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SAVE
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YOU
LIGHTEN
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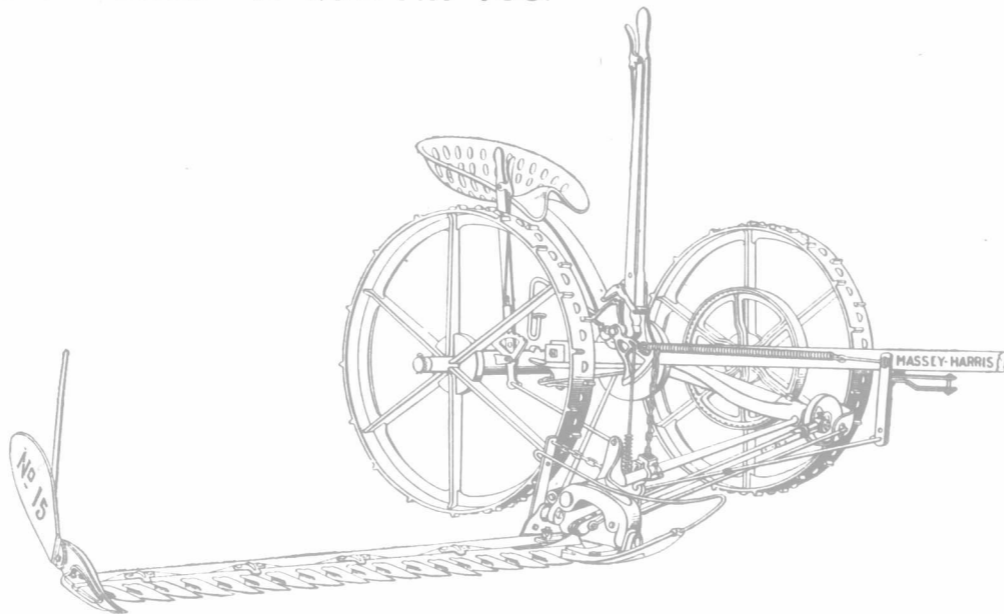
BY USING OUR

New Line of MOWING MACHINES

COME AND SEE THEM. IT WILL PAY YOU.

Broad and substantial roller axle bearings used on our Mowers . . .

The drive wheels are high, with broad face



No. 15. 4½ and 5 foot bar. We also build a No. 16 Mower—6-foot bar.
The care exercised in designing and manufacturing these Mowers ensures



The knife heel and both ends of the pitman are solid steel, giving increased wear and increased strength. The main frame is light and symmetrical, but very staunch.

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MASSEY-HARRIS CO., LTD.,

WINNIPEG, REGINA, CALGARY.

**SEPARATORS
WIND
STACKERS,
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BAGGERS ETC.**

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WATERLOO-ONT.

**ENGINES
PLAIN AND
TRACTION
THRESHER
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**WATERLOO
THRESHING MACHINERY**

is well known in every Province of the Dominion to be the best, and will do the best work in all kinds and conditions of grain. If you are interested in this class of Machinery, write to-day for catalogue.

Engines, Plain and Traction, in sizes 14 h.p. to 25 h.p. Separators in sizes ranging from 33-42 to 40-62.

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FACTORY **WATERLOO-ONT.** BRANCH OFFICE AND WAREHOUSE **WINNIPEG MANITOBA**

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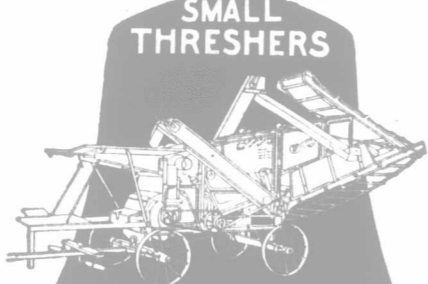
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Save All Your Grain
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for individual or neighborhood work. Compact, durable, operated with small crew. Capacity 1,000 bushels of wheat per day. Price Low. Pays for itself in one or two seasons. Saves risk of loss by threshing when grain is ready. Hundreds of farmers own them. Fully guaranteed. We also make Feed and Ensilage Cutters, Horse Powers, Saw Frames, Truck and Barrel Carts. Big catalog free.

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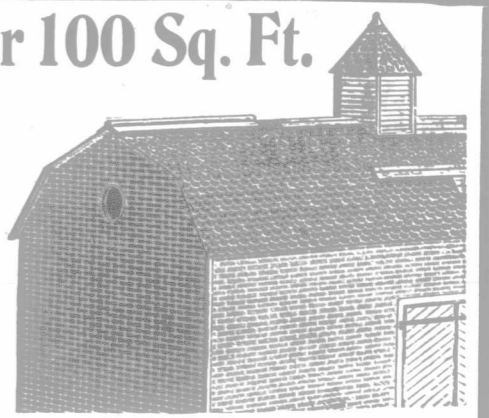
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All goods shipped day after order is received. We are the largest concern of the kind under the British Flag. Established 1861. Capital Invested \$150,000.00.

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SELL YOUR WHEAT TO US AND GET ALL THERE IS IN IT.

We handle consignments from farmers promptly and satisfactorily. Write us.

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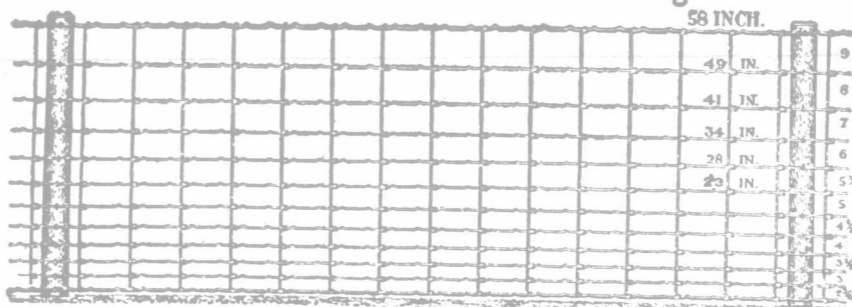
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Until recently represented by the late Edward O'Reilly, Esq.

WE LEAD THEM ALL IN QUALITY, IN CHEAPNESS, AND IN QUANTITY SOLD

Galvanized Steel Woven Wire Fencing



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Hinge Joints and Tension Curves.

We call your special attention to our extra Heavy Fence, all Horizontal Wires No. 9 gauge.

If your dealer does not handle our Fences, write to us.

Made by **The Canadian Steel and Wire Co., Limited,**
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WHEAT - BARLEY - OATS

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We handle orders on the Winnipeg Option Market, also all American markets on margins. Correspondence solicited.



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Nature's Wonderland.

LOW RATES TO ALL POINTS
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RATES, \$7. EXPRESS, 5c. POUND.
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CASH FOR YOUR FARM, BUSINESS, HOME, or property of any kind, no matter where located. If you desire a quick sale, send us description and price.

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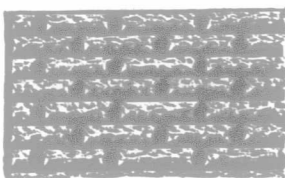
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"Safe
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Steel
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Are handsome and durable, interlock on all four sides, are easily applied, and are positively weather, fire and lightning proof.

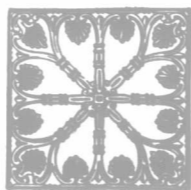


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OUR STEEL SIDINGS

Are well made—handsome in design. They are wind-proof, and keep buildings warm.

OUR EMBOSSED STEEL CEILINGS
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Should be used in all buildings where a permanent and sanitary finish is desired.

Manufactured by THE METAL SHINGLE AND SIDING CO., Preston, Ont.

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The Pioneer Limited

There is no train in service on any railway in the world that equals in equipment The Pioneer Limited train from St. Paul to Chicago, via the

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The railway company owns and operates the sleeping and dining cars on its trains, and gives to its patrons an excellence of service not obtainable elsewhere. The buffet cars, compartment cars, standard sleeping cars and dining cars of The Pioneer are the handsomest ever built.

W. B. DIXON,
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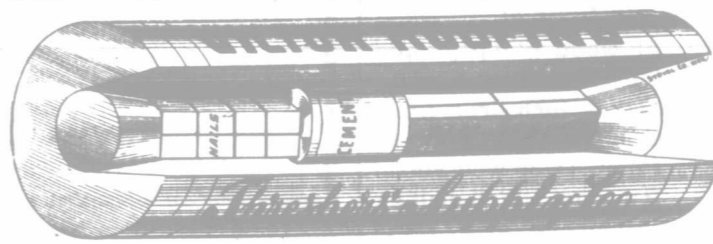
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Ye breechy brutes! though didst break through that factory-made kinked fence, The trick is turned. The harder that you buck this LONDON Spring Steel—coiled, not kinked, The stronger its recoil as now you've learned right well.

The London Field Fence Weaving Machine is a farmer's machine at farmers' price, designed specially for farmers, absolutely guaranteed to do perfect weaving at 40 to 50 rods per day in a farmer's hands. Full working instructions accompany each machine. If not sold in your town, address

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Write for our new book, "Practical Economy in Wire Fence Construction." Free to farmers. Reliable agents wanted in every section to sell London Machines, Wire and Fence Supplies. Write quick.



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The Siche Gas Co., 208 Pacific Avenue. WINNIPEG.

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Are the makers of the celebrated SICHE GAS GENERATOR, which is absolutely the safest, simplest and most perfect machine on the market. It is fully approved by the Board of Underwriters, and is admirably adapted for lighting of farmers' dwellings and outbuildings.

The cost of maintaining the light is about half that of coal oil; besides, it is an infinitely superior light.

Over 1,500 machines in daily use.

We shall be pleased to estimate for the lighting of your buildings and send you full information regarding our system.

H. A. KIDNEY, Western Manager.



Galt Steel Siding

LASTS A LIFE TIME

Applicable to Dwelling Houses, Stores, Factories, Warehouses—in fact, every kind of building. There is no limit to its use as an outside covering.

It very materially enhances the appearance of any structure at the minimum of cost.

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

The Classic Kids will gladly furnish details.

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EVERY TUBULAR STARTS A FORTUNE

If you had a gold mine would you throw half the gold away? Properly managed dairies are surer than gold mines, yet many farmers throw half the gold away every day. The butter fat is the gold—worth twenty to thirty cents a pound. Gravity process skimmers—pans and cans—lose half the cream. Your dairy can't pay that way.

Like a Crowbar

Tubular Separators are regular crowbars—get right under the trouble—pry the mortgage off the farm. How? Gets all the cream—raises the quantity and quality of butter—starts a fortune for the owner. It's a modern separator. The picture shows. Write for catalogue F-188.

Canadian Transfer Points: Winnipeg, Toronto, Quebec, St. John, N. B., Calgary, Alberta. Address


THE SHARPLES CO. CHICAGO, ILL. **P. H. SHARPLES WEST CHESTER, PA.**



T. H. MAXWELL

Manufacturer of

All-wood Pumps, Wood Head, fitted for 1 1/4 and 1 1/2 inch iron pipe. Our Own Patent Force Pump, Deep-well Steam Pumps, Well-drilling Machinery and Wells Drilled.



Our Force Pump is especially adapted to this northern country. We guarantee it to be frost-proof, and will go into a five-inch pipe. Do not let any one cut off your well casing and let drainage of your yard get into your well. Our pumps are made in this country—you cannot expect a pump made in a southern climate to stand the cold as ours will. We sell the famous JOHN CURREY PUMP. Mail orders promptly attended to. We want your custom, and we guarantee our pumps.

178 Rupert Street. WINNIPEG, MAN

SELECT FARMS IN LOWER FRASER VALLEY

British Columbia's richest farming district. I publish a real-estate bulletin, giving description and prices of some of the best farms in the Valley. Send for one (it will be of value to anyone interested in this country or looking for a chance to better their present conditions) to

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Capital (Paid-up) - \$3,000,000
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Branches in Manitoba, Northwest Territories, British Columbia, Quebec, and Ontario.

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\$3 a Day Sure Send us your address and we will show you how to make \$3 a day absolutely sure, we furnish the work and teach you free; you work in the locality where you live. Send us your address and we will explain the business fully; remember we guarantee a clear profit of \$3 for every day's work, absolutely sure, write at once: IMPERIAL SILVERWARE CO., Box 706, WINDSOR, ONT.

TO FARMERS

And others who may be interested:

We have just received a large consignment of Strictly Northern-grown Vegetable, Flower (in 5c. packages), Agricultural and Grass Seeds, including the best-known kinds of Timothy, Brome Grass, Red, White, Swedish and Alfalfa Clover, Millets, Rape, and the sensational Early New Sweet Corn, Peep o' Day, which ripens ten days earlier than any other kind.

TIMOTHY—"Stirling," Choice, 4c. per lb. Kentucky Fancy, 9c. per lb. Canadian Fancy, 8 1/2c. per lb. Bromus Inermis, 15c. per lb. In 100-lb. lots.

THE MACPHERSON FRUIT COMPANY, LIMITED.
Wholesale Fruits, Seedsmen, etc. WINNIPEG, MAN.

FRANK O. FOWLER, President.
ANGUS McDONALD, Vice-President.
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Full Deposit with
Manitoba Government.

Licensed to Transact Business in Northwest Territories.

The Central Canada INSURANCE CO.

Authorized Capital, - - - \$500,000.

Fire Insurance. Hull Insurance. Pure-bred Registered Live-stock Insurance

HEAD OFFICE: BRANDON, MANITOBA.

THE PEOPLE'S POPULAR STORE

REVILLON BROTHERS, Limited.

MAIL ORDERS CAREFULLY ATTENDED TO

When in the city, it will pay you to call on us and have your wants attended to. We lead the trade in

DRY GOODS, GENTS' FURNISHINGS, BOOTS and SHOES, CARPETS, GROCERIES and HARDWARE.

Our Ladies' and Fur Departments cannot be equalled.

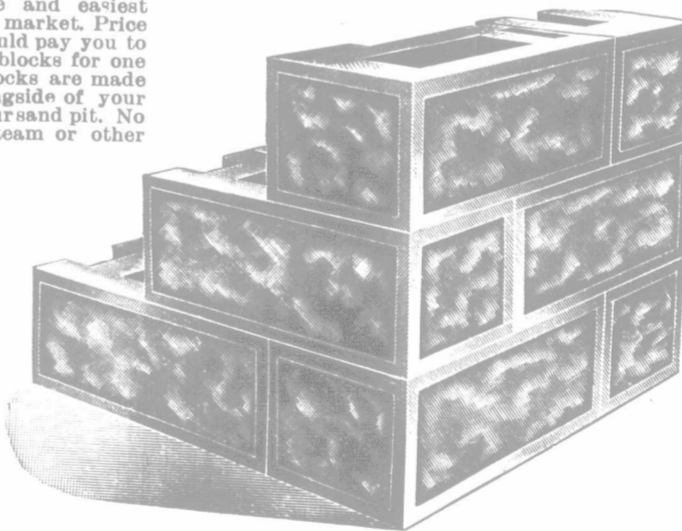
REVILLON BROTHERS, LIMITED,
Cor. Jasper Ave. and 2nd Street. EDMONTON.

Dunn's Hollow Concrete Block Machine

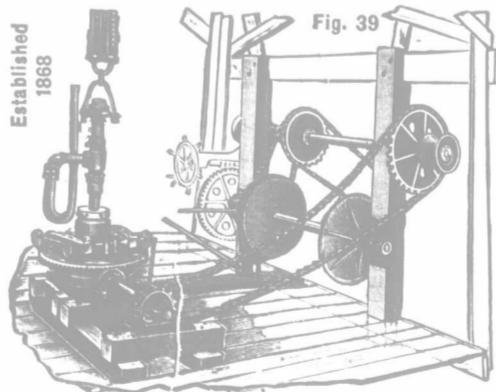
Most compact, portable and easiest operated machine in the market. Price so reasonable that it would pay you to buy one if only to make blocks for one fair-sized building. Blocks are made out in the open air, alongside of your building, or down by your sand pit. No firing or baking; no steam or other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

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

Write for particulars to Dept. N. om



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LIGHTNING WELL MACHINERY,

Rotary, Coring or Rock Drilling,

Any Diameter, Any Depth, for

Water, Oil, Coal or Mineral

Prospecting,

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with some timber. Where can you get it except in Canada? Best for grain and cattle. Good climate. Five families in 1904, 600 families in 1905. Write us for map and description. Some homesteads left. Join spring excursion. Cheap land on ten years' time. **SCANDINAVIAN-CANADIAN LAND CO.,** 172 Washington St., Chicago, Ill.



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LANDSEEKERS'

EXCURSIONS

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CANADIAN NORTHERN STATIONS IN

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Dauphin and West on the Edmonton Main Line as far west as the Elbow Station, Sask., at the crossing of the North Saskatchewan River and Melfort on the Prince Albert Extension.

One Fare for Round Trip

Tickets on sale at Stations Neepawa, Gladstone and South every Wednesday during April and May, 1905, valid one month and good for stop-over at Dauphin and West.

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This Spine Needs Fixing. So Does Yours.

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The Great Nerve Specialist,

Is permanently located in rooms 16, 17, 18, Dingwall Block, corner Main and Alexander Avenue, Winnipeg, Man.

If you have tired of medical treatments, try this never-failing, drugless science of healing. He uses no drugs, no knife, no osteo athy, no magnetism, no electricity. He guarantees to cure for life the following diseases by scientific adjustments of the nervous system: Asthma, Appendicitis, Abscess, Bladder Trouble, Bright's Disease, Cancer, Catarrh, Constipation, Diabetes, Dropsy, Diarrhea, Dyspepsia, Deafness, Eczema, Emissions, Female Diseases, Gleet, Hay Fever, Heart Disease, Indigestion, Jaundice, Kidney Diseases, Liver Diseases, Lost Manhood, Locomotor Ataxia, Leucorrhoea, Lumbago, Neuralgia, Nervous Debility, Ovarian Diseases, Palsy, Curvature of Spine, Spinal Diseases, Tumors, Urinary Disorders, and \$100 will be paid for any case of rheumatism he fails to cure.

Varicocele, Night Emissions, Gonorrhoea, Swelling of the Limbs, Sexual Decay, Open Sores, Seminal Losses, Consumption, first stage; Ringing in the Ears. No incurable cases taken. Consultation free.

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(Correspondence solicited.)

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The estate of the late Paul Gillie, deceased, situated at Nicola Lake, Yale District, B. C., containing some 1,700 acres, and with dwelling house, stables, sheds and implements necessary for working the ranch; also some 220 cattle and 8 horses.

The property is situated on the Nicola Coal Field, about a quarter of a mile from Nicola Lake P. O., and is one of the most beautiful locations in the country.

Tenders will be received by the undersigned for the ranch and cattle, together or separately, up till 1st May next.

Parties wishing for further information will be supplied with full particulars on application.

JAMES CHAPMAN, Executors.
JAMES D. GILLIE, Executors.
February 1, 1905.



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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

VOL. XL.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

NO. 655.

WINNIPEG, MAN. APRIL 12, 1905. LONDON, ONT.

Editorial.

Arbor Day Observance.

An Open Letter to Municipal Authorities, School Boards, and all Public-spirited Citizens.

In every country the conversion of the virgin state of the land into productive farms, comfortable homes and attractive surroundings, involves to a certain extent the reversion of the natural order of things. In wooded countries it is first the clearing of the forests, and in prairie districts the breaking of the sod. Associated with these initial efforts should go the making of congenial environments. The stripping of the land of the trees, the breaking of the prairie sod, the building of expensive houses and barns, does not wholly constitute the making of a home. Home, that it may be such in the best sense, requires, among other things, that whatever the location may be—and that is a matter of individual taste and necessity—there be a certain variation in the landscape, which may be secured by the planting and cultivation of trees and shrubs. This is a conception of a home that requires to be instilled in the minds of the young, especially those who are growing up in the prairie communities. Unfortunately, in the strenuous life incident upon pioneer experience, such things are often overlooked until the formative period of the child's mind has been passed. But we have a day set apart by our Government upon which school teachers are expected to assist the school children in beautifying their grounds, and which municipal authorities would do well to utilize for the improvement of streets and other public places. It is upon school grounds and the public places of the towns that we must look for the first evidences of the observance of Arbor Day, except in the some rare instances where individual farmers act upon their own initiative and improve their home grounds, for on most of the farms the season of tree planting is passed in the work of seeding. The few exceptions to this general rule are splendid examples, and such tree planting as has been done will not only serve the immediate purpose of affording comfort and beauty to the home, but will act as an inspiration to others to plant trees.

The school teachers, however, should make a special effort to observe Arbor Day. Possibly little can be done in one season, but that little helps. Probably nothing more can be done the first year than the breaking of the sod, but the next spring trees and shrubs can be planted which require but a few years to develop, and ever afterwards are a constant pride and comfort to the community. School trustees have a duty to perform in this respect. They should not consider that when they have met, employed a teacher and purchased the fuel supply, their work is done. To see that Arbor Day is suitably observed, should be considered one of their most important duties.

The latent power to make surroundings pleasant, which annually goes unused in towns, could, if properly utilized, alter the whole aspect of the prairie landscape, and convert the streets from their bare, bleak, litter-strewn condition into shady presentable avenues, where promenading would have an enhanced attraction. For one instant we would like to hold the mirror up before the residents of all our prairie towns, that they might see their streets through the eyes of so many of the travellers that pass through on each passenger train. Everyone has noticed the regularity with which the small children take to playing marbles as soon as the snow is off, how that later the larger boys play ball as soon as the streets are dry, and why should not the property

owners at the same time put forth an effort to give their streets, front and back yards an annual raking up? Upon the way in which the youth is trained, both by example and pre-cept, depends the happiness and contentment of the next generation. Let the example be wholesome.

Why Girls Leave the Farm.

The above problem and its settlement is one well worthy of study by the masculine as well as the feminine mind, and is just as important (possibly more so) as its companion problem, "Why Boys Leave the Farm." Much the same reasons are at the bottom of the cityward migration of the young people of either sex, although the majority of people so far have confined their investigations to the gradual decline in numbers of males on the farms.

The majority of the girls leave the farm for the city because by doing so they become more or less independent; they earn wages (in many cases far too small); can come and go when they please; their hours are shorter; their opportunities of marrying are increased, and so on. There is, to our mind, far more reason and excuse for girls leaving the farm than there is for the boys. Many, many cases are known and exist in which the girls work all their lives on the farms, either for the parents or brothers, getting nothing more than their clothes, and not a very great variety at that, and probably a little, oh so little, pocket-money, and at the parents' demise or brother's marriage, are homeless and with little cash to get them a home.

Many a girl on the farm is pointed to as an object of emulation, in throwing away her life for her parents or brothers; unselfish on her part, she is the victim of one of the worst forms of human selfishness extant. Without adequate remuneration, without prospects, it is a wonder that many more girls do not leave the farm; and the irony of it—a farm cannot be run successfully without the girl or woman, who is usually the worst-paid individual on it.

Some parents, when met with statements such as the above, say, "we are entitled to their services; we went to the expense and trouble of raising them; they owe it to us," which is, as far as the cost is concerned, a mere statement of fact; but as far as argument, is so much buncombe. At whose pleasure came they into this world? Not at their own, or at their own desire. Were they brought into the world to be considered as so many goods or chattels; or was the object "the improvement of the species," or are they in the world just the result of the attraction of two individuals, one for the other? Whatever the answer may be, the tide cityward will not be stemmed, and the drainage from the farm of its best blood will not be stopped until the girls are adequately recompensed for their work on the home farm. In the case of a son, he may not get wages, but will get the farm which he helps to build up; the daughter in many cases helps equally, and gets little or nothing.

Evidence in favor of our contention is the number of farmers' daughters in the teaching profession, showing that they, as well as the sons, are imbued with the desire to be independent—a most laudable ambition; and it also shows that it has not been made worth their while to stay on the farm, or that the prospects there were not sufficiently inviting. Another unfortunate thing is that these school teachers are strongly biased against the farm, and do not hesitate in conversation to give one the impression that they consider farming an inferior profession.

The parents are entitled to the work (provided such is reasonable in amount) of the child during

its school days. After that period the child, girl or boy, man or woman, is entitled to receive the wages their skill and knowledge will command. If such treatment is meted out by parents, there will be a considerable lessening of the plaint against the cityward trek. In addition, the place of abode should be made homelike, and as far as the family income will allow, music and literature of good quality should be provided.

Many of the youth of the country fail when forced out in the world, because they lack the sense of responsibility in any shape or form. Everything has been done for them, even to the spending of money by the parents. A poorer preparation for the real business of life cannot be imagined!

The Western Men Surrendered.

Everybody despises a "quitter," whether among men or horses, no matter whether it be during work or play. The conduct of the Western Members of Parliament, at Ottawa, if we are to judge by the terms of the compromise, rightly puts them in the "quitter" class, and, as such, earns for them the contumely of Canadians. It is a strange irony that sees the men from Ontario fighting the battle of the West at Ottawa, when the ostensible representatives of the great heritage of Canada have "lain down" in response to the crack of the party whip, and have abandoned a principle for the sake of a temporary advantage. The national sky had been singularly clear for years past, when as a thunderbolt, the bill to form two emasculated provinces was presented.

What have the Western men done? To save a party, as they think, they have decided to sacrifice both their country and their principles—no more, or less. History records nowhere more marked evidence of political weakness, and the vengeance of time, as chronicled before in history, can only be expected to be visited in turn upon them. Conscious of a bad cause, the leaders in the sacrifice, have been voluble, in excuse and unscrupulous in argument. By their actions they have awakened a race struggle which will yet be their political doom.

The main question at issue is not, after all, one of the merits or demerits of separate schools, but is one of Provincial rights and self-government; it is whether the Federal Government are right or not in denying to the two new Provinces about to be created, the exclusive power to make their own laws regarding education; in brief, to deal with their own affairs. Arguments as to the meaning of this and that sentence in the B.N.A. Act, are mere legal quibblings, indulged in to becloud the issue and confuse the electorate. Among other bad effects the Autonomy Bill is having and will have, is that of serving as a hindrance to immigration, because people will hesitate before entering a country where the system of education is a shuttlecock of politics, and is of a kind that tends to duality in language and thought, and makes for separation into sections and races, to the hindrance of commerce and the growth of a national spirit.

Reasoning from the Government's steady plea for toleration (a toleration which so far seems to be all on one side), Westerners assume that the authorities at Ottawa feel that they cannot trust them to deal out justice or to manage their own affairs.

If a Minister, Government or Party is so ill-advised as to let loose the evil geni of passion, race-hatred, intolerance, etc., whom can they blame but themselves if they suffer the consequences of their folly? In present-day life everybody delights to see the meddlesome one get a rap over the knuckles, and in this particular,

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namely, the matter of education in the Northwest Territories, the Dominion Government deliberately interfered in a question that really does not concern them, and naturally ALL TRUE WESTERNERS, irrespective of political leanings, because it is not a party question, RESENT THAT INTERFERENCE!

In order to be just to the Western M. P.'s, their reasoning for accepting a compromise may be as follows: "We believe in our hearts that the clauses should be cut out, and that the principle involved demands it; yet, if we insist, the Government would fall, which would be a national calamity, and the country would suffer thereby. Of the two evils, therefore, sacrifice of party or sacrifice of country and principles, choose what (from a party standpoint) is the least. To such a doctrine we cannot subscribe, believing as we do that no one party is indispensable to a country, and that when need arises (as it has arisen before and now) a few men will be found patriotic enough to do their duty, irrespective of party affiliations, or hope of reward from any party.

In politics the law of exchange holds good, it seems, and we understand from quite reliable sources that, in exchange for the surrender by the Western Members on the question of Provincial rights, the Government will not put a DUTY ON LUMBER; otherwise it would. In fact, such a course WAS ALREADY AGREED UPON.

One of the Laity Appreciates the Farmer's Professional Journal.

Enclosed find amount to cover my arrears to the "Farmer's Advocate." I am not a farmer, but appreciate your paper very much, and think every farmer in this land of ours should subscribe for it, and if they cannot read, they can study the pictures and get full value from that source alone. G. C. HALL.

Portage la Prairie, Man. a

Governmental Handling of Public Utilities.

In the House of Commons a short time ago the question of "Rural Delivery of Mail" was debated. The Postmaster-General expressed himself as opposed to the scheme in Canada, on the score of expense, quoted the U. S. experiment as a costly one, and incidentally expressed the hope that the telephone system would be extended to farmers, and possibly come under Government control. At his request a special committee was appointed to investigate and report upon the subject. Two M. P.'s (Lambton and West Kent) pointed out that the farmers of Canada are asking for rural free delivery of mail. It is well to study the cost of such mail delivery in the U. S., and for that purpose we cite from a reliable U. S. contemporary as follows:

"Between June 30, 1904, the end of the fiscal year, and March 1, 1905, the post office department established 5,432 rural free mail delivery routes. This made the total number of such routes 29,998. The State having the most rural routes is Illinois, which had on March 1, 2,450, an increase since June 30, 1904, of 326. Ohio had 2,161, and Iowa 2,048.

"Illinois' lead as a rural-mail-delivery State is partly due to the zeal and activity shown by her senators and representatives in furthering the interests of their constituents, but it is mainly owing to conditions existing in the agricultural sections. It is essential to the success of rural delivery that the districts in which it is tried shall be thickly settled. It would fail in Arizona or New Mexico, because a carrier might have to ride all day to deliver mail at one or two ranches. The rural districts of Illinois, on the other hand, have become so thickly populated that a carrier may deliver mail daily to one or two hundred families. The post office department requires roads on the rural routes to be kept in good condition. The highways of Illinois, while generally far from perfect, are, as a whole, better than those of many other States.

"The rural delivery system already costs the Government \$7,000,000 annually more than it earns; and every time a route is added the chronic excess of postal expenditures over receipts is increased \$25 a year. Nevertheless, public opinion sustains the post office department in steadily extending rural delivery. It does not yet pay the Government financially, but it is earning large dividends as a social investment. It has done much to ameliorate the loneliness of farm life. Enabling the farmer's family to get letters, newspapers and magazines as regularly and almost as quickly as persons living in cities, it tends powerfully to stimulate and broaden the national intelligence.

"When rural delivery is extended to a neighborhood, the amount of postal business received from that neighborhood rapidly increases. It therefore seems certain that in time the system will become self-supporting."

From our own experience, we would suggest that the Post Office Department improve on their present methods, preparatory to looking for fresh avenues of activity.

While the theory of Governmental control of public utilities is a popular one, it is well to reflect whether in the practical working of such a theory, the scheme is to be preferred to that in operation now, efficiency being in the former case too frequently satisfied in the hope of cheaper service. To make a comparison we cite the C. P. R. Telegraphs and the British Postal Telegraphs; the latter costs about half the figure of the former for a telegram of ten words, but the Government telegraph system makes five mistakes to the Company's one; and in business one mistake may lose more than the cost of one's telegrams for a lifetime. Then, again, in the civil service the inertia is appalling, taking the service as a whole, either in Britain or Canada. A good man's efforts are either so hampered that his efficiency is destroyed, or he quits the fight against departmental lethargy in disgust. There is also another thing to consider, and it is that the political appointee quite frequently gets to think that he is not paid enough when he takes his present and past services to the Government into consideration, and if he does not get the figure he values his services at he balks, and the public pays the piper. To our mind, Governmental control of public utilities is not likely to be satisfactory until appointments to the civil service are made by impartial examinations, in place of the system pretty commonly used, namely, political preferment, which sometimes lands a good man into the country's service, but more often an indifferent public servant.

