute blood vessels are gently stimulated to activity, thus allowing the food supply which can only be derived from the blood, to be carried to the hair roots, the effects of which are quickly seen in a healthy, vigorous growth of hair. There is no rubbing, and as no drugs or chemicals of whatsoever kind are employed there is nothing to cause irritation. It is only necessary to wear the Cap three or four minutes daily.

60 DAYS' FREE TRIAL!

The Company's Guarantee:

An EVANS VACUUM CAP will be sent you for sixty days' free trial. If you do not see a gradual development of a new growth of hair, and are not convinced that the Cap will completely restore your hair, you are at liberty to return the Cap with no expense whatever to yourself. It is requested, as an evidence of good faith, that the price of the Cap be deposited with the Chancery Lane Safe Deposit Company of London, the largest financial and business institution of the kind in the world, who will issue a receipt guaranteeing that the money will be returned in full, on demand, without questions or comment, at any time during the trial period.

The eminent Dr. I. N. LOVE, in his address to the Medical Board on the subject of Alopecia (loss of hair) stated that if a means could be devised to bring nutrition to the hair follicles (hair roots), without resorting to any irritating process, the problem of hair growth would be solved. Later on, when the EVANS VACUUM CAP was submitted to him for inspection, he remarked that the Cap would fulfil and confirm in practice the observations he had previously made before the Medical Board.

Dr. W. MOORE, referring to the invention, says that the principle upon which the Evans Vacuum Cap is founded is absolutely correct and indisputable.

An illustrated and descriptive book of the Evans Vacuum Cap will be sent post free, on application.

THE SECRETARY, EVANS VACUUM CAP CO. LTD.
REGENT HOUSE, REGENT STREET, LONDON, ENG.

WANTS & FOR SALE

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

TERMS—Two cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FOX AND MINK Trappers—I teach you eight secrets free. No fake. I buy the furs at highest prices. Enclose stamp. E. W. Douglas, Box 44, Stanley, N. B. 20-2 ff

POTATOES FOR SALE—Vicks Early and Six Weeks, two of the best varieties of early potatoes grown. Price \$1.00 per bus., sacks 10c. Also Red Pye seed wheat. J. T. McFee, Headingly, Man. 20-2 ff

FOR SALE—Three two-year-old and one three-year-old Kentucky Saddlebred Stallions registered, black, bay, and chestnuts. D. P. Woodruff, Caldwell, Alta. 8-5

BEES—Italian bees for sale, order now. Jno. Houston, M.D., Starbuck, Man. 8-5

FOR SALE—Uruguayan potato (Solanum commersoni violet) the new wonder, the finest tuber; it beats them all in productiveness and in quality as can be seen by the reports of the French National Society of Agriculture. They thrive best in wet, marshy land, but they will do well in any soil and beat any other kind; three thousand bushels have been raised in one acre; no fiction, just facts. Any quantity will be sent postpaid to any address on receipt of price: One dollar per pound; order now, no better investment. E. Cheyrien, St. Laurent, Man. Agent for Canada. 24-4

ON CROP PAYMENTS. 200 deep soil farms for sale on crop payments, these farms are ready for the breaker, and close to Yorkton, Saltcoats, Rokeby and Wallace, Saskatchewan, and Reston, Manitoba; first payment after you sell the first crop. Apply now, James Armstrong, 4 East Richmond street, Toronto. 22-5

RENT FOR TERM, option of purchase, 489 acres about 200 cultivated, 100 meadow, rest bluff, and scrub. Creek through center. Brick veneered, twelve roomed house. Good buildings, etc., tennis lawn. Quarter section joining, with shack and stable, creek, 25 acres cultivated, rest meadow and pasture. One mile from Austin, C. P. R. Half mile from G. T. P. Apply, Vavasour, Austin, Manitoba. 11-5

FOR SALE—One 10 inch Champion Feed Grinder, second hand, with new plates, re-babbitted throughout, \$25.00. Two Jacks, extra strong, for four horses, \$15.00 each. One Grindstone and frame, 18 inches diameter, 2 inches thick, \$6.00. The Manitoba Iron Works, Limited, Winnipeg, Man. 8-5

WANTED—Persons to grow mushrooms for us in their own homes. Waste space in cellar, garden or barn can be made earn \$15 to \$25 per week. Send stamp for illustrated booklet and full particulars. Montreal Supply Co., Montreal 22-5

WANTED—Position on farm. Practical experience in all branches. Two children, for season or longer. Would work a farm on shares. G. Mahagan, Rosser, Man. 8-5

HOLSTEINS FOR SALE—Young stock of both sexes, including this spring's calves, also a few cows. Prices reasonable. W. H. Mullins, Ponoka, Alta. 29-5

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THE EDEN REST Poultry Farms at Lethbridge are of the largest and best equipped purebred Poultry Farms in Western Canada. During the past year we have imported over 300 pure bred birds from Ontario. Write us and we will tell you about any of our matings. P. O. Box 333, E. J. Cook, Mgr.

C. W. TAYLOR, Dominion City—Barred Plymouth Rocks, Buff Cochins, Black-breasted Red Game, Eggs for setting.

FOR SALE—Choice Indian games, Golden Wyandottes, Buff Orpingtons, Plymouth Rocks. S. Ling, 128 River Ave., Winnipeg

AT MAW'S Poultry Farm, Parkdale Post Office near Winnipeg. Acclimatized utility breeds' turkeys, geese, ducks, chickens, incubators and poultry supplies. Large catalog mailed free.

ADDRESS YOUR CORRESPONDENCE to the Eden Rest Poultry Farms, P. O. Box 333, Lethbridge, Alberta, when you want eggs for hatching from pure bred, barred white and Buff Rocks White and Buff Wyandottes, C White and Brown Leghorns and Buff Orpingtons. Eggs \$1.50 per setting. E. J. Cook, Mgr. 26-4

FOR SALE—Barred Plymouth Rock and Mammoth Pekin duck eggs for setting. T. E. Bowman, High River, Alta. Box 81. 15-4

WHITE WYANDOTTES—A few good cockerels on hand. Also eggs. M. T. Buchanan, St. Charles, Man. 21

H. E. HALL, Headingly, Man. Pure-bred Barred Rock Eggs for sale. \$1.50 for 15. Incubator lots, \$7.00 per 100 eggs. 25-6

BUFF WYANDOTTES—Best winter layers yet produced. That's what counts. Any hens lay in summer. Purebred eggs \$1.50 per fifteen. Jas. Sinclair, Box 130, Stonewall, Man. 8-4

BUFF ORPINGTON Eggs a specialty \$1.50 per setting. McNaughton Bros., Didsbury, Alta. 15-5

INCUBATOR lots of eggs for sale at \$10.00 per 100. Barred and White Plymouth Rocks and Buff Orpingtons. All birds selected from trap nest record laying stock of A. W. Foley Dominion Government Poultry Breeding Station, Howmanville, Ont. Eggs from choicest stock, \$2.00 per setting. Address, Northern Nursery Co., Drawer L, Edmonton, Alta. 29-4

H. E. WABY, Riverside Poultry Farm, Holzfeld, Man., breeder of imperial S. C. Brown Leghorns which have won more 1st, 2nd and 3rd prizes and specials at all the big shows than any other strain. Write for free egg circular and list of winnings of our heavy laying strain of Leghorns. Amber B. Orpingtons and Ringlet Barred Rocks also Red Polled Cattle 8-4

BARRED AND WHITE ROCKS, White Wyandottes and Buff Orpingtons. Eggs \$2.00 per setting, am booking others now, catalog and prize list sent on application. Address: Old Chief Poultry Yards, Lethbridge, Alta. 15-4

JOHN STRACHAN, Crandall, Man. Silver Wyandottes, farm raised, only breed kept. Stock for sale. Eggs \$2.00 per setting. 8-4

PORTAGE POULTRY YARDS—Ringlet Barred Rocks and Single Comb Rhode Island Reds, Eggs \$2 per 15. Joseph Campbell, Portage la Prairie, Box 281. 15-5

WHITE WYANDOTTES, White Rocks, Black Minorcas. Eggs \$1.50 for 15. Mammoth Bronze Turkeys, great laying strain. Eggs \$2.00 for 10. J. B. Gamble, Lemberg, Sask. 29-5

EGGS FOR HATCHING—From two of the best American strains \$1.50 for 15, \$2.50 for 30, \$6.00 for 100. Mrs. J. T. McFee, Senior, Headingly, Man. 8-5

BARRED ROCKS exclusively. Eggs \$1.00 per thirteen, \$5.00 per hundred from utility stock. \$2 per thirteen, \$10 per hundred from fancy stock. All breeding stock selected for laying by Hogan system. Ship C. P. R. or C. N. R. Mrs. A. Cooper, Treestbank, Man. 15-5

ELMER SELLER, proprietor Last Mountain Valley Poultry Farm, Strasburg, Sask.; Harry Latta, Manager. Breeders of Buff Orpingtons exclusively. Our pens contain some noted prize winners from Canada and the United States; eggs, \$2.00 per 13; \$8.00 per 100. Satisfaction guaranteed. 22-5

THOMAS COMMON, Hazel Cliffe, Sask.—Eggs for hatching from Prize Winning White Plymouth Rock. \$3 sitting Barred Rocks, \$2 general purpose, \$1 sitting, \$1.75 two, \$5 hundred eggs. 15-5

HATCHING EGGS—Buff Orpingtons, Barred P. Rocks. My pens contain A 1 imported stock and prize winners. Eggs \$2.00 per 13; \$12.00 per 100. S. A. Tucker, Pincher Creek Poultry Yards. 8-5

FOR SALE—Pekin Duck and Single Comb Brown eggs at \$1.00 per setting. Thos. Y. Hurton, Carman, Man. 17-5

S. C. BUFF ORPINGTONS from Cooks' famous strain, Brown Leghorns, Pekin Ducks, Eggs, two and three dollars per setting. R. Hall, Woodleigh, Wapella. 15-5

W. F. SCARTH & SON'S S. C. Buff Orpingtons. Eggs from carefully selected hens mated with first prize cock, Manitoba Poultry Show, 1907, \$2.00 per 13. Box 706, Virden.

"PRIDE OF MANITOBA"—Rhode Island Reds and Buff Rocks. "Greatest laying combination on earth." "Bred for Western climate," Catalog free—Maple Leaf Yards, Oakville, Man.

EGGS FOR SALE from E. B. Thompson strain Barred Plymouth Rocks. Choice matings, \$1.50 per 15. Utility stock \$5.00 per 100. Mrs. Jas. McFee, Jr., Headingly, Manitoba. 22-5

CHOICE SINGLE COMB Snow-white Leghorn eggs from carefully selected pens of choicest matings. Bred for heavy layers and typical beauty. Testimonials report excellent hatches. Selected eggs reduced to \$1.50 per setting. Good hatch guaranteed. Orders filled promptly. Honest dealings. G. Norman Shields, 29 Close Ave., Toronto, Ont. 22-9

BARRED ROCK Eggs from carefully selected pens of choicest matings. Leading strains of America. Selected for their choice barring and heavy laying of large brown eggs, and headed by cockerels, vigorous, blocky, and beautifully barred. I expect grand results from my Barred Rocks this season. Testimonials report excellent hatches. Eggs carefully selected from choicest matings reduced to \$1 per setting or \$1.50 per two settings. Good hatch guaranteed. Orders filled promptly. Honest dealings. G. Norman Shields, 29 Close Ave., Toronto, Ont. 22-9

Lost, Strayed or Impounded

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 notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

SASKATCHEWAN

LOST.

LOST—Sorrel pony mare about 9 years of age; branded H2 over M over Z over G. E. C. Smith, Eye Brow Hill, Sask.

Breeders' Directory

Breeders name, post-office address, class of stock kept, will be inserted under this heading at \$4.00 per line per year. Terms cash strictly in advance. No card to be less than two lines or more than three lines.

POPLAR GROVE HEREFORDS, A number of young cows, heifers, and bulls now for sale from this famous herd at low prices. J. E. Marples Deleau, Man. Buff Orpington Eggs.

A carload of 2-year-old BULLS and HEIFERS will be at Medicine Hat for sale about the first week of June.

A. & J. MORRISON, Glen Ross Farm, Homewood Man., Clydesdales and Shorthorns.

JAMES WILSON, Grand View Stock Farm Innisfail, Alta., Breeder of Shorthorns.

H. H. KEYS, Pense, Sask.—Aberdeen Angus Cattle and Buff Orpington Chickens for sale.

GUS. WIGHT, Napinka, Man.—Clydesdales and Shorthorns for sale. Evergreen Stock Farm

WA-WA-DELL FARM.—Leicester sheep and Shorthorn Cattle. A. I. Mackay, Macdonald, Man.