The Trek to the West.

One of the best indications to intending immigrants of the opportunities of success in Manitoba and the Territories, is that gleaned from a study of the large movement of people from the prairie country to British Columbia. The majority of the pilgrims are comparatively well off, have made their pile, and have decided to finish out their lives at fruit-growing, instead of the more strenuous work of wheat-farming and stock-raising; although, in justice to the latter profession, few of its devotees voluntarily quit it, even if they are now on "Easy Street."

Few of the "trekkers" came to the prairie country with money, and what they have now has been made on the prairie within the last twenty years, the first ten of which hold memories of hard work, unremitting toil, discouraging prices, and occasional crop failures, due in many cases to ignorance of the best methods of farming. The man who has made money during the period mentioned, is invariably the one who started in a comparatively small way, and who added to his holdings as his administrative ability and financial capacity increased; few, if any, made the money to retire with by speculation. The influence of the new people on B. C. public life should be beneficial. It will tend to bring closer together the other Provinces and the Pacific Province, which nature in her rude way, by means of the Rocky Mountains, had endeavored to keep apart. A complaint frequently heard at the Coast is that the legislators at Ottawa are not so cognizant of British Columbia's needs as they might be. It is to be hoped that Eastern men will at an early date make the "grand tour"—and that not a hurried one—and will study their fellow Canadians west of the Great Lakes, and look over and investigate the possibilities of young Canada's great heritage.

What Price for a Herd-header?

The above question, often asked himself by the beginner in pure-breeds, was suggested to us a short time ago by a pure-bred cattle man, who drew attention to another breeder's idea of a bull to head his herd, and the price such should cost. The bull in question, an animal of one of the best breeds, cost somewhere between \$75 and \$125, and was at the head of a herd numbering some twenty or more breeding females. The said bull was neither a good representative of the breed (judged either for type or masculinity), nor of the beef type, and had he been altered, would have made, if properly fed, only a fair steer. The breeding females in the herd could safely be valued on the average at \$100. What, then, should the breeder expect to pay for a fit bull to head his herd, two things being steadily in mind, viz., that the bull is half the herd, and that the greatest and quickest improvement in the quality of a herd can be made by the use of a first-class male? Given a herd of twenty mature breeding females, at an average of \$100 apiece, no person can reasonably expect to get a bull with the necessary character, either of sex or breed, to render him the service such a bull should, for a sum much below \$300, and should be prepared to go double that price for a superior animal rather than take one of mediocre breeding and medium individuality at half the price. Any bull sexually sound will get calves if mated to healthy mature females, but there is in the breeder's art more than mere bringing together of animals to multiply the species. Even if the breeder looks at the matter solely from the standpoint of the money to be made from breeding pure-breeds, and does not concern himself over the improvement of the breed, even that man will find it pay him to use the very best bull he can afford; and he simply cannot afford to use an inferior bull because it costs only a hundred or two. Far too many men breeding registered cattle to-day are using inferior bulls, and are thus hurting themselves and the pure-bred cattle industry, by setting a bad example to beginners at the business, and also to the farmer seeking to improve his grade stock; and by flooding the pure-bred market with a lot of inferior stock, they lower the prices all round.

Horses.

Over-fat Stallions.

An exchange, commenting upon the tendency of many stock breeders to overload their animals with fat, at the expense of the development of muscular force, says:

"It should become apparent at a glance that the modern methods of feeding and fitting many mares and stallions may justly be regarded as highly detrimental. Work, the product of constitutional vigor, is the ultimate object in the production of the draft horse. Through selection, continued breeding in a right line, in a suitable environment furnishing adequate nutrition, size and weight have been developed and made transmissible characteristics or tendencies. Excess of fat in such animals is a positive disadvantage, for which not a sensible argument can be advanced. Feeding for the intentional production of fat is, therefore to be denounced. The art of the feeder should be devoted to the development of bone and muscle, that added ability for heavy work, not to the rounding out of the body with fat, which means, inevitably, fatty degeneration of the vital organs. The forcing process by which many draft stallions are made to attain great weights, is injuring the breeding business seriously. It is the reason for so many stallions proving wholly or partially impotent, for so many foals coming into the world crooked and weak, for so many grade colts from suitable mares failing to attain draft horse proportions. Deprive many a draft stallion of his surplus fat and he proves to be deficient in the width and depth of body, and development of muscle and bone that are the true attributes of the ideal drafter. Fat does not impart strength for labor. Its presence indicates weakness rather than strength. The fat stallion is a burden unto himself, and a disappointment to his buyer. Besides this he proves a failure on the stand, and his colts, few as they usually are, fail to develop draft horse size and character.

"The crying need of our draft-horse industry is for sires that are great in development of bone and muscle, and possessed of constitutional vigor—the product of natural feeding and management. In their place we are often offered stallions that have been fed on sloppy food, doped with drugs, made to seem powerful and ponderous, but rendered actually weak by such methods. Set one of these pampered beasts to work and he speedily loses three or four hundred pounds of fat, and thus depleted he is not a draft horse, and such stallions cannot beget real draft horses. There are others, and they are doing good service, but are scarce. When found they are prepotent and worth the high figures now being coaxed out of farm companies for fattened draft stallions such as we have described. Taken from the plow-harness, the draft stallion begets a full complement of lusty, robust colts from his mares. He is in a natural condition, and it is natural for him to procreate his kind. On the contrary, the pampered, plump, pretty, polished stallion is merely posing as something he is not. Fat makes him that, and often renders him impotent, or, should he beget a foal, it is likely to suffer by reason of the unnatural and unhealthy condition of its sire.

"These are plain words, but they are true and necessary. It is time to wake up to their truth and to seek the improvement of our draft horses by selection of true draft sires and mares, and not by the mating of pampered animals that, deprived of their load of fat, prove to be lacking in the requisite frame development of the true draft horse."

Breeding Trotting Horses.

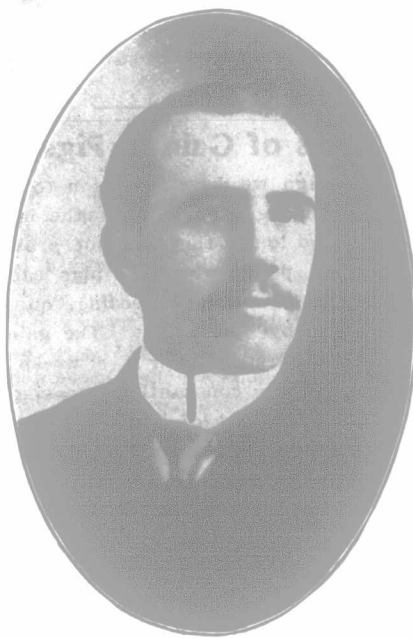
The first principle of breeding is to use as well-bred and shapely mares as possible, and mate these mares with the best bred and most successful sires within reach. It will not always be possible to produce sound and speedy colts, but the percentage of soundness and speed will be greater than where scrub sires and scrub mares are used. It does not pay to use inferior animals for breeding purposes, and no breeder can hope to succeed who uses this class of animals. There is always a demand for trotting-bred horses, and right now there is a buyer for every sound, useful light-harness horse, and I do not suppose that there is a reader who does not know that buyers are scouring every town-hip willing and anxious to buy every horse of marketable age.

The trouble with many breeders is that they attempt to breed horses on too large a scale, and the expense of development becomes burdensome. No farmer or small breeder should keep over a half dozen mares, and these mares should be made to earn their keep, at least, by being used for the ordinary work of the farm. I was at one of the largest breeding farms in Indiana a few days ago, and saw some thirty-five brood mares in idleness which could just as well have been doing the work of a score or more of work horses used in the farm work. Because a mare has a good pedigree is no reason why she should be

kept in idleness, and the sooner the farmers learn this fact, the better it will be.—[J. M. McCartney, before the Ohio Horse-breeders' Association.

The Manitoba Lien Act and Imported Horses.

At the Live-stock Conventions in Winnipeg some weeks ago, Secretary Greig drew attention to the need for revision of the said Act, with particular reference to the studbooks it was advisable to recognize. A short time ago, we understand, the owner of an imported French Draft Stallion desired to enroll his horse and take advantage of the Lien Act, but was unable to do so by the provisions of the said Act, which does not provide for this breed of horses. All things considered, we think that, judging from the recent controversies over horses carrying blood of the various French draft horse breeds, which we referred to in March 22nd issue, for all practical purposes the French drafts and Percherons might as well be grouped together, and registration in some Canadian book be insisted upon. If these horses of French extraction, whether bred in France or the U. S., are likely to help improve the horse stock of the country, then as few Governmental restrictions as possible should be placed upon them; if of little use, no harm will be done by putting the gates, in the shape of a customs' duty, up against them. The free entry of stallions into Canada is something that the Live-stock Commissioner could afford to grapple with in the near future, consulting the horse-breeders of all parts of Canada before coming to any decision which might later be incorporated on the statute books. In the meantime, the Manitoba Lien Act could, with profit, be amended.



C. D. McGillvray, V. S., M. D. V.,
Binscarth, Man.

A Good Appointment.

In the Hansard report of March 10, the Minister of Agriculture, in answer to a question by W. J. Roche, M. P., stated that the Veterinary Branch has practically taken charge of all the work in regard to "health of animals" in Manitoba. The newly-appointed veterinarian in charge, the chief veterinary inspector for Manitoba, is C. D. McGillvray, of Binscarth, Man., well known to readers of the "Farmer's Advocate" by his articles dealing with horses. Dr. McGillvray is a native of Scotland, a country from which come many good horsemen and veterinarians, and graduated from the Ontario Veterinary College, Toronto, some years ago, winning the gold medal and otherwise distinguishing himself. Later he spent a winter at the McKillop College, and took the degree of Doctor of Veterinary Medicine (M. D. V.). He has practiced successfully for years in his own locality, and has served as judge of horses, and as a lecturer for the Territorial Department of Agriculture, besides lecturing and demonstrating at the Live-stock Conventions in Winnipeg. The salary attached is not a large one, being \$1,500 a year.

It is the Most Up-to-date Paper for Farmers.

Dear Sirs.—Enclosed find amount to cover my arrears and renewal subscription to the "Farmer's Advocate." Would not like to be without the paper after twenty years' reading. I still think it the most up-to-date paper for farmers.
Pipstone, Man. HENRY WALKER.

Sterility in Mares.

"Sterility, infecundity, or failure to breed, depends on numerous causes, some of which are removable, many, unfortunately, are not.

It is difficult to ascertain the extent to which it prevails. In the studbook it is shown that among Thoroughbred mares the percentage of those which produce is 73.36, and those which abort and are infecund, 26.64. In the studs of France the fruitful mares are 59.57, and the unfruitful 40.43. Sterility may depend upon organic or physical causes, and may amount to permanent impotence, particularly when congenital and located in the generative organs. Hermaphrodites (animals which, strictly speaking, are not of either sex; in which neither the male nor the female genital organs are fully developed, but in which there is a partial development of both) are always sterile. Monstrosities are generally permanently sterile, as also are hybrids (the produce of a male and female of different species), but there are exceptions to the latter, as there are several well-authenticated instances of the mule and other hybrids reproducing. Prolonged continence and old age is a frequent cause of infecundity, as is noticed in mares that have been used for work or pleasure until their usefulness has ceased, and then been retired for breeding purposes.

Change of climate has often a marked influence on fecundity, sometimes checking it permanently, and at others rendering the animals infecund for a longer or shorter period. It may also be impaired or suspended temporarily or permanently by ill usage, bad hygiene, etc.

Sterility may be due, though temporarily, to premature or to tardy coition when the generative organs are not in a physiological condition for conception, or when they are in an irritable, abnormal state. Underfed or overfed animals generally do not breed as readily as those in moderate condition. These causes can, of course, be removed by careful feeding and attention. Excitable or vicious mares are less likely to procreate than those of an even, gentle disposition. It has been observed that with mares accustomed to work, active exercise, even to produce fatigue, before being bred, is favorable to conception.

Various diseased conditions (which in many cases may only be suspected) of the generative or other organs, as well as general derangements of the system, may prove antagonistic to conception. There may be disease or alterations in the ovaries, fallopian tubes (the tubes which convey the ovum from the ovaries to the uterus), uterus or vagina, which will prevent conception; and if any material obstacle to the contact of the spermatic fluid with the ovum be present in these parts, conception cannot take place. Tumors of various kinds in these organs is not infrequently the cause of sterility.

In all these cases a careful manual examination should be made, as it is not infrequent that the removal of the obstacle to generation is quite within the scope of surgical or medical measures.

Probably the most common cause of sterility is an abnormal condition of the neck of the uterus. Occlusion of the os uteri (the canal leading through the neck to the body of the uterus) is more common than is generally supposed. This occlusion may occur during copulation only, and be due to a spasmodic contraction of the muscles of the os, occurring in nervous, excitable mares, and passing off when sexual excitement ceases, but is fatal to conception all the same; or the occlusion may be permanent, due to a chronic enlargement and thickening of the parts, to false membranes, or to a growth of tough, fibrous tissue. In all cases but the latter the obstruction to conception can generally be removed by an operation. The operator must, of course, have an intelligent idea of the anatomy of the parts; he must be conversant with the normal condition, in order that he may be able to determine and appreciate the deviation from the same. The hand and arm should be thoroughly washed and then coated with sweet oil, and introduced through the vulva into the vagina, then pressed forward until the os is reached. In a normal case one or two fingers can with little pressure be introduced through the os into the uterus. If this can be readily done and the mare is of a nervous and excitable nature, we may suspect spasmodic contraction of the muscles, as stated. When this cause is suspected, the neck of the womb should be smeared with the solid extract of belladonna, which relaxes the muscles and prevents contraction. The mare should be bred in about two hours after the belladonna has been applied. If, on the other hand, occlusion is found to be permanent, a passage should be forced. Various instruments are manufactured for this purpose, but when an entrance can be forced with the fingers no instruments should be employed. By inserting the point of the forefinger into the center of the os, and pressing forward with a sort of rotary or screwing motion, it, in many cases, can be forced through, then two fingers can be used

in the same manner. When the fingers have not sufficient power to force an opening, a blunt sound about the size of an ordinary catheter, or a piece of hard wood made perfectly smooth and about two feet long, so that it can be guided by the hand in the vagina, and force applied with the other hand, can be used (of course the instrument should be well oiled). Considerable force may be applied with an instrument of this kind, and when once a passage has been forced it can usually be enlarged with the fingers. When the occlusion is due to growth of fibrous tissue, or where fibrous rings surrounded the os, an entrance cannot be effected except by the use of a cutting instrument, and I do not consider it wise to operate, as, though a successful operation may be performed by a skillful operator and conception take place as a result, there is usually a reformation of the fibrous tissues during gestation, which prevents delivery and often results in the death of the dam. Hence, when cutting is necessary for conception, it is wise to forego all hopes of reproduction. When the operation with fingers or sound is successful, the mare should be bred in an hour or two after the operation. Diseases of the lining membranes of the uterus or vagina, which cause a more or less constant discharge, will prevent conception, and must be treated before breeding operations are attempted.

WHIP.

Thoroughbreds and Hunters at the London Horse Show.

The third week of the London Horse Shows was occupied by the Thoroughbreds, the Hunter Improvement Society, and by the Polo and Riding Pony Society's Exhibition.

To those who are non-resident in England, probably these shows have less interest than those that took place in the two preceding weeks, namely, the Shire and Hackney Horse Societies Shows, but to any that may be in England at the period when these annual shows take place, who has any predilection for horses of the type of the Thoroughbred, Hunter or Polo, no better or more interesting exhibition could be imagined than that which is held by these societies in the second week of March in each year.

The Thoroughbred stallions which were exhibited on the first day of the show numbered ninety-four. These comprised many race horses, which have been in training for a considerable number of years. They competed for twenty-eight premiums, each of the value of £150, which are provided by the Government as a retaining fee for their services for the ensuing year, in the particular districts in which they are stationed.

The good work that has been accomplished by reason of these sound sires being stationed in the districts of the country is most fully seen in the classes for their stock, included in the exhibition of the Hunters' Show, which took place on the following two days. The entries this year for this class numbered two hundred and fifty-four, and were all of very superior merit and quality.

Efforts are being made by the Hunter Improvement Society to establish a studbook for hunter breeding. Whether or not this will eventually be successful is a question open to much discussion. A reference, however, to the present year's catalogue shows that such a record is not likely to become general for many years, if ever; for the larger proportion of the winning produce was sired by the Thoroughbred from the cross-bred mare. Weight, bone and substance are as essential in the hunter as quality and go, and, therefore, it is hard to see how all these combined can be secured by direct breeding. It may be that such will be the case when it does come; it will then be of value to other countries, because if through the efforts of the home society to establish a studbook, such becomes an accomplished fact, it will then be possible for both the colonial and the foreign buyer to purchase stud stock, and continue to breed what is at the present time a most valuable commodity in the horse market, i.e., hunters that combine size, weight, quality and character. W. W. C.

The Horse Market.

The season for farm horses has not opened to any extent. During January and February it looked as if the demand for farm horses would be somewhat light this spring, but within the last few weeks the enquiry has improved, and the fact that seeding will only be nicely started by this date will increase the demand. There is a good supply in Winnipeg at the present time, mainly of Ontario breeding. Prices are very high in Ontario, and to get good horses it has been necessary to pay fancy prices. At the present time, farm horses that are sound and weigh 1,200 to 1,500 cannot be bought for less than \$125, and from this price run up as high as \$550 per team. At sales in the country, at which horses and other live stock are sold on time, prices have averaged up to the above. In Brandon prices are somewhat stiffer. With the railroad work and prairie breaking to be done this summer, horse prices will not be likely to drop.

Stock.

Molasses for Live Stock.

An Old Country exchange has the following to say regarding the British child's bread-appetizer and sweetener, familiarly known as "treacle":

"Some years ago, when the use of these substances for stock-feeding purposes was first introduced, treacle was very largely employed, and in some cases with such lack of discrimination as to be productive of injurious results, for it was found that when given in quantity to breeding animals it had the effect of injuriously affecting their procreative powers. On account of this, a reaction against the use of molasses for stock of any kind set in, and the consequence was that for a number of years foods of this kind labored under a heavy handicap, because of the prejudice generally entertained against them. For fattening stock the objection, which held good in the case of the breeding animals, did not apply, and the consequence was that many who might have profitably employed treacle for this purpose, were needlessly prevented from doing so by the dread of injuring their animals. Treacle, like all sugary compounds, is very fattening; and the experiences of our best feeders go to show that, when used with discretion, it is capable of being very advantageously employed in the fattening of farm stock. It is, of course, best adapted for use when the animals are being house-fed, and the most effective plan of giving it is to dilute it with hot water, and pour it over the chaffed fodder which the animals are receiving. In the use of treacle—as, indeed, in the use of all foods—moderation must be exercised at the commencement, and only a small quantity given. A pound per head per day is quite enough for a beginning, but when the systems of the animals become accustomed to it—for, as is well known, it is very laxative in its effects—as much as three pounds per day may be given with advantage to full-sized cattle."

Rates of Gain in Pigs.

A short time ago we drew attention to a comment by one of the Winnipeg packers, that the bacon feeders kept their hogs too long; they did not grow them fast enough to make a profit when the pigs came on the market. Henry, in Feeds and Feeding, quoting an experiment conducted by him, says: The gain of fattening hogs after the first four or five weeks of confinement is secured only by constantly increasing quantities of feed for a given weight of increase. An Irish contemporary, endeavoring to answer the query, what is the average rate of increase, says:

In practice, it is usually considered that a pig which is giving an increase of 1½ lbs. per day is making very satisfactory progress, and the results obtainable through the medium of the animals exhibited from time to time at our great fat-stock shows, go to prove that this is about correct. The following tables, showing the ages, weights and average daily gains of the three prize pigs in two classes for Large White (known in Canada as Yorkshires) breeds, at one of the leading cross Channel shows a few years ago, are very instructive in this connection:

LARGE WHITE PIGS, NOT EXCEEDING NINE MONTHS OLD.			
	Age in days.	Weight in lbs.	Daily gain in lbs.
First prize.....	250	458	1.82
Second prize.....	254	434	1.74
Third prize.....	273	325	1.19
LARGE WHITE PIGS, BETWEEN NINE AND TWELVE MONTHS.			
First prize.....	326	608	1.86
Second prize.....	300	511	1.70
Third prize.....	297	357	1.20

It should be remembered, of course, that these pigs were specially fed for show purposes.

Study Your Live Stock.

Where a knowledge of anatomy and physiology is a help, is at once shown by the comparative sizes of stomachs of two classes of our domesticated animals.

Though the horse is a substantially larger animal than the ox, the stomach of the latter has a capacity of from 15 to 18 or 20 times that of the former. The stomach of a medium-sized horse is capable of holding only about three gallons, whereas a full-sized bullock is capable of holding from 50 to 55 gallons. This difference in the capacity of the stomachs of the two animals shows that they are adapted for quite different systems of feeding. Because of the small size of its stomach the horse requires to be given highly concentrated foods in comparatively small quantities, and at fairly frequent intervals.

How Can I Build a Tank?

The question is constantly being asked, "How can I make a water-tank that will keep the water from freezing in winter?" We have been thinking the matter over carefully, and would like to submit the following plan to the consideration of interested parties. We do not blindly recommend it, but would like to have an expression of opinion upon it. The plan is this: "Have some power, windmill, gasoline engine, etc., to raise the water from the well, creek, slough, etc., to the tank, which might be set in any convenient place. Make the tank of concrete, eight of sand to about one of Portland cement, with a thick plaster on the inside of equal parts cement and lime. Have a pipe at the bottom to draw the water off. Where there is a rise on the farm near the building, it could be used to give more fall to the water. In building the tank, put down a layer of stone if they can be had; then mix the concrete and lay the bottom of the tank, tamping the concrete well. Use a temporary wooden mould to keep the concrete in shape. When the bottom has been laid, set up the shoring of plank for the walls in whatever shape it is intended to make the tank, and fill in with the concrete, tamping it well all the time. The shoring can be moved up as soon as the concrete has set, and when the job is finished it can be taken away. Walls of this kind may be from eight to fourteen inches thick at the bottom, and from four to six at the top. Wire laid in the concrete will strengthen the walls. The building of the tank now being complete, we would suggest that a wheeled scraper or grader be used to bank up around the tank, after which cover it with sod or seed it with a good fine grass. The top could then be covered with lumber and paper, and roofed. In time such a tank would become more or less of an ornament to the place if it were well kept, and we believe would serve the purpose of a good reservoir. It could be made at least six feet high. This would raise the water to a trough set the ordinary height off the ground, and if set on the side of a knoll, would raise it much higher. Of course, the question might arise whether or not the frost would penetrate the embankment and the walls of the tank. If it should, that might be a serious objection, but with a heavy embankment and a good close top the water should not freeze very much, especially if it were raised from a deep well. The problem of building tanks or reservoirs is a vital one, and we should like to have opinions on the subject.

What it Costs to Export a Sheep to Britain.

Sheep handlers are protesting against the vociferous manner in which exporters of live mutton have advertised their losses of late. In the history of the trade there never was a time when either cattle or sheep exporters admitted that their books balanced on the right side. "Their actions repudiate their talk," remarked a sheep man. "As a matter of fact, sheep sent across the water have made money this season. Take a 130-pound wether, costing 6c. on the Chicago market. It represents an investment of \$7.80. An additional \$2.00 will lay it down in London or Liverpool, and as the pelt is worth that much, the cost of the carcass is thus \$7.80. Such a sheep will dress not less than 48 per cent., or 62½ pounds of mutton, costing a little less than 12½c. per pound. Now, the stuff has been fetching 13c. and 14c. right along on the other side, when sheep are worth \$5 and \$5.80 here; and lately 16c. has been paid on British markets, a price that leaves a good profit. If exporters lose money right along, why do they continue operations?"—[Live-stock World.]

One Indication of Masculinity.

In the selection of their rams in autumn, flock-masters are always careful in avoiding animals with long, narrow necks. And very properly so. Experience shows that animals so constituted lack the masculine character and great constitutional vigor which it is always of so much importance that a sire should possess. A thick, stout neck, with a good arch, or crest as it is called, may always be taken as an index to constitutional vigor in the sire possessing it. The remark applies as well to horses and cattle as to sheep.

A Correspondence Course in all Branches of Agriculture for \$1 50.

I consider the "Farmer's Advocate" the finest correspondence school of agriculture extant. H. T. C. WILSON, Fresno Vineyard Co., Cal.

Scale of Points for Jerseys.

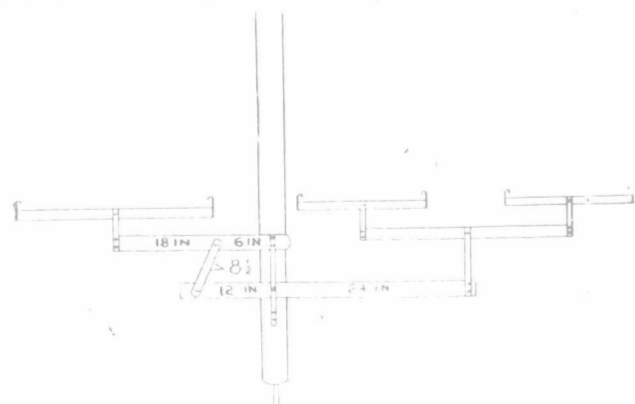
Adopted by the American Jersey Cattle Club, May 6th, 1908.

Table with columns: FOR COWS, Points. Head: A, medium size, lean; face dishd; broad between eyes and narrow between horns. B, eyes full and placid; horns small to medium, incurving; muzzle broad, with muscular lips; strong under jaw. Neck thin, rather long, with clean throat; thin at withers. Body: A, lung capacity, as indicated by depth and breadth through body, just back of fore legs. B, wedge shape, with deep, large paunch, legs proportionate to size and of fine quality. C, back straight to hip bones. D, rump long to tail setting and level from hip bones to rump bones. E, hip bones high and wide apart; loins broad and strong. F, thighs flat and well cut out. Tail, thin, long, with good switch, not coarse at setting on. Udder: A, large size and not fleshy. B, broad, level or spherical, not deeply cut between teats. C, fore udder full and well rounded, running well forward of front teats. D, rear udder well rounded, and well out and up behind. Teats of good and uniform length and size, regularly and squarely placed. Milk veins, large, tortuous, and elastic. Size, mature cows, 800 to 1,000 pounds. General appearance, a symmetrical balancing of all the parts, and a proportion of parts to each other, depending on size of animal, with the general appearance of a high-class animal, with capacity for food and productiveness at pail. Perfection 100.

Table with columns: FOR BULLS, Points. Head: A, broad, medium length; face dishd; narrow between horns; horns medium in size and incurving. B, muzzle broad, nostrils open, eyes full and bold; entire expression one of vigor, resolution, and masculinity. Neck, medium length, with full crest at maturity; clean at throat. Body: A, lung capacity as indicated by depth and breadth through body just back of fore shoulders; shoulders full and strong. B, barrel long, of good depth and breadth, with strong, well-sprung ribs. C, back straight to hip bones. D, rump of good length and proportion to the size of body, and level from hip bone to rump bone. E, loins broad and strong; hips rounded and of medium width compared with female. F, thighs rather flat, well cut up behind, high arched flank. G, legs proportionate to size and of fine quality, well apart, and not to weave or cross in walking. Rudimentary teats, well placed. Tail, thin, long, with good switch, not coarse at setting on. Size, mature bulls, 1,200 to 1,500 pounds. General appearance, thoroughly masculine in character, with a harmonious blending of the parts to each other; thoroughly robust, and such an animal as in a herd of wild cattle would likely become master of the herd by the law of natural selection and survival of the fittest. Perfection 100.

Three-horse Evener.

The sketch shows a three-horse evener that can be used on wagon and disk harrow. A hole is made in the tongue six inches back of the regular



one, and a hammer strap with two holes in it (to match the two holes in the tongue) is put on. Strap iron is used to connect the two-foot and three-foot eveners. This is one I made for myself, and I find it very satisfactory. W. G. K.

Farm.

Some Experiments Summarized.

Just at this period it may be well to recall the results of experiments with wheat, oats and barley conducted at the experimental farms. Mr. Bedford, of the Brandon Farm, gives the average results of a test of nine varieties of wheat for seven or eight years, as follows:

Table with columns: Varieties, Years under test, Yield per acre. Varieties: Goose, White Fife, Crown, Monarch, Red Fife, White Russian, White Connell, Rio Grande, Preston. Years under test: 8, 8, 8, 8, 8, 8, 8, 8, 7. Yield per acre: Bush. Lbs. (e.g., Goose: 41, 58; White Fife: 36, 35).

With oats, Mr. Bedford reports the following averages:

Table with columns: Varieties, Years under test, Yield per acre. Varieties: American Beauty, Mennonite, Banner, Early Golden Prolific, Bavarian, Holstein Prolific, Golden Giant. Years under test: 8, 7, 7, 8, 8, 8, 8. Yield per acre: Bush. Lbs. (e.g., American Beauty: 91, 10).

Four varieties of barley were tested for seven years, with the following average yields:

Table with columns: Varieties, Years under test, Yield per acre. Varieties: Mensury, Nugent, Trooper, Summit. Years under test: 7, 7, 7, 7. Yield per acre: Bush. Lbs. (e.g., Mensury: 56, 17).

The 1903 report from the Indian Head Farm gives the yields of the field crops of oats as follows:

Table with columns: Varieties, Character of straw, Yield per acre. Varieties: Banner, Abundance, Wide-awake, Black Beauty, Thousand Dollar, Goldfinder, Improved Ligow, Tartar King, Waverley. Character of straw: Strong, Weak, Strong. Yield per acre: Bush. Lbs. (e.g., Banner: 119, 2).

In a test with wheat, Mr. Bedford got an average yield of 30 bushels and 10 pounds from selected seed, as against 29 bushels 59 pounds from unselected seed. With Mr. Mackay the results were more marked, the following results being obtained:

Table with columns: No. of days maturing, Yield per acre. Varieties: Selected seed, Well-cleaned seed, Small seed. No. of days maturing: 130, 130, 130. Yield per acre: Bush. Lbs. (e.g., Selected seed: 37, 20).

In this test the selected seed was hand-picked when ripe, before being cut, and thoroughly cleaned by the mill. The well-cleaned seed was from the best Red Fife, run twice through the fanning mill, and was a large, plump sample; the small seed was what was taken out of the well-cleaned seed. New settlers are particularly reminded of the necessity of treating wheat and oats to prevent smut, as it is almost certain to develop if the seed is not pickled.

Every Man a Weed Killer.