O. KING, Wawanesa, Man.—Breeder of Yorkshire, Barred and white Rock Poultry and Toulouse geese.

MERRYFIELD FARM, Fairville, Thos. Brook, breeder of Clydesdales and Shorthorns. Box 18 Pense, Sask.

CLYDESDALES, Shorthorns and Tamworth. T. E. M. Banting & Sons, Banting, Man. Phone 85, Wawanesa.

STONSA STOCK FARM—Well bred and carefully selected Shorthorns and Berkshires. David Allison, Roland, Man.

W. HARDY, Fairview Farm, Roland, Man. breeder of high class Ayrshires, Yorkshires, Black Minorcas and White Wyandotte poultry

SHETLAND PONIES and Hereford Cattle, fine in Canada. Write or come and see them. J. E. Marples, Poplar Grove Farm, Deleau, Man.

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

R. A. & J. A. WATT, Salem, Elora Station, G. and C. I. R. R.—Champion herd at Toronto and New York State fairs, 1906, also Grand Champion females, including both Senior and Junior Honors at both fairs. Write you wants.

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

ASHCROFT, W. H. NESBITT, Roland, Man. Clyde and Hackney mares and Stallions, work horses in car lots, Ayrshires. Our motto, Live and let Live.

BERKSHIRES.—Gold Medal Herd, Neepawa Manitoba. Address, J. A. McGill.

WOODMERE FARM.—Clydesdales, Shorthorns and Yorkshires. Pigs at 8 weeks, f. o. b. Neepawa, \$8 apiece. S. Benson.

GEORGE LITTLE, Neepawa, Man.—Shorthorns of best Scotch type.

BELLEVUE HERD of Yorkshires—Boars in service: Oak Lodge Gamester, Summerhill Oak and others. Young stock got by the above boars out of choice sows ready to ship soon. Eight lighters to select from, order early. Oliver King, Wawanesa, Man. 5-6

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Drilling Machine Co. Manufacturers of well drilling machinery and drilling tools. The most efficient and best equipped outfit in Canada. Catalogue and full particulars on application.



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GOSSIP.

DISPERSION SALE OF SHORTHORNS.

A Shorthorn sale of more than average significance to Western stockmen is that of the herd of A. & G. Mutch to be held at the city amphitheatre, Regina, Sask., on June 26th. The sale is an unreserved auction of about thirty head and will be conducted by Mr. Geo. Bellows, one of the most successful salesmen in America, to hear whom alone is well worth going many miles and spending some time. Craigie Mains has the enviable reputation of being the home of the largest and most select lot of stock in Canada. The reputation has been built upon square dealing and in always placing stock a little bit better than represented.

The Shorthorn herd has not been long established, but it is found necessary to dispose of it owing to the fact that having sold nearly one half the acreage in Craigie Mains, the stock has to be reduced. The cattle were purchased during the dull days of the trade in Ontario, and notwithstanding that the market for purebreds has not been buoyant in the West, they have proved a profitable investment, and being mostly young cows will be equally as valuable to their future owners.

The foundation stock was mostly secured from the Maple Shade herd of Hon. John Dryden and from Jas. I. Davidson, two herds which have contributed largely to the improvement of cattle in Canada. The families most largely drawn upon were the Brawther Breeds, Canadian Duchesses of Gloster, Victorias, Necklaces, Lavenders, Augustas, etc., all noted breeding tribes, and their representatives at Craigie Mains are big easy-doing, rugged, regular breeders, that give size and flesh to a herd where their blood is introduced.

We shall have something more to say in future issues regarding the individual merits of the herd and of the stock from which they are descended.

AGRICULTURAL OUTLOOK.

The House of Commons Committee on Agriculture at Ottawa has submitted its final report to Parliament for the session. It states that the average wheat crop in Great Britain is 30.95 bushels per acre. In Ontario the average of winter wheat is 22.50, and of spring wheat 18.92, showing that we are not in this respect a great way behind the Mother Country. France averages 19.57 bushels, which is under the average yield for Ontario. Manitoba gives about 18.45, the Northwest of Canada, 19.13; while Russia, in Europe, gives an average of 9.05 bushels per acre, and the United States, 13.43. The Argentine Republic gives an average of 14.76 bushels per acre. Australasia, as follows: New South Wales has an average of 9.9 bushels per acre; Victoria, 7.18 bushels; South Australia, 6.62 bushels; West Australia, 11.51, and Queensland, 15.77.

Referring to the dairy industry in Canada, the report says it is in a very prosperous condition. Canadian cheese is now regarded in the British market as second to that of no other country. This is largely due to the introduction of cool curing rooms as an adjunct of cheese factories, and the ample provision made for export in cold and cool storage.

Large quantities of small fruits of the apple orchards are left over annually. These are not marketable owing to size, but they might be profitably manufactured into excellent jam, jellies, etc. It is suggested that co-operation would probably convert what is now a loss into a profitable industry. The report concludes:

"A careful survey of the entire field demonstrates that agriculture, the cornerstone of national wealth and power, is in a more prosperous condition at present in Canada than in any other country of the world, while the yet unmeasured territory of rich virgin lands awaits settlement ready to respond bounteously to the industry and intelligence of many millions of willing hands. In a word, Canada is the world's greatest bread field of the day."



HAIL INSURANCE

If you are interested in Hail Insurance ask our Agent for rates and other particulars. He can tell you what the protection *will* cost this season. Others can only tell you what it cost last year, and guess at what it *may* cost this year.

The two Royal Commissions appointed to investigate Hail Insurance in Manitoba (1899 and 1906) had absolutely no complaints against Companies that insure under yearly contracts. Why? They hold their business by treating their patrons right, not by a term contract that it is almost impossible to have cancelled no matter how unsatisfactory it may be.

JOS. CORNELL, MANAGER

THE GLANDERS QUESTION WORTHY OF CAREFUL THOUGHT.

(Continued from page 686.)

THE STAMPING OUT POLICY IS PROVING SUCCESSFUL.

Although the time which has elapsed since the inauguration of the policy of compensation and slaughter is altogether too short to enable us to form a definite and decided opinion as to its wisdom and probable effectiveness in securing the eradication of glanders, the following figures furnish convincing proof that it has a strong tendency to remove the disinclination generally evinced by owners to report outbreaks of the disease and to permit the slaughter of their horses:

In considering these figures I desire particularly to draw your attention to the large increase, not only in the numbers of those tested and killed as reactors, but of those showing clinical symptoms. These figures furnish incontestable evidence that the present system brings to light a very large number of cases of glanders, which, without provision for payment of compensation, would never have been reported.

Under the conditions formerly existing, there was a tendency on the part of owners, and doubtless of some veterinarians, to avoid trouble and loss by concealing the existence of glanders. Where no compensation is paid many owners, otherwise quite respectable, are undoubtedly in the habit of allowing clinically affected cases to run their course, working them as long as possible, and finally either permitting them to die or having them quietly destroyed; while those less honest or more unprincipled have no hesitation in subjecting them to palliative treatment, with a view to removing or concealing suspicious symptoms, and subsequently disposing of them to the best advantage.

It is interesting to note the manner in which the new regulations are received in different parts of the Dominion. In districts where the disease has prevailed to any considerable extent and where horse owners realize its serious nature and the importance of stamping it out, the new order of things is heartily welcomed. On the other hand, in places where the people are comparatively unfamiliar with glanders, the new regulations are looked upon as unnecessarily severe, and people complain bitterly that their horses are being slaughtered without good and sufficient reason. The claim is made that our inspectors destroy more horses than the disease itself would ever be likely to kill, the argument being advanced that only a very limited number of horses die from glanders under ordinary conditions, and that the disease seldom or never becomes epizootic.

Facts, however, are entirely against this contention. The figures already quoted from the returns of the Board of Agriculture of Great Britain indicate that, under modern conditions, the disease, unless properly controlled, is certain to spread rapidly and to cause a constantly increasing loss in horse flesh.

As an illustration of this, I would quote from our own experience the case of one Canadian lumber company in a remote part of the country which reported last year for the first time the existence of glanders among its horses. Enquiry elicited the fact that in less than four years upwards of fifty head of valuable horses, owned by this company, had died of glanders. Of thirty-six survivors, thirty-four reacted to



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THE SHOWERPROOF OVERCOAT is your best friend this month. It will protect you and your clothes and save its cost many times over—if it is a good one.

20th Century Brand Showerproofs

are made in a great variety of thoroughly proofed cloths in plain goods, stripes and checks. Carefully tailored, roomy and stylish. Agents in 250 towns.

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There is no Breakfast Food as good as "B & K" OATS. None equal in delicacy of flavor, in purity, in wholesomeness.

Our 25 years' experience in Milling is behind this statement, and our guarantee goes with every sack.

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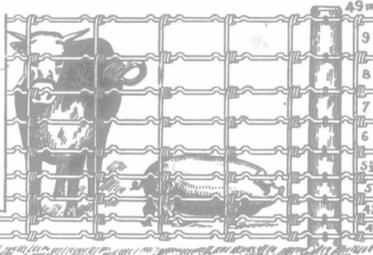
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SPECIAL STEEL SPECIAL GALVANIZING
ALL No. 9
HARD, STIFF, SPRINGY WIRE
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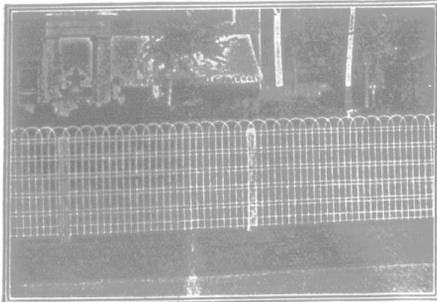
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Tension Curves
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Any height to 8 ft. Any length you say. From 16 cents a foot. Gates to match, from \$2.25. Last longer. Easy to put up. Get booklet.

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mallein and were destroyed. Of the two remaining, neither had been in contact with the diseased horses.

We have a number of similar cases on record, but it would scarcely be possible to furnish a better illustration of the evil results certain to follow carelessness or neglect in dealing with glanders.

In this connection I cannot refrain from quoting an extract from the London *Lancet* of July 5th, 1905, which, in a review of the Report of the Board of Agriculture, speaks as follows:

"Glanders is admittedly on the increase, and it is time that some radical measures be taken to control the disease. In 1894 there were only 502 outbreaks reported, but in 1904 these had increased to 1,539, and 2,658 horses were killed as glandered. More power ought certainly to be given to the veterinary inspectors to test the in-contact horses with mallein, as by this agent an almost infallible diagnosis can be made within 24, or at most, 48 hours. The expense, although great the first year, would not be excessive if allowed to spread over a period of years; and where a preventable disease, which also causes the deaths of numbers of human beings each year, is concerned, the cost ought certainly not to be considered too seriously as the reason why it should not be taken thoroughly in hand."

It is gratifying to note that the British authorities are being urged to introduce the identical policy which we have already adopted in Canada.

While dealing with this phase of the subject, I would point out that if the adoption of our system is deemed necessary in a small country like Great Britain, where police and inspection work has been reduced to a science, there can be no doubt of the wisdom of its adoption in the Dominion of Canada, where the distances are magnified and the population, especially in some districts, sparse to a degree, although I am glad to say that the last named condition is being rapidly altered by the constant influx of desirable settlers who are coming from all parts of the world, but perhaps in greatest number from the Western United States.

In this connection I would say that while we do not think it necessary to test the human immigrants from that country, I think it altogether likely that we shall be compelled, in the near future, to impose this precautionary restriction upon those of the equine species, as the records in our possession indicate that a considerable number of the outbreaks of glanders in Western Canada are due to imported American horses, of which we have for a number of years back been absorbing from twenty-five to thirty thousand head per annum.

GOSSIP

MUST BE DOING WINTER FEEDING.

Three thousand head of cattle it is expected will be marketed at Olds within the next three months.

GOOD PRICES FOR SHORTHORNS.

The Meadow Lawn sale of reds, whites and roans, the property of C. E. Clarke, was quite successful, as is seen by the averages. The sale was held at South Omaha. 12 bulls averaged \$302.00; 40 cows averaged \$333.33; 52 head brought 16,958; average 326.00.

SOME EXCHANGES IN STALLIONS.

Pride of Glasnick (imp.) has been sold by the Pomeroy syndicate, of which Andrew Graham is the manager, to W. H. Dobson, Virden, Man. This horse has been a very successful stock horse for the past four years in the hands of the Pomeroy people and they are determined to replace him with the best that can be got, their experience proving to them that the best pays. The Bayview syndicate have we understand, negotiated the sale of their horse Methuen (imp.) by Mains of Airies, to Fred Sims of Stonewall. Andrew Graham has been commissioned by the Pomeroy syndicate of twenty farmers to secure one of the best imported Clydesdale stallions to be had in the East.