The extent to which weeds have encroached upon the farms of the wheat belt is positively alarming. Their spread has been rapid and practically unobstructed, particularly with those species that grow best under such circumstances as spring grain is grown. Now, however, there is in most places a serious determination to do something to arrest the spread of some of the most noxious kinds. The difficulty in getting clean seed no doubt has been responsible for many of these good resolutions, but we trust that through seeding the resolutions will not be scattered with the seed, unless it is with the same object for which the seed is sown. Several farmers have expressed their intention of using a weeder (an implement with a double row of teeth, resembling those in a horse-rake, upon a frame with a pair of shafts) after seeding to keep down the weeds and to conserve moisture. Others have decided to use a light harrow as soon as the crop is well up, and in this way to destroy many tender weeds, and also conserve moisture. In a recent issue we suggested the advisability of the Provincial Governments conducting demonstration stations, to illustrate how lands could be cleared of weeds, but as such a means of providing information on so important a subject would require several seasons, we invite a discussion of the subject of weed prevention and control in our columns. There are throughout the country many experienced farmers who have succeeded in keeping their farms free of weeds by judicious management, and there are also many readers of the "Farmer's Advocate" who have not had the advantage of an early training on the farm, or who are not familiar with the nature of many of our worst weeds, and are anxious to know how best to prevent their encroachment or to eradicate them altogether. The problem of weed control is not simply one for the individual, but for communities, for no matter how clean a man may keep his farm, it is in constant danger if there is a neighbor who, through ignorance or neglect, allows his farm to become overrun with weeds. We should like to see a passion for weed destruction aroused throughout the country that would result in making every man feel his responsibility in the matter, and do his part to protect the fertility of these new rich fields from being robbed and wasted by the spread of weeds.

Harrowing and Its Effects.

In many sections of the prairie country farmers do not follow any hard and fast rule as to harrowing, but decide, quite frequently, as to the time available; in other words, if the seeding is late, as little harrowing is done as possible or considered necessary. The effect of harrowing is, among other things, to arrest the probable waste of the soil moisture, by forming what has been frequently termed a dust-blanket, thus retarding evaporation. Especially is the above necessary and valuable in seasons when seeding time and weeks after are dry, bearing in mind that, to ensure even germination, heat and moisture are necessary.

Fall-plowed land, then, would, in the majority of cases, be better harrowed as soon as the soil can be worked, in order to retain moisture in the top inches of soil sufficient to ensure a good start to the seed. Just recently a wide-awake farmer, who has been using the disk seeder for some years, stated he had found from experience, which, as will be seen, cost him something, that land seeded with the disk drill should be harrowed right after drilling, the harrowing to be done within twenty-four hours after the seeding; and that he was confident he had gained five bushels per acre over the returns from land that had not been so harrowed. The best way to do would be to harrow up to the seeder, either at the end of



At Haying Time. On the Bute Farm, St. Charles, Man.

the day, or, the following morning first thing. He is of the opinion that the harrowing ensures an even start which the disk seeder does not guarantee, unless the sown land is at once harrowed. This farmer likes the disk seeder, but if he had to purchase another seeder would buy a shoe drill, so as to have the two kinds, and thus be the better enabled to meet conditions as such arise.

For land plowed this spring, especially if this month and the early part of May are dry, each day the plowing done should be harrowed, and not left to dry out under the sun's rays by the upward movement into the air of the soil water. This loss is bound to occur unless checked by a dust blanket.

Wheat-producing Power of Soils.

In the Northwestern Miller, Prof. Harry Snyder points to the various influences determining the wheat-producing power of our farms, as follows:

The question is often asked, "Why do American farmers produce such a low average yield per acre of wheat?" In many European countries where the soil has been cultivated for centuries the yield of wheat is twice as large as in the United States, where the wheat lands have been under cultivation only a few decades. The low yield in the United States is due largely to lack of systematic methods in wheat farming. Wheat has been the main crop of the pioneer, and the new lands brought under wheat cultivation have, in the past, exceeded in area those withdrawn for other crops. With only a limited area of new wheat lands remaining, the conditions have been reversed, and the acreage devoted to exclusive wheat culture is now gradually decreasing.

As a pioneer crop, wheat is raised with comparative ease on cheap lands of high fertility. With an increase in the price of land it is not surprising that wheat is displaced by other crops. A point has now been reached where wheat-raising is destined to occupy a new position in American agriculture; it will soon cease to be a pioneer crop, and will become more of a standard crop to be grown under better conditions, insuring a larger yield per acre. This must necessarily follow, because no other cereal can take the place of wheat for the production of bread.

Wheat has been considered by many as hard on the land, causing the soil to become impoverished. It is true that when wheat has been grown for a number of years upon the same land the yield per acre gradually declines. This would occur if any other crop were grown continuously. Compared with other crops, wheat does not remove a large amount of fertility from the soil. An acre of wheat removes less total plant food, as nitrogen, phosphoric acid and potash, than oats, corn, or barley. The amount of plant food removed per acre by the principal farm crops, as determined by the Minnesota Experiment Station, is as follows:

Crops.	Gross weight.			Pounds per acre.		
	Lbs. per acre.	Nitrogen.	Phosphoric acid.	Potash.		
Wheat, 20 bushels	1,200	25	12.5	7		
Straw	2,000	10	7.5	28		
Totals		35	20.0	35		
Barley, 40 bushels	1,920	28	15.0	8		
Straw	3,000	12	5.0	30		
Totals		40	20.0	38		
Oats, 50 bushels	1,600	35	12.0	10		
Straw	3,000	15	6.0	35		
Totals		50	18.0	45		
Corn, 65 bushels	2,200	40	18.0	15		
Stalks	3,000	35	2.0	45		
Totals		75	20.0	60		
Peas, 30 bushels	1,800		18.0	22		
Straw	3,500		7.0	38		
Totals			25.0	60		
Flax, 15 bushels	900	39	15.0	19		
Straw	1,800	15	3.0	8		
Totals		54	18.0	27		
Manure, 10 tons	20,000	75	35.0	150		
Meadow hay, 1 ton	2,000	30	20.0	45		
Red clover hay, 2 tons	4,000		28.0	66		
Potatoes, 150 bushels	9,000	40	20.0	75		

From the figures given it is quite evident that wheat does not remove as much fertility from the soil as many other farm crops. It is a more delicate-feeding crop than oats, barley or corn, and requires more assistance in securing its food than do these. To meet the food requirements of a wheat crop the soil must be in a high state of fertility. Spring wheat is placed at a greater disadvantage than corn in securing its food. The wheat plant takes its food from the soil early in the spring, before much of the raw nitrogen has undergone the fermentation process known as nitrifi-

cation, which makes it available as plant food; while corn, on the other hand, takes its food later in the season, when more nitrogen is available.

Wheat cannot be regarded as a crop which exhausts the land; the decline in yield where wheat has been grown continually is not due to removal of the fertility by the crop, but to other causes. Let us consider briefly what these other causes are.

When the virgin prairie land is first brought under cultivation it contains a large amount of decaying vegetable matter, the accumulation of centuries. This vegetable matter, known as humus, is rich in the element nitrogen. When the land is continually under the plow the vegetable matter, or humus, rapidly decays, and the nitrogen is liberated in larger amounts than is needed by the crop for food purposes. The nitrogen, which is not assimilated by the wheat, forms gaseous and volatile products, which are easily lost. Tests by the Minnesota Experiment Station have shown that on new land this loss of nitrogen through decay of humus was five times greater than the amount utilized as food by the wheat crop.

Wheat has been blamed for reducing the fertility when the real cause of the decline in fertility has been the continuous cultivation of the land, causing rapid decay of the humus and loss of the nitrogen. No soil was ever intended to be kept continually under the plow and made to produce just one crop; weeds, insect ravages, and plant diseases are all nature's protests against a one-crop system.

ROTATIONS OF CROPS NECESSARY TO PROFITABLE WHEAT-GROWING.

The fact that on those farms where wheat has been grown systematically in a rotation along with other crops, and some farm manure has been applied, the yield of wheat and other grains has not declined, is sufficient evidence that low yields are due more to poor systems of farming than to impoverishment of the soil caused by removal of fertility through the crops produced.

The limit of wheat-producing power of our soils has not as yet been reached. There is a vast amount of latent fertility in the soil which has not been developed. This fertility can be made available for wheat production by practicing more systematic methods of farming, as rotation of crops and use of farm manures; this will result in increasing the yield of wheat from five to twelve bushels per acre.

At the Minnesota Experiment Station, when wheat was grown twice in a six-year rotation with clover and corn, and farm manure was applied to the corn, the two wheat crops yielded nearly as much total wheat as was produced in four years on the plots where wheat was grown continuously. Not only a larger yield of wheat, but an increase of twenty bushels per acre of corn was secured by the rotation.

A more even grade of wheat, containing less weed seeds, is secured on rotated land. On some farms the fertility removed by the weeds and lost from the farm, along with the grain sold, has been nearly as great as that removed by the crop. There is a large amount of fertility appropriated by weeds; some of the more troublesome ones remove over twice as much as wheat.

When wheat is grown upon rotated land, insect ravages are reduced; grasshoppers, chinch bugs, and army worms are always more numerous and troublesome on old wheat lands than on rotated lands. Crop rotation is also beneficial in other ways, particularly in reducing the losses from fungous diseases. A strong, well-fed wheat plant does not so readily succumb to plant disease as a weak, poorly-nourished one, and when a soil is well stocked with plant food, the crop matures earlier, thus often escaping frost, late insect ravages, and fungous diseases. During the last year it was particularly noticeable that on manured and crop-rotated land the crop was a little in advance of that grown on old wheat land, and was not so affected by rust.

Larger yields of wheat and also wheat of better quality can be secured by improved methods of farming, so as to develop the latent fertility of the soil, and by the use of better seed. The use of improved seed alone, or of a specific fertilizer, will not in itself improve conditions so that maximum yields will be secured. Poor seed has been one of the causes of low yields; particularly is this true in the case of old wheat lands. Light-weight and immature seed of low vitality has been seeded when heavy-weight mature grain of high vitality should have been used.

I have before me, while writing this article, three pots of growing wheat, one from heavy-weight seed, one from medium-weight seed, and one from very light-weight seed. The difference in the appearance of the young plants is most noticeable, the plants from the heavy-weight seeds are nearly two inches taller, and are more vigorous and of a richer green color than those from the light-weight seeds. This difference in appearance of the plants is not surprising, when one considers that there is nearly twice as much mineral plant food stored up in the heavy-weight seed and at the disposal of the growing plants as in the case of the light-weight kernels. Good seed must be reinforced with rich soil which is thoroughly cultivated. Neither good seed nor fertile soil alone will accomplish the best results, but jointly they are capable of greatly increasing the yields of wheat on American farms, even exceeding the yields obtained in European countries.

CLOVER NECESSARY IN SOIL REGENERATION.

In building up the soils so that they will yield their

maximum returns, clover must necessarily take an important part, because the humus and nitrogen content of the soil can be largely restored by the production of clover. When a clover sod is plowed under, new stores of humus and nitrogen are added to the soil. Clover, more particularly than grass crops, adds more nitrogen to the soil, because clover indirectly has the power of assimilating its nitrogen from the abundant supply found free in the air.

So many inquiries have been made in regard to the clover plant and its relation to the economic production of wheat, in supplying the wheat plant with the nitrogen necessary for the formation of gluten, that it may be of interest to consider briefly the relationship of the two plants.

From the earliest times, it was known that whenever clover was grown the yield of succeeding grain crops was increased. Clover was used as a green manure crop in Roman agriculture. Washington, the most progressive farmer of his time, grew clover, and Benjamin Franklin was its enthusiastic admirer. In later days, when scientists studied the sources of plant food, clover was an enigma. It was known that such plants as the cereals were benefited by nitrogenous fertilizers, while clover, a plant of comparatively high nitrogen content, was not benefited.

At last the problem was solved by Hellriegel, in 1888. He demonstrated that clover could indirectly assimilate its nitrogen from the free nitrogen of the air, through the workings of the micro-organisms upon the roots of the clover.

When the roots of a vigorous clover plant are examined numerous "knots" or "swellings" are found; these are sometimes called nodules or tubercles, and are due to micro-organisms, producing a diseased condition of the roots. The micro-organisms within these nodules obtain a part of their food from the clover plant; nitrogen they assimilate from the air.

After the organism assimilates or "fixes" the free nitrogen of the air, it is appropriated by the clover plant, which cannot make direct use of atmospheric nitrogen for food purposes.

Thus, through the workings of the micro-organisms upon its roots, the clover plant is capable of utilizing the free nitrogen of the air for food purposes. The value of this is more fully appreciated when it is realized that nitrogen is the most expensive of all of the elements of plant food, and in commercial forms costs from 15 cents to 18 cents per pound.

What Constitutes a Day's Work?

The amount of work that should be accomplished on a farm by one man in a day is pretty well known to the practical man—the man used to Western Canada farm conditions. Many men are farming in the West to-day who have had no previous experience, and for them this article is written. Conditions may cause some variation from the figures given, but speaking generally, those given will be found accurate. The working day on the farm for field work, except in harvest, is usually one of ten hours; in harvest, 11 hours. Briefly, the hour of rising should be, as soon as spring work begins (such begins before seeding), 5 or 5.30 a. m., so that the field work with teams may start at 7 a. m., continuing until 11.30 a. m.; then one hour and a half for lunching men and horses, resuming work at 1 p. m., and continuing until 6.30, when the horses will be brought to the stable, watered, unharnessed and fed; after this, supper, and then grain feeding, brushing the horses, and attending to what other live stock there is on the farm.

A man with three good farm horses and a fourteen-inch walking-plow should turn over three acres a day (10 hours); with the same number of horses and a double 12-inch-furrow gang, three and one half acres; and with the same plow and four horses, four acres should be well plowed. Three horses on the harrows—four sections—should be able to put a dust-blanket over twenty-five acres in the field-day of ten working hours. With the same motive power, namely three horses, on a sixteen hoe or shoe seeder, about fifteen acres should be covered; or it can be arrived at approximately by allowing one shoe (or hoe) to the acre. In harvest time, with an average crop, with a bundle-carrier on and the knottor working well, a man should keep up with the binder stooking; or, in other words, three horses on a binder, six-foot cut, should put down fifteen acres a day, which the stooker (or shocker, as some dub him—depending whether the bunches of sheaves are termed "stooks" or "shocks") should put up. Two men with a team and wagon should stack ten acres a day of a crop averaging twenty-five bushels per acre. These figures, while they may be varied from slightly, will be found useful as a guide; and to the newcomer who is not accomplishing as much, he had better investigate to find out cause of the small quantity of work done—whether the motive power is insufficient in the way of horses or oxen, whether the start is not made early enough in the morning, or whether too long a day is made, with the resultant exhaustion. Frozen grain is generally the property of the farmer who is seen meandering to work with his horses at about 9 to 10 a. m. An hour before dark is worth two after.

Penalty for Stealing Fertility.

The following excerpt is taken from an American exchange and is worth pondering, in the light of existing conditions in the Canadian West. Today there are not wanting plenty of men who say there is practically no limit to the fertility of their lands, but the same statement has been made many times before in those sections referred to in the following lines:

"Here in Southern Illinois (Edwards County) you can see hundreds of farms that are almost ruined because they were devoted entirely to grain. The hills have deep gullies in them, and wide stretches of level prairies will hardly grow anything but "toads' hair" or "dogs hair." If it is sown in wheat it must be a good wheat year if the farmer gets his seed back. Besides, he raises a lot of chinch bugs, which destroy corn and grass in neighboring fields. I have seen 10-acre fields of corn on which I do not think you could gather over two loads of good solid corn. Yet these farmers go on in the same old way, they and their lands growing poorer each year. I have heard old settlers say these prairies used to raise 75 bushels of corn per acre. Of course, with a rotation of crops and legumes, perhaps, the outcome would not be so bad. Now, as to our experience. My father bought one of the oldest farms in this country about forty years ago. It was so poor at that early date that they had to pull up the oats by the roots to get them long enough to tie the bundles. He went largely in debt for it (the former owner spent his last years in the county poorhouse), and began a rotation of crops and kept his stock on the farm (having no stock law at that time, most people let their stock run at large), and stabling them in winter, made all manure possible and putting it from the stables right out on the fields, keeping about as much stock as he could feed well on the roughness and some grain of the farm. He has never spent a nickel for commercial fertilizers, but has bought some manure, although not very much; has sown clover largely. He has now 225 acres of good land, besides mortgages on other farms, and is spending his old age, not in the poorhouse, but in a comfortable house in town. As for myself, I have 75 acres, the most of which, three years ago, would not pay the expense of putting in a crop of corn, wheat or oats, but it is a little better now, and I intend to sow peas largely, and clover as soon as it will grow, and feed up all hay and grain and use straw for bedding.

Systems of Crop Rotations Necessary.

One of the aids to good farming is the practice of following a system of crop rotation. At the present time, few really good rotations have been worked out for the prairie farmers, who, up till now, have been debarred the extensive use either of corn or clover, two plants which enter into the best rotations on land to the East and South.

Prof. Snyder, of the Minnesota Station, states that continued growing of grain has a tendency to make the soil more open, and, in conjunction with that admitted opinion, says: "Wheat thrives on compact soil, barley on open soil." It seems, then, that the farmers of this country need worry very little over getting the soil into shape for barley, but that there is abundant need for hard work, in the shape of thinking and planning field work, for the man who would be a successful grower of our staple grain—wheat. At the S. Dakota Station the results of their rotation trials have shown that the most potent influence governing the wheat yield is the effect of the immediately preceding crop. The experiments have shown that wheat should not be sown on land cropped the previous season to oats. Two short rotations that have done well with the Station mentioned are: (a) wheat, barley, peas (harvested), wheat and corn; and (b), wheat, corn (manure) wheat, oats. The rotations so far reported, do not include grass, which is a serious omission, but one which the report accounts for. Barring for the present corn and clover, the grass (either timothy, rye or brome) might well take their place, especially so as manure may be applied to the grass before breaking up. Referring to the use of manure, we quote the following:

"The farmer should fully understand that, while the application of barn-yard manure to the soil is certain to have a beneficial effect by adding to the store of plant food, its effects may not be apparent in the results of the first crop after the application, and that the immediate mechanical or physical effects upon the soil may be either beneficial or detrimental, depending upon the character of the soil, the kind of manure, the time and method of application, the nature of the crop, and the character of the season as to moisture and temperature.

"The soil of the farm should be considered a bank in which the surplus resources of the farm, in the form of plant food, should be deposited, with the understanding that this surplus cannot be withdrawn at once, but is to remain until such time as the conditions are favorable for its utili-

zation. With our light rainfall and retentive soil, the danger of loss from leaching is very slight.

"From our experience and observation, we believe we are warranted in recommending as the surest method of guarding against the possibly bad physical effects of the application of the manure, that it be applied to land intended for corn instead of wheat; that it be hauled direct from the stable during the late fall, winter and spring, and plowed under in the spring. The corn will likely be benefited, and the wheat crop that should follow the corn will probably be improved as much as or more than it would if the manure were applied direct to the crop."

We intend discussing the question of crop rotations further, and shall be pleased to hear from our readers, their ideas on this subject, and rotations they have found satisfactory.

Millets and Their Uses.

The German millet (*Setaria Italica Germanica*) differs from the common millet, in being larger and coarser. German millet is a plant 3½ to 5 feet high. It produces an immense amount of forage, but does not mature so early, neither is it as good a drouth-resister as the common or Hungarian millets. The place of millets on the farm is that of supplementary crops, to be sown for fodder when the season is late. They are useful in short rotations—useful to aid in getting rid of weeds, and as a supplement to other forage plants, and to be used in place of a bare fallow. The millets in common use are the foxtail millets (*Setaria* or *Chenopodium Italica*, var *Germanica*). These plants thrive well in rich, warm, loamy soils, but not on thin, poor land. It has been stated that a crop of millet on new breaking helps in preparing it for a subsequent crop. German millet is supposed to have been brought from British India, as it was formerly known as Bengal grass. Hungarian millet was for a time very popular, but it has a tendency to volunteer, which is a quality not favored by farmers. Millets are generally sown in the latter part of May or in June, on spring plowing, and if sown on breaking is sown after the breaking has been disk harrowed. The millets can be sown in the seeder or by hand—the former way preferably. The quantity of seed used per acre is from one-half to three-quarters of a bushel. Thin seeding frequently results in coarse stalks—not a desirable quality for hay. This class of fodders should be cut before the seed has begun to ripen, especially for horses. If cut too early the hay has too laxative an effect. The best time to cut is from complete "heading out" until late bloom; or, as one authority puts it, "the best time to cut for hay is when the majority of heads have distinctly appeared." From experiments made in North Dakota, millet hay, in which the seeds had been allowed to ripen, had been found distinctly injurious to horses. Immature or over-ripe millet is said to produce abortion in mares and cows, although data of an experimental nature of this statement are not available. The millets are slightly laxative in effects on the bowels, and stimulate the kidneys to work; immature millet is laxative, over-ripe diuretic (acting on the kidneys). Once a day is sufficiently often to use well-grown, properly-cured millet hay for horses, and it should not be fed oftener than twice a day for other stock; preferably not at all to in-foal mares or cows advanced in calf.

Seeding Pointers.

In discussing the growing of grain, before the Moose Jaw Agricultural Society, Mr. Angus Mackay, of Indian Head, said:

"Grain should be down two and one-half inches. In heavy clay soil two inches was sufficient. Everyone knew that an inch on top of the soil dries off every year. They had put in grain three inches, but that had kept it very late. In answer to a question, he said one and one-half bushels of wheat to an acre was best, but they got just as good crops from one bushel to the acre. Where summer-fallow was worked right, it was advisable to sow one bushel to an acre. The seed will ripen earlier. When sown one and one-half bushels to the acre, the wheat is a little larger. Two bushels of oats to the acre is altogether too much; the heads grow small. They always fanned over grain two or three times and took out all the small grain. On stubble land, one and one-quarter bushels to the acre was always best to sow."

Dairying.

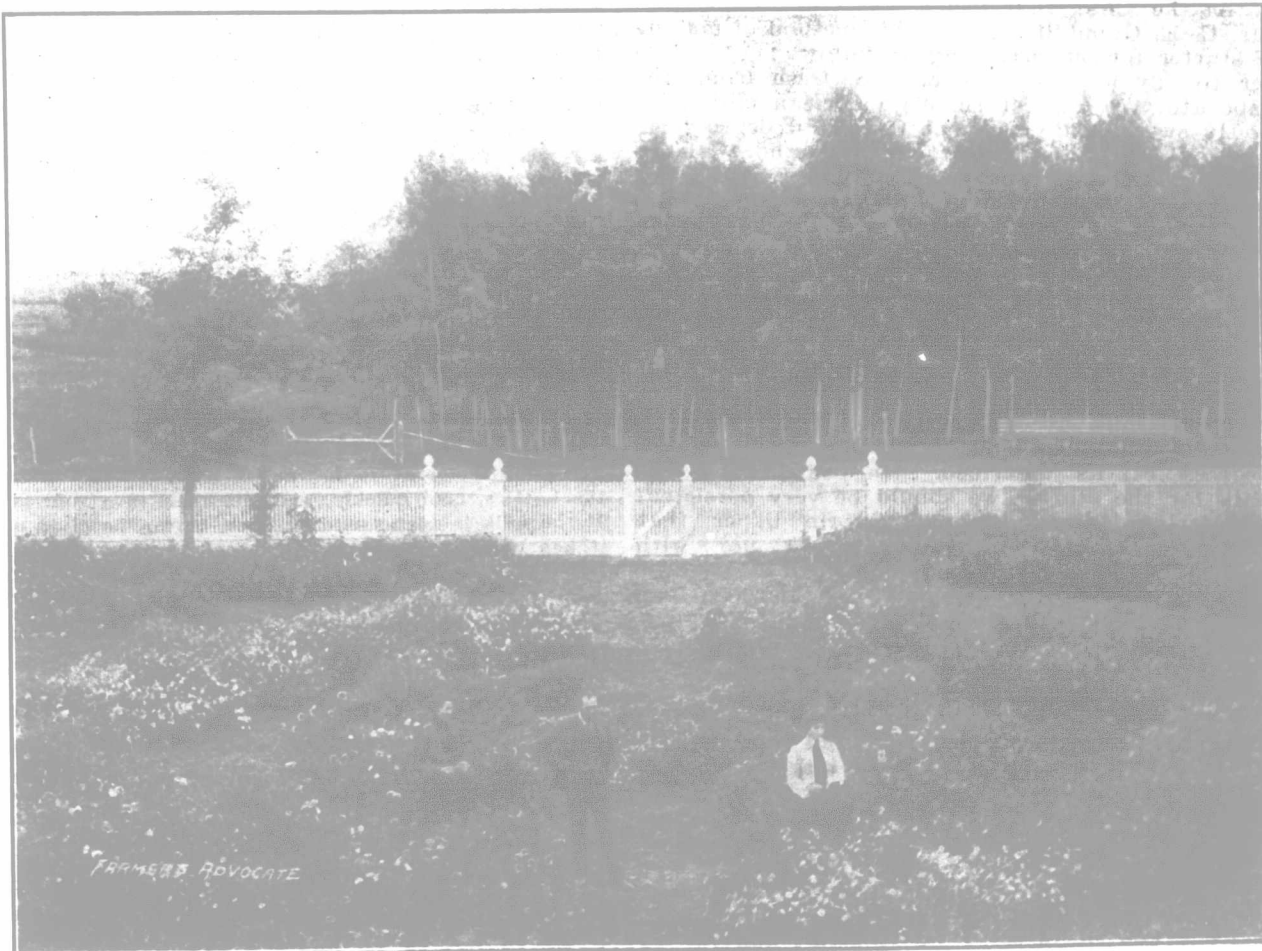
Progressive Steps in Farm Dairying on the Prairie.

A U. S. authority, in describing the phases of dairying in States south of the line having conditions similar to those existing here, divides the history of dairying in those States into three periods, and cites the lessons pertaining to each as follows:

The first lessons in the industry were paid for by the farmers at the rate of about \$100 per lesson in co-operative stock creamery companies, organized by smooth promoters. The scheme of running a creamery without a sufficiency of contributors of cream or milk was disastrous. The second step was bringing into practice the idea of skimming the farmers' milk at a station, and shipping the cream to a central point for churning. This lesson, Mr. Webster says, cost the farmer only about \$25.

The third and successful step was the use of the separator. The authority quoted discusses the relative cost of hauling milk both ways and of hauling cream one way, and comments on the increase in the butter-fat due to the use of the separator, and also urges that while the separator is automatic in its skimming, some care and exercise of brains are needed in the handling of the cream. He also shows that a large share of the responsibility for the production of good butter rests upon the creamery management. There is no fear, he says, of the ultimate outcome of the farm separator creamery system if all who are concerned in it make the best use of the means they have at hand, and study to know more about the business and to make high quality both of cream and butter—the end to which all efforts should be bent.

I might say that I put a high value on the "Farmer's Advocate." I have stopped subscribing for all other papers of the kind, thus saving valuable time having only one agricultural paper to read, and find that is needed in the "Farmer's Advocate."
Van-couver Island, B. C. A. CAMPBELL.



On the Headingly Road.

Cheddar Cheese Making.

By Prof. A. J. Glover, Illinois.

Milk that has more than .2 of 1 per cent. lactic acid should not be received for cheesemaking.

Unless milk is occasionally stirred while it is being received and ripened, the cream will rise, and by mixing it with the milk again some of the cream will become churned, thereby losing considerable fat in the whey. When the milk is all in the vat steam should be turned on and the milk heated to 86 degrees, and the rennet or acid test made. Milk should be ripened to a point where in two hours from the time the rennet is added the curd will be ready to separate from the whey.

The first day that cheese is made, the maker should make a rennet test and note the condition of the milk. If milk is found to be overripe, the cheesemaker must hurry to keep ahead of fermentation. If milk is too sweet, he will have to wait until the proper amount of acid develops. When good sweet milk is delivered a starter should be used to hasten the ripening. Usually not over two per cent. is needed.

When the milk is properly ripened the rennet extract should be added, about 4 ounces to 1,000 pounds of milk. This is diluted in a pail of water, and is poured evenly into the vat from one end to the other. The water should be at about 86 degrees. The rennet should be thoroughly mixed with the milk, by stirring gently for five minutes after it is added.

The curd is ready to cut when it will break clean before the finger. Curd should be firm enough to cut in 15 to 30 minutes after the rennet is added, into cubes one-half inch square, which is fine enough for slow-curing cheese. The curd must be stirred constantly, or it will soon settle and knit together. It is well to stir five minutes before the steam is turned on; then apply steam, slowly at first, taking about 45 minutes to raise the temperature from 86 to 98 degrees. If milk is heated rapidly it requires vigorous stirring to keep particles from knitting together, and causes considerable loss in the whey. When the milk is over-ripe, the curd must be heated faster and to a higher temperature.

It is difficult to tell when the curd is cooked enough. There should be one-eighth inch of acid in the curd when the whey is drawn. When a handful is pressed together it should not remain in a solid mass, but fall apart readily. An overcooked curd will be tough and corky, while an undercooked one will be soft and mushy and will not make solid cheese. The whey should show only .2 of 1 per cent. acid.

When the correct amount of acid is developed the whey is drawn and the curd placed on racks in the end of the vat and covered with coarse linen cloth. It should be stirred for a few moments to remove loose whey, and then left to mat evenly, about six inches deep. In about 15 minutes it may be cut into large blocks, which should be turned frequently to prevent the whey from collecting in any part of it.

When the curd is cooled to 85 degrees it can be put in the press. Pressure should be applied slowly at first, but in 15 minutes full pressure can be applied. The cheese will be ready to press in one hour. After dressing the cheese it should be pressed until next morning, when it may be taken out and put in a cooling room.—American Dairyman.

Buttermaking Starter.

At the Ohio Dairyman's Association meeting, Mr. C. E. Gammill described his method of making a starter for buttermaking as follows: "I prefer to buy a good pure culture, fresh from the laboratory. I select some good clean milk, perfectly sweet, and then heat it to 180 degrees F., and hold at this temperature for about thirty minutes, then cool down to 75 degrees and put about a quart of it in a glass jar that has been sterilized, and add the pure culture, being careful not to fill the jar so full but that you have ample space to shake, and shake it often for the first hour or two, to be certain that your culture is all dissolved and thoroughly mixed with the milk; then place it in a warm place or bucket of warm water about 75 degrees F., and keep it warm till the milk begins to curdle, when it is ready to put into the milk which has been selected to make the starter, and which has been heated to 180 degrees F., as described. In pasteurizing the milk for the starter we should be very persistent in stirring it; not with an old tin dipper that has a thousand bacteria to the inch, nor with a wooden stick or paddle, but with a metallic stirrer made for the purpose, one that you can keep absolutely sterilized.

"I first select enough milk for the amount of starter wanted, in proportion of one to forty, or a quart to ten gallons; I strain the milk into the ten-gallon cans, and they are placed in a galvanized tank with steam and water connections, and in this tank all my starter is made. After pasteurizing the milk I draw off the hot water and immediately cool it down to 75 degrees F. We have a common flat galvanized tank that will hold ten cans. This sits on the operating-room floor, and is just the right height to let the tops of the cans be above the water, and it is convenient to lift the cans out and in; we made a noiseless heater in the bottom of the tank, also laid some pipes in the tank to set the cans on, so that the hot or cold

water can get under and all around them. If, in the morning afterwards, the starter does not seem to be quite ripe—that is, thick enough—or has not developed acid sufficiently, we can again warm it and cool it with very little trouble. We find that the lactic acid germs do not thrive or multiply very fast below a temperature of 55 degrees F.

"Now, take a quart of the starter and put it into ten gallons of the pasteurized milk, and stir thoroughly for the first hour; in about 20 hours, holding the milk at 75 degrees, it will curdle and have developed enough acid, and is ready to put into the cream. First, save out enough mother starter for the next day, proceeding from day to day along the same line till your starter goes off flavor. Then be sure to discard this starter and make another, as a poor starter is worse than none.

"Cleanliness will have more to do with keeping the starter in good condition for a longer period than anything else, and must be practiced from the start and kept up till the finish if you can expect good results. I seldom use a starter longer than a week or ten days, even if it may seem to be all right."

Creamery Cold-storage Bonuses.

I am directed by the Honorable the Minister of Agriculture to state that Parliament will be asked to extend the bonus on cold storage at creameries to the year 1905. All owners of creameries, or creamery associations complying with the conditions enumerated below, will be entitled to the sum of \$100, to be paid in three installments, as follows:

(1) Fifty dollars, as first installment, at the close of the manufacturing season of the year 1905.

(2) Twenty-five dollars, as second installment, at the close of the manufacturing season of the year 1906.

(3) Twenty-five dollars, as third installment, at the close of the manufacturing season of the year 1907.

All subject to ratification by Parliament. To be entitled to the payment of the bonus, the following conditions must be fulfilled:

(1) A suitable cold-storage room must be built, in accordance with the new plans (year 1904) supplied by the Dairy Commissioner's Branch of the Department of Agriculture, or with any thoroughly effective and acceptable plan.

(2) Butter must be manufactured at the factory during the summer months, at the average rate of not less than 2,000 pounds a month, and an accurate statement of the quantities sent to the Department.

(3) The temperature in the said cold storage must be maintained continuously during the summer months under 38 degrees F., and a statement of the temperature recorded day by day on forms supplied by the Department, must be forwarded at the end of each month to the office of the Dairy Commissioner.

(4) All applications for the bonus must be sent in before the 1st of July, 1905. Any application after that date will not be considered.

Plans showing the style of construction recommended for the insulation of the refrigerator, for either the cylinder system or the circulation system, will be furnished free of charge on application to this office. Experts will be sent whenever possible to give instructions on the spot if application is made to the Dairy Commissioner, J. A. RUDDICK, Dairy Commissioner.

Homemade Pasteurizer.

Pasteurized milk can be prepared by the house-keeper, as follows: Put the milk in a small-mouthed glass bottle which has been cleaned with boiling water. Stop the mouth of the bottle with cotton batting or absorbent cotton. Place the bottles in a wire basket, and immerse the basket in a pot of cold water, or a pan can be placed in the pot, upside down, and the bottles stood on it. Heat the water gradually to a temperature of 158 to 165 degrees. Keep the water at the same temperature for about 30 minutes. Remove the bottles, cool quickly, and put them in a cold place. If the milk is to be used at once, it can be given when it has reached a temperature of 98 degrees.—American Dairyman.

The Milking Machine.

To the Editor "Farmer's Advocate":

Sir,—Replying to yours of the 20th, would say that in the month of February last I visited three farms in Little Falls, N. Y., where they are using a milking machine manufactured by D. H. Burrell & Co., of Little Falls. This machine is a modification of the "Lawrence-Kennedy" milking machine. The farmers are well pleased with the work of this machine, and, so far as I can see, I consider it quite practicable. It will milk from eight to ten cows at once, and on one farm one man was milking from thirty-two to thirty-six cows, night and morning, and doing this work in about an hour and a half. They say they are able to dispense with the help of one man since

the introduction of the milking machine. We hope to have one of these machines installed in the dairy department of the College in the near future, although the manufacturers have not yet placed them on the market, but they hope to be able to do so in the very near future. We are also trying to get a Canadian firm to take up the manufacture of the machine in Canada. I have great faith in the future of the milking machine.

O. A. C. Dairy School. H. H. DEAN.

Horticulture and Forestry.

Arbor Day at Victoria, B. C.

Now that the season for Arbor Day is fast approaching, it might be of interest to the dwellers on the prairies to know how that day is celebrated at the Capital City of the most westerly province of our great Dominion; and, perhaps, it would be well to note here that the people of British Columbia do not appreciate the value of trees as they should. To the farmer the tree is the cause of years of unproductive labor and barrels of honest sweat before the land is ready to bring forth of its abundance in the form of cereal, tuber or root; therefore, it is not surprising that the tree should be looked upon as a nuisance rather than a necessity. It is only necessary to walk a mile or two at the most in order to reach the forest, no matter in what part of the country one may live, and in most cases the farmer has a portion of the primeval forest on one corner of his farm.

In the cities the cars will take those who wish to the woods in ten minutes for a charge of five cents. But in spite of this, tree-planting on the streets is often neglected, to the detriment of aesthetic culture. In and around Victoria, however, the land has been cleared largely by capitalists, who carefully guarded the native oaks, so that many of the gardens have great natural beauty.

It was while the prairies were covered with their protective garment of frozen whiteness, and the chill winds that ushered in the New Year gave no hope of the coming resurrection of plant life, that the school officials, scholars, and some of the dignitaries of the city and Province, were assembled on the green lawn at the Victoria High School for the ceremony of tree-planting. His Honor the Lieutenant Governor, Sir Henri Joly, made a short speech, in which he complimented the Cadet Corps on their soldierly bearing. The trees were put in place by Sir Henri and Mr. Pemberton, after which the spade was presented to the school gardener. The latter and Trustee Beaumont Boggs made speeches, Mr. Boggs giving a short history of the origin of Arbor Day.

H. F. PULLEN.

Free Distribution of Plants.

Among the other advantages of membership in the Western Horticultural Society is the chance of sharing in the annual plant distribution.

For some years it has been the practice of the society each spring to offer to members a free choice of several plant premiums. The plants for these distributions have been very carefully chosen, with a view to their desirability, as well as to their hardiness and suitability to our conditions. The directors believe that through the receiving of these many persons have been encouraged to horticultural efforts along new lines, and that this feature of the work of the society has been a most valuable one.

The offering this spring affords a wide variety, and includes a number of very desirable plants that have been thoroughly tested but not generally distributed throughout the country. The offering includes seven selections. Each member is entitled to one parcel, and those who are not now members, but who wish to participate in the distribution, may do so by sending the regular membership fee of \$1.00, along with application for plants. The payment of this sum will also entitle the sender to the other privileges of membership.

(a) Twelve plants Ginnala Maple (*Acer tartaricum* Ginnala).—These plants are one year old, and about 6 to 10 inches high. The Ginnala Maple is splendidly adapted for hedging purposes, or to provide shrubbery about lawns. It has been extensively grown both at Brandon and Indian Head Experimental Farms for the past 14 years, and found to be perfectly hardy. It ordinarily attains a height of about 5 or 6 feet, and may easily be kept down to small hedge size. The leaves are small, and prettily cut or lobed. The wings of the seeds are early margined with bright red, and in the autumn the leaves assume brilliant hues of red and scarlet. This is undoubtedly one of the hardiest and most beautiful of shrubs, and is well adapted for general cultivation throughout Manitoba and the Territories.

(b) One plant Rudbeckia (Golden Glow).—These are strong field grown roots. This is a hardy new perennial flower, that forms a good-sized bush 6 feet high, and bears a great profusion of large, yellow, aster-like flowers. Flowering continues from July until the frost comes.

(c) One plant Upright Honeysuckle.—Very hardy variety, producing pink and white blossoms. The

honeysuckle bears a profusion of beautiful flowers in the early spring, succeeded by berries, generally red.

(d) Twelve plants Strawberries.—Most reliable varieties for Northwestern Canada, procured from a Manitoba nursery where they have given heavy crops for several years past. All staminate varieties.

(e) One plant Virginia Creeper.—Hardy variety of this beautiful climber, which is so much esteemed because of the brilliant colors of its autumn foliage.

(f) One plant Red Dutch Currant.—This is one of the hardiest of the red currants. The fruit is not large, but is produced in abundance. Bush is of upright habit.

(g) Three Seedling Apple Trees.—These are one-year-old seedlings, from seed of the Hibernian, Wealthy and Duchess, grown in the Northwest. The quality of the fruit cannot be foretold, but there is reasonable ground for hope that the trees themselves may prove fairly hardy. Experimenting with these seedling apples is a work that is full of promise, and likely to produce varieties suited to our climate.

It is particularly requested that applications for plants be made AT ONCE. The supply of some of the lines offered is limited, but while they last each applicant will be given his choice. Should any class of stock be exhausted, a second or third choice will be sent. All parcels will be delivered charges prepaid.

The Western Horticultural Society is anxious to extend its usefulness throughout Western Canada, and an invitation is extended to all persons who are interested in any branch of horticultural work or forestry, such as fruit-growing, vegetable gardening, floriculture, etc., to become members of the society. One dollar, sent to the Secretary, Geo. Batho, Box 1310, Winnipeg, will pay the entire cost of membership for the current year. This will entitle members to all the publications of the society, which contain many interesting articles on horticultural topics, forestry, etc. All members will also share in the annual free distribution of trees and plants, which is made in the spring.

The Fruit Trade with Ontario.

Last summer, it will be remembered, Prof. Reynolds, of the Ontario Agricultural College, experimented with two carloads of tender fruits, to determine the nature of the objections to shipping larger consignments of Ontario fruit to the Northwest. At the time of the experiment the "Farmer's Advocate" gave a description of the experiment and quoted the prices realized, which, by the way, were quite satisfactory, both to the Ontario shipper and the Western buyer. Recently, however, Prof. Reynolds has issued a bulletin based upon his experiment, in which he cites the objections of shipping fruit to the West, and shows that all may be obviated or removed. With fruit properly handled (the art of doing which the growers are rapidly learning), careful icing of refrigerator cars, and a reasonably fast freight service, the Professor asserts that peaches, pears, grapes, plums, berries, etc., can be landed in Winnipeg in first-class condition in from six to seven days from date of picking, and that these fruits when kept at refrigerator temperatures will remain fresh for from sixteen to thirty-six days. As in so many other things, the freight service is the most serious interference with the shipment of fruits from the East, but with a railway commission, having the interests of both the producer and consumer at heart, this difficulty should easily be remedied, providing sufficient pressure is brought to bear by all parties interested in the trade. The Ontario Fruit-growers' Association have pressed their case before the commission, and it is hoped that the promised redress will be operative before the 1905 crop is ready to ship.

To Prevent Potato Scab.

An Albertan reader asks how to treat potatoes to prevent scab, and in reply we give treatment recommended by Prof. Samuel B. Green, of the Horticultural Division of the Minnesota Experiment Station (see bulletin No. 87). Corrosive sublimate was formerly advised, but formalin, used as below, is now recommended as equally efficacious and safer to use. Corrosive sublimate is a deadly poison. The expense of formalin is slightly greater, but it does not amount to much in either case, since one pound of formalin, costing not more than fifty cents, will make thirty gallons of solution, and is enough to treat fifty bushels of potatoes.

This material should be mixed with water at the rate of eight ounces (one-half pint) of commercial formalin to fifteen gallons of water. The potatoes should be soaked two hours in it. If this method is used, the seed should be planted within two or three days after treatment. This material gives equally as good results as corrosive sublimate. It is slightly more expensive, but the expense is light in any case. It has, however, great advantages over the latter, in that it is not so dangerous, and being a liquid is easily diluted for use, and may be placed in any kind of a receptacle. This material does not in any

way injure the tubers or make them dangerously poisonous. If the solution stands a long time it will probably lose strength.

If the tubers are exposed to full sunlight for several weeks before planting the scab germs will largely be destroyed. It would be a good plan to turn such potatoes occasionally, in order to expose them fully to the light.

As the result of following out this method of preventing scab on potatoes at the Minn. Experiment Station, for more than five years they have grown potato crops each year that have been nearly free from this disease, and they believe that the farmers cannot afford to neglect this simple and inexpensive method of treatment.

Advice to New Settlers.

To the Editor "Farmer's Advocate":

"Aye be planting a tree."—Scott.

I note in your valuable publication from time to time earnest words from correspondents as well as editorial writers, on the great want of your boundless prairies, namely, extensive tree planting. Having visited this new prairie region last summer, the writer felt the same want keenly, and as I am about to send to some friends at Moose Jaw and Pense, and to the Experimental Farm at Indian Head, some cuttings of the most valuable and successful tree which was ever introduced to our prairies, I thought a word from our experience, where conditions were much the same at the first settlement as they are now in the Canadian Northwest, might be of interest to tree-lovers among your readers. The variety of tree commended is known by the name of English White or Grey Willow, and is, as its name indicates, of European origin. For timber and wind-break purposes it is almost invaluable to a treeless country, and is superior in all respects to any of the many native species of this continent. Its hardihood, which is always the first consideration, its vigorous growth, and its ability to reproduce itself from the stump after being cut, are among its valuable characteristics. I think it must be hardy with you, for I saw a specimen growing in Moose Jaw, six or eight years old, which was thrifty and hardy. Then, its ability for reproduction, either for timber or wind-breaks. The growth after being cut is vigorous and rapid, sending up many shoots from the stump, and in ten years' time is ready to cut again, giving a much larger product at each such cutting. Some hedge-rows here are now being cut for the third time since planting thirty years ago, producing large quantities of wood and poles from a growth twenty to twenty-five feet in height and poles six inches in diameter. Always having ability to withstand the climate and peculiar natural conditions, you will have to depend largely upon your native poplar; but trees to introduce next in value to the willow, would, I think, be the cottowood, condemned by many unthinking persons on account of its wealth of seed, which is voted a nuisance at time of shedding in the spring of the year. This so-called objection is a very small matter, and we have the authority of our Professor of Botany in our University for saying that, taken all in all, it is the best tree for a new country. It certainly is a great success with us, being by far our most prominent native species. Trees of this kind, planted by the writer as little twigs in 1862, now measure three and a half to four feet in diameter, eighty feet in height, with a good saw-log twenty feet long, and the whole tree making, if put into cordwood, several cords to the tree. This tree will also be hardy on your prairies, and both it and the willow were successfully raised from cuttings eight or ten inches in length, of the last year's growth.

Your prairie pioneers seem to be planting largely of the box-elder or ash-leaved maple of the books (*Acer Frax irrafolia*), misnamed in Canada "Manitoba Maple," for it is more widely distributed on this continent than any other species. This is also valuable on account of its hardiness and ease of propagation, from its abundance of maple seeds, maturing in the fall as the sugar maple, and unlike the soft maple which matures its seed in early spring. This last species of maple is native here, and has been planted largely with great success, but I am afraid would not be hardy on the Northwest prairies. The Western or green ash, I think, is native to you, and is very valuable. The American or white elm, I think, can be relied upon by you, and is also valuable.

Now, a word of encouragement for the new settlers, taken from our experience in this once almost treeless country. Our early settlers gave attention immediately to planting groves everywhere, and wind-breaks, and as a result, in the comparatively short time since settlement, thousands of cords of wood are being cut all over Eastern Nebraska from their plantings, and beautiful groves are everywhere to be seen.

J. J. HAWTHORNE.

Formulas of Some Standard Spray Mixtures.

BORDEAUX MIXTURE.

- Copper sulphate..... 5 pounds.
- Quicklime 5 pounds.
- Water, Imperial gallons 40 to 50.

To destroy leaf-eating insects, add four ounces of Paris green. For peach, use only three pounds each of copper sulphate and lime, and three ounces of Paris green, on account of the tenderness of the foliage.

To prepare, dissolve in a coal oil barrel, part full of hot water, five pounds of copper sulphate (bluestone), by suspending, immersed, in a cotton bag or basket. In another vessel slack five pounds of fresh lime with as many gallons of water. If the lime when slacked is lumpy, it should be strained through a fine sieve or coarse sacking. Nearly fill the barrel containing the sulphate solution with water, add the lime water, agitate, and it is ready for use. Use good lime, and slack carefully. When a large amount is to be needed, make separate stock solutions of lime and bluestone, to be diluted as needed. Dissolve 100 pounds of copper sulphate in 40 gallons of water; two gallons of the solution will thus contain five pounds of the bluestone. In another barrel slack 100 pounds of fresh lime, and make a milk by adding 40 gallons of water. When well stirred two gallons will contain five pounds of lime. To make a barrel of Bordeaux mixture, take two gallons of the stock solution of copper sulphate, partly fill the barrel with water, and add two gallons of the milk of lime; if the lime is of good quality it will be sufficient to neutralize it completely. If the lime is air-slacked or impure, the right quantity can be ascertained by applying the ferro-cyanide of potassium test. A two-ounce bottle containing a saturated solution of ferro-cyanide of potassium (yellow prussiate of potash) added to the mixture will turn brown. Add the milk of lime till the drop of ferro-cyanide of potassium remains colorless, then add a little more milk of lime to make sure that the strength is uniform, and fill the barrel with water.

It is desirable to dilute both the lime and sulphate before mixing, and especially important that the sulphate be poured into the lime, and not the lime into the sulphate.

COPPER SULPHATE SOLUTION.

- Copper sulphate 1 pound.
- Water 25 gallons.

This should be used only before the foliage appears. It is easily applied, and acts as a general germicide and disinfectant. In simple solution copper sulphate is very injurious to foliage. When lime is added, as in making Bordeaux mixture, its corrosive action is neutralized and injury to the foliage prevented. In this way a larger quantity of bluestone may be used, and it adheres to the foliage better by the agency of the lime.

AMMONIACAL COPPER CARBONATE.

- Copper carbonate 5 ounces.
- Ammonia 2 quarts.
- Water 50 gallons.

The copper carbonate is best dissolved in large bottles, where it will keep indefinitely, as it should be diluted with water as required. For the same purpose as Bordeaux.

LIME, SALT AND SULPHUR.

- Lime 35 pounds.
- Sulphur 15 pounds.
- Salt 10 pounds.
- Hot water enough to make 30 gallons of mixture.

The proportions of this mixture may be varied to almost any extent. Salt may be omitted, but is considered useful in making the mixture more adhesive. To prepare, place half of the water in a large kettle, add the salt and sulphur, bring the water to a boil, throw in the lime, adding hot water from another kettle to prevent burning; boil two or three hours, increase the quantity to 30 gallons with hot water, and apply while hot. Though not mentioned in our spray calendar, the lime-salt-sulphur mixture is highly recommended for scale insects, notably San Jose scale. It is also a fungicide of considerable efficacy, and an application to fruit trees in early spring is advised.

LIME, SULPHUR AND CAUSTIC SODA.

- Lime 30 pounds.
- Sulphur (flower) 15 pounds.
- Caustic soda 4 to 6 pounds.
- Water 1 barrel.

In preparing the wash the lime is started to slack with six gallons of water, and while slacking, the sulphur, which has just previously been made into a thin paste with hot water, is added and thoroughly mixed in with the slacking lime. To prolong the boiling of the wash the caustic soda is then added with water as needed, and the whole mixture is kept thoroughly stirred. As soon as the chemical action has ceased, the required amount of water is added, when the mixture is ready for use.

LIME, SULPHUR AND SAL SODA WASH.

- Lime 25 pounds.
- Sulphur (flower) 20 pounds.
- Sal soda 12½ pounds.
- Water 1 barrel.

Put five or six gallons of hot water in a wooden barrel, add the lime, quickly following with the sulphur

and sal soda, and stir until the slaking is practically completed. It may be necessary to add a little cold water at intervals to keep the mixture from boiling over. After the violent action has ceased, cover the barrel to retain the heat and allow it to stand 15 or 30 minutes, dilute to the full quantity and apply.

PARIS GREEN.
For Fruit.

Paris green 4 ounces.
Water 40 or 50 gallons.

For Potatoes.

Paris green 6 to 8 ounces.
Water 40 to 50 gallons.

Test of Paris Green.—Put a small quantity into some common ammonia or hartshorn. If it be good the Paris green will all dissolve, leaving no sediment; if not, there will be more or less sediment remaining. It is always well to apply this test before treating a large area, as but a few minutes are required to make the test, and much valuable time may be saved, for Paris green is not always true to name.

HELLEBORE.

Fresh white hellebore 1 ounce.
Water 3 gallons.

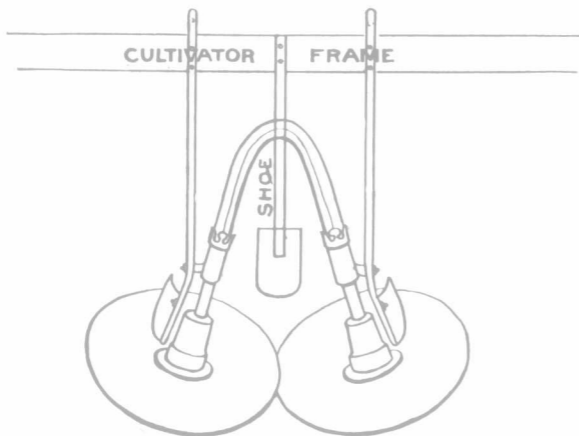
KEROSENE EMULSION.

Hard soap ½ pound.
Boiling water 1 gallon.
Kerosene 2 gallons.

Dissolve the soap in hot water; add the kerosene and churn with a pump, by directing the nozzle into the solution for five or ten minutes, until it emulsifies (or becomes of a thick, creamy consistency). This is the stock emulsion, and will remain in this state indefinitely. It must be diluted with water, according to directions, from four times for San Jose scale when the leaves are off, to twenty times for aphids. For insects that suck, cabbage worms and all insects that have soft bodies.

A Sugar-beet Topper.

The sugar-beet topper that I used is made by a blacksmith in Tupperville, Kent Co., Ont. It is two disks, same as those on a disk harrow, lying almost flat or level on the ground, tilted a trifle up behind, attached to a strong arched frame that is attached to our beet cultivator. It goes on any of the beet cultivators. The friction of the disks on the ground makes them revolve, turning toward each other, and lapping over about one inch, they cut anything in their way. The depth of cutting is regulated by a shoe that



Sugar-beet Topper.

runs on the row of beets just ahead, which regulates the topper almost perfectly. This shoe is set a trifle to one side, which causes the tops to all turn that way, so that the driver can see what he is doing. There was only a limited number, made last year and placed in different places to see how they would take. I do not know the name of the maker, but it can be had from the Wallaceburg Sugar Co. I send a hand-drawn cut of it that may help to describe it better. It cost twelve dollars last year. E. NEWELL.

Hints on Strawberry Growing.

Strawberries succeed best on rich, well-drained soil which will not bake easily. Thorough preparation and heavy manuring will give best results. Seldom, if ever, are strawberries too heavily manured. There are many systems of growing plants, but for those who are not strawberry growers and even in most cases for those who are, the matted row is the best. Plant early in the spring when the soil is ready, setting the plants from eighteen inches to twenty-four inches apart in rows three and a half to four feet apart. Give thorough cultivation during the growing season. The looser the surface soil is kept the better the results will be. Place the runners, if possible, so that they will be evenly distributed in the row. If the plants are kept at least six inches apart the results will usually be better than if closer. Matted rows best before winter sets in, and after the ground has been covered with coarse straw or marsh hay. To smother this will save the plants in thawing and frosty weather without snow on the ground, when otherwise they would be killed. Remove matted runners before plants begin to grow and place between the rows. It may smother the plants if left on the ground.

W. T. MANNING,
Central Experimental Farm, Ottawa, Ontario.

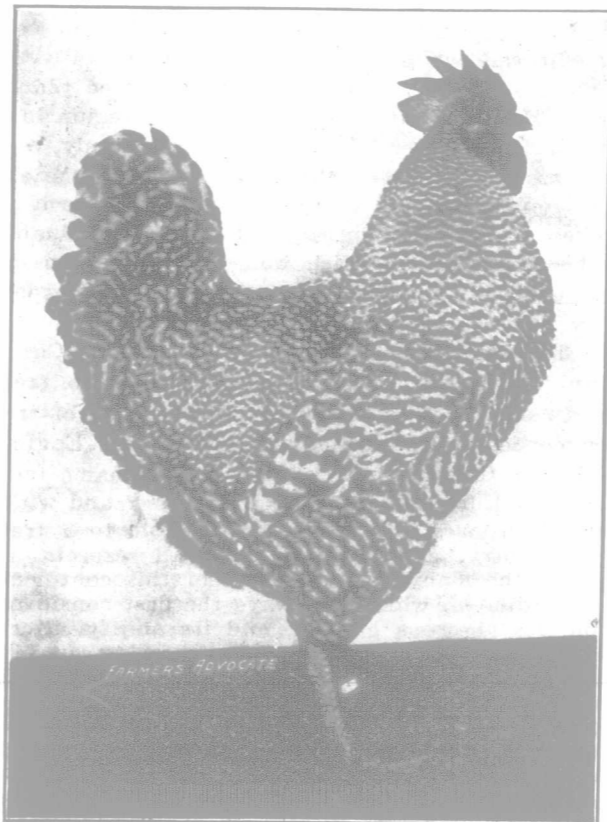
Poultry.

Advice on Incubator Management.

To the Editor "Farmer's Advocate":

Early pullets must be hatched in March and April to make fall and winter layers and take the place of older breeding stock which is to be marketed. The early cockerels will bring the best profits as fancy spring chickens, and the profits on sale of such should practically pay the cost of the food consumed by the pullets.

Don't start with a poor or cheaply-constructed machine. Get the best incubator you can buy, and be as careful in selecting it as you would any other piece of farm machinery. The best is the cheapest in the end.



Excelsior, First-prize Cockerel, Manitoba Poultry Show, Winnipeg, Feb., 1905.

Scored 92 (Holden). Owned by H.W. Hodgkinson, Neepawa.

Be sure to get a size large enough to do your work. One with too small an egg capacity will prove a bitter disappointment when eggs are plenty and setting hens hard to find, and 60 eggs will hatch just as well in a 120-egg machine as in a smaller one.

WHERE TO RUN THE INCUBATOR.

As soon as you have uncrated your incubator, before setting it up, read carefully the manufacturer's directions, and then re-read them. This is the only way to start right, and it is important. Learn what you have to do, and how to do it, then go ahead. The first question to come up will be, where is the best place to run the incubator? As a rule, the answer will be that the house cellar, if free from gas and decaying vegetable matter, is the best place, unless one has a specially-constructed incubator cellar; but with a well-made incubator almost any unused room having a firm floor, free from excessive vibration, can be made to serve the purpose well. The best results will be secured in a heated room, where the temperature remains fairly uniform, at about 65 degrees. The question of ventilating the incubator room is not as important as is generally supposed, and so long as the air of the room is kept reasonably pure good results will be obtained. A good deal has been written about the danger from carbonic acid gas, but the fact remains that the embryo chick is able to stand a considerable amount of this gas in the air around the eggs. Several experiments by experienced investigators tend to show that the presence of carbonic acid gas (carbon dioxide) in the hatching chamber, when accompanied by moisture, has a tendency to assist in process of exclusion by its action on the egg shell. Apparently the gas weakens and partially dissolves the shell, making it easier for the chick to hatch. Experiments made at the Experiment Stations found nearly twice as much carbon dioxide under sitting hens as was found in the egg chamber of the incubators used in the test. Ordinarily the incubator room will get sufficient ventilation in winter without keeping the window open. If a number of machines are run in the room it may be necessary to air it out once a day. In summer a window should be kept open night and day for ventilation.

HAVE THE INCUBATOR LEVEL.

Care must be taken to place the incubator so that it will not be in a draft, and it should be made as nearly level as possible. To test it, place a level on top of the incubator to test it from front to back and from side to side. If a level is not available use a shallow pan of water on top of the incubator for the same purpose.

pose. If the water is the same depth on all sides, with bottom resting evenly on the top of the incubator, the machine is level. Block up under the legs of the incubator until you get it right. If the body of the incubator is not level, the egg chamber will not heat evenly. Be sure, also, that the machine sits firmly.

WARMING UP.

When starting the incubator, run with low lamp flame until the machine is thoroughly warmed through; then run with a moderate lamp flame and adjust the regulating device according to the manufacturer's directions. After securing the proper adjustment, the machine should run evenly, at a temperature of 102½ to 103 in the egg chamber, with the center of the thermometer bulb two inches from the bottom of the egg tray. Maintain this temperature throughout the hatch. Run the incubator empty a few days, until you become familiar with it and are sure that the regulating device is working properly. After you are sure you understand the operation of the machine, and can run it at an even temperature, the eggs may be put in.

SELECTING EGGS FOR HATCHING.

Don't be eager to fill the machine to the fullest capacity of the egg trays. Select the eggs for hatching as carefully as you would for use under hens. Be sure the eggs used for hatching are from breeding stock, that is in the best possible condition. Eggs from debilitated or unhealthy fowls will only prove a disappointment. If they hatch the chicks will not do well, and the probability is that many of them will be dead in the shell or die within the next ten days after hatching. Eggs of medium size usually hatch best; very large or very small eggs should not be used.

STARTING THE HATCH.

After placing the eggs in the machine, let it alone until the eggs have had time to warm up, which will take several hours; then make sure that the machine is holding temperature properly, and do not let the heat run above 103 degrees. Too high a temperature during the first week will injure the germs. Under all ordinary conditions it will be best to run with the ventilators closed in hot-air machines having an exhaust or return pipe to the heater, and nearly closed in other types. Too much ventilation is worse than none. The modern machines of standard make furnish ample ventilation, and it is seldom necessary to run the vents wide open. In case of doubt, consult the directions furnished by the manufacturer. He should know best the proper conditions for securing good results with his machine. Run the incubator lamp with a moderately high flame at the start, gradually reducing the height of same as the hatch progresses, until you are running with the minimum height flame necessary at hatching time. This is necessary on account of the constantly increasing radiation of animal heat from the eggs as the embryo grows and becomes more vigorous.

TURNING THE EGGS.

After the second day it will be necessary to turn the eggs twice a day. These turnings should be as nearly twelve hours apart as possible. The writer prefers to turn eggs by removing them from the center of the tray to the ends, and rolling the balance inward toward the center with the flat of the hand. This is the most satisfactory method, and is easy and simple in practice. It tends to even up any inequalities of temperature in the egg chamber, and gives all the eggs an even chance to hatch well. In addition to this the egg trays should be changed from side to side at the morning turning, when two or more are used, and turned from end to end at the night turning.

COOLING THE EGGS.

Under all ordinary conditions, except in extremely warm weather, the eggs will do better if no cooling or airing is attempted. The eggs get all the airing necessary, for best results, while being turned, and should be returned at once to the incubator after turning. After the eggs are replaced the door of the egg chamber should be closed and the machine let alone until next turning time. The temperature of the eggs and the egg chamber always falls whenever the incubator door is opened. Do not attempt to adjust the regulating device to assist the machine to return to normal temperature; if it is let alone it will recover the proper temperature in a short time without regulation. In very hot weather, where the temperature runs high in the incubator cellar, the eggs may be cooled from five to fifteen minutes once a day. Follow these rules and you will be satisfied. JOHN W. DORAN.