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CLOTHES
IN FIVE
MINUTES**

25 minutes to wash a tubful of clothes by hand.
5 minutes to do it better with the

"New Century" Washing Machine

There's no rubbing—no keeping the hands in steaming, dirty water. Simply fill the tub half full of hot, soapy water, put in the clothes, turn the handle, and the "NEW CENTURY" does all the work.

Let us send you a book about this new way to wash clothes. It's free.
The Dowsell Mfg. Co., Limited
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Trees and cuttings, small fruits, shrubs, creepers spruce, apples and crabs. I have by far the largest stock in the West of these hardy, fast growing Russian poplars and willows; I send everything by express, prepaid so as to arrive in good order. Trees may be returned at my expense if not satisfactory. No agents, no commissions, selling cheap. A postcard will bring you my price list and printer directions.

JOHN CALDWELL, Virden Nurseries
VIRDEN, MAN.

Eat in Haste

and repent with acute indigestion, heartburn, hiccoughs or flatulence. Then resolve never again to be without a box of these wonderful digestive correctives.

Beecham's Pills

Sold Everywhere. In boxes 25c

DO YOU KNOW

All you should know about

Diamond Dyes?

Do you know the real satisfaction of transforming colors?

Do you know that you can keep up with the styles by using the Diamond Dyes?

Do you know the real economy of utilizing garments that have become a little faded, a little soiled or a little spotted?

Do you know that with the Diamond Dyes you can make an old waist, skirt, a soiled blouse soiled ruffles, in fact all articles of dress accessories look as new and as fresh again?

You can keep up with the Diamond Dyes change them to any color you desire, then make them over in any fashionable style.

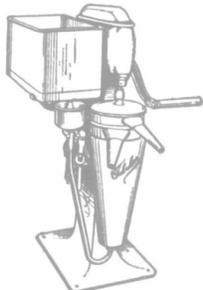
Yet you color curtains, draperies, reps and carpets, in fact you can color any fabric, and do it just as well yourself with Diamond Dyes as a professional dyer.

The most important thing in connection with these dyes is to be sure you get the real Diamond Dyes. If you would dye with success use only the DIAMOND DYES.

Write to The Dowsell Co., Limited, Montreal, Quebec, Canada, or by mail to any address in the Dominion of Canada for SAMPLES OF DYED

Because You Need The Money

It's your business and if you don't attend to it, who will? You cannot afford to keep cows for fun. That isn't business, and, furthermore, it isn't necessary. There is money in cow keeping if you go at it right, and besides there is more fun in going at it right than there is in staying wrong.



You need a Tubular Cream Separator because it will make money for you; because it saves labor; because it saves time; because it means all the difference between cow profits and cow losses.

Look into this matter; see what a Tubular will do for you and buy one because you need it.

How would you like our book "Business Dairying" and our catalog B. 18 both free. Write for them.

The Sharples Separator Co. West Chester, Pa. Toronto, Can. Chicago, Ill.

STOCK MEN



ADVERTISE YOUR FANCY STOCK BY MEANS OF FIRST CLASS DRAWINGS AND ENGRAVINGS Send us your Photos and our STOCK ARTIST will bring out the POINTS

THE TORONTO ENGRAVING COMPANY LIMITED TORONTO - - - CANADA. DESIGNERS, ILLUSTRATORS, ENGRAVERS

The great progress of Canada is denoted by the advance in all lines of manufacture. None is more apparent than the success of

Chocolate Cowan's Cocoa

which are now a household word from the Atlantic to the Pacific. Guaranteed absolutely pure. The Cowan Co. Ltd. Toronto

The Scottish Farmer says: "Mr. Gilbert, Cochrane, Alberta, sails this week-end with two stallions bought from Mr. D. Riddell, Blackhall, Paisley. Gay Stewart, a three-year-old was bred on the farm of the Earl of Wemyss at Longneddry, and is by Gay Everard, out of a Lord Stewart mare, bred at Seaham Harbor. King's Perfection is a two-year-old, also of great promise. He was bred at Blackhall, and is by Mr. Riddell's horse Luftness, out of a mare by Springhill Darnley.

REGISTRATION OF CLYDESDALES.

The Secretary of the Clydesdale Horse Association of Canada writes: "At no time in the history of Canada have draft horses commanded so high a price, nor has there ever been such a keen demand for them, as at the present day. Never before was superiority of character and quality so highly appreciated. The incentive, therefore, to produce the best and only the best possible is very strong.

"These conditions place the Clydesdale in a class apart from all other draft breeds. The advantage of using heavier horses on the farm, the increasing requirements of Canada's rapidly growing cities, the necessities of railroad contractors, together with the populating of the West, give assurance of a steady demand for many years to come. The breeder of high class Clydesdales is sure of a handsome remuneration.

"The Clydesdale Horse Association of Canada desires to urge on every farmer and horseman the advantages of both combined and individual effort to meet this situation, and to meet it in such a manner as will turn present demand into permanent trade. Every high class Canadian-bred stallion or filly can be sold for a very profitable price and assists in the sale of another wherever it may be sent.

REGISTRATION.

"The registration of all eligible stallions and fillies of a suitable character is urged. Many stallions, standing for service in Canada, as well as breeding mares, have not yet been recorded, and the registration of their progeny, sometimes only attended to when necessary for sale purposes, is then attended with unnecessary expense trouble and delay.

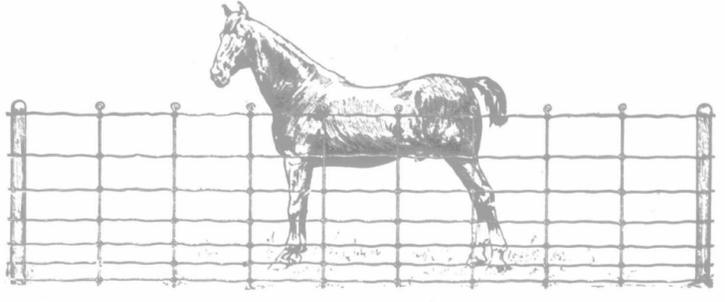
"In the case of a four-cross filly, it is sometimes difficult to obtain the required information and evidence, and this becomes greater as time passes. Owners of fillies eligible for registration are urged to attend to the matter early. It gives enhanced value to the animal, and in the case of change of ownership, no delay occurs. Every breeder is recommended to keep, in a safe place, not only a record of all colts, but the pedigree of the sire and dam from which each colt is bred. A record kept of every consecutive cross, with name, description, color and pedigree, number of the sire, name and description of the dam, is something which every farmer should keep in his own interest, as it is sure to mean dollars in his pocket. The older, Canada grows, the more consideration will buyers and breeders of draft horses give to pedigree. The experience of the past few years give ample proof of this.

RECORDING.

"The cost of recording is two dollars to non-members and one dollar to members of the association. In the case of an animal being sired by a stallion recorded in Scotland, but not recorded in Canada, the sire must also be recorded. In filling out application forms, be sure to give the correct numbers of all sires, and, if the dam is registered, her name and number also. About one-fifth of those who record animals are members of the association. All Clydesdale breeders are invited to join. Send two dollars to the accountant at Ottawa and your name will be placed on the membership roll. The fee is paid annually, and the advantages are, reduced cost of registration, and a copy of the stud book free.

"The recording of pedigrees at Ottawa is proving most satisfactory. The work is done quickly and accurately. Breeders will please observe the rule fixed by the Record Committee—that

Field Erected with No. 9 Galvanized Coiled Steel Wire



Heavy coiled steel wire fence, hard steel wire lock that does not rust or slip and kinks both wires. All heavily galvanized and is replacing other makes of fencing using lighter gauged wire. Can be erected as cheaply as barb wire and

DOES NOT INJURE STOCK

WRITE FOR CATALOGUE BUY THE BEST AGENTS WANTED

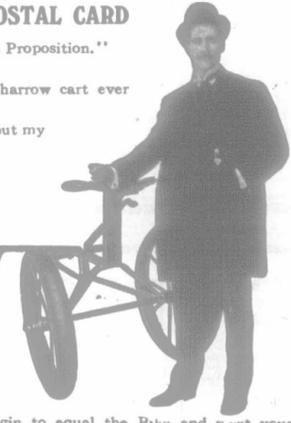
THE GREAT WEST WIRE FENCE CO. LTD.

76 LOMBARD STREET, WINNIPEG, CANADA

WANTED TO-DAY 100,000 FARMERS TO INVEST ONE CENT IN A POSTAL CARD

Address it to me. Say on it: "Send me your SPECIAL 20,000 Bike Harrow Cart Proposition." You will be glad afterwards if you do it to-day. Yes, sir!!! It will pay you big. My proposition gives you a chance to get the best harrow cart ever built on two wheels for nothing. It's so good you can't afford to walk. It's a big undertaking for me to sell 20,000 carts, but my proposition is doing it. It's a little out of the ordinary. Get in on this 20,000 cart deal while it lasts. It only costs you one cent to get the proposition. I leave it entirely to you if it is not just a little bit the most interesting harrow cart proposition you ever heard of. Drop me a postal if you don't write another one for six months. Don't buy a cart of any make, kind, brand, or at any price until you first get my proposition. I will then leave it entirely with you to be the judge. I know what you Canadian farmers need in a harrow cart. I have built and sold more harrow carts than all other manufacturers put together and am selling them only direct from my factory to your farm. I own and operate a large farm at Laford, Sask., near Regina, and know what is required of a harrow cart in Canada. I know there is no harrow cart built that will begin to equal the Bike and meet your requirements like it. It is a high wheeler with a positive lock, just right for rough ground. I will carry a large stock at Regina and can ship quick. Write me to-day. It's interesting.

WILLIAM GALLOWAY
President of the William Galloway Company
715 Commercial Street, Waterloo, Iowa, U.S.A.
WILL ALSO SEND YOU OUR LARGE IMPLEMENT CATALOG FREE



Hawthorn Bank Clydesdales Hackneys Shorthorns

I have a few three-year-old colts left, which I will sell at attractive prices to clear. I am entirely sold out of mares, but will have another carload from Scotland about May 30th.

SHORTHORNS—I have a grand lot of young bulls on hand both imp. and home bred. If you want a herd header don't buy till you see me. Also females of all ages for sale

JOHN GRAHAM Garberry

10,000 Well-Bred Cattle For Sale

Owing to the curtailment of their range by settlement, the **New Walrond Rancho Company, Livingston, Alberta,** intends to offer during the coming summer their entire herd of **Shorthorn, Hereford and Galloway Cattle** for sale.

Owing to the winter feeding and careful handling these cattle are semi-domestic, the young heifers are easily made gentle. For settlers they are the most desirable imaginable, being absolutely free from tuberculosis and other diseases common among dairy breeds, and while they are high-class beef cattle, they yield a large quantity of very rich milk.

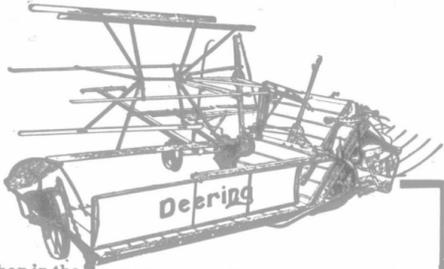
When necessary to car them, neighbors should combine so as to purchase a train-load, say 300 to 400, smaller numbers cannot be handled profitably.

Bulls will also be disposed of.

For particulars apply to

THE LOCAL MANAGER
NEW WALROND RANCHE CO. LTD.
Livingston P. O., Alberta

It Pays To Be Right



AND there is no place where it pays better than in the harvest field.

That is one place where mistakes are specially costly. To come successfully through the season to the harvest time, and then fail of a just reward because of inferior or imperfect harvesting machines is unfortunate, indeed. You may make sure of success by buying a Deering binder.

The Deering is designed and constructed with a view to efficient and long continued service. It meets fully the most exacting demands of the grain grower.

Should the grain be tall or short, light or heavy, standing or down and tangled, the Deering will harvest it all cleanly and without loss.

Being made in four sizes—5, 6, 7 and 8-foot cut—the Deering binder meets a wide range of uses.

The wide-cut binder is specially valuable to the large grain grower, being of unusual capacity.

CANADIAN BRANCHES: Calgary, London, Montreal, Toronto, Ottawa, Regina, St. John, Winnipeg.
INTERNATIONAL HARVESTER COMPANY OF AMERICA,
(INCORPORATED)
CHICAGO, U. S. A.

This extra wide binder is provided with a tongue truck, which reduces the draft and weight on the necks of team. We can't bring out the many special features of the Deering binder in this small space.

You should read about these in the Deering catalogue.

The Deering line of harvesting machines is complete and includes, besides grain and corn harvesting machines, binder twine, mowers, tedders, sweep rakes, side delivery rakes, hay loaders, stackers. Also a complete line of tillage implements and seeding machines, comprising disk drills, shoe drills, hoe drills, cultivators and seeders, smoothing, spring-tooth and disk harrows, land rollers and scufflers. Also gasoline engines, cream separators, hay presses, wagons, sleighs, and manure spreaders.

Call on the local Deering agent and discuss with him the qualities and advantages of Deering harvesting machines. Any of the following branch houses will supply you with the Deering catalogue.

DISPERSION SALE

ESTATE OF HENRY NICHOL

Will sell by PUBLIC AUCTION on Sec. 3, Tp. 11, Range 19,
4 miles north of Brandon, at one o'clock sharp

On May the 23rd, 1907

23 Head of Purebred Shorthorn Cattle
15 Head of Grade Cattle
and the balance of Implements

No reserve as Mrs. Nichol is giving up farming.

Catalog on application. T. C. NORRIS, Auctioneer.

FIRST ANNUAL SALE OF Pure Bred Hereford Cattle

from the celebrated herd of **THE MOSSOM BOYD CO.**, of Bobeaygeon, Ontario, consisting of 30 bulls and 7 females to which will be added the entire herd of choice Aberdeen-Angus Cattle belonging to **C. D. JERMYN, Esq.**, of Coal Banks, Alberta, consisting of about 30 or 40 head, will be held at the

ALBERTA STOCK YARDS, CALGARY, ALTA.,
ON THURSDAY, MAY 9th, 1907, commencing at 10 a.m.
MR. S. W. PAISLEY, Auctioneer.

Particulars and Catalogues upon application to

The Alberta Stock Yards Co. Ltd., Calgary
P. O. Box 1062. Phone 301.

FAIRVIEW SHORTHORNS

SIX YEARLING BULLS, fit to head herds. Sired by Nobleman, Meteor and Tepsman's Duke. Also some cracking **BULL CALVES** by Meteor. Some females (Cows and Heifers) in calf; just the stuff to lay the foundation of a herd with.

NOW IS THE TIME TO BUY

Cattle are going up in price. I shall not hold a sale this year, but parties will have abundant opportunities to buy by private treaty.

CARBERRY—C.P.R. and C.N.R.
FAIRVIEW—C.N.R.

JNO. G. BARRON

Advocate advertisements for prompt results.

application sent for registration must be accompanied by the cash; otherwise the accountant cannot issue the recorded pedigrees. Address all communications to The Accountant, National Live Stock Records, Department of Agriculture, Ottawa, Ontario.

"Application forms, transfer blanks, envelopes, etc. will be forwarded to all persons requesting them from the above.

"All letters to the above will pass free of postage, if the letters O. H. M. S. are placed in the upper right hand corner of the envelope."

* * *

The following is an extract from the address of Mr. Gifford Pinchot, chief of the United States Forestry Service and a close personal friend of President Roosevelt, before the Canadian Forestry convention:

"You have called this convention in recognition of the vital importance of forestry to Canada. Forestry is more closely, and I think it fair to say, more tremendously involved in the prosperity and well-being of the American continent north of the Mexican border than in that of any other area on the face of the whole earth.

"Timber and water in the east, water and timber in the west, are the great products of this great beneficent cloak of forest which has been spread over so much of our land on both sides of the line. We are apt to consider it as simply a truism, when we say that forestry is important. Well, it may be a truism, but it is one of those truisms that need not only to be made widely known, but to be realized and acted upon. For that we must speak definitely, unless we can specify what forestry will do for us in Canada and the United States we may very well consider that we have failed in the presentation of our case.

"I like to think of the forest as giving us not merely protection for our water supply, not merely the guarantee of the productiveness of our soils, not merely the assurance of the continuity of desirable local climatic conditions, but also as doing what it actually does—supplying us from day to day with that material which is perhaps on the whole the most important material for the building up of our civilization. We call this an age of steel, and so it is, but it is not the less an age of wood.

"We are face to face all over this North American continent, with a coming scarcity, in no long time, of this chief ingredient in construction, the pinch of the lack of which is going to be felt widely and keenly when it comes. We must remember that when this want does come, it will not be a question merely of reopening the source of supply as we reopened the mines when we were threatened with a coal famine a few years ago. It will be a question of facing the want for years. Fifty years is the shortest possible time within which the materials of construction can be grown. This is a matter in which foresight is the prime duty. Signs are not lacking throughout this continent that the approaching timber famine is not far away. I am informed that the prices of pine in Ontario have doubled within the past ten years; and similar facts might be cited from the other timber producing areas of North America.

"Let us pass briefly in review some of the ways in which the forest contributes to the national well being. You all know these things; nevertheless it will do no harm for us to keep them freshly in mind, as I think we should do throughout this convention. Though it is true that, in the eastern part of Canada and the United States, the pioneer farmer was obliged to clear away the forest before it was possible for him to build his house or support his family, it is also true that the time of the conquest of fields from the forest is almost wholly past. We have now reached the point where the forest, instead of being the enemy of the farmer in the east, is his most potent friend. And in the west we have reached the point where the farmer without the forest either nearby on his own farms or within the distance of reasonable railroad transportation, absolutely cannot prosecute his indus-

Dr. Wood's Norway Pine Syrup

Cures Coughs, Colds, Bronchitis, Hoarseness, Croup, Asthma, Pain or Tightness in the Chest, Etc.

It stops that tickling in the throat, is pleasant to take and soothing and healing to the lungs. Mr. E. Bishop Brand, the well-known Galt gardener, writes:—
"I had a very severe attack of sore throat and tightness in the chest. Some times when I wanted to cough and could not I would almost choke to death. My wife got me a bottle of **DR. WOOD'S NORWAY PINE SYRUP**, and to my surprise I found speedy relief. I would not be without it if it cost \$1.00 a bottle, and I can recommend it to everyone bothered with a cough or cold.
Price 25 Cents.

\$1.00 A POUND

POSTPAID

SOLANUM COMMERSONI VIOLET
OR
URUGUAYAN POTATO

The New Wonder—The Finest Tuber

It beats them all in productiveness and in quality, as can be seen by the reports of the French National Society of Agriculture.

The Academy of Sciences and other scientific bodies who sent agents to investigate, and in some places of first-class wet land they found that the yield of one acre went as high as 3,000 bushels; this is no fiction, just facts.

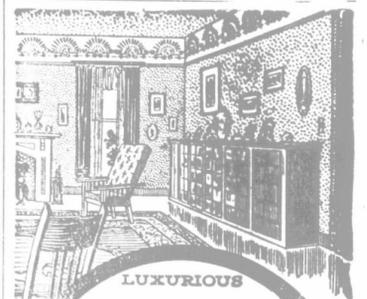
The potatoes I offer for sale have been grown here by myself from imported seed and I had a fine crop.

They thrive best in wet soil, marshy land, but they will do well in any soil and beat any other kind. As to quality, they are extra fine, rich in fecula. 17 to 18 per cent. free from diseases, and hard to freeze. Cut and plant as usual; three inches is deep enough in wet land. Any quantity will be sent postpaid on receipt of the price.

Order now; no better investment.

E. CHEYRION

St. Laurent, Man.



LUXURIOUS

rooms may be decorated in absolute good taste with Alabastine—a range of tints to select from that will let your walls harmonize with any furnishings. Send 10c for a copy of "Homes, Healthful and Beautiful," with many dainty, new ideas for the decoration of your home. Alabastine is sold by hardware and paint dealers everywhere—a 5 pound package for 50 cents.

Ask your dealer for tint card.

NEVER SOLD IN BULK.

THE Alabastine Co. LTD.
WILLOW STREET, PARIS, ONE

Kool
For Sale
no stone
Close to
400 front
buildings
Geo. G.

ECZEMA AGAIN OVERCOME

ZAM-BUK CURES A CASE WHICH FOR TWO YEARS HAD DEFIED EVERY REMEDY TRIED.

A Farmer's Grateful Testimony.

No case of eczema, skin disease, or ulceration, should be despaired of until Zam-Buk has been applied. The case of Mrs. Francis Renoit, of St. Anne's, (Man.), is a powerful illustration of Zam-Buk's efficacy. She says: "I suffered from eczema for two years, and tried a great number of remedies. None of them, however, seemed to do me any good. The ailment was mostly in my legs, and both these were actually raw from the knees down. A small sample box of Zam-Buk was given to me, and even so small a quantity as that did me a little good. I then obtained a proper supply, and by the time I had used a few boxes I was completely cured."

Zam-Buk differs from ordinary salves and embrocations in containing no animal oil or fat. It is compounded from rich, healing, herbal essences, and is an ideal natural combination of power and purity. It is highly anti-septic, and instantly kills bacilli and disease germs, which settling on to wounds and skin diseases set up festering, blood poison, etc. For cuts, burns, bruises, ulcers, abscesses, pimples, boils, skin eruptions, scalp sores, spreading sores, children's skin troubles, chafing sores etc., Zam-Buk is unequalled. It also cures piles. All druggists and stores at 50c. a box, or from Zam-Buk Co., Toronto, for price, 6 boxes for \$2.50.

Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with Fleming's Fistula and Poll Evil Cure.

—even bad old cases that skilled doctors have abandoned. Easy and simple, no cutting, just a little attention every fifth day—and your money refunded if it does not. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Advice.

Write us for a free copy. Sample-size boxes, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.

FLYING HERR, Chemist, 45 Church Street, Toronto, Ontario.

A \$10 CASH AWARD

for the Stockowner reporting the best results from the use of Hackney Stock Food.

Ten dollars in cash will be given for the best testimonial, received by July 1st, 1907, as to the results received from the use of Hackney Stock Food.

In order to enter this contest it is only necessary to obtain a 25 lb. pail of Hackney Stock Food from your dealer and report the results, stating who you obtained the Food from and for what purpose it was used, etc.

If you are not entirely satisfied with the results obtained from the use of Hackney Stock Tonic, your money will be refunded.

Many farmers are receiving splendid results every day but do not let their neighbors know about it, so the Hackney Stock Food Co., Winnipeg, decided to hold this trial contest.

Kootenay Fruit Lands

For Sale 160 acres in Sloean Valley, no waste land; no stone, all level; soil first class, 2 nice streams. Close to school, P.O., Ry Sidings, 7 acres cleared 400 fruit trees, some are bearing. Good log buildings. \$1000.00 Cash.

Geo. G. McLAREN, Box 654, NELSON, B.C.

try. We have reached the point where successful agriculture depends directly and immediately on the preservation of our forests. Just across the line in Michigan, there is a most convincing example of the expense and loss and lack of productiveness produced by the destruction of the forest on non-agricultural lands.

"We may assume then, that the fundamental industry of your great country and my great country is absolutely impossible in the absence of forest preservation. We cannot build railroads nor maintain them without the forest. We figure that if a tree were growing at each end of every railroad tie in every railroad in the United States, we should be able barely to keep these ties sound in the track. The estimate makes no allowance for any increase in mileage, which increase is going on so rapidly. The annual consumption of ties on steam and electric railroads in the United States closely approaches 150,000,000 per annum. It is an enormous sum, the contribution of the forest to transportation; without it transportation would be impossible.

"The average citizen depends in his daily life at every point on the timber supply. And I repeat it, for it stands to me in a vital place in the consideration of this whole matter, that wood is just as necessary to us in this day as a material basis for our civilization as any other material. If we are to preserve our prosperity, if we are to grow—and growth is the one thing that every citizen of Canada and of the United States looks forward to for his country—we must preserve our forests. That stands in the first place."

AUDITORIUM FOR BRANDON.

A decisive step has been taken in the preparations for the holding of future Manitoba winter fairs by the adopting of plans for a building to be erected in Brandon.

The plans are as previously announced with the exception of the size of the building, the dimensions of which have been enlarged to 120 feet by 228 feet. A cement floor will also be placed in the stabling room, which will give accommodation to sixty head, and a spacious department is also reserved for sheep and swine. The exhibition room will be 60 by 100 feet and the arena 50 by 100 feet. There will be a seating capacity for 1,800 people and the auditorium stage will be 30 by 50. The building will be modern in every particular, steam heated and fitted with all improvements. The cost will be about \$30,000.

The auction sale of Clydesdales belonging to Mr. J. L. Clark, Norval, Ont., on April 17th, was most successful. One pair of Canadian-bred mares, matched, sold for \$801; two pairs of two-year-olds sold for \$600 each; one pair of yearlings past, brought the handsome figure of \$535, and all the rest of the horses sold for good figures. The cattle also sold well. The proceeds of the sale totalled over \$6,000.