Effect of Weather on Egg Fertility.

A correspondent in one of our exchanges stated some time since:

It is usually found, though it is difficult to suggest any satisfactory reasons, that during a warm, muggy winter, the percentage of infertile eggs is larger than when the weather is severe. East winds are responsible for infertile eggs, and I have repeatedly noticed that during a spell of east winds all the eggs laid are infertile. I can offer no explanation, but merely state the fact. It is necessary, therefore, in order to overcome this difficulty, to provide substantially and well built houses, so that the birds may be protected as far as possible. Moreover, some form of shelter should be provided under which the fowls can go, as they object to shelter in their roosting compartments, frequently preferring to stand about in the wind and rain.

Why Chicks Die.

It is almost the universal practice of those who do not know its effect, to feed wet corn meal to young chicks. There is no surer way to give them bowel trouble. Young chicks should be fed dry feed. It pays to use a prepared chick food, at least for the first three weeks. If one cannot obtain it, or finds it too expensive, he should use coarsely ground or cracked oats, wheat, barley and corn. If he could not get it any other way, it would pay to crack enough grain in a coffee mill to feed them while quite young.

Clean water should be kept always where they can get it, so that they will drink whenever they are thirsty and never drink a great deal at a time. It can be kept clean by using a drinking-fountain. A good chick fountain may be made by punching a nail-hole in a tin can about half an inch from the open end. Fill it with water; place a flat dish, a little larger in diameter than the can, over the top of it; turn the arrangement over so that the can is bottom side up in the dish; the water will come out as the chicks drink it. The saucer in which the jar of a house-plant is placed is a good dish to use; a small tin plate will do.

Another source of bowel trouble is the practice of allowing chicks to run in the grass before the dew is off. The coop should be shut till the grass dries; besides, gophers often kill a good many chicks if they run in the long grass when quite small.

Nothing is harder on chicks than extremes of temperature. If hatched early, they should never be allowed to get cold; if hatched late, they should not be allowed to run out in the sun till fully feathered.

Filth kills a great many. Chicks should never live in a dirty coop, and never be fed so that their own filth becomes mixed with their food.

Lice on a hen when the chicks are hatched, means death to many of them. The hen should be dusted with insect powder when she is set, once while she is sitting, and when she is taken off. A very little grease should be put on the head of each chick and all round his neck at the base of the skull. The bone of a chick's skull is not hardened when it is hatched, so lice can bite through and pierce its brain. The grease will keep them away. W. I. THOMAS. Minn.

Grading up Farm Stock.

I have noticed a marked improvement during the last few years in the class of poultry bred on the farms, chiefly due to the introduction of better blood into the barn-yard flocks by the use of pure-bred males. Many farmers now keep nothing but pure-bred fowls, and in a good many cases they have the best; they find that it pays to do so, and pays them well. In fact, a great many of our leading poultry fanciers are practical farmers, and everybody knows there is no better spot on the face of the earth for growing good stock than the broad acres of the farm. Everyone with a flock of common barn-yard fowls, as they are commonly called, kept merely for domestic and utility purposes, can improve them very much from year to year by giving a little time and attention to the selection of a few of the best ones for breeders. There should be a separate room in the poultry house for them, allowing six or eight square feet at least for each fowl, with a good-sized run adjoining, sufficiently large that the grass will continue to grow and not get tramped out altogether. The room, of course, should be made comfortable and kept clean, in which put eight or ten of the best hens or pullets, selecting the best layers, considering also the size, shape, color, etc.; in short, your very best hens. Head the pen with a good-looking, lively, vigorous male, not closely related, or, better, not at all—if pure-bred, all the better—Wyandotte, P. Rock or Orpington preferred for this work. From this little flock you can easily raise 300 or 400 chickens if you wish during April, May and June. Another plan, without the separate pen, will have good results. Procure as many pure-bred males as will serve the whole flock of hens, letting them all run together; then, when selecting your eggs for hatching choose only the best. By looking carefully after this branch of the poultry department year after year, very soon you will make a vast improvement in your poultry in every way that counts—more, larger and better eggs; larger, heavier bodies in the fowl; better-looking, healthier, more vigorous and, best of all, surprisingly larger profits, while the time and expense in bringing this about amount to nothing when compared with the benefits derived therefrom.—[Ex.

Events of the World.

Canadian.

Lord Strathcona is in Canada.

Four townships have been reserved for the half-breeds in Alberta, and an Industrial school will be erected for them. The land will be subdivided into 80-acre lots.

Victoria University, Toronto, has been made the recipient of two handsome donations, one of \$200,000, from the trustees of the Massey estate, and one of \$50,000, from Hon. G. A. Cox.

British and Foreign.

Seven thousand armed peasants, pillaging in Russia, routed a force of Cossacks.

A reign of terror has broken out in the Caucasus, and Poland may rise in rebellion.

Maxim Gorky, the Russian author, is to be tried on the charge of writing seditious proclamations.

General Gripenberg has been relieved from command of the second Manchurian army, but is permitted to retain his position of aide-de-camp to the Emperor.

Gessler Rosseau, the dynamiter, now under arrest in New York, says he made the machine that blew up the Maine, but that it was intended to destroy a Spanish vessel. What about the American casus belli?

Relations between Norway and Sweden have become strained. Norway accuses Sweden of disregarding the terms of the Treaty of Union, and should an amicable settlement not be arrived at, danger to the Union itself is threatened.

There are again rumors of turbulent socialist disturbances in St. Petersburg, where several of the largest manufacturers have recently closed down, with the result that 30,000 men are walking the streets idle and ready for any disturbance. Already the machinery in one of the big cotton mills has been wrecked, and the guard officers have been warned that their death warrant will be sealed the moment they again order the troops to fire on the people. It has also become a matter of public discussion, that sentence of death has been passed upon the Czar, the Dowager Empress, and thirty others high in authority. In Warsaw 80 bombs have been discovered in a brick grave in one of the cemeteries, and an attempt has been made upon the Chief of Police, who miraculously escaped with his life, though severely wounded by the effects of the bomb, which was exploded in his carriage. Upon the same day a bomb was thrown into the police station of Praga, one of the suburbs of the city, and six policemen were severely wounded, the furniture and walls of the room into which it fell being completely wrecked. The peasant movement in south and west Russia also continues to spread. Several landlords have been murdered, and in some sections the peasants have taken possession of estates and are offering resistance to the police.

There is little news from the Far East this week, except of extensive preparations that are being made for further operations of war. Supplies are still being rushed to Vladivostok, which, it is expected, will be besieged by Oyama's forces early in May, and arrangements have been made for the purchase from French builders of great numbers of cars, which will be utilized in hurrying men and provisions to the front. In the meantime, General Linevitch is devastating the country as he goes, in the hope of impeding the progress of the Japanese. It is now thought that he will make a stand much further south than has been expected. He has sent 50,000 men to Kirin, and, with the remaining 250,000, is entrenched at Swantsanhei, where an engagement may possibly occur in the near future.

Field Notes.

Eastern Ontario and Quebec maple sugar and syrup makers propose organizing and adopting a brand.

Water is to be taken from Canada for an irrigation scheme in the State of Montana.

Two thousand British immigrants arrived in Toronto during the ten days previous to March 29th.

United States farmers are warned by the Secretary of Agriculture that their wheat fields are falling.

The Iowa Agricultural College will make instruction in road-making a special feature of this season's work.

Through the efforts of the Board of Trade, Agricultural Society, and Western stockmen, a stock sale market will be established at Moose Jaw.

It is announced that M. D. Wisdom, of Portland, Ore., has been appointed Chief of the Live-stock Department of the Lewis and Clark Exhibition, to be held at Portland during the coming summer.

Mr. F. G. Bergen, of Ormond, Ont., who took a course at the Ontario Agricultural College, specializing in poultry-keeping, has been appointed manager of a large poultry plant, owned by L. F. Swift, President of the Union Stock-yards, Chicago.

Prof. W. J. Kennedy, of the Iowa Agricultural College, son of Mr. A. Kennedy, of Vernon, Ont., has returned from his British and European tour, as a representative of the U. S. Dept. of Agriculture. After making his official report he will resume his college work.

Largely through the initiative of King Victor Emmanuel, of Italy, the proposal of David Lubin, of California, has taken preliminary effect at Vienna, in the organization of an International Chamber of Agriculture, to fix and control the prices of grain.

Old, exhausted rhubarb plants may be rejuvenated. They are dug up and the roots cut in pieces so as to leave an eye to each piece. If these are planted out and given good culture they will again be productive. A hill may be forced in the spring by placing a headless barrel over it. The leaves will quickly come to the top of the barrel, and the stems, though long and slim, will be of good quality.—[Prairie Farmer.

The Executive Committee of the Niagara Fruit-growers' Association has appointed a local committee to assist Prof. Loehhead, of the Ontario Agricultural College, in carrying out experimental work in that locality in connection with San Jose scale and other pests. Mr. A. H. Pettit urged the establishment of a fruit experiment farm, as referred to in last week's "Farmer's Advocate."

Jas. Oastler, B.S.A. (Tor.), well known to Manitoba stock-breeders as one of the men who helped turn the show herds of Hon. Thos. Greenway out for inspection, and later at the Northern Minnesota Experiment Station at Crookston, Minn., has been appointed manager of Sir Wm. Van Horne's farm at St. Andrews, New Brunswick. Mr. Oastler, it will be remembered, won a \$100 prize for an essay on pig breeding and management.

Consumptives need fresh air, sunshine and cheerful occupation. They should eat nourishing food, but not excessively; should drink plenty of pure water, except at meal-time; should refrain from use of tea and coffee; should bathe regularly, and should give every care possible to the rules of hygiene. Consumption is conveyed from one person to another through germs coughed up by the persons and spit out of the mouth, thus becoming dried, and as a dust floating in the air, being drawn into the system by breathing. Therefore great care should be exercised in disposing of this sputa.—[Green's Fruit-grower.

The Cold Facts Disprove Jones' Prophecies.

There has passed inspection at Winnipeg, from the crop of 1904 up to March 31, 31,954,650 bushels of wheat, as against 27,017,060 for the corresponding period of last year. The three months of the current year show a most remarkable increase in shipments over last year. At the end of December the shipments stood:

Table with 4 columns: Month, 1904, 1903, 1905. Rows include September to December, January, February, and March.

These heavy inspections have not been at the expense of interior elevators; for on the first of March there was in country elevators 8,200,000, and during the month just closed the receipts at many points have been heavier than during the month of February; indeed, the past ten days have witnessed very heavy receipts of wheat at country elevators. Allowing the same amount in interior elevators as was known by sworn statements to be there on the first of March there has been marketed at the present date more wheat than Mr. H. V. Jones allowed Western Canada for the entire crop, without reference to requirements for seed, flour, or amount still in farmers' hands.

The inspections for last month show how the wheat panned out as to quality:

Table with 2 columns: Quality, Quantity. Rows include No. 1 hard, No. 1 northern, No. 2 northern, No. 3 northern, No. 4 extra, No. 4, No. 5, Feed, Feed (2), Rejected (1), Rejected (2), Rejected, No grade, and Condemned.

Total 2,292

President of the British Board of Agriculture.

Our English correspondent writes that the appointment of Mr. Ailwyn Fellowes, as President of the Board of Agriculture, has not occasioned any surprise, as he has acted in the House of Commons as Lord Onslow's representative with great ability. His appointment, moreover, meets the demands of the Chamber of Agriculture for a Minister who has a seat in the Lower House. Mr. Fellowes is a landowner, and, therefore, should be in sympathy with agriculturists, but, unfortunately, he is a strong opponent of the movement for repealing the act which keeps out live cattle from Canada.

Our English Letter.

Farmers up and down the country had been crying for rain, and last week they had it with a vengeance, a fall of three inches being recorded in many places. Throughout this week fine spring weather has been experienced, and the crops have been benefited greatly.

The wheat market has remained in a very dull state during the past week, with some pressure to sell cargoes afloat, but with buyers holding aloof, in view of the liberal supplies to be expected in the near future, seeing how large has grown the quantity afloat for the United Kingdom, whilst at the same time the Continental demand remains disappointingly small. The enormous shipments from Argentina form, of course, a tangible obstacle to any immediate improvement in the market, and tend to overshadow all other considerations. Factors are steady in asking \$8.64 ex-ship for No. 2 northern Manitoba, and \$8.16 for No. 3. For La Plata wheats, landed, \$7.80 upwards is asked, and for No. 2 Calcutta, \$7.70. Russians are held up to \$8.64 landed, but only the finer sorts meet any attention.

There has been very little animation in the flour market, and owing to the reserved attitude of bakers and flour buyers generally, prices have been difficult to maintain. In London there is 6c. decline in town-made flour, which is quoted \$6.25 per 280 lbs., ex-mill, for households, but some millers are taking this price delivered. American patents remain scarce and firm, at \$7.44 to \$7.56 ex-store, for Pittsburg's best, and similar grades, whilst bakers' brands offer in grain at \$5.30 to \$5.40 ex-store.

With practically nothing being shipped from any other country than America, the market for American maize (corn) has decidedly improved, although the latest markets are not so firm. Old La Plata maize is extremely scarce, and early shipments of new crop are held at high prices. Mixed American ex-ship is held at \$5.13, and for April shipment at \$4.90, c. i. f. La Plata landed \$6.12, and new crop, April-May, \$5.10, c. i. f., quoted.

Oats continue very dull for common sorts, but are firm for the finest descriptions. Canadian (per 320 lbs.), \$4.10 to \$4.20; Australian, \$3.60; White Libans, \$3.96; New Zealand oats (per 384 lbs.) sell up to \$5.50.

Barley keeps quite firm, at \$4.47, ex-ship, for Odessa, and \$4.32, c. i. f., for March-April shipment. Landed, it makes \$4.56 per 400 lbs. Californian (per 448 lbs.), \$6.75 to \$7.40.

The live cattle trade has felt the effect of the storms of last week, with the dumping of two weeks' supply into one. On Saturday last 2,330 States beasts at Deptford made 11½c. to 12c., but since then the demand has been very slow, and prices have been lower. On Monday 1,462 out of a total of 2,262 were sold, at 11c. to 11½c. per lb., the remainder being held over. Wednesday's market brought another very liberal supply, which included 721 Canadian cattle. Prices for States beasts ranged from 10½c. to 11½c., and for Canadians only 421 were sold, from 10½c. to 11c. per pound. The following are the figures for this day's (25th) Deptford market: 2,228 States beasts, 10½c. to 11½c., and 225 Canadians, 10c. to 10½c. There were 1,100 held over; very slow trade.

In Smithfield market the demand for all kinds of beef is exceptionally slow, and to make anything like a clearance very low prices are accepted. Deptford-killed sides can be bought at 8½c. to 10c. per pound, and Birkenhead sides a point less as usual. U. S. refrigerator hinds are quoted 9½c. to 11c., and fores, 6c. to 7c. per pound; Argentine refrigerator hinds, 7½c. to 7½c., and fores, 5c. to 5½c. per pound. Mutton trade is stronger, and with a hardening tendency. Scotch mutton makes up to 15c., and small tegs to 16½c. per pound. English lamb, 19c. to 23c. per pound; New Zealand frozen lamb, for which there is a good inquiry, at 11c. to 12½c.

The trade for bacon remains firm, and prices are slightly higher than last week. Heavy and light lean are realizing 11½c. to 11½c.; 10½c. to 11½c. for prime, and 11½c. to 12c. for leanest.

Hams have gradually shown signs of steady improvement, and better prices have been obtained during the present week. Long-cut (green), 9½c. to 10½c., with a few at 11c.; short-cut (green), 9½c. to 10½c.

Cheese keeps very firm, and although no great amount of activity is much noticed, the prices show a disposition to advance, and little is offered below 12½c. for finest white, and 12½c. for colored.

Butter is firm, the request being chiefly for Australian and New Zealand makes, which are selling well, at from 22c. to 23c. Argentine butter is in good demand at present for the lower-priced qualities. Finest to good and fine are fetching from 22½c. to 23c. London, England.

Lewis & Clark Centennial Live-Stock Show Dates.

The live-stock shows to be held at the Lewis & Clark Centennial Exposition, Portland, Oregon, are:

Horses—August 28th to September 8th; entries close August 1st.

Cattle, sheep, swine and goats—September 12th to 29th; entries close August 15th.

The fair management are offering cash prizes on all classes of registered stock, and a one-way freight rate has been arranged for on all railroads.

Important Bridge Work on C. N. R.

The Canadian Northern Railway are building five very extensive bridges of steel and masonry at the different crossings of the Saskatchewan River, in the two new provinces of Alberta and Saskatchewan. It is estimated that the total cost of these five fine structures will be close on to \$1,500,000, and that they will rank with the best railway bridges in the country. All the steel spans are proportioned to the heavy rolling load of the Dominion Government specification of 1901, chap. 1, consisting of two consolidated locomotives and tenders coupled together, and each weighing with full load of coal and water 311,000 pounds, or 155½ net tons, followed by a train load of 4,500 pounds per lineal foot. They are of the Pratt truss type of single intersection, pin connected, with built riveted top chords and eye-bar lower chord, except the two end panel lengths, which are built of stiff members.

On the main line, the first crossing is that of the South Saskatchewan River, 278 miles west of Grandview, or 485 miles from Winnipeg, about 15 miles above Saskatoon. The total length of the bridge work on this crossing is 1,530 feet, consisting of 400 feet of timber trestle work on the east approach and 100 feet on the west, with six deck steel spans, 180 feet between pier centers, resting on concrete piers on pile foundations, surrounded by caissons, the distance from rail base to low water being 85 feet.

The next crossing in order going westerly is the first crossing of the North Saskatchewan River, 514 miles west of Winnipeg, near the point called the "elbow," on this river. The total length of this bridge work is 2,240 feet, consisting of 60 feet of timber trestle work on the east approach, and 1,200 feet on the west. There are eight steel spans, of which two are "thru" and six deck spans, all at 160 feet between pier centers, also resting on concrete piers similar in character to the first described, the distance from rail base to low water being 58 feet.

The second crossing of the North Saskatchewan River, 577 miles west of Winnipeg, is situated about six miles north-west of the present town site of Battleford, and is 2,437 feet in length, consisting of 150 feet of timber trestle work on the east approach and 450 feet on the west. There are 11 steel spans at 167 feet between pier centers, two of which are "thru," and nine deck spans, resting on similar piers, the distance from rail base to ordinary water being 60 feet.

The third crossing of the North Saskatchewan River, 811 miles west of Winnipeg, occurs at Fort Saskatchewan, which is situated 16 miles north-east of Edmonton. The bridge work is 2,335 feet in length, consisting of 75 feet of timber trestle work on the east approach and 1,500 feet on the west, the steel work, consisting of four deck spans 190 feet between pier centers, also resting on similar concrete piers, the distance from rail base to ordinary high water being 72 feet.

On the Prince Albert extension there is one crossing of the South Saskatchewan River, 525 miles west of Winnipeg, and about 16 miles south-east of Prince Albert. This bridge work is 2,480 feet in length, consisting of 600 feet of timber trestle work on the east approach, and 800 feet on the west. The steel work comprises six deck steel spans, 180 feet between pier centers, resting on similar concrete piers, the distance from rail base to low water being 85 feet.

Supporting Agricultural Organizations.

In the course of an address before the Arrow River Farmers' Institute, Mr. Gilbert Rowan, of Minota, said everyone should avail himself of the advantages of farmers' organizations, but should be careful of the uses which are made of any organized association. In the matter of getting new ideas on agricultural subjects, the institute should be used for the purpose of exchanging experiences, and to discuss the application of results obtained at the experimental farms. In this respect farmers should be like the implement men, with the exception that the latter must pay for the use of new ideas, while we may get them gratis or in exchange. Difficulties should be discussed so that if possible their causes may be located and removed, and to this end the reports of the experimenters are often most useful. Farming is such a complicated business that if one would make all departments pay he requires to have a wide and ever-increasing knowledge of his subject. In conclusion, Mr. Rowan made a strong plea for the institute, on the ground that it disseminated the best methods of grain-growing, encouraged the keeping of better stock, and produced a more intelligent community; and for the Grain-growers' Association, because it exerted itself in the effort to secure remedial legislation for the producers of farm products.

Will Protect Game.

The culmination of a long-felt desire has at last been reached, by the formation of the Manitoba Game Protection Association. The organization was formed in the Y.M.C.A. Hall, on the evening of March 31st, a large number of interested persons having met for that purpose. After considerable discussion a constitution was adopted, which named as officers two patrons, a president, vice-president, secretary, treasurer, and an executive of six members, with the provision that the president of branch associations would be ex-officio vice-presidents of the central association. The association will recommend legislation to Parliament, and will assist game wardens in all details relating to the protection of game. The membership fee was fixed at \$1.00, this to hold good at both central and branch associations. The officers elected were: Patrons, Sir Daniel Mc-

Millan and William White; Vice-President, Sheriff Colin Inkster; Secretary-Treasurer, J. P. Turner; Executive Committee, A. Code, G. F. Bryan, Dr. Gordon Bell, I. Pitblado, Eric Hamber, and G. A. Britton.

Vancouver Island Wants an Experimental Farm.

For some time past there has been a good deal of agitation among the farmers of Vancouver Island, with the object of persuading the Dominion Government to establish an experimental farm there. The chief arguments in favor of such a move are:

That the farm at Agassiz is of very little benefit to this part of the Province because of the differences in soil and climate. The farm is located on the side of a hill where there is nothing but a gravelly soil, so the results of the experiments conducted there are no indication of what might be done in the other soils of the Province. The climate is more rigorous than on the Island, with a greater rainfall. Besides that, the distance is so great that farmers living here scarcely ever are able to visit the farm, in order to study the work.

The soils on Vancouver Island are quite varied, but nearly all may be found within the radius required for one small farm. The black soil with a clay subsoil is found in the valleys; on the benches is a reddish soil, which was at one time thought to be of no value to the farmer. With cultivation, however, this improves very fast, and is particularly suited for fruit-raising. Besides these there is the gravelly soil of the hill-sides, which makes good clover land, and when fertilized becomes very productive. Many of the swamps are covered with peat, requiring to be exposed to the sun and frost for some time before becoming productive.

In order to make sure of his ground, the writer interviewed a number of leading agriculturists and the members of the Provincial Parliament representing agricultural districts, and they are unanimous in declaring that it is the duty of the Government to provide the farmers of this district with an experimental station. The farmers do not desire anything very extensive or very expensive, but they feel cut off from the rest of the country, and think themselves entitled to the same privileges as others. This is especially the case when one considers that the Island of Vancouver is scarcely yet touched, from an agricultural point of view. Some parts of the Island have not even been explored, so the need for such an institution is quite apparent. A petition for this purpose has lately been signed by the farmers and forwarded to the Government, and nearly all of the Farmers' Institutes have passed resolutions favoring such a move. It is thought that either the Cowichan or Saanich districts would be the most accessible for the farmers, though some think the station should be located farther north. The principal thing is to get the farm; the location could easily be arranged.

Victoria, B. C.

H. F. PULLEN.

Natural History Society in the Territories.

Under the auspices of the Department of Agriculture, the Territorial Natural History Society was organized, and is quietly but assiduously gathering specimens for a reference museum, and studying the fauna (animals) and flora (vegetable life) of the country. It is proposed that all branches of natural history shall be represented, attention being first given to such lines of work as will be of most value in encouraging the study of this subject, or having a direct bearing on the success or failure of farm and garden crops. Lectures are given which are illustrated by lantern slides. Insects and plants are identified for enquirers, and remedies suggested in the case of damage to crops. Teachers should make use of this opportunity. Books and magazines are procured for members of the society at lowest figures.

If you think such work worthy of support become a member, by contributing the annual fee of \$1.00.

Donations of specimens will be gladly accepted and duly acknowledged.

It is hoped that this society will have the liberal support of the people, and is but the beginning of what will one day be an institution creditable to any country.

Address communications to the Secretary, T. N. Willing, Regina.

Brandon Fair to Have a Zoo.

At a meeting of the directorate of the Brandon Fair Board recently, it was decided to make a start at once on the collection of native animals, with the idea of having a zoo in connection with the exhibition grounds. The manager was instructed to purchase two bears, which have been offered at Dauphin for \$75, and before the fair opens on August 1st, it is expected the collection will consist of bears, moose, deer, foxes, wolves, etc., and many varieties of birds. The work of excavating for the bear pit has already commenced, and Mr. Bruin and wife are expected to arrive here within ten days.

Things to Remember.

LIVE-STOCK SHOWS, SALES AND FAIRS. Calgary (conventions and show); May 17 and 18. Calgary (cattle sale, Alberta stock-yards); May 22, 23, 24. Manitoba Live-stock Associations' Sale, Winnipeg; May 31st. Neepawa (summer show); June 29 and 30, July 1. Yorkton (Assa.) Show; July 12 and 13. Winnipeg Industrial, July 20 to 28. Killarney (summer show); August 8, 9, 10. Manitou Show; August 11 and 12. Dominion Exhibition, New Westminster, B.C.; Sept. 27 to Oct. 7. Secretaries of fairs and agricultural societies are requested to send in their dates, so that their fixtures may be made known to our readers. Western Stock-growers' Association; Medicine Hat, May 11. Fifth annual Live-stock Associations' cattle auction; Calgary, May 15 to 18. Territorial Cattle-breeders' Association; Calgary, May 16. Edmonton Fair; June 29 to July 9. Calgary; July 18 to 20.

MANITOBA FAIR DATES (DEPT. OF AGRICULTURE CIRCUITS).

Table listing fair dates for various locations in Manitoba, including Elkhorn, Virden, Carberry, Westbourne, Hartney, Melita, Deloraine, Cartwright, Pilot Mound, Morden, Shoal Lake, Strathclair, Oak River, Hamiota, Carman, Morris, Crystal City, Portage la Prairie, Wawanesa, Cypress River, Dauphin, and Swan River, with dates ranging from July to August.

FALL FAIRS.

Table listing fall fair dates for various locations, including Woodlands, Stonewall, Gilbert Plains, Russell, Macgregor, St. Jean, St. Pierre, Brokenhead, Headingly, and Meadow Lea, with dates from September to October.

The Ontario Shorthorn Sales.

The breaking up of the country roads had a harmful effect on the Shorthorn sales last week, it being exceedingly difficult and almost dangerous to drive any considerable distance, owing to the soft snow and flooding creeks.

The Goodfellow Bros.' sale, at Macville, on March 21st, was not up to their expectations, as the quality of their cattle was such that they were entitled to better prices. There was a good attendance from the surrounding country, and quite a sprinkling of breeders from a distance, and those who were present secured some good bargains—20 females sold for \$3,900, an average of \$195 each, and 5 bulls for \$1,050, an average of \$210 each; the 25 head averaging \$198.

Mr. W. G. Howden's sale, at Columbus, Ont., secured a very fair attendance, and the useful cattle brought medium prices, but the buyers had the best of it, and received excellent value. The five-year-old imported bull, Meadow Lord, was purchased by Mr. R. J. Bloomfield, of Brechin, at \$250, and the average for all was about \$88 each.

Mr. Geo. Johnston's sale, at Balsam, had the largest attendance of breeders from a distance, and, considering the almost impassable condition of the roads, may be said to have been fairly successful. The cattle were an excellent offering, quite beyond the expectations of those who had not seen the herd before. The excellent imported roan two-year-old bull, Choice Korai, by Duthie's Choice, fell to the bid of Mr. Jos. Ackitt, of Inglewood, Peel County, at \$360. The average for the entire herd sold figured out at \$125 each.

Poisoning Gophers.

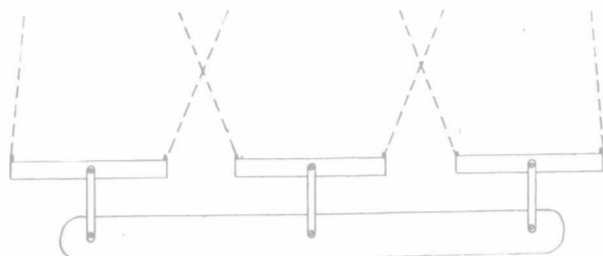
A U. S. experiment station recommends the following method and formula as the best way to poison gophers:

Dissolve one and one-half ounces of strychnia sulphate in a quart of hot water. Add a quart of syrup—molasses, sorghum or thick sugar and water—and a teaspoonful of oil of anise. Thoroughly heat and mix the liquid. While hot, pour it over a bushel of clean wheat and mix completely; then stir in two or more pounds of fine corn meal. The quantity of corn meal will depend on the amount of extra moisture present. There should be enough to wet every grain of the wheat and no more. Care should be taken that there is no leakage from the vessel in which the wheat is mixed. Let the poisoned grain stand over night, and distribute

it in the early morning of a bright day. Use a teaspoonful of the wheat to each hole occupied by prairie dogs, putting it near the mouth of the burrow in two or three little bunches. Do not put out the poison in cold or stormy weather. It will keep for a considerable time, and is much more effective after a cold period, after a late snowstorm in the spring, as the animals are then hungry and eat the grain readily. A bushel of wheat should poison 1,000 to 1,200 holes.

Another Three-horse Evener.

In your paper of March 15th you ask for a three-horse evener. We have used one like cut in that paper for plowing, but for a seeder or



wagon found one like the accompanying plan better, as there is less space between the team and their load. G. R.

Mr. Beith's Hackney Sale.

The dispersion sale, on March 29th, of the Waverley Stud of Hackney horses, belonging to Mr. Robert Beith, at Bowmanville, Ont., brought together a very large and appreciative company of admirers of this grand class of harness horses. The weather was delightful, the horses were an exceedingly attractive offering, and Mr. Beith's sound judgment and commendable enterprise was rewarded by the presence of liberal buyers from many parts of the Dominion and the United States. No expense was spared in making the visitors comfortable, a large tent being erected, decorated with the Union Jack and Stars and Stripes, for use as a sale pavilion in case of unfavorable weather, and a sumptuous luncheon provided. With the sale-ring and surroundings well covered with shavings, and the horses brought out in the pink of condition, nothing was wanting to ensure the success of the sale, as buyers were there with no narrow notions of the value of this splendid class of carriage horses. The only regret is that so many of the best were bought to leave the Dominion, our American friends proving as usual stayers in the bidding when the stuff suits. The grand Canadian-bred five-year-old stallion, Saxon—97—641, winner of the grand championship at St. Louis and Chicago last year, topped the sale, at the sensational price of \$5,500, going to the bid of Mr. J. H. Godfrey, of New York. The four-year-old horse, Imp. Royal Drewton, was taken by Mr. J. T. Walker, Clarksville, Mo., at \$2,300. Prof. M. Cumming, of the Nova Scotia Agricultural College, secured a snap in the three-year-old Cliffe Rosador (imp.) (8416), at \$1,050. If there was another snap it was the purchase by Mr. John Duncan, of Riverview, Grey Co., Ont., of the three-year-old St. David (imp.)—216—, at \$1,175. Mr. L. W. Cochran, of Crawfordsville, Indiana, was one of the largest buyers, securing some six head of good ones, wisely selected. The highest price for a mare was \$1,625, paid by Mr. Jay, of New York, for the fine four-year-old Minona, by Robin Adair 2nd. The average realized for the 89 Hackneys sold was \$655 each. The harness and saddle horses brought from \$130 to \$360 each. Following is the sale list of the breeding stock:

STALLIONS.