The Pierce Land and Stock Company, of San Francisco, California, at their recent sale of 72 head of Holsteins, held in Chicago, realized an average price for that number of \$227, the highest price being \$1,350, for the cow, Alcartra Polkadot, whose daughter, a calf, sold for \$530. Included in this statement was a bull that was crippled en route, and several young calves born on the way from San Francisco to Chicago.

Mr. W. H. Bryce, Doune Lodge, writes us that Lonely Star, a Baron's Pride mare, has foaled a horse colt, by Hiawatha. He is doing well and is expected to take a place in the showing this season.

The champion mare Rosadora has also foaled, but had twins which did not live.

Cledenning Bros. of Harding, Man., report that their sows are farrowing large healthy litters. Grass roots, laxative food, and a good run are some of the essentials in successful swine raising and about the surest road to failure is keeping the sows in a close, warm pen.

Runs in Oil

A cream separator has parts that run at high speed. To work smoothly and easily they have to be fitted together very exactly and yet unless thoroughly oiled they will grind and wear away. Hence the need of proper and ample oiling. In the U. S. Separator, oiling is done automatically and perfectly. The cut gives you an idea of the extremely simple arrangement.

Notice that part of the frame has been broken away, showing the driving gears, and the bowl which turns fastest. The sight feed oil cup automatically supplies the bearing that steadies the bowl; then that oil runs down into the gear chamber, where you see the little hollow. Once the machine is well oiled, this hollow gathers the surplus and keeps full. Now when you turn the gears in the improved

U.S. CREAM SEPARATOR

the teeth of the lowest gear run through this pool of oil and throw it up in a spray just as a buggy wheel throws water when you drive through a puddle. In this simple, economical way, the teeth of the gears above, the spiral teeth on the spindle of the bowl, and the simple, one-ball bearing at the bottom end of the spindle on which the bowl spins,—are ALL kept wet with oil when running and that's why (combined with proper construction and the best materials) there is so little friction to a U. S., and why it is the longest-wearing and lightest-running separator made.

Here we can only give you an idea of the superior oiling device, and can't even mention the many other advantages of the U. S. But we'll send you free a copy of our big, new separator catalogue that tells all about the U. S. Just say, "Send catalogue number D 110," and write us now while you think of it. Use a postal if it's handiest, or send a letter, addressing

Vermont Farm Machine Co.
Prompt Deliveries from Eighteen Distributing Warehouses. 442 Bellows Falls, Vt.



UNRESERVED SALE OF RAWLINSON BROS' HACKNEYS

In consequence of Messrs. RAWLINSON BROS. having sold their Ranch and who are leaving the country their entire stock of highly bred pedigree Hackneys must be disposed of and will be sold by Auction in JULY NEXT, at the Ranch 11 miles west of Calgary. The pedigree Hackneys consist of

- 3 IMPORTED STALLIONS
- 12 Four-year-old FILLIES
- 12 Yearling FILLIES, also 97 head of unregistered Mares, Fillies and Geldings.
- 6 HOME BRED STALLIONS
- 9 Three-year-old FILLIES
- 48 BROOD MARES
- 8 Two-year-old FILLIES

Nearly all the best mares the Champion "Robin Adair" ever got in this stud are included in this sale, together with the full sisters to "Saxon"—Pricilla and Minona—who won everything in sight at all the Eastern Shows, including the championship of both sexes at the St. Louis World's Fair. It is the greatest collection of high-class Hackneys that is ever likely to be offered in Canada for many years.

Catalogues of Sale will be ready for distribution on June 1st, 1907, and may be obtained from **JORDISON BROS., Auctioneers, P O Box 1172, CALGARY, Alberta**

The Bow River Horse Ranch has for Sale

Two and three-year-old Registered Clyde Stallions. Registered Clyde Mares, 1,600 and 1,700 lbs. heavy in foal. Grade Clyde Mares, 1,400 and 1,500 lbs., 4 and 5 years old, heavy in foal, sound and gentle, at \$500 per team. Grade Clyde Geldings, 3 and 4 years old, 1,200 to 1,300 lbs. Everything sound, halter broken and gentle, and the mares in foal to registered prize winners.

Two car-loads of well-bred 1,100 lbs. mares, mostly in foal to a French Coach stallion.

High-class drivers and saddle horses a specialty. Prices reasonable. Prospective buyers met at Cochrane.

G. E. GODDARD Cochrane, Alta.

CLYDESDALE STALLIONS and MARES

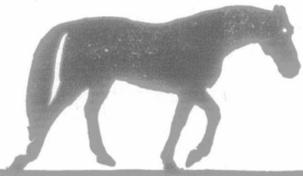
Out of a carefully bred and selected lot I am offering a five-year-old stallion, a three-year-old, a two-year-old, two yearlings, and several mares and fillies. Will sell quick before seeding. Farm (Meadow Lawn) convenient to Regina. Full details given on application. Address

J. D. TRAYNOR Condie P. O., Sask.

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New importation from Scotland has just arrived. *Scottish Farmer* reports—"Altogether this makes up one of the grandest shipments made this eventful year." A large number of excellent males of the above breeds to select from, both home bred and imported. Also a few stallions suitable for range purposes. Quality and breeding of the best. Prices defy competition. No agents or commission men—business conducted personally. Sales speak for themselves—35 stallions sold last season. Anyone wishing a show stallion or filly can have a greater choice here than in any other breeding establishment in Canada. Orders for stock carefully filled. Visitors all made welcome.



Where all else fails USE Kendall's Spavin Cure

Bone Spavin, Ringbone, Splint, Blood and Bog Spavin, Thoroughpin, Curb, Capped Hock, especially if of long standing and obstinate—will not yield to ordinary liniments or blisters.

KENDALL'S SPAVIN CURE is an extraordinary remedy that gives extraordinary results. It cures old, stubborn cases that many times veterinarians have given up—takes away every sign of lameness—does not scar or kill the hair—and leaves the horse sound and smooth.

BENITO, Man, Sept. '06
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and it never failed me once."
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Write for noted book "Treatise On The Horse"—something worth knowing on every page. Sent free. Kendall's Spavin Cure is sold by dealers everywhere at \$1. a bottle—\$ for \$5.

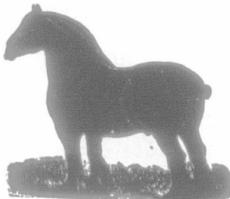
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Do you want to improve your stock of horses?
Then buy a first-class Stallion. We have them.

Don't take my word for it but look up my prize record

At Brandon winter fair I took 1st, 2nd and Championship. At Winnipeg
At Neepawa a horse sold from my barn took first. At Winnipeg
Industrial I took 5 firsts on individuals; I also won
the 3 gold medals offered by the Percheron Society
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ship mare and 3-year-old stallion. These are for
sale and at reasonable prices. Write or call on
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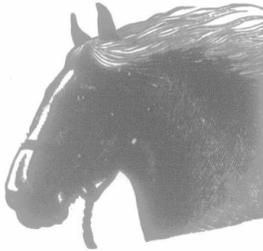
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at lower prices than all competitors.

New Shipment just arrived
containing several sons of the noted
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A few choice Suffolks, Percherons and Hackneys on hand.

EVERY ANIMAL GUARANTEED. WRITE FOR PARTICULARS.

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Stallions and mares of excellent breeding, of all ages, for sale

Also some choice young bulls fit for service and a number of
cows and heifers of noted Scotch strains.

Many of them Leading Prize Winners at the big Western Fairs.

P. M. BREDT

Regina, Sask.



THE DISPOSITION OF THE PLACENTA (AFTERBIRTH).

(Continued from page 686.)

They are instinctively compelled to eat their placenta only, and all mammalian females eat their own placental membranes. This is a dominant physiological necessity, as we shall see. The newly born yet enveloped in the placenta lying motionless within it and completely saturated by special nutritive juices, it is no wonder that they slight these poor animals; having no midwife nor obstetrician to instruct them, they eat up everything heedlessly. But as soon as they feel that the newly born move or are alive, they are no longer deceived; they show on the contrary the greatest concern for their offspring. And this eager desire, this necessity to devour their placenta, is peculiar to all mammalian females, carnivora as well as herbivora, and it is even common among tribes of people in Asia, Africa, and Oceania, who are even at the present day placentophagists. Since the labors of Brown-Sequard we have studied and tested the potency of the organic juice and we have long recognized that the placental juices have great effect upon the health of the parturient and upon certain functions which stand in relation to it—for example, lactation. However, the influence of the placenta upon the organization of lactation is dependent upon other symptoms of pregnancy, which I shall try to summarize briefly for amateur breeders and others. The thyroid gland secretes iodine, arsenic and phosphoric bases, which play an important part in the formation of the skin and its appendages, hide, feathers, brain, genital organs, and the embryo. The excess of these substances is excreted in the form of menstruation in those females which have little hair upon the skin, and as long as there is no foetus to consume them. The monthly catamenia in the human species is only a means of emptying the thyroid secretions, which are abundantly discharged during the menstrual period, in the unimpregnated uterus. Men are not subjected to it, because their hair system is a sufficient drainage for the products of the thyroid glands, which after puberty is constantly growing and renewing itself. The females of animals which are well clothed with hair, at the time of heat do not suffer any loss of blood, while those animals which have little hair, menstruate. We have noticed for a long time, that in the case of certain animals, a very close relation exists between the activity of the organs of reproduction at the time of heat and the evolution of certain parts of the body which undergo changes periodically, as the antlers of the deer, the hoods of fowls, the nuptial feathers with which certain birds are adorned at the mating season. Moreover he has given an explanation of this strange phenomenon of the relation between apparently so remote and to a certain extent strange organs, in which he says, that a special epithelium plays the principal role in the fetal evolution of the ovaries and testicles and that the feathers and hair are of a simple epithelial nature. To-day these anatomical analogies are strengthened by the functions of the thyroid glands; so that we can state with certainty, only a means of drainage for the secretions of the thyroid gland, which are eliminated in excessive quantities at the time of menstruation. Every moult, every new production of hair or feathers, stops as soon as the reproductive organs and their accessories, that is the mammary glands, begin their functions. Now additional organic juices flow together into the placenta and accumulate there for the development of a new being. Everything that the female body can produce, it stores up in the placenta. Fortunately at the moment of delivery the contractions of the uterus press the placenta slowly together, to some extent to facilitate the absorption of a part of this stored up supply, which later would be useless. In any case a great portion is wasted at the time of delivery, which is a great loss to the body. This natural instinct to make use of this valuable material



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to give satisfaction.

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

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They can virtually go right down in the poultry keeper's pocket and take the money. If left undisturbed the natural increase is so great that they soon multiply to a swarm that will sap the life of young chicks, breed disease in the pens and ruin profit.

Instant Louse Killer

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kills lice on poultry, lice on stock, and ticks on sheep. It is harmless to use, and will effectively destroy cabbage worms, slugs on rose bushes, and bugs on cucumber, squash and melon vines. Instant Louse Killer is the original powder louse killer put up in round cans with perforated top. Look for the word "Instant" on the can—then you won't get an imitation.

1 lb. 35 cents
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MOUNT GAME, HEADS, TAN SKINS, MAKE RUGS, etc.

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T. R. PEARSON
NEW WESTMINSTER, BRITISH COLUMBIA

nutrition, which is created from her own body, even if she belongs to a species to which flesh foods are usually abhorrent. Since it has an especial value for her at this moment, it creates a strong desire to eat and digest the afterbirth. Every female which can eat all or a part of her placenta, recovers more quickly from her confinement and the milk secretion makes its appearance more rapidly and more plentifully. And it is especially true and striking in the case of rabbits and guinea-pigs. We take pains to prevent these animals from eating their afterbirth, and when we do, their offspring never attain full growth; the flow of milk makes its appearance late and scantily; the physiological formation of milk does not take place, and their young ones perish." [From observations made by us we cannot agree that the consumption of the placenta by a cow increased the milk flow. Whether erroneous or not we have always held to the opinion based on observation, that the reverse was the case. The theories advanced by Dr. Quinet are ingenious to say the least.—Ed.]

QUESTIONS AND ANSWERS.

PLANTING SHELTER BELT.

I have some trees to set out this spring and would like to know which is the best way to plant them. I got some apple trees from the Experimental Farm, Brandon; also about 300 Russian willow trees. How would you plant the willow trees to shelter my fruit trees? Some advise me to shelter them from the north and east. My land is a black loam which is high and dry, with a small bluff to the north. If there is any shrub which will grow faster and make better shelter than the willow, kindly advise me.

Man. W. E. M.

Ans.—There are no better trees than the willows, if of the right kind, for windbreaks or shelter. Plant the shelter-belt on the south and west principally, and be sure to get them far enough away to prevent snow drifting in and breaking the fruit trees. 100 to 300 feet will be necessary, according to the lay of the land, bluffs in the vicinity, etc. We should advise planting the fruit trees on the north side of the bluff if practicable. Plant the willows 4 feet apart each way. To form a good shelter, 10 to 15 rows of trees are necessary, and it is a good plan to plant a single or two rows 100 feet outside of the main break, to cause the snow to bank in the space between the shelter belts, and save the trees from damage by banking of snow.

FENCING: DENTISTS.

1. Will you please tell me about fences in Sask.? I wish to fence my quarter and should like to know if my neighbors bordering my quarter can be made to fence their half or do I have to fence it all? If they do not fence it and I want to keep the town cattle out, can I go ahead and fence it and charge them for the work, etc.?

2. What does a dentist have to do to practice in Canada when he comes from U. S. and graduated in U. S.? Where does he go to take an examination (if any) in Sask. What are the requirements?

Rouleau, SASK. SUBSCRIBER.

Ans. 1.—See reply under another head in this issue.

2. Formerly all that was necessary was to register with the Association of Dentists. We think it is the same yet. A local dentist could inform you.

PATENT: GARNISHEEING.

1. What is the address of the Dominion Patent Office?

2. What is the fee for securing a patent in Canada and the United States?

3. A garnishee B for C's wages, but does not get anything. Can A touch C's bank account? The claim is on a promissory note.

Sask. J. W. S.

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AUTHORIZED CAPITAL \$500,000.00
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FOR SALE—Shorthorns, combining milk and beef, and prize winning Tamworths, pigs of both sexes. Write me,

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Saskatchewan Valley Stock Farm.

Largest Herd of Pure Bred SHORTHORNS in northern Saskatchewan. Winners of Imperial Bank Cup. Best herd any breed 1904, 1905 and 1906.

Stock for Sale. Farm adjoins city.

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The Champion Herd at Regina and Calgary, 1906. At present all my bulls are sold but I can supply a number of first-class females of all ages and of most approved breeding. My old stock bull, Sittyton Hero 7th, has left a good mark. Get my prices for females before closing elsewhere.

GEO. KINNON, COTTONWOOD, Sask.
Lumsden or Pense stations.

Boo Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be initiated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

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The Champion Herd at Winnipeg and Brandon for three years. This year won nine first prizes out of ten competed for. At Winnipeg, three champion ships and one grand championship.

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Stations: Brooklin, G.T.R. Myrtle, C.P.R.

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Several excellent Shorthorn Bulls and Heifers for sale. Some of these are extra quality.

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12 Sows due to farrow in April and May.

Barred Plymouth Rock and Mammoth Pekin Duck Eggs for Hatching
Write for what you want and get my prices before buying elsewhere.

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Spring Pigs \$10 apiece when weaned.
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Shorthorn Bulls, Heifers and Hefier Calves for Sale.

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

Young Stations for sale, two and three years old. Also mares and fillies. Leicester Sheep, both sexes. Stock always on hand.

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Ranchers and farmers need the red, white and roan, if you wish to breed the best and most profitable cattle. Can supply you with tip-top stuff. Am offering two-year-old Bull—herd header—and 14 yearling Bulls; also Cows and Heifers

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FOR SALE two right good Clydesdale Stallions, rising two years Shorthorn Bulls and Heifers, one and two years old. Yorkshire Pigs (fall and spring litters), and a grand lot of Barred Rock Cockerels.

All at moderate prices.

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Garman or Roland Stations, C.P.R., G.N.R. or G.N.R.

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All the best families represented.
Some fine young bulls for sale from both imported and home bred cows. Prices reasonable

S. MARTIN, Rounthwaite, Man.

The Champion Herd at Winnipeg and Brandon for three years. This year won nine first prizes out of ten competed for. At Winnipeg, three champion ships and one grand championship.

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If you are thinking of replenishing your home furnishings you cannot invest in anything that will give as much genuine help in your housekeeping as the Chatham Kitchen Cabinet—and once you use it you'll find the regular weekly—monthly—and yearly housecleaning is no longer a bugbear. Your kitchen and pantry take the biggest part of your time—and make the hardest part of your housework—but if you'll use my Cabinet you can cut out all the kitchen drudgery and use the extra time for pleasanter work or recreation.

Now you should get my **FREE KITCHEN CABINET CATALOGUE** at once—and you can get it, postpaid, by writing a postal. Send for it today without fail. It's a handsome book that shows beautiful photographs of the Chatham Kitchen Cabinet and gives my prices and terms. It's free for the asking. Write for it today. Address me personally.

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Percheron stud headed by Berenger, winner of first prize at three years old at Paris, France, in 1905.

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Every horse sold under a warranty. Terms easy. Correspondence solicited. Barns 1/2 mile of station.



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Ans.—1. Parliament buildings, Ottawa
2. You would need a solicitor to secure you a patent and properly protect your rights. Consult one and he will tell you the fees.
3. You should bring action and get a judgment against C, who would then have to pay the amount and costs.

COW SUCKING HERSELF.

I should like to know what to do to prevent a cow sucking herself. She is a valuable animal and I would not like to lose her. I have at present a strap round her body with a pole between the forelegs attached to the strap and then to a halter, but it causes a sore on her back and when she is lying down she can still suck a little.

Alta. AN ADVOCATE WELL-WISHER.
Ans.—It might be a good idea to put a pad under the strap on her back or use a wide band sursingle? Another plan is to take a piece of light, tough, wood, which will not split (basswood for instance), about eight inches long and five inches in breadth; on one side of it whittle an oblong opening which will fit into the animal's nose, somewhat after the manner of an old fashioned-bull ring; gouge out enough to let the board play easily and hang down; then when the animal tried to suck itself this piece of wood will flap down over her nose in such a manner as that she cannot reach the teat, the wood coming between her nose and the teat. The contrivance does not prevent the animal from grazing or feeding in the stable. Some cows can be cured by wearing a leather halter, with sharp nails through the nose-piece, the points standing upwards and pricking their flanks when they attempt to suck.

BUILDING LINE FENCE.
A wishes to fence his homestead. Can he compel his neighbors to bear half the expense of the fence which divides A's homestead from his neighbor's and must A's neighbor keep up the repairs of half the dividing fence?
Sask. W. H. E.
Ans.—A cannot compel his neighbors to bear half the expense of a line fence until they join their fences to his, thus making use of the line fence as a part of their enclosures. They must then repay you a half the value of the fence and also keep half of it in repair.

BRITISH COLUMBIA LANDS.

Can a man get a pre-emption in British Columbia after having a homestead proved up in Saskatchewan?
If so, in what part of B. C. can he get it? And please give a description of the said land.
Sask. A. Z.
Ans.—With the exception of lands along the C. P. R. the provincial Government controls the lands in British Columbia, and consequently they are not subject to the same regulations as those in Saskatchewan and Alberta. We should advise writing the Department of Agriculture at Victoria for the latest information as to the lands available and surveyed. Conditions are constantly changing and you should have the latest descriptions and information.

CHANGING SURVEYS.

I filed a homestead and find that there was a mistake in the old survey. I wrote to Ottawa and the surveyor came and found the mistake and reported. Then another surveyor came and dug the corner mounds where they ought to be. The old survey takes over twenty acres off my place. What I want to know is—Can my neighbor hold that land or can I get it? It is all fenced. What would be the legal way to get the fence changed, or can it be changed from the old survey to the new one which is correct?
Alta. A. P. W.
You will be entitled to remove your fence, but you will be obliged to lose the land, although the Department should compensate you for the loss of your labor if cultivated. The only way you can get this arranged is by writing to the Department of Interior, Ottawa, stating all the facts and if there is any trouble about getting your fence they will issue you an order allowing you to remove it. Your neighbor, however, should make no objection to your taking your fence, which you are entitled to.

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"OSHAWA" GALVANIZED STEEL SHINGLES

Sold under a plain GUARANTEE that keeps your roof good for 25 years. With decent care, an Oshawa-Shingled roof will last a CENTURY.

Easy To Put On

With a hammer and a snips (tinners' shears) anybody can put Oshawa Shingles on perfectly. Locked on all four sides—see the side lock?

It drains the shingles so that water can't seep under. Top lock (see below) makes whole roof practically one piece and sheds water quick. Made in one grade only—23-gauge semi-toughened steel, double-galvanized (saves painting).

Wind - water - and - fire - PROOF. Keep buildings safe from Lightning. Cost only \$4.50 a square (10 ft. x 10 ft.)



Send for booklet and learn how little a RIGHT roof costs. Address

The PEDLAR PEOPLE
Of Oshawa

Montreal 321-3 Craig St. W. Ottawa 423 Sussex St.
Toronto 11 Calborne St. London 69 Dundas St.
Winnipeg 76-82 Lombard St. Vancouver 615 Pender St.

An Ideal Stock Farm For Sale

960 acres in Block. 7 1/2 miles from town; all fenced. Running Water and Springs. Good House and Barns. Write for full particulars. This is one of our many good buys.

CANADIAN AMERICAN REAL ESTATE CO. Ltd.
LACOMBE, Alberta

Well DRILLING & PROSPECTING MACHINES

Fastest drillers known. Great money earners!
LOONIS MACHINE CO., TIFFIN, OHIO

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et book on 'Roofing ight' and e how little sk you take hen you oof any uilding with

AWA") STEEL SLES

ARANTEE good for 25 an Oshawa- ENTURY.

On a snips



ned steel, ainting).

- fire- uildings e from ghtning- st only .50 a iare (10 x 10 ft.) for book- d learn RIGHT Address

LAR DPLE

wa ex St. on as St. iver or St.

arm

miles unning House ll par- of our

. Ltd.

G & IACHINES earners! , OHIO

POOR WORK AT THRESHING.

A certain man came to me last fall and asked to do my threshing. He claimed to have a first class threshing outfit and first class men to run it and also would guarantee first class work. I told him if he threshed for me I wanted good work. When I came to handle the straw through the winter I found that there was considerable grain in the straw. I consider that there would be enough to pay for the threshing of the whole crop, which amounted to \$168.25. I payed him part. Can I collect damages of him for the waste? T. H. F. Sask.

Ans.—From what you state it would appear that the thresher guaranteed first class work, and if there is a large quantity of grain in the straw, which you state there is, you would be quite justified in retaining the whole of the money due him for threshing and if he entered action against you to recover the money you could then counterclaim for damages for the loss sustained by you for the bad work. In order to satisfy the court of the amount of your loss you should get some competent farmers to gather up a quantity of the straw at the different places and out of a certain quantity thoroughly shake the wheat, collect it and then see how much you have and you could then make a fair estimate of the wheat in the straw. If part is not threshed and the wheat still left in the heads it would be well to get some neighbor farmers to collect the heads; or you could collect them in the presence of a witness, have them tied together and kept in view of the evidence. If the thresher does not enter action against you for the amount due him, you could immediately proceed against him for the value of your loss. This is a matter which it would be necessary to lay before a solicitor with all the facts.

CEMENT FACTORIES, STEEL GRANARIES.

1. Please inform me where cement is manufactured in Manitoba or the other western provinces, if any.

2. Can you inform me also where portable steel granaries are manufactured? W. R. C. Sask.

Ans.—There are two cement factories about to be operated at Calgary, and we think another is being projected at Medicine Hat. In Manitoba a factory is in process of erection near Morden, but we are not certain that any of these have actually manufactured cement as yet.

2. Any of the machine works; such as the Vulcan Iron Works, Winnipeg; Brandon Machine Works, Brandon; Regina Machine Works, Regina, etc., would make such an article on order.

FENCING A HOMESTEAD.

A has taken up a homestead. Can he prove up same by fencing the whole thing providing 20 head of cattle and shelter for same, sleeping on the homestead at night and through the day working at a neighboring town to earn a livelihood? W. H. E. Sask.

Ans.—Yes, that would be fulfilling the conditions of the Homestead Act.

LIMBER NECK IN FOWL.

I wonder if you could tell me what the trouble is with my poultry. Two roosters have taken ill and died. They first get dull then twist their necks around and finally die. Man. POULTRY KEEPER.

Ans.—This disease is usually called "limber neck", and is caused by eating of some foul matter. The general idea is it is caused by eating at a dead body, either a dead chicken or impure carcass of some kind. While this is often the case I think it can be caused by fowl living steadily as they

If you want feed that will give you more eggs with the best, for blood in them. I can supply you with the best, Shetlands and White Leghorns JAS. BRAY, Portage la Prairie

Kettle Valley Irrigated Fruit Lands Company

have large acreage of subdivided fruit lands now for sale. Prices \$100 to \$150 per acre. Ample supply of water for which NO RENT is charged. Soil a rich sandy loam which produces the finest apples, small fruits and vegetables. Valuable local market in surrounding mining towns. Splendid climate and excellent railway facilities. Apply to

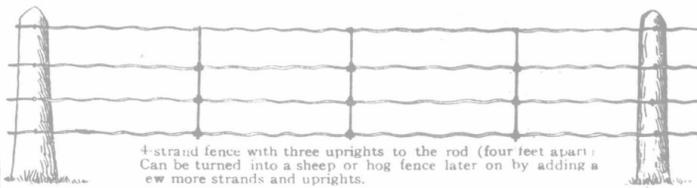
W. O. Wright, Managing Director MIDWAY, B. C.