Table listing stallions for sale, including Saxon, Royal Drewton, Ivanhoe, St. David, Cliffe Rosador, Lord Meltonby, Wadsworth Squire, Terrington Bellerophon, Bethany, Mr. Dooley, Royal Gannymede, Sir Wilfrid, and Vanguard, with prices ranging from \$100 to \$5,500.

MARES.

Table listing mares for sale, including Minona, Priscilla, Rickell's Helress, Terrington Bonniel, Gaudy Kitty, Canadian Queen, Lady Brookfield, Melody, Lady Aberdeen, Mona's Queen, Cherry Ripe, Portia, Wild Mint, Thelma, Doris, Wild Cherry, Floradora, Lady Minto, and Olga, with prices ranging from \$185 to \$1,625.

Table listing various horses for sale, including Rosalie, Wild Violet, Waverley Belle, Waverley Queen, Wild Clover, Waverley Enchantress, Waverley Winnie, Coquette, Pickwick and Waverley Kate, and Peverill, with prices ranging from \$105 to \$800.

Anent Gambling in Wheat Options.

The Live-stock World quotes as follows: "A bill to prohibit gambling in grain or produce has been introduced and read for the first time in the Illinois Legislature. Its object is to suppress all places where gambling in grain is permitted, and provides for the forfeiture of the charter of corporations violating the gambling act. It includes cotton, grain, provisions, petroleum, other produce, and stocks and bonds. It applies to business on margins or otherwise, without any attempt on the part of the person or corporation so buying or selling or receiving or delivering and paying for the property so bought and sold."

A bill such as the above would have probably cut down the crop of suckers in Manitoba the past winter. Instances are plentiful where canny Manitoba townsmen went down and out in the effort to back the grain option tiger. "It's a hard proposition trying to beat a man at his own game," and the townsmen or farmers undertaking it are going to get beaten 99 times out of 100. Just recently a bucket-shop concern went down in Minneapolis, and its tentacles caught Winnipeggers and Neepawa men. The firm had offices in Manitoba, but the prospects of the losers recouping their losses are nil. Some of those bitten say the Government should not allow these shady concerns to do business. Very true; but no Government can effectively legislate against personal cupidity, or adequately protect a man against his own foolishness. If it was attempted, the cry would arise that personal liberty was being restricted, and so on. The wise man will profit by the experiences of others!

Another Idea Exploited as a Fad.

For some time past the press has contained frequent reference to the new so-called "fertilizer," nitro-culture, which is simply a culture in yeast-cake form of any one of the several species of nitrogen-gathering bacteria which are found in the nodules on the roots of leguminous plants. As usual with these discoveries, some extravagant claims are being made by the numerous firms which are now undertaking to supply the culture commercially. The fact is no results worth mentioning need be expected from application to soil where the legume for which it is to be used has previously grown, as such soil is already inoculated. On soil where clover or alfalfa has not recently grown, nitro-culture might be worth trying, but we would not advise a farmer to spend money on it till it has been further tested at our experimental farms and elsewhere. Good cultivation, short rotations, and barn-yard manure, supplemented with ashes, and perhaps a little mineral fertilizer for the special benefit of the legumes, may always be depended upon for results, and with such methods artificial inoculation is likely to prove an unnecessary expense.

Free Fencing Wire.

Untaxed fence wire means a benefit to the farmers of Canada, and a benefit, too, to the fence manufacturers whose raw material the wire is. The taxing of the wire would mean the imposition of a burden upon the farmers, and would be a blow to the fence-manufacturing industry as well. The demand for such taxation would be a typical instance of the injustice of high protectionism—or "adequate" protection, as the makers of such demands always prefer to say; their modest idea of the adequacy of the tariff tax they want the Government to impose being that it should be high enough to secure them against outside competition, and give the Canadian consumer into their hands. The protest made in advance by the "Farmer's Advocate" is as sound and fair as it is vigorous, and has the complete endorsement of the Free Press.—[Winnipeg Free Press.]

Immigration Dept., Ottawa, Attention!

Moose Jaw, as an important junction and connecting point, should have a first-class immigration building. Newcomers forced to spend a night in a railroad waiting-room, be it warm and comfortable, are prejudiced against the spot. Children especially get tired, and the immigration building should afford them places in which to be washed or have food prepared. Commissioner McKellar is looking into this matter, and it is to be hoped that the Ottawa people will move speedily, and not spoil a splendid record.

Markets.

Winnipeg.

Wheat—Thompson, Sons & Co. say: The exceptionally favorable weather which has continued over the winter wheat country in the United States during several weeks past, has intensified the bearish feeling among traders in the speculative markets, and prompted them to sell wheat for July and September delivery at gradually decreasing prices, until, as the saying goes in the trade, they have sold it to a standstill. Whether this action on their part is wise or otherwise will depend on future developments. In the meantime the general situation of the breadstuffs trade over the world does not in our judgment call for such a decline in prices as has taken place in America during the last four or five weeks. Speculative short selling for future delivery, prompted by current favorable prospects for the American winter wheat crop, along with the high prices which have obtained for wheat recently, as compared with the ordinary prices, which have become familiar to the present generation during the past few years, has lately been carried to excess, and is responsible for the decline. Aggressive action in selling short by those who have espoused that view of the situation which considers prices abnormally high, and that possible increase in supply must mean very much lower values may turn out to be a grievous mistake. In the meantime, the side of the short seller has been greatly helped by its own action, for thousands of holders of wheat, bought at higher prices, have been forced to let go their holdings as prices declined, and their property forced for sale on a falling market has added fuel to the flame and helped further decline. Along with the fine weather affecting markets in a bearish way in the States, there has in recent weeks been much larger world's shipments, affording such supply in prospect for European requirements that the markets over there have been quite sluggish, and demand for wheat for export has been quite flat. The whole situation, therefore, as developed in the last few weeks, has been to bear down prices, though occasionally lightened by temporary spurts, caused principally by short sellers buying in to cover their short sales, when something happened to cause them to think it might be prudent to do so. As a rule they only bought in at the moment, and again put out their short sales at lower prices. The consequence of all this trading has been to squeeze out weak holders and to concentrate the holdings of wheat in strong hands bought at moderate prices. And now while it is still quite possible prices may still be forced lower, the situation is not unlikely to turn to one of strength and advancing prices. The crop weather in the South has been so favorable for some weeks that any change is mostly sure to be less favorable, which would cause short sellers to run to cover. Until within the last few days early spring seemed probable over the Northwest, which would have caused seeding to go straight ahead, but the change to wintry conditions again makes several days delay in starting, and a great deal both as regards the winter and spring wheat crops is depending on the quality of the weather during the next two months. Then, when we turn to world's supplies during summer months, it seems to us that recent shipments from some of the large shippers, such as Argentina and Australia, have been so large during the last two months that they are not likely to continue much longer on the same scale. Therefore, with America practically out of export business for the time being, and the prospect of India being only a moderate shipper on her present crop, it may easily turn out that world's shipments will be on a moderate or small scale, and this would induce stronger markets in Europe. Besides this, native supplies in England and France are on only a moderate scale, and likely to be exhausted before their new crops are harvested. Therefore, put-

ting all these things together, it may be taken that prices should not decline much further, and should any crop failure develop in this year's crops, prices would easily advance sharply. In the meantime, the crop prospects in America and Europe are generally favorable, and of course might develop to unusually favorable results, in which event prices would no doubt decline in the long run, but from the viewpoint of present date the crops may have many drawbacks to encounter before they are safely gathered. The difference in prices from a week ago runs from 3c. to 4c. lower. The visible supply decreased last week 1,126,000 bushels, against a decrease of 1,151,000 bushels the previous week, and a decrease of 414,000 bushels same week last year. The world's shipments were 9,744,000 bushels, against 9,976,000 bushels the previous week, and 9,232,000 bushels last year. The world's visible supply, according to Bradstreet's, decreased 2,906,000 bushels, against a decrease of 1,834,000 bushels the previous week, and a decrease of only 451,000 bushels same week last year.

Manitoba wheat in our market has for the most part been weak, has easily declined under the influence of lower Minneapolis and Chicago markets. We consider our position has also been heavily handicapped, owing partly to the impossibility of working any export business for immediate shipment, and partly to the fact that we have had a good many people holding May wheat bought on speculation, and owing to the continuing decline in prices these have either lost nerve or been unable to margin it further, and thus it has come for sale at heavy losses to the holders on a market already weighted down by a decline of 15c. per bushel since the 3rd of February. Thus, the only buyers that could face the market and buy more are the large firms who already hold the bulk of our wheat stored at lake port elevators, or in store, country points, and although they may believe wheat at present prices good property, there is a limit to the buying capacity of even the strongest house, when loaded up and no immediate turnover can be made. Thus by the impossibility of selling wheat for immediate shipment except at a loss, and the inconvenience of adding to purchases to be held, our trade in both cash and option market has been dull and unsatisfactory, to say the least. The fact is, a great deal of the business done recently has been sales of May wheat, on account of holders who could not hold longer. The trade generally is looking forward to the opening of lake navigation to give relief to the congested condition of the present situation. An early spring will cause more activity in our trade, whatever prices may be, and in the meantime our trade and prices will be governed from day to day very much by the fluctuations in the Minneapolis market. Trade in our Winnipeg market has been quiet and steady, and prices are as follows, viz.: No. 1 northern, 93c.; No. 2 northern, 90c.; No. 3 northern, 84c.; No. 4 extra, 76c.; No. 4 wheat, 74c.; No. 5 wheat, 64c.; spot, or delivery within a week. All prices are based on in store, Fort William and Port Arthur.

Oats—No. 2 white, steady, at 37c.; No. 3 are 35c.; feed grades, 33c.
Barley—No. 2, 38c.; No. 4, 34c.
Flax—\$1.05, No. 1 Northwestern, Ft. William basis.
Hay—Baled, new, in car lots, \$5.50 to \$6; loose hay, \$7 to \$8 a ton.

MILLEFEEDS.

Flour—Best Hungarian patents, \$2.95; strong bakers, \$2.15.
Bran—\$13 per ton.
Shorts—\$15 per ton.
Oil Cake—\$27 a ton.

PRODUCE.

Potatoes—60c. per bushel.
Butter—Creamery butter, 27c. to 28c. for solid; 28c. for bricks. Dairy butter—Prices firm, in response to the demand, an advance of 2c. to 4c. being noted.

No. 1, 18c. to 20c.; No. 2, 14c. to 18c.; pound bricks, 22c. to 23c.

Eggs—Recovering from the big slump of a week ago, 13c. being the jobber's quotation.

Dressed Meats—Mutton, 10c.; hogs, 6½c. to 7c.; beef, 5c. to 5½c., country dressed.

Hides—6c. to 7c.

LIVE STOCK.

Cattle—Up 15c. a hundred; prices, \$2.75 up.
Sheep—\$3 to \$3.50.

Hogs—Prices steady, at 5c. Last week's quotations at Toronto, 6c. to 6½c., fed and watered. Winnipeg prices, as above, off cars. As the packers here say they can use a far greater quantity, it is hard to see why the prices are down so low.

Chicago Horse Market.

The week's auction sales have been fully up to the high standard of other days in both orders and prices. The necessity of five days' auction per week is emphasized by the record receipts of the current month, in which arrivals would necessarily be bunched only for the additional auction outlet. Fresh country arrivals were fully up to the level in demand and price of the early offerings of the week. March receipts for one day, one week and one month will make a new market record. Receipts of drafters large, and of exceptionally good quality; prices firm, at \$175 to \$225, and up to \$325 for a few fancy 1,800-lb. offerings. Bulk of sales of good to choice kinds at \$170 to \$195. Expressers and wagon horses are active at unchanged prices. All classes sell readily at the following quotations:

	Poor to fair.	Good to best.
Drafters	\$125 to \$165	\$175 to \$225
Loggers and feeders	70 135	150 195
Chunks	65 85	125 145
Expressers	110 125	135 175
Farm mares and small chunks	45 75	80 125
Light drivers	70 125	155 360
Actors and coachers	115 140	160 375
Carriage pairs	225 275	290 675
Western (branded)	12 35	40 75
Plugs and scrubs	5 15	25 45
Mules	60 140	150 200

Chicago.

Cattle—Good to prime steers, \$6 to \$6.75; poor to medium, \$4.50 to \$5.75; stockers and feeders, \$2.75 to \$5.
Hogs—Mixed and butchers', \$5.30 to \$5.50; good to choice, heavy, \$5.40 to \$5.52½; rough, heavy, \$5.30 to \$5.40; light, \$5.20 to \$5.40; bulk of sales, \$5.35 to \$5.45.
Sheep—Good to choice wethers, \$5.60 to \$5.85; fair to choice, mixed, \$1.50 to \$5.40; native lambs, \$4.75 to \$7.40.

Montreal.

The feature of the market continues to be the scarcity of good to choice cattle, for which the demand from butchers is good. Sales of choice heaves are made at 5c. to 5½c.; good, 4½c. to 4¾c.; fair, 3½c. to 4c.; common, 2¾c. to 3½c.; and inferior, 2c. to 2½c. per lb. The trade in sheep and lambs is quiet, owing to the continued small offerings. Sheep sell at 4c. to 4½c., and yearling lambs at 5c. to 5½c. per pound. Calves meet with a fair sale, at prices ranging from \$2 to \$3 each.

British Cattle Market.

London—Live cattle are quoted at 10½c. to 11c. per pound; refrigerator beef, 8½c. to 8¾c. per pound; sheep, 12c. to 13c. per pound.

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Life, Literature and Education.

"To tell your own secrets is generally folly, but that folly is without guilt; to communicate those with which we are entrusted is always treachery, and treachery for the most part combined with folly."—[Dr. Johnson.

The Letters of Junius.

Readers of the "Farmer's Advocate and Home Magazine" will have noticed occasionally in the newspapers letters signed "Junius," "Junius Junior," or other combinations in which Junius forms a part. But these are not the celebrated anonymous letters known in literature and history as the "Letters of Junius." The subjects of the letters were mainly political, and 44 in number, besides others signed "Philo Junius," "Mnemon," "Atticus," "Lucius" and "Brutus," believed to have been from the same pen. Added to these were private letters addressed to Mr. H. S. Woodfall, the publisher of the Public Advertiser, a London, Eng., newspaper, in which the letters appeared, and to John Wilkes, the famous journalist and public character of that time. They were written and published during a period of five years, from early in 1767 to the middle of 1772. Sometimes they were addressed to the Printer of the Public Advertiser, and frequently to the public men of the time. That was during the last year of the administration of the Duke of Grafton, and the first year of that of Lord North. The first of them was entitled the "State of the Nation," at that time George III. being King. It was a trenchant and powerful arraignment of the administration of the day, when the liberties of the press had not yet been vindicated. "In one view," he remarks in the course of that letter, "behold a nation overwhelmed with debt; her revenues wasted; her trade declining; the affections of her colonies alienated; the duty of the magistrates transferred to the soldiery; a gallant army, which never fought unwillingly but against their fellow-subjects, mouldering away for want of the direction of a man of common abilities and spirit; and the administration of justice become odious and suspected to the whole body of the people." The Duke of Bedford, Lord Mansfield, the Duke of Grafton, and others, writhed beneath the lash of this anonymous correspondent, an invisible, unknown and dreaded censor, who was equally cognizant with their public careers as with the follies and crimes of the private characters. The letters were bold, forceful, pointed, epigrammatic, clear in argument, exquisite in language, and above all stern and steady in their attachment to the purest principles of the constitution, giving them a popularity and influence which no other series of letters before or since have ever possessed. The writer was a man of affluence, wide and mature experience, accurately posted regarding the secret intrigues of the

Court and doings of the Government. The last political letter over his signature was addressed to Lord Camden, in 1772. The author himself predicted their immortality, but declared: "I am the sole depository of my secret, and it shall die with me." That he was able to preserve an impenetrable masquerade is one of the marvels of literature and history. Even his printer, Mr. Woodfall, did not know for a certainty his identity. Efforts to solve the mystery began with the publication of the first letter, and have continued intermittently ever since. They have been attributed to Samuel Dyer, Burke, Boyd, Dunning, the Duke of Portland, Lord George Sackville, Earl Temple, W. G. (Single Speech) Hamilton, Col. Barre, Wilkes, Horne Tooke, Thos. Lyttleton, and Sir Philip Francis. To the latter they are, perhaps, most generally credited.

Charles Sangster.

Chas. Sangster, who was born at Kingston, Ont., in 1882, and died at Ottawa in 1893, ranks among the widely-known and representative Canadian poets. He was the author of "The St. Lawrence, The Saguenay, and Other Poems," published in



Charles Sangster.

1856, and of "Hesperus, and Other Poems and Lyrics," in 1860. His lines to England and America begin as follows:

"Greatest twain among the nations,
Bound alike by kindred ties—
Ties that never should be sundered
While your banners grace the skies—
But united stand and labor,
Side by side and hand in hand,
Battling with the sword of freedom
For the peace of every land."

The Real Squeers.

I recently read in a newspaper an account of the death of the man who furnished Dickens with the character of Mr. Squeers, of Dotheboy's Hall. He was described as a mild, scholarly man, but I happen to know that Dickens did not exaggerate.

I was a very small boy when Nicholas Nickleby was being issued for the first time, in monthly parts. In fact, I was at that time a scholar at a large school in Yorkshire, situated within a mile or so of the veritable Dotheboy's Hall. The boys of the two schools went to the same church together. The real name of Squeers was Sowerby, and the statements

made by Dickens were pretty near the truth, as we boys knew who were in such close contact with the Squeers boys once a week.

We were known as "Simpson's lads," they as "Sowerby's boys." Observing as we did the starved condition of the other boys, we used to pocket "hunks" of suet pudding and "chunks" of good bread and take them to church to pass to our hungry neighbors as we marched upstairs beside them.

The great treat of their lives came to the Sowerby boys on Sundays, when they were given half a salt herring and a boiled potato for dinner. If Dickens had seen the poor scarecrows dressed for church he would have done better with his description of the use of the wardrobes required by the prospectus.

A part of the farm belonging to our school adjoined Sowerby's place at a small "nut gill," or little ravine with a stream running through it, which divided the properties. Hazel-nut bushes lined both sides of the gill, and there Simpson's lads were allowed to gather all the nuts they could find and save them for winter use. At nut-gathering time Sowerby would patrol his side of the gill, having a heavy dog-whip in his hand, and accompanied by a half-starved bulldog, which he would try to set on the lads. The dog was acquainted with us because we carried food to him, and when ordered to "sick'um" he would chase across, wagging his tail in expectation of "grub." As we always went in squads of ten or twenty, we had no fear of Sowerby.

The picture of Dotheboy's Hall drawn by Dickens ruined the business of all the Yorkshire schools, and on my return home I was asked if I were not glad to leave the beautiful place in which I had spent four happy years. But from my actual knowledge of the creature who supplied the character of Squeers, the idea of his being a "mild, scholarly gentleman" is too great a libel on the fair name of Dickens to be allowed to pass uncontradicted.—[John Dalziel in the Argus.

Succeeded in Business, but Failed as a Man.

He stopped growing.
He was not greater than his occupation.
He never learned to look on the sunny side.
He stuffed his pocketbook, but starved his brain.
He had no use for sentiment which could not be cashed.
He never learned to take the drudgery out of his work.
He did not live in his upper stories, but in the basement of his being.
He regarded his business as a means of making a living instead of a life.
He lost his early friends by neglect, and had no time to cultivate new ones.
He never learned to enjoy little things, to see the uncommon in the common.
He never learned to lubricate his

life's machinery with laughter and good cheer.

He made life a grind, out of which he got neither pleasure, profit, nor instruction.

There was only one side of his nature developed, and that was the money-making side.

No face ever brightened at his approach, no heart thrilled at the sound of his voice.

Society bored him, children bored him, music and the drama were unknown languages to him.

He never learned to enjoy himself as he went along, but was always postponing his happiness.

He could not rise to his feet to speak at a public meeting, or to put a motion, if his life depended on it.

He used every means to develop his business, but none to develop his mind or to make himself a larger man.

When he retired from his business he found that, in his struggle to get the means of enjoyment, he had murdered his capacity to enjoy.

He knew nothing about what was going on in the world outside of his own narrow circle; another state was like a foreign country to him.

He read only market reports in the newspapers. He never read articles in magazines, and books were an unknown quantity to him.

The idea of helping others, or of owing society, his city, or his nation, any duty, outside of caring for his own interests, never occurred to him.

Recreation, relaxation, or amusement of any kind was condemned by him as a wicked waste of valuable time which might be coined into dollars.

He was a giant in the store or factory, but a pigmy elsewhere. He was as awkward and ill at ease in a drawing-room as a bull in a china shop.

He had neither wife, nor child, nor friend, yet he lived as penuriously and hoarded his gains as jealously as if some great issue depended upon the result.

Nobody had power to interest him unless he thought he could get something out of him. If he could not see the dollar mark in the man, he dropped him.

He could talk "shop" fluently, but could not carry on intelligent conversation or express an opinion on any subject outside of his own line of business.

He knew nothing about politics or political parties, because he did not think them necessary to help his business along—which was the gauge of all his values.

Requests for aid for any charitable purpose, any philanthropic work, were gruffly refused with a curt "If those people had done as I did, they wouldn't need help.

All the softer human emotions, the tender sentiments, the blossoms of the finer side of a man's nature, were nipped in the bud as so many hindrances to his business.

Social conditions, the relation of nations to one another, the progress of science—all the great questions of the world—passed by him without even raising an interrogation point in his mind.—[O. S. M., in Success.

A Few Hints on Painting.

In a recent number of the "Farmer's Advocate" I read a little wail from Mahstick, describing the beauties of the sunset just at milking time. I felt inclined to write and sympathize, but it was "chore" time in general, and so the fascinating paper had to be laid down and I had time to think it over. I have frequently been struck by the artistic talent displayed by the boys and girls on the outlying farms, and have felt it to be a pity that they must struggle along alone, when a few words of advice to direct their efforts would mean so many difficulties smoothed over. It was my great good fortune while I was studying at college to be under the direction of Mr. Frank Dicksee, R. A. I also had the happiness of meeting the late John Ruskin more than once, and enjoying his remarks on the Turner collection of water colors. The records of these great masters have been of the greatest assistance to me. The methods of the greatest are always the most simple, and though I chose a breezier, healthier life than that of an artist, I have been enabled by the advice of these men to paint pictures that gladden the hearts of my own household. I should be sorry to leave the freedom of the farm life, to exchange it for that of an artist, for then I should be obliged to paint pictures that would please the purchaser; now I can paint to make myself happy, whenever I can steal a few moments from the house and poultry-yards. Mahstick's sorrows are frequently my own, only I find that it is the dawn that tempts me most. I believe my greatest temptation is the sight of the pretty children bathing on the sea beach, and perhaps after that pre-Raphaelite bits by clear pools. It was suggested on the same page that we should write and try to help each other with our experiences on drawing and painting. My little contribution towards our "art class" lies in the following few hints: Practice absolute truthfulness in reproducing all that you see. Remember that the simplest little outline that is faithful and accurate is far more valuable than the handsomest, largest canvas that is decorated with falsehoods. Never allow a chance effect to stand. Copy patiently from nature, as though every line was the only one that you were ever to draw. Let your outline be bold, and confine all boldness to your outline. Let the filling in be tender and full of toil. A roll of plain wall paper is a cheap and plentiful supply to practice studies on. A few sticks of charcoal complete the preliminary outfit; and when you have learnt to dash in your outline, I should recommend a few oil paints in preference to water colors, as you are so much more likely to acquire a bold style, and they are much less ominously expensive than the sable brushes and moist paints. Always use a bristle brush for oils; never be tempted into anything more yielding. A flat piece of wood nicely planed will make a delightful panel to try your first attempts on. I have found that it will sometimes happen that I am interrupted just as my palette is set. I have discovered a plan whereby the paint need not be wasted. I squeeze the paint tubes carefully on a small saucer, and with my palette knife take a small portion at a time on the palette. I keep a small bowl of water in the studio, and slide my saucer face downwards under the water. The paint will keep moist for weeks, and will mix up nicely with a little working.

(MRS.) OCTAVIUS ALLEN,
Granges, B. C.

Likes the Wrist Bag.

I am well pleased with the wrist bag I received. Wishing you paper every success,
L. J. BUCHANAN

If you have to sew for many hours in succession, rest yourself by frequently changing your chair and your position.



The Picture Book.

'Twas the first of March and a stormy day,
When you've nothing to do but play,
For a blizzard was raging outside,
So Annie and Jack stayed away from school:

They could not get there if they tried.
The hours drag slowly and wearily on,
When you've nothing to do but play,
And the children found that their favorite games
Couldn't keep them happy all day.

"Let us look at pictures!" said Jack at last,
And Annie agreed to the plan—
They're only pretending, of course, you see,
That they won't show one to Fan.

For baby Fan is the pet of the house:
Do you see how they look and smile?
They know she will climb on the table soon
If she thinks it is worth her while.

But pictures are rather beyond her yet,
Though she loves the "Advocate's" sheep,
And at pigs and cows and horses and calves
She is ready enough to peep.

She cares not for plans of houses and barns
Or portraits of famous men;
But kisses the babies and claps her hands
When they show her a pure-bred hen.

What we're looking for we can always find,
In picture-books as in life,
And our pictures are varied to suit the taste
Of children and husband and wife.

COUSIN DOROTHY.

One Little Injun.

I cannot tell how many years the story of "One Little Injun," as written for Harper's Young People and republished, by permission, in booklet form, has lain amongst my gatherings. But here it is with its exquisite humor and tender pathos:

"I am a jolly little Indian pappoose. I keep pretty close to my mother. She does not often like to face a responsibility of my size, but she will shoulder it any time, and so we are bound together by the strongest ties.

"When I am at home I live in a wigwam, which mother and I built. We made it of poles covered with bark and skins. We built it together. Mother did the work, and I backed her up heavily, and between us both we pulled through without interrupting father, who was busy sitting on the warm side watching mother and me work. My father is a proud and lofty being; the Sun is his father, he basks in his rays: the Earth is his mother, he reposes upon her bosom. My father honors his parents, he is bound to bask in all the Sun there is and repose on all the bosom he can lie down upon, no matter how much time it takes to do it. He clings to his mother Earth and she hangs upon him, many waters cannot part them, in life they hold close and in death nobody knows them apart. My father gives all his mind to basking and reposing and he worries in his smoking, drinking and eating at odd times. But when there is a war, or a hunt, or a dance of the braves, he arises, paints himself all glorious, beats mother to make her good, and goes off with a gun.

"Mother and I do all the rest of the work; we plant and hoe and harvest the crops; we grind the corn between stones or pound it in a mortar; then we make it into cakes, and roast them in the fire for father to eat. Mother does it, but I keep right round after her, seeing to it all. Sometimes we have nothing to eat—roots, berries, acorns, everything gives

out. My father can shoot no squirrels, my mother can get no corn. Then we start for the Agency to get rations. It is a long tramp, but I don't mind it, for mother does the walking. We form a procession of two—a double-header. Mother heads the front and I head the rear. As the column moves forward I go ahead backward like a born leader of the hindmost, and I pass everything on the road that is not going my way.

"The first thing I notice is our wigwam and cornstalks and bean poles. They are large at first, then they get smaller and fainter, till they are no bigger than a mosquito, and then fade quite away. So all our village goes from sight, and the sky gets big and empty, and the earth has no end. At length we come to things—horses, mules, ditches, rivers, trees, houses. One by one they bounce out upon me from around mother's shoulder. They all begin big and strong, and they go away little and faint. Everything I see is going away from me. I don't know what is coming, and I can't dodge it till it is past. That is what comes of going ahead backward.

"My people are pretty much like me. The old Mother Government straps them upon a board and shoulders them around from one place to another. If she hears them moan with hunger, she feeds them; if she sees them shiver with cold, she blankets them; when they shriek and kick with rage, she beats them. She lets them live on this side of somewhere till somebody else wants it, and then she bundles them off to the other side of nowhere, which nobody wants.

"My people, like me, are going ahead backward. Once they had all America to hunt and fight in; now they have only a small portion of the land where they can stay. The father of all my fathers could shoot an arrow right through a bison, but his son could only kill a bear, and the bear-killer's son could only kill a deer, and the deer-killer's son shot foxes, and the fox-killer's son shot squirrels, and the squirrel-killer's son—that is myself—can only catch flies. Ah! my people started in 'big Injun,' but they are coming out little pappoose.

"White men who stay home and make books say my people are dying out; but white men who look around and count say my people are living on, as many as ever. Oh, I am the interrogation point, that points the Indian Question? What am I—a person? or folks? How did I come so? Where? When? Why? How am I coming out—voter or scalper? Which or the other? Likely as not, or more so. There are thousands upon thousands like me, bright-eyed, brown-skinned, lusty young braves, at this very minute cutting our eye-teeth on our knuckle-bones and toughening our lungs on young warwhoops, but we are always on the hind side and either we are not going the way we are headed or we are headed the way we are not going. Who knows? Either way we shall come at the polls, we fellows—as citizens perhaps, ballot in hand, as outlaws maybe with tomahawk aloft and hang 'em at our belt—the polls. Hoopla! Toss up.

"They say there are white babies who are carried upon their mother's hearts and next to their cheeks; these babies always look forward, and everything starts small and grows large and comes toward them, and they can catch it if they want it. These babies have their eyes and ears trained to find out what is coming, their foreheads bulge out to meet future events, and their noses are sharpened upon them as they whiz by. So these babies grow to be strong men. They talk with the lightning; fire and water are their horses, and the smoke is their banner. The forests and the mountains bow down to them.

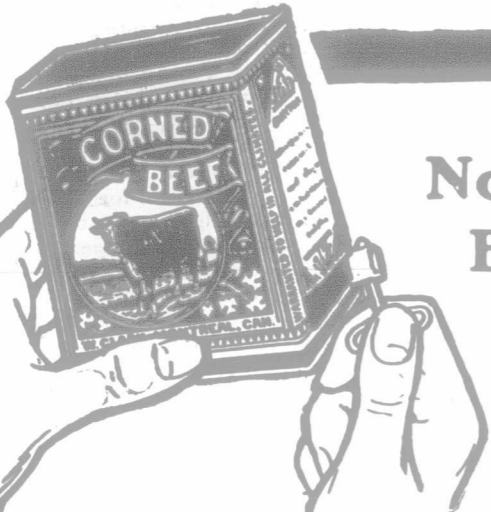
"Oh, old Mother Government, take up my poor people and bear them upon thy heart! feed them with the milk of human kindness; give them justice, and teach them, by example, the law of love. Then shall my people lift up their heavy hands; they shall look forward, and not backward, up and not down, and lend a hand."

From time to time we have had an occasional talk over some nationalities, and their several types, but I ask you could any be found of deeper interest to our readers, whether of Eastern or Western Canada, than that of our red-skinned brothers and sisters, who once, claiming them as their own, roamed at will over the forests and prairies of what we are proud to call the Dominion of Canada?

H. A. B.



The Picture Book.



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With the Flowers.

English Ivy.

Miss M. E. S. writes: "Could you give a treatise on the English Ivy in one of your earliest issues? I expect to get a slip from England about 1st of April, and would like to know how to start it, water it; in fact, all about it. I very much enjoy Flora Fernleaf's talks on flowers, they are so instructive; in fact, we think the 'Farmer's Advocate' a splendid all-round paper; it could scarcely be beaten."

Ans.—Slips of English Ivy are easily started by placing in clean sand and keeping moist, or by wrapping the end in a ball of shagnum moss, and placing it in a jar where the moss can be kept constantly damp. When rooted, pot in good garden loam; keep the soil moist (not wet) and train up around the window and walls as it grows. It is best to place the pot in the light where the soil will be kept sweet, but the leaves will flourish anywhere on the walls, their only requirement being frequent sponging to keep off the dust. If scale or mealy bugs appear, take off with a blunt knife, or wash with a solution of fir-tree oil soap. The English Ivy will not grow outside in Canada, but is admirable for inside decoration.

Pansy seed may be sown in August, or very early in spring in flats. Many people, however, prefer to buy the plantlets from a greenhouse, and set them out in the garden when already well on the way toward flowering. Many others have beds held over from last year; so it is with these already-started plantlets, and not with the starting of them, that we will to-day deal.

Make the pansy bed a few days before the plants are to be set out. The soil should be pulverized thoroughly and mixed with good leaf mould and some cow manure which is so old and well rotted that it somewhat resembles old, rich soil. If this old manure cannot be procured, chip dirt with a plentiful sprinkling of soot is good, or pure leaf-mould even, when it can be had conveniently in a sufficient quantity. Most people hold that the pansy bed should be made in a place where it will be in partial shade; others, however, maintain that it will give even better results in full sunlight, that the plants will be more sturdy there, and the flowers more brilliant in coloring.

Wherever the spot selected, set the plants but nine inches apart, and remember to keep them well watered. A thorough drenching once or twice a day will not be found too much; the drier the situation, the more water required. Soot tea, made by soaking soot in water, will also be found very beneficial, but care must be taken that it does not fall on the foliage. If fungous disease should attack the plants, spray with Bordeaux mixture. Mildew may be treated by dusting with sulphur.

Above all things do not neglect to remove all blossoms as soon as they begin to wither. It will pay to buy new seed every time, as seeding invariably weakens the plants, makes the succeeding blossoms smaller, and shortens the season of bloom. By going over the bed in this way every day, and seeing to it that plenty of water is given, you may induce your pansy beds to put forth their best efforts until quite late in the fall. If, however, for any reason, the flowers seem to be diminishing in size, and the plants beginning to sprawl and become unattractive, you may remove them, and fill up the bed with tuberous begonias, ageratum, or petunias.

Among pansies, which are highly recommended are the following: Giant Black; Snow Queen; Giant Yellow; Giant Trimardeau (mauve and purple); Giant "Madame Perret" (reddish shades).

FLORA FERNLEAF.

"Farmer's Advocate" office, Winnipeg, Man.

How to Keep a Boy at Home.

By Mrs. Annie Rodd, Charlottetown.

Although much has been written on this, or similar subjects, yet the problem appears to be as far as ever from being solved, for many of the boys continue to leave the old homestead to seek their fortunes in distant lands. One thing is certain, however, if the boy once makes up his mind to leave home, it is generally very little use to try to oppose him or keep him against his will. The couplet reads:—"A man convinced against his will is of the same opinion still."

I suppose this will apply to the boy as well. It would be hard, indeed, to convince a boy he should remain home when he has made up his mind to go away. It is too late in the day then, the lessons should have been given him in the early morning of life. This is the proper time to take "the impression" (as it were), which will remain firm and steadfast. Surely what is needed is to so train and educate the boy from his infancy that he will not wish to leave his beloved birth-place. But the training cannot be commenced too early. As soon as he is able to toddle around, or even before, the parents should give him good practical lessons. Not only by precept, but by example should the little innocent one be taught. The parents should never forget the responsibilities of their position. They should live right to God, and thus set the child a noble example. Honesty and truth, should not only be strictly enjoined, but lived, and the home should be a true haven of rest. Very early the boy should be taught to love the beauties of Nature and the free enjoyable life on the farm. He should be taught to love the animals and always treat them with kindness. When the boy tries to do his very best the parents should let him know that they appreciate his efforts. "Parents, don't be afraid to praise your boy, it will encourage him and act as a stimulant to future efforts. Take the chubby little man out to the fields and do all in your power to interest him in farming. Fathers, never let him hear you complain of hard times or of farming being hard work, for this might lead him to seek another vocation later on. As he grows older do not relax your efforts to keep up his interest in the farm. Give him a piece of land, a fruit tree or one of the calves for his own. This will please and interest him, and he will thoroughly enjoy the responsibility. When you are about to engage in any new method of farming, or invest in new machinery, talk over the matter with your son. Let him see that you love him and value his opinion. Treat him as a trusty, worthy, intelligent boy, never suspect him of doing wrong. Suspicion kills ambition, therefore parents should be careful on this point. If strict obedience is enforced in early infancy the child will be easily managed after he grows older. The proper time to "break in" a boy is before he is three years old; then it is easily done, as a general rule; if the parent practices firmness, gentleness, and self control, love will conquer. Keep your home well supplied with good literature. A careful perusal of the Advocate every week will arouse his enthusiasm and interest him in farming.

Don't scold or find fault with him; if he happens to make a mistake sometimes, remember you were not perfect yourself when you were a boy. Exercise cheerfulness and avoid worry. Take an interest in your boy's likes and dislikes, encourage him to confide in you and tell you all his joys and sorrows. Give him a little pocket money sometimes, for it makes a boy feel independent to have his own purse.

This is the gospel of labor—
Ring it ye bells of the kirk,
The Lord of love came down from above,
To live with the men who work.

—Van Dyke.



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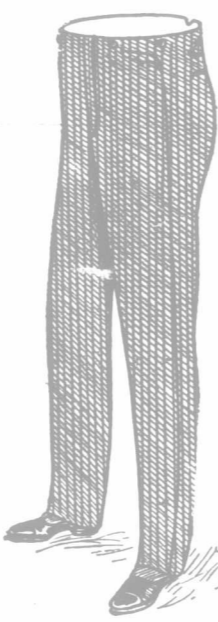


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While walking along the street one day a gentleman noticed a group of boys apparently playing a game of some description. Much interested, he stopped, and inquired in a kindly tone: "Well, boys, what are you at to-day?" A bright youngster looked up and said: "Why, don't you know, sir? This is the latest game out!" "Oh! What do you call it?" "Automobile, sir." "Automobile! Why, how do you play it?" "Well, you see, sir, I'm the driver." "Yes."

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Ideal Friendship—"A Three-fold Cord."

Two are better than one: because they have a good reward for their labor. For if they fall, the one will lift up his fellow. . . . and if one prevail against him, two shall withstand him, and a threefold cord is not quickly broken.—Eccl. iv.: 9-12.

I in them, and THOU in ME, that they may be perfected into one.—S. John xvii.: 23 (R. V.).

"A friend is worth all hazards we can run! Poor is the friendless master of a world! A world in purchase for a Friend is gain!"

Surely no one will contradict that assertion, for a friendless man would, indeed, be terribly "poor," even though he were "master of a world." St. Paul was very rich, because he made friends everywhere he went, and yet held fast to the old ones. But, you may ask, how can the ideal friendship be "threefold," when so many will agree with the saying: "Two is company, three is none?"

Looking out of the window one sunny morning last fall, I saw a tall tree crowned with a magnificent crimson wreath of the Virginian creeper. I thought no more about it, until a few days ago, when it suddenly struck me that it was a picture of a merely human friendship—a union of "two," beautiful, indeed, but limited, and, therefore, disappointing. The ideal unity is that of GOD Himself, and of our own personality—a Trinity in Unity. Although "two are better than one," only the "three-fold cord" can stand a long, hard strain. The tree supported the vine, and the vine graced the tree with its beauty, both were constantly aspiring, but both had nearly reached their limit of height. Already the long tendrils of the vine, having nothing higher than the tree to cling to, were drooping towards earth again. A friendship between two human souls can only be "ideal" when Christ "makes, unseen, a Third." Our hearts burn within us while He talks with us by the way; we understand what real communion means, when we talk with Him of our friend, and can also talk with our friend of Him—sure of perfect comprehension and fellow-feeling. If He is the dearest Friend of each, then the closer the earthly friends are knit together, the nearer they draw to Him Who reigns in both hearts.

"One Hope within two wills! one Will beneath Two overshadowing minds! one Life, one Death, One Heaven, one Hell, one Immortality!"

The separation—even the dread separation of death—may do its worst, but it can only rivet the links which bind friends together.

"Death hides, but it cannot divide; Thou art but on Christ's other side; Thou with Christ and Christ with me, And so together still are we."

No real friendship is possible without the elements of Sacrifice and Trust. Love may exist without Trust: many a broken-hearted father or mother loves, as David loved Absalom, when all trust is gone; and many a saddened woman shows the deathless power of love, when, instead of walking joyfully through the wilderness, "leaning upon her beloved," she spends her life in the weary attempt to uplift the man who should be her tower of strength. But it has been truly said that "Trust is the native air of friendship." Damon gladly went out to die for his friend, because his trust in that friend's loyalty was unshaken; and, though our friendship may not be as

severely tested as was that of the famous friends of Syracuse, if it is not founded on mutual trust and a readiness for sacrifice, it can hardly be called friendship at all. Abraham well deserved the name of "friend of GOD," for he was not only ready to sacrifice his dearest earthly possession, but also trusted GOD to fulfil His promise—"In Isaac shall thy seed be called"—even though, in order to do it, He might have to raise Isaac from the dead.

As the friendship should be threefold, so the trust and sacrifice should also be threefold. Friends must have confidence in each other and in Christ, standing always prepared to prove their love by sacrifice, and He—Who has already proved His love to the uttermost—will gladly, if possible, trust us as "friends." He Who would not commit Himself to some men because "He knew what was in man," did—for the very same reason—commit Himself to a few, saying: "I have called you friends." He knew them through and through: knew that, although they would desert Him a few hours later, they loved Him still. St. Peter made no mistake when, although he could offer no proof of loyalty, he threw himself so confidently on his Friend's knowledge of his heart, saying: "Lord, Thou knowest all things: Thou knowest that I love Thee." Surely it was not only the Master's Divine power that gave Him such clear insight—the pure in heart can not only see GOD, but also man. A pure-souled woman knows that when she instinctively shrinks from anyone, there is good reason for the feeling of repulsion, though there may be no outside proof to support her intuition. In the same way we know intuitively when another soul is one with us in our deepest spiritual longings. Tennyson, in "Geraint and Enid," shows how Geraint knew intuitively that his wife was trustworthy—although, manlike, he refused to trust his own intuition—and Enid endured patiently because she knew well that her husband loved her, though he was treating her with such cruel injustice. She could not see into his mind, but she could see into his heart, and, being true to her own convictions, she was far less unhappy than he. Edna Lyall also shows, in "A Hardy Norseman," how the most convincing circumstantial evidence against a noble character weighs absolutely nothing against his own word, in the judgment of the few tried friends who see deep down into his very soul.

But even the best earthly friends are only human, and, therefore, not always worthy of trust. Must friendship, therefore, be broken as soon as a friend falls? Surely not! "for, if they fall, the one will lift up his fellow." Our Lord set us a wonderful example when, even at the last moment, He tried to draw Judas back to his allegiance with the tender, pleading words: "Friend, wherefore art thou come?" Our love for Him may be like a frayed thread, as weak "as flax that was burnt with fire," but His love—the love by which He draws our hearts to Himself—is everlasting and mighty, being already "Threefold," even the love of The Blessed Trinity, revealed in the Incarnation. Though we may be as ignorant as Ephraim, and know not that He is healing us, yet He still draws our souls upwards "with cords of a Man, with bands of love." If we twine our weak cord of love round that mighty "band," it will stand every strain, for all the pressure will fall on the central strand.

Then, if we are to be friends, we must show ourselves friendly. The church can never forget that she failed her Lord when He sank beneath the Cross which he was bearing so willing for her, His Bride. She forced Him then to accept the unwilling help of a stranger—not one friend pressed eagerly forward to ease the heavy weight—but that is no reason why we should fail Him now. When He, in the person of one of His overburdened friends, looks to us for help, shall we not gladly forestall Simon, the stranger? May it never be said of us: "Inasmuch as ye did it not to one of the least of these, ye did it not to ME." No one

can live unto himself alone. It is a necessity of our nature to reach out eagerly and touch kindred spirits—those who understand our thoughts "which lie too deep for words"—seeing ourselves reflected in them; for, "as in water face answered to face, so the heart of man to man." Surely in this also we are made in the image of GOD, for His Spirit is continually reaching out to touch the spirit of man in intensest secret communion, with which not even the dearest earthly friend may intermeddle. And—we may well bow our heads in wondering unworthiness at the thought—this mysterious communion of Spirit with spirit is a real joy to Him too: "The Lord thy God in the midst of thee is mighty: He will save; He will rejoice over thee with joy; He will rest in His love; He will joy over thee with singing."—Zeph. iii.: 17.

Let us prize God's great gift of friendship, for, as Jesus the son of Sirach has said: "A faithful Friend is the medicine of life; and they that fear the Lord shall find Him." If we are closely linked with Christ, He will make us channels of power through which His Spirit will continually flow into the spirits of our other friends. He is ready to work—through us—mighty works that the world does not dream of. This is a hidden and secret service, but is not all power—physical as well as spiritual power—invisible and incomprehensible? The infinite gain of this "threefold" union is beautifully expressed in the following verses, which were sent me last Christmas by a dear friend, who, young as she is, has early learned the power and sweetness of the Communion of Saints:

"Go thou thy way, and I go mine, Apart, yet not afar; Only a thin veil hangs between The pathways where we are. And 'GOD keep watch 'tween thee and me,' This is my prayer; He looks thy way, He looketh mine, And keeps us near. I know not where thy road may lie, Or which way thou wilt be; If mine will lead through parching sands And thine beside the sea; Yet GOD keeps watch 'tween thee and me, So never fear; He holds thy hand, He claspeth mine, And keeps us near." HOPE.

How "Just as I Am" Came to be Written.

In the March Delineator Allan Sutherland gives an interesting account of the origin of "Just as I Am," Charlotte Elliott's famous hymn. After telling how the hymn came to be inspired through a remark of Dr. Cesar Malan to the invalid composer, when she had told him that she did not know how to find Christ—"Come to Him just as you are," said Dr. Malan—it is related that the hymn first appeared anonymously in The Yearly Remembrancer. Dr. C. S. Robinson, a noted clergyman, states: "Beginning thus its public history in the columns of an unpretending magazine, the little anonymous hymn, with its sweet counsel to troubled minds, found its way into scrapbooks, then into religious circles and chapel assemblies, and finally into the hymnals." That the hymn has had a deep influence for good upon humanity may be seen from the testimonials of ministers given in this article, and from the fact that after the death of Miss Elliott, above a thousand letters were found among her papers thanking her personally for the great blessings which had come to the lives of the writers through the instrumentality of "Just as I Am."

For Everyday Use.

It was only a helping hand, and it seemed of little availing, But its clasps were warm, and it saved from harm A brother whose strength was failing. —Commonwealth.

It's only a mighty big man that doesn't care whether the people whom he meets believes that he is big; but the smaller the fellow is the bigger he wants to appear.—Lorimer.

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HEALTH IN THE HOME.

By a Trained Nurse

Home.

Whether in the Arctic Circle
Or in India's coral strands,
Where the winds are perfume laden
And warm waves caress the sands,
Whether eastward, whether westward,
When the daylight fades to gloam,
Where a baby runs to meet you,
And to kiss you, that is home.

Where a baby runs to meet you—
That is all there is in life;
All there is at all worth winning,
Worth the slaving and the strife;
Two wee dimpled arms stretched to you,
Two expectant eyes that wait;
It is home for you wherever
There's a baby at the gate.

It is home—sweet home—forever,
Where the lilt of laughter run
Of a tousle-headed baby,
Sitting playing in the sun;
It is home where every night time
As the evening shadows creep
A wee night-robed figure whispers:
"Now I lay me down to c'leep."

Is Your Cellar Clean?

The approach of spring naturally turns our minds to thoughts of housecleaning. The cellar should be the point of attack. A great many people store their winter vegetables there; some are obliged to do so, and by the time spring comes the atmosphere is disagreeable and unhealthy. Vegetables should not be kept in the house at all if it can be avoided. The cellar is of no great advantage for any purpose except to contain the furnace room and coal, unless it is dry, well lighted, easily aired and clean. Many otherwise immaculate housekeepers appear not to mind considerable dirt in the cellar, whereas it is quite as necessary for cleanliness to prevail there as in the attic or any other part of the dwelling. Half-decaying vegetable matter provides an especially favorable residence for every kind of germ. The rough woodwork of a cellar is another trap for all kinds of germ-laden dust.

The ideal cellar has a separate room for furnace and coal, a concrete floor and several windows, so arranged that opening them does not mean letting in an accumulation of ice and snow. Cellar windows are necessarily just beneath the ground-floor level, and consequently just below the cellar ceiling, and if made with one movable square pane in each, afford a means of thoroughly changing the air in a few moments. Cellar stairs have been the death of many a woman, both on account of their not being protected by a railing, as a rule, and because they are generally steep and awkward; the treads are too narrow and the risers too high, and the woman goes up and down many times during the day carrying something, often of a pretty fair weight. The result is excessive fatigue. It would be a good investment in building a house to see that the cellar is light, that the woodwork is at least planed, and to provide a well-built flight of stairs with bannisters. Stairs are bad enough, without being badly built. There should also be a landing at the top, so that the threshold of the door leading to the cellar is not the top of the last stair, coming up. All these things make a great difference to the people who have to attend to the household matters in point of fatigue, consequently nervousness, consequently good temper.

Vegetables should be kept in a root house, or a shed put up for that purpose. An accumulation even of fresh vegetables has a disagreeable smell, and time, combined with a stuffy cellar, does not improve it. Air and

sunlight are disinfectants in themselves, and anything that cannot be safely exposed to air, at any rate, should be kept out of the house where people live. A. G. OWEN.

Tired Mothers.

A little elbow leans upon your knee,
Your tired knee that has so much to bear;
A child's dear eyes are looking lovingly
From underneath a thatch of tangled hair.
Perhaps you do not heed the velvet touch
Of warm, moist fingers, folding yours so tight;
You do not prize this blessing over-much—
You almost are too tired to pray to-night.

But it is blessedness! A year ago
I did not see it as I do to-day—
We are so dull and thankless, and too slow
To catch the sunshine till it slips away—
And now it seems surpassing strange to me,
That, while I wore the badge of motherhood,
I did not kiss more oft and tenderly
The little child that brought me only good.

I wonder so that mothers ever fret
At little children clinging to their gown;
Or that the footprints, when the days are wet,
Are ever black enough to make them frown.
If I could find a little muddy boot,
Or cap, or jacket, on my chamber floor—
If I could kiss a rosy, restless foot,
And hear it patter in my house once more—
If I could mend a broken cart to-day,
To-morrow make a kite to reach the sky,
There is no woman in God's world could say
She was more blissfully content than I.
But, ah! the dainty pillow next my own
Is never rumped by a shining head;
My singing birdling from its nest is flown—
The little boy I used to kiss is dead!
—May Riley Smith.

To Cook Dried Fruit.

Success in cooking dried fruits depends largely upon little cooking and long soaking. Cover the fruit with cold water and let it stand a short time to soften any dirt that may adhere to it. Then wash the fruit, rubbing it carefully between the hands. Thoroughly rinse the fruit and cover it with plenty of cold water, letting it soak twenty-four hours. Then drain out the fruit and to the water add half a pound of sugar for each pound of dried fruit. When the sugar and water have cooked clear, put in the fruit, taking care not to crowd it, and only cook it until it is just tender.

When making layer cake, if there is not time to line the tins with paper, the cake is not so likely to stick if after the tins are greased they are lightly dredged with flour.

THE HEAT OF THE OVEN.

For angel cake, sponge cake, pound cake and kisses, have the oven so cool that it will require five minutes to turn a piece of white paper light yellow. For all butter cakes, have the oven so as to color the same kind of paper dark yellow in the same length of time.

For bread, have the oven hot enough so that there will be little specks of brown on the bread in ten minutes. For rolls, have the oven as hot as you can without burning the article cooked. When the crust of the pie is cooked, lower the heat to allow all the fruit to cook, if not already done.

To choose time is to save time

To choose the

ELGIN WATCH

as your timekeeper is to save your reputation for punctuality.

Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches. "Timemakers and Timekeepers," an illustrated history of the watch, sent free upon request to ELGIN NATIONAL WATCH CO., ELGIN, ILL.

ELGIN WATCHES BY MAIL

Don't pay big prices for watches when you can get them by mail at the following prices:

7-Jeweled Elgin, heavy case,	\$6.00
15-Jeweled " "	\$8.50
17-Jeweled " "	\$10.00

Gold filled cases, guaranteed for 20 years, \$1.00 extra. We guarantee all watches, and if you are not satisfied, we will refund your money.

The Western Supply Co., Western Agents for Elgin Watches,
Wholesale and Retail. 490 MAIN ST., WINNIPEG.



Our Catalogue "C"

is a messenger of artistic cabinet work from the most exclusive furniture maker in Canada. Its 600 illustrations, with lowest possible prices on fine furniture, give one a liberal education in furniture values not to be lightly passed by. Write for Catalogue "C" to-day.



This pretty centre table is of choice golden oak, accentuated grain, lustre polish, neatly turned legs, strongly supported by lower shelf, top 16x16 in. \$1.30



This dining chair is made of selected hardwood, golden finish, fancy embossed seat, back prettily carved, legs strongly braced. An ornament to any dining-room. Price from Winnipeg, \$1.20 Price from factory, \$1.05



This gold medal folding camp chair is a boon to surveyors and those doing homestead work during the summer months. Strong duck seat. Can be folded into very small space. Price - - - 70 cts.

WRITE FOR CATALOGUE "C"

John Leslie,
324-26-28 Main St., Winnipeg.

Our Debt to Asia.

It is noteworthy that out of Asia came our alphabet and our Arabic numerals. The compass we owe to the Chinese, who knew the magnetic needle as early as the second century A. D. Gunpowder originally came out of Asia, and so did the art of printing and the manufacture of paper. The Chinese invented movable types in the middle of the eleventh century, 350 years before Gutenberg. They also made silks long before Europe, and porcelain that has never been equalled by Europe. Truly, Asia is the cradle of the race. On the original ideas of the Persians, Arabians, the Hindoos and the Chinese our modern society has been built.

Humorous.

A certain prominent dry-goods merchant is also a Sunday school superintendent. Not long since he devoted the last few moments of the weekly session to an impressive elucidation of the parable of the Prodigal Son, and afterward asked with due solemnity if any one of the "little gleaners" present desired to ask a question. Sissy Jones's hand shot up. "Very well," he said, designating her with a benevolent finger and a bland smile, "what is it you would like to know, Cecilia?"

"Please, what's the price of them little pink parasols in your show-window?"

Two correspondents wrote to a country editor to know respectively, "The best way of assisting twins through the teething period," and "How to rid an orchard of grasshoppers."

The editor answered both questions faithfully, but unfortunately got the initials mixed, so that the fond father of the teething twins was thunderstruck by the following advice:

"If you are unfortunate enough to be plagued by these unwelcome little pests the quickest means of settling them is to cover them with straw and set the straw on fire."

While the man who was bothered with grasshoppers was equally amazed to read:

"The best method of treatment is to give them each a warm bath twice a day and rub their gums with boneset."

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

Worry Goes To the Stomach

Tears Down the Little Telegraph Lines
that Operate and Control the
Digestive Processes.

How to Repair These Telegraph Lines.

**I Will Gladly Give Any Stomach Sufferer
a Full Dollar's Worth of My Remedy
Free to Try.**

Ask no deposit—no reference—no security. There is nothing to risk—nothing to pay, either now or later. Any stomach sufferer who does not know my remedy may have a full dollar's worth free, if he merely writes and asks.

I willingly make this liberal offer because Dr. Shoop's Restorative is not an ordinary stomach remedy. It does not, indeed, treat the stomach itself. It goes beyond—it treats the nerves that control and operate the stomach. The nerves that wear out and break down and cause stomach trouble. For stomach trouble is really only a symptom that there is serious nerve trouble inside. That is why ordinary remedies fail. That is why my remedy succeeds. That is why I can afford to make this offer.

Yet do not misunderstand me when I say "nerves." I do not mean the nerves you ordinarily think about. I mean the automatic stomach nerves, over which your mind has no control. I have not the space here to explain to you how the nerves control the stomach, or how they may be vitalized and restored. When you write I will send you a book which will make these points clear. But this much is certain—ailing nerves cause all forms of stomach trouble—indigestion, belching, heartburn, insomnia, nervousness, dyspepsia. No stomach medicine will cure these ailments. Only nerve treatment will do that. No other remedy than Dr. Shoop's Restorative even claims to reach these nerves.

What ails the stomach nerves? Worry, probably. Mental anguish destroys their tiny fibers and tears down the telegraph lines. Without which the stomach has no more self-control than a sponge. Overwork will do it. Irregular habit will do it. Overeating will do it. Disipation will do it. But the effect is the same—stomach failure.

No matter how these nerves became impaired I know a way to rebuild their strength—to restore their vigor. It is a remedy which took thirty years of my life to perfect—a remedy which is now known in more than fifty thousand communities—in more than a million homes—as Dr. Shoop's Restorative.

If you have stomach trouble and have never tried my remedy, merely write and ask. I will send you an order on your druggist, which he will accept as gladly as he would accept a dollar. He will hand you from his shelves a standard-sized bottle of my prescription, and he will send the bill to me. This offer is made only to strangers to my remedy. Those who have once used the Restorative do not need this evidence. There are no conditions—no requirements. It is open and frank and fair. It is the supreme test of my limitless belief. All that I ask you to do is to write—write to-day.

For a free order for a full dollar bottle you must address Dr. Shoop, Box 52, Racine, Wis., state which book you want.

Mild cases are often cured by a single bottle. For sale at forty thousand drug stores.

Dr. Shoop's Restorative

Never too Late

To get individual instruction in any of the departments of the

Winnipeg Business College

Write for new catalogue.

G. W. DONALD, Secretary.

STENOGRAPHY BOOK
e.g., thoroughly taught, complete courses. Catalogue free. NATIONAL BUSINESS COLLEGE, Limited, E. J. O'Sullivan, C. E., M. A., Principal, Winnipeg, Canada.



The following letters will explain themselves. That of B. S. is certainly a revelation; one could scarcely have believed that conditions such as those described could be common to any community in the Dominion. Poverty and hardship a true woman can face somehow, if she has to, but to be "cursed" at for making a simple request is dreadful. It is to be hoped that a few of the men, such as those whom she describes, will read her letter, and resolve to turn over a new leaf in the future. In marked contrast to this letter comes Gertrude's. It is a pleasure to peep into a happy home such as hers, and a pleasure also to be able to tell you that the great majority of the letters which have come in resemble hers in that they have nothing but good to say of the farm life, and the farmer husbands. We shall publish these, or extracts from them, just as soon as possible.

DAME DURDEN.

"Farmer's Advocate" office, Winnipeg, Man.

ROOM FOR A CHANGE.

Dame Durden,—As regards the happiness or otherwise of the farmer's wife, I am convinced that very few of them would complain or wish to leave the farm, if they had any thought given to their needs or comfort. There are very few women wholly devoid of sentiment or love of the beautiful. As a rule, these attributes are far from a blessing to a woman who lives on a farm. No doubt, there are some farmers who take a pride and interest in their homes, and make of them a spot of beauty; but, indeed, they are the exception. How often you hear a hard-working farmer's wife say: "Oh, my garden is not much to look at. The men will not bother plowing it, and I am not able to dig it properly." Yet you can see those same farmers sitting on the fence idle long enough to spade the entire garden twice over. I do not mean to say that men should not relax and take a rest, but I do think that they might spade the garden first.

Marriage, in its most sordid meaning, is at least an even partnership between a man and woman. How often the wife becomes a nonentity as regards the distribution of the proceeds of the unhappy, discontented wives of our country testify. Why, or how a man can claim the title of honesty, and at the same time not only cheat his partner in life of her just share and due interest in the joint concerns of life, but even deny her the satisfaction of a deserved word of praise, is beyond me. How would the same conduct appear in the eyes of the public, if it were acted between man and man? The usurper would be justly called a plain thief. Does it make the action noble or honest because it is only a helpless woman whom he is defrauding? Were he to act in the same manner with a woman who was not his wife, he would be prosecuted as a villain. You may say the wife has her "keep." Has not the husband his "keep," and his extras in the way of tobacco and liquor? If the men were only honest enough to make a plain, honest statement as to the course of action they meant to take after partnership was contracted, I am positive not one woman in the full possession of her senses would enter into the net. Do men consider it right or just to never let the wife handle one dollar the year round? Is that their idea of the golden rule, or a joint partnership?

How I wish I could take Dame Durden to see some of my neighbor women. Where there is a henhouse or garden fence, the women have put them up; mud roofs on most of the homes, and rain and mud dropping on the table during mealtime; every morsel in the house frozen to resemble stone during the winter. Is it any wonder women are not content to live like that? When it rains, mud up to the ankle; the men cannot trouble to scrape it off, so come in loaded with mud and manure, shuffle their

feet well, and leave it for their wives to clean up.

We all like to have our labor duly appreciated. Why does the average husband deny the coveted bit of praise for which his wife hungers? He gave it in abundance when they were lovers, why not now? Oh, how an act of kindness, or word of praise, would lift the heavy heart. It would not cost even one cent of that beloved object, his money; yet he is not honest enough to bestow it. Ask him to plant trees around the home, and you are cursed for your trouble. Ask for a pump or closet, the same result follows. Ask for small fruit, you are told you are insane. Now, this is a really true picture of by far the greater number of farmer's homes in some vicinities, and it is the lack of all that constitutes a real home that makes women detest the farm. It remains in the hands of the farmer to remedy the evil.

Alta.

B. S.

A WORD FOR THE O. A. C. BOYS.

Dear Dame Durden,—Being an interested reader of Ingle Nook Chats, and having just finished Marie's letter, I, too, think I will give a few of my views regarding that Illinois letter.

Two years ago I married a farmer (gentleman), and having spent all my previous life in a parsonage, you can imagine the change in regard to work. However, I always found work a splendid friend, and so get along famously. If a person has a good system and strictly follows it, work is made much more easy. In modern farm homes there are so many conveniences—in fact, almost like town homes—work is made much lighter. However, as yet we have none of these conveniences, but hope to some time. I find it rather inconvenient in winter, regarding water, for instance.