SPEND A CENT

on postage and ask us for a mailing box for your watch. We will report cost of repairs and upon your instructions will repair and return to you, guaranteed for one year

A. BRUCE POWLEY 324 JASPER AVENUE EDMONTON Official Time Inspector for the C. N. R.

"Anchor" Field Erected and "Majestic" Woven Wire Fences



4-strand fence with three uprights to the rod (four feet apart). Can be turned into a sheep or hog fence later on by adding a few more strands and uprights.

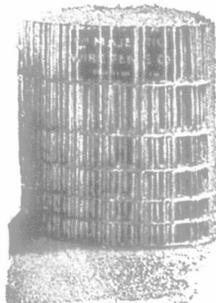
Our "Majestic" is a specially designed Hog and General Purpose Fence.

When writing for prices state for what kind of stock required

Manufacturers of Farm and Lawn Fencing Gates, Coiled Spring Wire, Staples, Wrought Iron Fences, Gates, etc.

We do not sell everything; from the proverbial Needle to the Anchor, but fences to turn everything from a Buffalo to a little Pig.

MANITOBA ANCHOR FENCE Co. LTD. 90 PRINCESS ST. WINNIPEG



Farmers! Ship your Grain to the GRAIN GROWERS' GRAIN CO. Ltd.

Commission Merchants, Track Buyers and Exporters

Wheat, Barley, Oats and Flax bought on track or handled on commission

We would ask every farmer, whether a shareholder or no, to consign his grain to us or wire for bids when car is loaded. Let every farmer take a share or shares in the Company and increase our working capital. The larger the Company the greater the economy in operation and ease in maintaining satisfactory export connections. Although enjoying the privileges of membership on the Winnipeg Grain and Produce Exchange, we will take every opportunity to enlarge our export connections and trade in Eastern Canada and the Old Country.

You must pay someone for the service of handling your grain. The Company will employ part of the profits of the business in spreading the organization, improving conditions and developing markets; the balance of profits will be available in the payment of dividends on paid-up capital. Those of our subscribers who have only paid 10% on shares had better meet the 20% call since made, at once, and so share to a greater extent in the profits of this season's business.

Get your neighbors as shareholders, if possible; if not, try and induce them to patronize the Company.

Bill your grain to the order of the 'Grain Growers' Grain Co., at Fort William or Port Arthur, according as you are on the Canadian Pacific or Canadian Northern railway system

Write across the bill "Advise Grain Growers' Grain Co., 5 Henderson Block, Winnipeg."

Our Binder Twine Prices



At Winnipeg it sells for 11 1/2c. per pound, at Brandon for 12c, at Regina 12 1/2c., and at Calgary for 12 1/2c.

These prices are very close to the cost of production, and the reason is that we are selling our twine on a very close margin, for as a matter of fact we are not in the business to make money out of it, but to accommodate our customers. We had many enquiries about Binder Twine, and when we investigated the matter, we found that we could save money to all who bought from us.

Our prices are considerably lower than the prices that have prevailed in the country and the quality of our twine is such that we have no hesitation in recommending it. It is made specially for us, contains about 50% of pure Manila, measures 550 feet to the pound, and is so evenly and smoothly woven that it can be used with entire satisfaction in any pattern of knotter.

So confident are we of the excellent quality of our twine that we give the following guarantee.

Should your crops be destroyed, by hail or excessive rain, or should the twine be unsatisfactory for any reason, you are at liberty to return it to us at our expense, and we will refund your money promptly.

The most economical way to buy twine, is in car-lots. You can get it laid down anywhere in Manitoba, in car-lots, for 12 cents, which is an exceedingly low price for this grade of twine. Have your neighbors combine with you and send your orders all together, and even if you have not a full car, send them to us, for its quite possible we have other orders for your station that will make up the car-lot. If not we will see that you get the Twine in the cheapest way possible.

Write for our Special Grocery Catalogue

THE T. EATON CO. LIMITED WINNIPEG, CANADA.

How many times during a year would you be willing to pay a few cents an hour for a reliable power?

A good many times, no doubt. For grinding or cutting feed, sawing wood, separating cream, churning, pumping water, grinding tools, and a score of other tasks. A good many times, indeed, and when you want it you want it without delay.

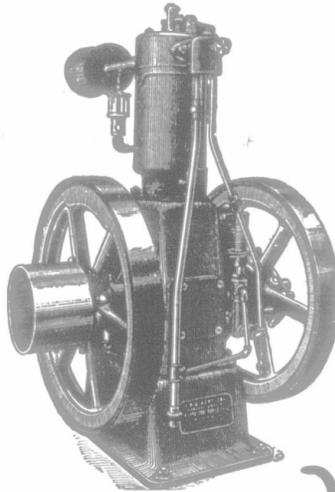
An I. H. C. gasoline engine will furnish such power—a 3-horse engine, for instance, will furnish power equal to that of three horses at the smallest cost per hour, and it will be always ready when you want it, and ready to work as long and as hard as you wish. You don't have to start a fire—not even strike a match—to start an I. H. C. gasoline engine. All you have to do is close a little

switch, open the fuel valve, give the flywheel a turn or two by hand, and off it goes, working—ready to help in a hundred ways.

Stop and think how many times you could have used such convenient power last week, for instance.

There should be a gasoline engine on every farm. Whether it shall be an I. H. C. or some other engine on your farm is for you to decide, but it will pay you well to learn of the simple construction of I. H. C. gasoline engines before you buy. It will pay you to find out how easily they are operated, how little trouble they give, how economical in the use of fuel, how much power they will furnish, how strong and durable they are.

CANADIAN BRANCHES: Calgary, London, Montreal, Ottawa, Regina, St. John, Toronto, Winnipeg.
INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.
(INCORPORATED.)



These engines are made in the following styles and sizes:—Horizontal (stationary or portable), 4, 6, 8, 10, 12, 15 and 20-horse power. Vertical, 2 and 3-horse power. It will pay you to know these things. Call on our local agent or write nearest branch house for catalog.

often do by scratching in the horse and cattle barn. I have known a flock of fowl which had one or two cases of this complaint to have no more after being shut away from the stables. Burn all dead bodies. It is no use trying a cure for this complaint.
W. E. WABY.

Trade Notes

IN THIS ISSUE is advertised a variety of potato that is claimed to be particularly adapted to wet, marshy soils. It is a new discovery said to have been made in Uruguay, and the cultivation so far, though limited, has been most gratifying. It is claimed for these potatoes in addition to their growing in swampy lands that they are large yielders, that the flavor is pleasant and the sun does not burn any that are exposed. Persons interested in new vegetable discoveries from an experimental or commercial standpoint should write Mr. E. Cheyrien, St. Laurent, Man.

WE TAKE PLEASURE IN TELLING our readers of the rapid progress of the Manitoba Gypsum Company, Ltd.

This company own a large gypsum deposit on Lake Manitoba. Last year they placed upon the market Manitoba hard wall plaster. The product has taken well with the people, the demand has greatly increased and everywhere it has given the best satisfaction. We could print columns of testimonials, but the following from a well known Winnipeg merchant is sufficient proof of the merits of this article.

"The Manitoba Gypsum Co. Ltd., Winnipeg, Man.

"Gentlemen:—We have handled your products since you started to manufacture same, and have shipped all through Western Canada and we take great pleasure in advising you we have never received a single complaint on your line of goods, but same has always given the most uniform satisfaction, and we are pleased to send you this tribute to the quality of your goods, and will be glad if it helps you to increase your sales.
"Yours truly,

"THE J. H. ASHDOWN HARDWARE CO."
Write direct to Manitoba Gypsum Co., Winnipeg, for further particulars.

FAMOUS FRUIT RANCH SUB-DIVIDED.

A Great Opportunity to Buy an Improved Fruit Farm in the Kootenay.

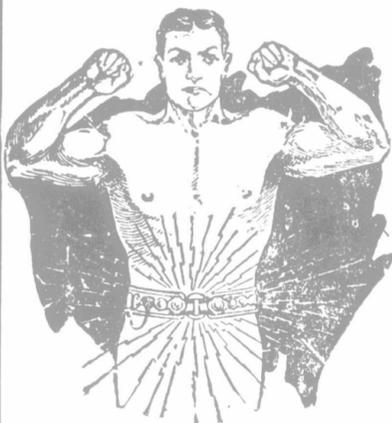
S. M. Bridges and D. LaBau, owners of the famous Cold Spring Ranch, near Proctor on the west arm of Kootenay Lake, 18 miles from Nelson, announce that they have decided to subdivide it into small holdings, which will be sold for fruit ranches. This property is probably the best known improved ranch of large size in the Kootenay country. There are 1,000 acres in it, several hundred acres are partly cleared and about forty acres have been planted with apple, pear and cherry trees for three or four years.

This property is well watered and controls ample water rights for such irrigation as may be needed, though in common with advantageously located fruit lands in the Kootenay country, it does not require irrigation for fruit raising.

While the bulk of the property will be held up in 5 to 25 acre farms, the improved lake frontage has been reserved for residence lots, which will make desirable summer home sites for the people of Nelson and outsiders who desire to spend their summers in the Kootenay. Ample lake frontage will be available for the common use of the people of the small farms, and in the case of the property great care has been taken to lay out roads, so that the improved lots will be readily accessible to the lake, which crosses the property on a regular landing. The property is owned by LaBau, Knapp and Bridges, exclusive agents for the Kootenay property. That interested parties in Chicago and elsewhere should contact the International Harvester Co., Chicago, and

WEAK, RUN-DOWN WORN-OUT MEN

Wear My Belt Without Cost Until Cured



I have the grandest invention of the age for weak, run-down, worn-out men; the surest and easiest cure for all nervous and chronic diseases. Its wonderful power is directed to the seat of the nervous system, through which its vitalized strength penetrates into all parts of the body, carrying new life to every function which has been weakened by disease or dissipation, restoring energy to the brain and power to the system. No weak man will ever regret a fair trial of this invigorator.

Why will you be weak? Why do you go on from day to day when you know you are losing your nerve force—your manhood—when you see a cure within your grasp? Do not delay a matter which is the key to your future happiness. Whatever your condition to-day, you will not improve as you grow older. Age calls for greater vital force, and the older you get the more pronounced will be your weakness.

Dr. McLaughlin's Electric Belt

will make you strong. It will send the life blood dancing through your veins, you will feel the exhilarating spark warm your frame, the bright flash will come to your eye and a firm grip to your hands, and you will be able to grasp your fellow man and feel that what others are capable of doing is not impossible to you. This grand appliance has brought strength, ambition and happiness to thousands of men in the past year.

It is the one sure remedy for the cure of Rheumatism, Weak Back, Weak Kidneys, Weak Stomach, Varicose, Loss of Power in young or old, and similar ailments, as well as Dyspepsia, Constipation, etc. How can any one remain in doubt as to the value of this grand remedy when you see so many cures by it?

My confidence in my method enables me to offer any man or woman, who will offer me reasonable security, the use of my

ELECTRIC BELT FREE UNTIL CURED.

CAUTION.—Don't be misled by imitators. Remember that electricity must be properly applied to cure, and that for your case there is but one way to apply it properly. Without that you might just as well not use it at all.

Dr. McLaughlin—I should have written to you long ago, but neglected doing so. I got one of your Belts nearly three years ago and used it according to your instructions for nearly two months, and I am well pleased with the result. My back, which was so weak and lame, is entirely cured and has not bothered me since. I sent it to some of my neighbors with the same result. Wishing you all success in your good work, I am, ALLEN SHOEMAKER, Grand View, Man.

Dr. McLaughlin:—Dear Sir—I received the Belt from you a month ago, and I now write you with pleasure. I am pleased to say that the belt is doing me a great deal of good. My back has not troubled me once since the first night I had it on. I have a good appetite and I feel better than I have felt for several years. Thanking you for the Belt, I remain, J. W. BUSH, 317 Pacific Ave., Winnipeg, Man.

ALL TO-DAY for Free Test of my Belt and Free Book. If you can't call, cut out and send in this coupon.

FREE BOOK

Write me to-day for my beautifully illustrated book with cuts showing how my Belt is applied, and lots of good reading for those who want to be "the noblest work of God"—A MAN. In close this coupon and I will send this book, sealed, free.

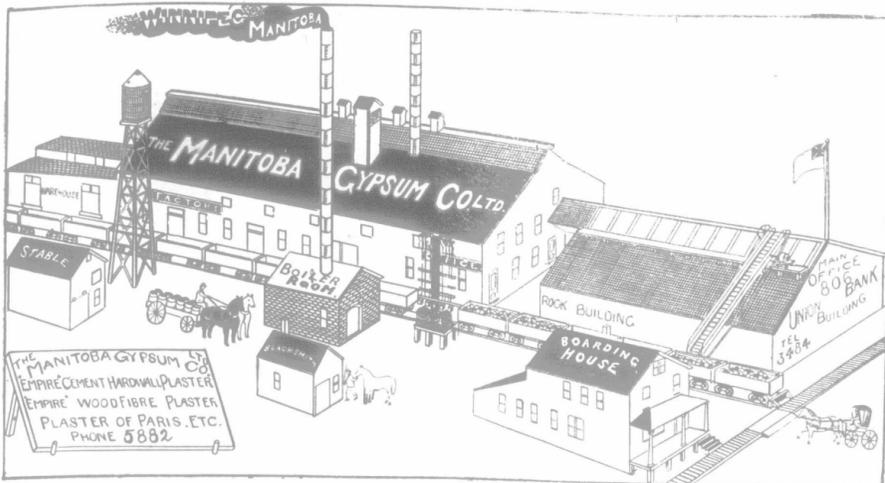
DR. M. D. McLAUGHLIN, 112 YONGE STREET, TORONTO, CAN.

Please forward the name of your books as advertised.

NAME _____

ADDRESS _____

Office Hours: 9 am to 6 pm, Wednesday and Saturday until 5 pm.



This is the Mill that makes the best
Hard Wall Plaster and Empire Wood Fibre Plaster, Plaster of Paris and Finish on earth
 Send for descriptive book.
 The Manitoba Gypsum Co. Limited
 806 Union Bank Building
 WINNIPEG

TO OUR FRIENDS FROM THE OLD LAND

By special arrangement with the publishers of the Overseas Edition of the London Daily Mail we are able to make this special offer:

The Farmer's Advocate one year.....\$1.50	Our special clubbing offer gives both
The London Daily Mail one year..... 1.75	the papers for only.....\$2.25
Both together are worth..... 3.25	

You should keep in touch with the Homeland and read the best agricultural literature. This is easily done by this special low priced offer.

THE FARMER'S ADVOCATE

WINNIPEG, MAN.

60 DAY'S FREE TRIAL
 of a World-Famed Remedy

Use my Invention for 60 days. If then cured, pay me. If not, return it. I ask not a penny in advance or on deposit.



Health is happiness. It is the foundation-stone of the happy family. It is success in business; it is contentment and self satisfaction. You enter your home after your day's work, and even though tired, your buoyancy fills the house with joy and pleasure. Your friends seek you, and you are the centre of all that is true wealth—perfect happiness, cheer and contentment. All the money in the world cannot give you those if you have lost your health. The debilitate bring only misery into a family: are often shunned by friends, and are generally a failure in business or their vocation. Life is a burden to them. I think this state almost a crime when a reasonable opportunity is offered to overcome it. There is a way to overcome it. I have a cure for these unfortunate men and women, and since I found the remedy 40 years ago I have aided more than 100,000 to regain their health and strength.

My treatment for those who suffer from Rheumatism, Lumbago, Nervousness, Melancholia, Lame Back, Wrecked Stomach, Ataxia Partial Paralysis, general ill health, etc., is the simplest and most natural ever offered. It is Electricity. Everybody to-day knows that a normal quantity of it in the human body means perfect health and strength. A deficiency means weakness and disease. I can give you back this natural electricity and make you as well and strong as ever you were. So confident I am of what I can do, that to anyone suffering as above, I will give my World-famed, Dr. Sanden Electric Herculex, completely arranged for men or women, upon absolute

FREE TRIAL UNTIL CURED

NOT one penny do I ask you to pay in advance or on deposit. My low-power Herculex at \$5.00 is strong enough in many cases. If you wish to buy for cash, I give a very liberal discount. I cure people every day in this way.

As the originator and founder of the Electric Body Battery system of treatment, my success is the envy of many, and my Herculex, of course, is imitated (what good thing is not?), but my great knowledge gained from 40 years' experience is mine alone and cannot be imitated. I give advice free to my patients till the cure is complete. My Electric Herculex, guaranteed to give a current instantly felt, or I forfeit \$5,000, and to last for at least one year.

Call or send for my Herculex to-day, or if you want to look into the matter further, I have two of the best little books ever written on electricity and its medical uses, which I'd like to send you. Sent free, sealed, upon request.

Also complete establishments, with competent physicians in charge, at

- | | | |
|-------------------------------------|---|--|
| San Francisco, Cal., 997 Market St. | Canton, China, 73 Maine St. | Bombay, India, 75 Hornby Road. |
| New York, 1151 Broadway. | Buenos Aires, South America, 15 Artes. | Madras, India, 168 Mount Road. |
| Montreal, Can., 132 St. James St. | Rio Janeiro, Brazil, Largo el Carioca No. 29. | Cape Town, South Africa, 12 Plein St. |
| Paris, France, 14 Rue Taitbout. | Montevideo, South America, 18 de Julio, 129. | Johannesburg, South Africa, 77 Eloff St. |
| London, Eng., 15 Hanover St. | Sao Paulo, South America, 5 de Nov. No. 69. | Yokohama, Japan, 51 Yamashita St. |
| Stockholm, Sweden, 36 Malmkilnstr. | Santiago, Chili, Cassilla, No. 3. | Tokio, Japan, 15 Guiza St. |
| Calcutta, India, 7 Wellsley Place. | Lima, Peru, Quidre No. 17. | Hong Kong, China, 34 Queens Road. |

DR. C. F. SANDEN, 140 Yonge Street,
 TORONTO, ONTARIO.

HAVE YOU GOT YOURS?

Have you received the splendid free picture of the 1907 Girl? After much trouble and expense the Sharples Separator Company succeeded beyond their hopes in reproducing from life, in the softest and daintiest colors, the sweetest dairymaid ever offered by any cream separator company as a free picture suitable for framing and placing in any home. The demand for this excellent picture has been so great that the first lot was quickly exhausted. The Sharples Separator Co. has ordered more and will give you this last chance to get one, free. Send at once to the Sharples Separator Co., West Chester, Pa., the names and addresses of five farmers who keep cows but have no Tabular Cream Separator, and the Sharples Separator Co. will mail it to you, in return, the picture of the 1907 Girl, free from printing and large enough for framing. Give your own name and address clearly. You must mention the name of this paper to get the picture. The Sharples Separator Co. has a limited number of wall calendars and will send one of them free, with each picture, as long as the calendars last. If you want both, write at once.

A New York dispatch says that to test the efficiency of Arabian horses for use in the United States cavalry Second Lieutenant E. R. Warren McCabe, of the Sixth Cavalry, stationed at Fort Riley, will start on an endurance ride on May 1st, from Silverton, Ore., to Morris Plains, N. J., carrying the regulation army equipment, a distance of more than three thousand miles. He will use the chestnut stallion Nejdran, imported from the desert of Arabia by Captain Gainsford, of the English Army, and now owned by Homer Davenport, of Morris Plains, who offered the animal to the government so that the test might be made. Nejdran is 12 years old, and is 14 hands high. He was played in the international polo matches in England in 1904 and brought to this country in the autumn of that year and exhibited at the Lewis and Clark Exposition, at Portland, Ore., in 1905. The animal has been pronounced "perfect" by such horsemen as "Tom" Matlock, of Oregon, and Dr. McGinnis, of Kentucky. Following suggestions set forth in a report to the War Department by Major-General J. F. Bell, statistics will be kept showing the weight and condition of the horse and rider at the beginning and end of the journey; the same data at frequent intervals throughout the trip; the time of starting and stopping; hour and time of halts for rest; exact time of the horse's daily travelling and resting, the character of food consumed, and the state of the weather each day; as well as the animal's condition when concluding each day's task.

"The honorable way is the profitable way. All the more so because not one in 100 will do it. There's not much competition in virtue.

"The public may not know goods, but it knows men. It's not worth while to spoil a man to make a business."

"Mutual confidence is the cornerstone of success. How to gain it? First, by honestly desiring it; secondly, by really deserving it."

STUPID BUNNY.

One day Willie's mother found her young hopeful holding his pet rabbit by the ears. From time to time he would give bunny a violent shake and demand sharply: "Two plus two? Two plus two?" or "Three plus three? Three plus three?"

"Why, Willie," asked his mother with deep concern, "What makes you treat your poor little Bunny that way?"

"Well," replied Willie, greatly disappointed, "teacher told us in school to-day that rabbits multiplied very fast, but this dummy can't even add."

The following appears in an advertisement in a South African up-country paper, announcing the sale of poultry: "Prize poultry for sale, seventy-five hens and five hens' husbands."



Bell

PIANOS AND ORGANS

Established in 1864

Canada's Best

USED ALL OVER THE WORLD. CANADA'S LARGEST MAKERS

THE BELL PIANO AND ORGAN CO., Limited, GUELPH
ONTARIO

Bell Pianos and Organs are Sold in the West by

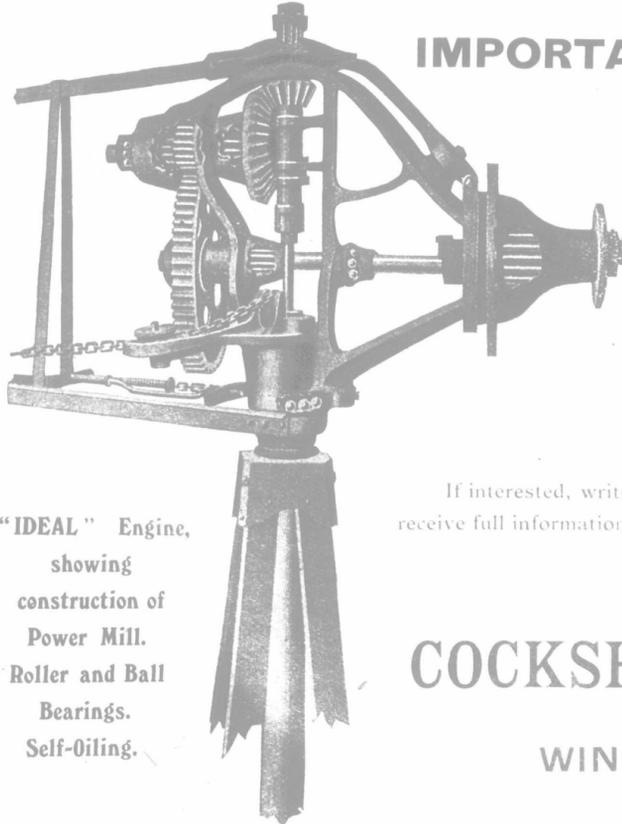
<p>THE WINNIPEG PIANO AND ORGAN CO. 295 Portage Avenue - Winnipeg, Man.</p> <p>B. E. FOSTER - - - Music Store 8th Street - - - - - Brandon</p>	<p>SASKATCHEWAN PIANO AND ORGAN CO. Saskatoon and - - - Regina, Sask.</p> <p>ALBERTA PIANO AND ORGAN COMPANY Norman Block - - - - - Calgary</p>
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McINTOSH & CAMPBELL
Edmonton

Catalogs or information cheerfully furnished by the Agent in your district. Write him to-day.

“IDEAL” STEEL POWER WINDMILLS

IMPORTANTLY SUPERIOR to all others.



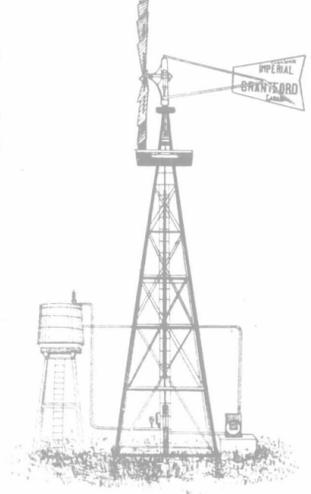
“IDEAL” Engine,
showing
construction of
Power Mill.
Roller and Ball
Bearings.
Self-Oiling.

More “Ideal” Power Mills in use in Canada than all other makes combined.

Their quality—unequalled anywhere—enables them to lead in foreign countries as well.

“Imperial” Pumping Windmill
Winner of first prize in a test
against the whole world.

If interested, write for booklet, “Brantford Windmills,” and receive full information regarding these world-beating mills.



“Imperial” Pumping Mill

COCKSHUTT PLOW CO., LIMITED

WINNIGEG REGINA CALGARY