No farmer's wife needs to be a slave, and if she is, it is her own fault. Of course, I know there are men who are nothing but brutes, and who rather enjoy seeing the women doing all the drudgery, but a woman should simply refuse to do it. That Illinois farmer is a sample. He should be tarred and feathered.

Country life is superior to city life for many reasons. We have "disadvantages," of course, but we have advantages too. If we choose, we can spend all day at our work, but for my part, I prefer devoting the afternoon to music, fancywork or reading. I am as fond of a clean home and a good table as any one, but I do not believe in making a slave of myself.

It does seem unfortunate that so many of our young men are growing up with the impression that the women have as much right to milk and chore around as themselves. Why, surely then can see that a woman's hands are full with her house alone, without working in the barn or barnyard. A woman's place is in the home, not outside.

Truly, dear Dame, I could write columns on this interesting subject, for I do think it disgraceful that some women have to slave so. I have only had two years' experience, so do not know a great deal about it, but am sure time will never make a slave of me.

Fortunately for me I won a real, true gentleman for a husband, and he treats me as a wife should be treated. He was a student at Guelph College, and that may have given him some ideas; if so, I would advise all young farmers to take a course there and prepare themselves for husbands, not for slave-drivers.

Trusting to see many more letters.
Bedford Park. GERTRUDE.

A MAN'S OPINION.

Dear Madam,—In answer to "Martha's" (Oxbow, Assa.) query about butter bowls, I have used mine, a common one, six or seven years now, without the least check. I think the secret lies in never soaking a bowl through. When I use mine, I scald it with the water used to scald the churn, in which I always put a little washing soda. When well soaked,

I empty and refill with cold water. After working the butter, I wash first with tepid water, then scald, and set away. To scrub the outside, I turn it over on a table, scrub with soap, and rinse—never soak in water. I have heard that some people grease them when new, before using, but know nothing of the process. I may add that to keep a churn in good condition, it should be thoroughly washed with cold water immediately after the butter is taken out, so that no particle of butter can melt into the wood. The metal ring should be scoured with salt inside.

All water used for soaking, scalding or washing the butter bowl and churn should be strained in through the quality of cotton used for inside sugar sacks. It is surprising the amount of dirt which will be taken out.

With respect to Illinois Farmer's Wife's letter, I am astonished from my knowledge of Americans that he is allowed to exist. There are numbers of such husbands in the world. The best remedy for such a state of affairs is for every mother to see that her daughter has some occupation, which she should learn thoroughly enough to be able to get her own living by, if needed. In this particular case, the woman is to blame for doing so much work. Surely she might have done a little more, and then "Farmer" would not have to work at all. He cannot be much of a hustler, unless at whittling before the chores. Men are naturally tyrants, and the more they are indulged, the more tyrannical they become; particularly as all men are childish in some way or other, a fact which, perhaps, accounts for the material element in a woman's love for a man. Good-bye, Dame Durden, with best wishes for your success, also that of the paper, which deserves it.

QUO VADIS.

Langley Prairie, B. C.

A POOR LITTLE CHORE GIRL.

Dear Dame Durden,—For a long time I have been longing to be one of you, but was too timid to knock for admittance; but I am going to try now. I enjoy the Chats very much, and find much useful information in your Ingle Nook.

We have a farm, and there is a lot of work to be done on it. We have twenty-five head of cattle, two horses, and about fifty pigs, and as father is so busy working all the time, I have to be the little chore girl. I have to feed the pigs and cattle, and cook five sacks of potatoes a day for the pigs when we are fattening them, and many other things I have to do. I think it is a little too hard for a girl to do; what do you think about it?

Well, as this is my first visit to the Nookers, I will close, hoping you will not be disgusted with me. I may not come again.

LITTLE CHORE GIRL.

Be sure to come again, brave Little Chore Girl. I wish we knew how to make things easier for you.

A Dog's Sense of Humor.

The following bit of news from New York City certainly proves that dogs think, and that they are sometimes struck with a sense of humor, as are human beings. It is related that "the proprietor of a Third Avenue store owns a little black kitten, that cultivates a habit of squatting on its haunches, like a bear or a kangaroo, and then sparring with its forepaws, as if it had taken lessons from a pugilist. A gentleman took into the store the other evening an enormous black dog, half Newfoundland, half collie, fat, good-natured, and intelligent. The tiny black kitten, instead of bolting at once for shelter, retreated a few paces, sat erect on its hind legs, and 'put its fists' in an attitude of defiance. The contrast in size between the two was intensely amusing. Slowly, and without a sign of excitability, the huge dog walked as far as his chain would allow him, and gazed intently at the kitten and its odd posture. Then, as the comicality of the situation struck him, he turned his head and shoulders around to the spectators, and if animal ever laughed in the world, that dog assuredly did so then and there. He neither barked nor growled, but indulged in a low chuckle, while eyes and mouth beamed with merriment. It is nonsense for people to maintain that animals do not reason."

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

The LEAVENWORTH CASE

By A. K. Green.

CHAPTER XXIII.—Continued.

I felt a deathly chill strike me, "Yes," I replied, "a few."

"Would you mind naming them?" she asked in a low distinct voice.

"Certainly not," I returned. "Mrs. Veeley, of course, Mrs. Gilbert, Miss Martin and a—"

"Go on," she whispered.

"A gentleman by the name of Claver-

ing."

"You speak that name with evident embarrassment," she said, after a moment of intense anxiety on my part. "May I inquire why?"

Astounded, I raised my eyes to her face. It was very pale and flashed like marble in the firelight, and wore the old look of self-repressed calm I remembered so well. I immediately dropped my gaze.

"Why? Because there are some circumstances surrounding him which have struck me as peculiar."

"How so?" she asked.

"He appears under two names. To-day it is Clavering; a short time ago it was—"

"Go on."

"Robbins."

Her dress rustled on the hearth; there was a sound of desolation in it, but her voice when she spoke was expressionless as that of an automaton.

"How many times has this person, of whose name you do not appear to be certain, been to see Mary?"

"Once."

"When was it?"

"Last night."

"Did he stay long?"

"About twenty minutes, I should say."

"And do you think he will come again?"

"No."

"Why?"

"He has left the country."

A short silence followed this.

"Mr. Raymond," she said at length in a changed tone, "the last time I saw you, you told me that you were going to make some endeavor to restore me to my former position before the world. I did not wish you to do so then, nor do I wish you to do so now. Can you not make me comparatively happy, then, by assuring me that you have abandoned or will abandon a project so hopeless?"

"It is impossible," said I; "I cannot abandon it. Much as I grieve to be a source of sorrow to you, it is best you should know that I can never give up the hope of righting you, while I live."

She put out one quick hand in a sort of hopeless deprecation inexpressibly touching to behold in the fast waning firelight. But I was relentless.

"I should never be able to lie quietly in my grave if through any weakness I should miss the blessed privilege of setting a wrong right, and saving a noble woman from unmerited disgrace." And then seeing that she was not likely to reply to this, drew a step nearer and said:

"Is there not some little kindness I can show you, Miss Leavenworth, which you can mention before we part; or some message you would like taken, or some action performed which only a friend could do?"

She stopped to think. "No," she said, "I have only one request to make, and that you refuse to grant."

"For the most unselfish of reasons," I urged.

She slowly shook her head. "You think so," murmured she; then before I could reply: "I could desire one little favor shown me, however."

"What is that?"

"That if anything should transpire; if Hannah should be found, or—or my presence required in any way, you will not keep me in ignorance. That you will let me know the worst when it comes, without fail."

"I will."

"And now good-night; Mrs. Veeley is coming back, and you would scarcely wish to be found here by her."

CHAPTER XXIV.

A Report Followed by Smoke.

When I told Mr. Gryce that I only waited for the determination of one fact, to feel justified in throwing the case unreservedly into his hands, I alluded to the proving or disproving of the supposition that Henry Clavering had been a guest at the same watering-place with

The Woman who Would And The Grocer who wouldn't.

Every day from five to fifteen letters are received by The Ogilvie Flour Mills Co. from women living in the smaller towns throughout Canada, saying they have asked their grocer for Royal Household Flour but can't get it. One writes—"I told my grocer, Mr.----, that I would buy 'Royal Household' regularly if he would always keep it on hand, but he said he wouldn't take on another brand of flour until he was obliged to." Another says—"My grocer is an 'old fogie' and never gets the newest or the best things until the year after." A third says—"We haven't an enterprising grocer in our town and are obliged to send to-----for 'Royal Household' or take a poorer flour."

Write direct to Ogilvie's.

If you can't get "Royal Household" from your grocer, write to us direct—we will immediately give you the name of the nearest grocer who keeps "Royal Household" and send you also the "Royal Household" recipes. There is no good reason why your grocer should compel you to use inferior flour—no first class grocer will hesitate to order "Royal Household" for you, and even the smallest dealer will get it if you insist upon it.

THE OGILVIE FLOUR MILLS CO., LIMITED, MONTREAL.

Eleanore Leavenworth the summer before.

When, therefore, I found myself the next morning with the visitor-book of the Hotel Union at R— in my hands, it was only by the strongest effort of will that I could restrain my impatience. The suspense, however, was short. Almost immediately I encountered his name written not half a page below those of Mr. Leavenworth and his nieces, and whatever may have been my emotion at finding my suspicions thus confirmed, I recognized the fact that I was in the possession of a clue which would yet lead to the solving of the fearful problem which had been imposed upon me.

Hastening to the telegraph office, I sent a message for the man promised me by Mr. Gryce, and receiving for answer that he could not be with me before three o'clock, started for the house of Mr. Monell, a client of ours, living in R—. I found him at home, and during our interview of two hours, suffered the ordeal of appearing at ease and interested in what he had to say, while my heart was heavy with its first disappointment and my brain on fire with the excitement of the work then on my hands.

I arrived at the depot just as the train came in. There was but one passenger for R—, a brisk young man, whose whole appearance was so different from what I expected Q's to be that I at once made up my mind he could not be the man I was looking for, and was therefore turning away when he approached and handed me a card on which was inscribed a single character "Q". Returning his bow with a show of satisfaction, I remarked:

"You are very punctual; I like that."

He gave another short, quick nod. "Glad, sir, to please you. Punctuality is too cheap a virtue not to be practised by a man on the look out for a rise. But what orders, sir? Down train due in ten minutes; no time to spare."

"Down train? What have we to do with that?"

"I thought you might wish to take it, sir; Mr. Brown"—winking expressly at the name—"always checks his carpet-bag for home when he sees me coming. But that is your affair; I am not particular."

"I wish to do what is wisest."

"Go home, then, as speedily as possible." And he gave a third sharp nod exceedingly business-like and determined.

"If I leave you, it is with the understanding that you come first to me with your information. That you are in my employ and in that of no one else for the time being, and that mum is the word till I give you liberty to speak."

"Yes, sir. When I work for Brown & Co., I work for them; and when I work for Smith & Co., I work for them."

"Very well, then," said I, giving him a memorandum I had made before leaving Mr. Monell's, "here are your instructions."

He looked it over with a certain degree of care, then stepped into the waiting-room and threw it into the stove, saying in a low tone: "So much in case I should meet with any accident; have an apoplectic fit or anything of that sort."

"But—"

"Oh, don't worry; I shan't forget. I've a memory, sir. No need of anybody using pen and paper with me."

And laughing in the short, quick way, one would expect from a person of his

appearance and conversation, he added: "You will probably hear from me in a day or so," and bowing, took his way down the street just as the train came rushing up to the depot where I was.

My instructions to Q were as follows:

1. To find out in what day and in whose company the Misses Leavenworth arrived at R— the year before. What their movements were while there, and with whom they most consorted. Also the date of their departure and such facts as could be gathered in regard to their habits, etc.

2. Ditto in respect to a Mr. Henry Clavering, fellow-guest and probable friend of said ladies.

3. Name of the individual fulfilling the following requirements. Clergyman, Methodist, deceased since last December or thereabouts, who in July of '75 was located in some town not over twenty miles from R—.

4. Also name and present whereabouts of a man at that time in service of the above.

(To be continued.)

The sporting editor says the situation of Russia in the far east and the Czar's reported determination to continue the war reminds him of the Australian oarsmen who were struggling along in a race far behind the rival pair. Their coach was running along the bank of the river shouting "Go on, go on, you're not beat yet." Two blokes on the riverside, seeing the hopelessness of it, yelled out, "Don't you mind him. You are beat. Chuck it, chuck it."

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

BREEDERS' DIRECTORY.

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

- A. D. McDONALD, Napinka, Man.—Breeder of Shorthorns, Yorkshires and Berkshires. Young pigs for sale.
A. D. GAMLEY, Brandon, Man.—Breeder of Leicester sheep and Roadster horses. Stock for sale.
A. DAMSON BROS., Gladstone, Man., breeders of Shorthorns and Yorkshires, 1 1/2 miles from Stn.
B. POTTER, Maple Leaf Farm, Montgomery, Assa., Holsteins, Yorkshires and Berkshires.
A. J. MORRISON, Glen Ross Farm, Homewood, Man. Shorthorns and Clydesdales.
BRYAN BROS., Neepawa.—The thoroughbred poultry men. White Rocks, White Wyandottes. Eggs, \$3, sitting of 15. P. O. box 511.
W. TAYLOR, Dominion City.—Bred Ply. mouth Rocks, Buff Cochins, Black-headed Red Game, White Cochins.
H. CROCKER & SON, Pine Lake, Alberta. Aberdeen-Angus cattle.
O'BRIEN, Dominion City. Buff Orpingtons, Scotch Deer Hounds, Russian Wolf Hounds
D. HYSOP & SON, Killarney, Man., Landaser Farm, Shorthorns and Percherons.
E. D. BROWN, Boissevain.—S lver Wyandottes. Eggs, \$3 per setting.
E. TON & WATT, breeders of pure blood Herf rd and Shorthorn cattle. Choice young bulls now for sale. Clverdale Farm, 3 miles northeast of Birds Hill, Springfield Township Man.
E. T. GRIFFITHS, Moose Jaw, Assa.—Breeder of Clydesdales and Shorthorns. Stock for sale.
F. J. COLLIER, Weywun Station, Assa. Aberdeen-Angus and Berkshires.
GORRELL BROS., Pilot Mound, Man.—Short horns. Stock of both sexes for sale.
H. W. HODKINSON, Neepawa, Man. Barred Rocks. Winners.
HENRY NICHOL, Fairview Farm, Brandon Man. Breeder of Clydesdale horses and Shorthorn, etc.
J. G. WASHINGTON, Nings. Shorthorns and Clydesdales. Four choice young bulls. One scallin two years. Good one.
JOHN GIBSON, Underhill, Man.—Breeder of Shorthorns and Tamworths. Stock for sale.
JAMES DUTHIE, Melgund Stock Farm, Hartney, Man. Shorthorns and Berkshires.
JOHN LOGAN, Murchison, Man. Shorthorns.
J. MANSFIELD, Rosebank Farm, Brandon, Man., Breeder of Shorthorns. Young stock for sale, both sexes.
JOHN WISHART, Portage la Prairie, Man.—Breeder of Clydesdales and Hackney horses. Young and breeding stock of both sexes for sale.
J. H. REID, Moosomin, Assa.—Breeder of Herefords. Young bulls for sale.
J. M. MACFARLANE, Moose Jaw, Assa.—Breeder of Clydesdale horses.
J. CHILDREN & SONS, Okotoks, Alta.—Duroc Jersey swine, either sex, for sale.
JAS. TOUGH, Lake View Farm, Edmonton, breeder of Hereford cattle.
LAKE & BELSON, Grenfell, Assa.—Breeders of Polled-Angus cattle. Young bulls for sale.
L. E. THOMPSON, Deloraine, Man.—Breeder of Clydesdales, Shorthorns, Jacks and Jennets, O. I. C. swine and P. B. Rocks.
L. V. B. MAIS, Fort Qu'Appelle, Assa. Gallows.
LUM CREEK STOCK FARM.—J. H. Kinnear & Son, Souris, Man. Breeders of Shorthorns. Stock for sale.
R. A. COX, breeder and importer.—Shorthorns, Berkshires and B. P. Rocks. Hereford, Man. Stock for sale.
R. A. & J. A. WATT, Salem P. O., Ont., and telegraph office.—Breeders of Shorthorns and Clydesdales. Imported and Canadian-bred females; also a pair of bull calves.
RIVEREDGE FARM.—Shorthorn cattle, Deerhounds, B. Rocks, B. B. R. Games. A. A. Titus, Napinka, Man.
REGINA STOCK FARM.—Ayrshires and Yorkshires for sale. J. C. Pope, Regina, Assa.
ROBT. SINTON, Regina, Assa.—Breeder and importer of Herefords. Stock, both sexes, for sale.
R. P. STANLEY, Moosomin, Assa.—Breeder of B. R. Percherons and Hackneys. Stallions of both breeds for sale.
S. THORTHORNS and Clydesdales. Wm. Chalmers, Smithfield Stock Farm, Brandon. Phone at residence.
S. THORTHORNS of the fashionable families. John Kennedy, Swan River, Man. (C. N. R.), 1 1/2 miles from town.
THOS. WALLACE, Red Herd Farm, Portage la Prairie, Man. Shorthorns.
THE "GOULD FARM," Buxton, North Dakota, U. S. A., breeders of Red Polled cattle, the dual-purpose breed of America.
TRAYNOR BROS., Regina, Assa.—Clydesdales. Stallions for sale.
THOS. ELLIOTT, Regina, Assa.—Breeder of Herefords.
THOS. DALE, Portage la Prairie, Man.—Breeder of Shorthorns and Berkshires. Young and breeding stock of both sexes for sale.
W. M. LAUGHLAN, Hartney, Man. Breeder of Shorthorns, Berkshires and B. P. Rocks.
WALTER CLIFFORD, Neepawa, Man. Breeder of Polled Angus Cattle. Single horns.
W. M. DAVIDSON, Lyonsburg, Assa.—Bred Shorthorns. Young stock of both sexes for sale.
W. S. LISTER, Middle Church (N. W.), Wm. Marohn rd. Herf Scotch Shorthorns of all ages from imported stock. Telephone 1000.
YOUNG Shorthorns for sale. Prices reasonable. Apply to Stewart Bros. & Co., Pilot Mound, Man.

WANTS & SITUATIONS.

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

TERMS.—One cent per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 25 cents.

AGENTS.—Tell me what you are selling, and I will show you how to start in business for yourself. No money required. E. P. Blackford, Toronto.

BEES for sale.—First-class colonies bees; warranted free from disease and of excellent strain. Have shipped a large number of colonies to the West. Address, R. F. Holtermann, Brantford, Ont.

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

ELK TEETH.—We will pay you good prices for Elk teeth in good shape. Correspond with us if you have any to sell. The Winnipeg Jewelry Co., 490 Main St., Winnipeg, Man.

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

FOR SALE.—Br. me grass seed, \$8.50 per 100 lbs., f.o.b. Balduf. Shipped in good grain bags. Cash must accompany order. James Strang, Balduf, Man.

FOR information concerning 100 improved and unimproved farms in the Dauphin district, write A. E. Iredale, Dauphin. Terms to suit purchasers. Particulars mailed free.

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

FOR SALE.—Three registered black and all black Aberdeen-Angus bulls, ready for service. Best of blood. Farmers' price. G. W. Fogman, Graton, N. D.

FARM for sale.—Consisting of 120 acres, situated in Chilliwack Valley, British Columbia; 50 acres improved, balance small timber. A living stream of water passing through the same; soil mostly black loam. Six acres of orchard, consisting of apples, plums, prunes, pears and cherries. Two good barns, stabling for ten cows and three horses, a five, roomed house (one story), separator room and stone cellar. Half-mile from school and three miles from hurch, three miles from steambot landing. Price, \$6,500. Address, M. Hilton, box 100, Chilliwack, B. C.

FARM for sale.—Between Vancouver and New Westminster, B. C.; 44 acres of land, 20 in high state of cultivation, 4 acres of strawberries, yielding \$1,200 per annum; 6-room dwelling, with all conveniences; barn and other outbuildings; water right, 300 inches. Situate 7 miles from Vancouver and 3 1/2 miles from New Westminster. Terms liberal. Address, Alexander Bell, Ellard Block, New Westminster, B. C.

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

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

PARTNER WANTED in established nursery business, willing to put in \$3,000. Well located in Vernon, B. C. For particulars apply to Box 371, Vernon.

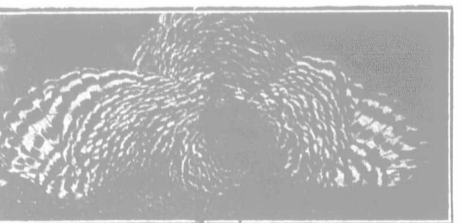
WANTED, in Western Manitoba or the Territories, situation on farm by man and wife, with one year's experience on Manitoba farm, either together or separately. Woman with two children (three years and eight years old) will go as help on farm. Will pay partly for board for good situation. C. Kehan, Plumus, Man.

WANTED.—Brakemen, baggageman, operators and bookkeepers on Canadian and U. S. railroads, \$45 to \$100 per month. Pay after you have a position. Home study. Catalogue free. New York State Correspondence School, Elmira, N. Y.

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

WANTED to buy.—One hundred sheep for breeding purposes. Write, stating how many you have, what kind, and price. A. E. Gardiner, Shoal Lake, Man.

YOUNG English minister desires position as private secretary, teacher, or any thing similar in Canada, near Winnipeg preferred. Apply to Rev. A. C. W., care of Farmer's Advocate, Winnipeg.



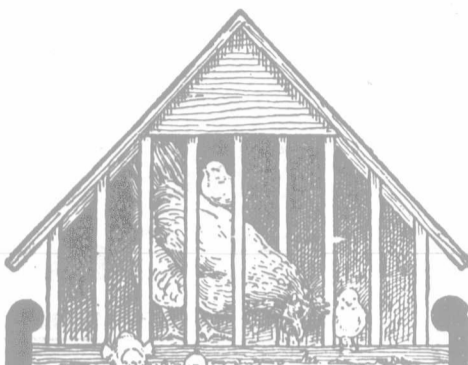
Barred Plymouth Rocks, Silver-spangled Hamburgs and Pearl Guineas.

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

THOMAS BROS., Crossfield, Alberta

W. S. KNOWLTON, Brandon, Box 397

Wanted at White Wyandottes, exclusive of ten cockerels for sale, \$2 each. Must be sent to make room for breeding stock. Price \$2 per setting, 3 settings for \$5.



Chicks without Lice. Instant Louse Killer. If you will sprinkle the setting hen and nest thoroughly with Instant Louse Killer, we will positively guarantee your brood to come off free from lice. 1 lb. 35 cents. 3 lbs. 85 cents. Sold on a Written Guarantee. Manufactured by DR. HESS & CLARK, Ashland, Ohio, U. S. A.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at one cent per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns.

BUFF Orpingtons, White Wyandottes, \$2 per setting. C. W. Robbins, Chilliwack, B. C.

BUFF ORPINGTONS. At Central Canada Exhibition my Orpingtons won ten prizes; and again at Eastern Ontario Exhibition they won 9 prizes. Eggs, \$3.00 per 15. A. W. E. Hellyer, Ottawa, Ont.

BUFF Orpingtons—Eggs for sale, \$3 per setting; imported direct from William Cook, England. Also White Rocks that swept everything in Winnipeg. W. N. Mitchell, Moose Jaw, Assa.

BUFF ORPINGTONS, Silver-laced Wyandottes, B stock. Eggs \$2 per setting. Scotch collie pups. W. J. Lumsden, Hanlan, Man.

BARRED Plymouth Rock eggs for sale, from pens headed by pure E. B. Thompson males, \$1.50 per setting, \$5 per 100. Mrs. Jas. McPhee, Jr., Hesdingly, Man.

EGGS for hatching from Golden Wyandottes, Indian Games and Barred Plymouth Rocks, \$2 for 15. Write S. Lutz, 128 River Ave., Winnipeg.

FOR SALE.—Eggs for hatching from the best stock in America, E. B. Thompson's Ringlet Barred Rocks—get the best—\$2 per 15. Geo. D. Meikle, Morrisburg, Ont.

VERDEN Duck and Poultry Yards. Eggs for hatching from Mammoth Pekin Ducks, White Wyandottes and Black Orpingtons, \$1.50 per setting, \$8 per 100. Correspondence solicited, Menlove & Thickens, Verden, Man.

WHITE Wyandotte and Buff Orpington eggs, \$1.50 per setting. Cash with order. C. W. Beaven, Pingrove, Prescott, Ont.

A. J. Carter, Breeder and Barred Rocks and Silver-laced Wyandottes. A few cockerels of each variety for sale. Eggs now ready, at \$2 per 13, from my prizewinning stock. A. J. CARTER, Box 90, Brandon, Man.

Hodkinson's Barred Plymouth Rocks AGAIN IN THE LEAD.

At the recent Manitoba Poultry Show my birds won 1st-prize pen, 1st and 4th cockerels, 3rd cock and 4th pullet. Eggs, \$3 per setting, or two settings for \$5.

Send for circular. H. H. HODKINSON, Neepawa, Man.

Advertise in the Advocate

Shakespeare's Town.

By Anna L. Jack.

The famous Mecca for Shakespearean pilgrims is somewhat disappointing to admirers of the great dramatist, for it is given over to a money-making crowd, and Stratford-on-Avon is not the sleepy, old-fashioned village of our dreams.

It seemed a strange travesty as we passed over the threshold of the Shakespeare Hotel, to be shown into a room that held over the door the word "Macbeth" in large, imposing letters. Looking down the corridor we noticed each bedroom named, and with a touch of sentiment that was half superstition, wondered why some more fortunate person was to have "A midsummer night's dream," while we were given over to tragedy.

In the town, as it is now called, all is stir and bustle when the crowd of sight-seeing Americans invade the place. Into the old house—and the old church, when often a crowd await their turn in line, as if at a ticket-office, and indeed there are tickets, for shillings and sixpences seem to go as if by magic out of one's fingers, and in return we receive a yellow slip, and afterwards a blue one on payment of another shilling. It is the same as Anne Hathaway's Cottage—guarded by the money-making exhibitors—but well worth the amount paid. The church is a fine old building, and the approach to it under two rows of arching lime trees, is very beautiful. Many memorial windows give a wonderful light in the sunshine—the prisms of color truly gorgeous. In the churchyard the stern stanza guards his "bones," and the noise of a tiny cascade is heard mingling with a breeze among the trees. Such is the end of human greatness, we say, and a little of this eulogy, while he lived would have been of more value than the homage paid to a dead lion.

It was pleasant, after the throng had passed by, to sit in the chimney corner of Anne Hathaway's Cottage, and look up its yawning gap to see the blue sky and swallows passing in and out, to and from their nests. Here we could dream of that wonderful brain, its visions and marvellous insight into nature, and again the thought comes that he did not in his life enjoy the result of his great labor, or receive the recompense for what he has been to posterity. But dreaming ceases as the caretaker rattles the keys, and we seek the Shakespeare "bus," while the air is redolent with the fragrance of lavender and roses, and we depart with a consciousness of an empty pocket-book, but a memory well stored with the relics of a departed glory and of a town that lives on dress parade.

Short Interviews with Advertisers NO. 8 Proprietors of Stevens' Ointment. "The result of our advertising is distinctly gratifying, and shows the value of your paper."—[Proprietors of Stevens' Ointment, St. George's Mansions, London, Eng.]

MORMONS COMING TO ALBERTA. The Calgary Herald of recent date states that the Mormon Church of Utah are the purchasers of the Cochrane ranch, the sale of which was reported in this paper some time ago.

A little girl stood in a city meat-market waiting for some one to attend to her wants. Finally the proprietor was at liberty, approached her and said benignantly, "Is there anything you would like, little girl?" "Oh, yes, sir, please: I want a diamond ring, and a sealskin saccie, a real foreign nobleman, and a pug dog, and a box at the opera, and, oh, ever so many other things; but all Ma wants is ten cents' worth of Bologna."

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

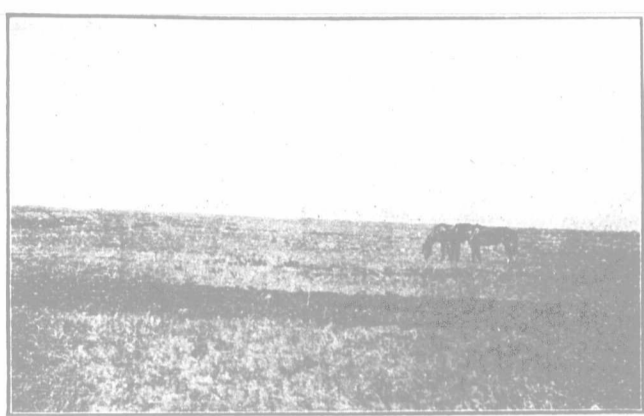
Last Mountain Valley

Steamboat Service On the Lake.

S. S. Queen City and S. S. Silken Dale will make regular trips with freight and passengers.

Railway in Operation This Summer.

WRITE FOR FREE MAPS, BOOKS, ETC.



The Finest Wheat Land in North-east Assiniboia.

Average crop for 5 years
25 bushels per acre. . . .

Wm. Pearson & Co.,
WINNIPEG.

FARM BOOKS.

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

LIVE STOCK.

Veterinary Elements.—A. G. Hopkins, B. App. D. V. M. \$1.50. A practical farm live-stock doctor book.

The Study of Breeds (Cattle, Sheep and Swine).—Prof. Shaw. 400 pages, 60 engravings. \$1.50.

Horse Breeding.—Sanders 422 pages. \$1.50.

Horse Breaking.—Capt. Hayes. \$5.00. Far and away the best on this subject.—*The Field.*

Points of the Horse (3rd edition).—Capt. Hayes. \$10.00.

Light Horses—Breeds and Management. (Vinton series.) 226 pages. \$1.00.

Heavy Horses—Breeds and Management. (Vinton series.) 219 pages. \$1.00.

Cattle—Breeds and Management. (Vinton series.) 270 pages. \$1.00.

Sheep—Breeds and Management. (Vinton series.) 232 pages. \$1.00.

Pigs—Breeds and Management.—Sanders Spencer. 175 pages. \$1.00.

Feeds and Feeding.—Henry. 600 pages. \$2.00.

Live-Stock Almanac. Handsomely bound. 75 cents. Paper cover, 40 cents.

Live-Stock Judging.—Craig. \$2.00. The only work on this subject.

GENERAL AGRICULTURE.

Agriculture.—C. C. James. 200 pages. 30 cents.

Chemistry of the Farm.—Warrington. 183 pages. \$1.00.

Farmyard Manure.—Aikman. 65 pages. 50 cents.

Successful Farming.—Rennie. 300 pages. \$1.50, postpaid.

Agricultural Botany.—Percival. \$2.00. A very useful book for student farmers.

Soiling Crops and the Silo.—Shaw. 366 pages. \$1.50.

Fertility of the Land.—Roberts. 415 pages. \$1.00.

Physics of Agriculture.—King. 604 pages. \$1.75.

DAIRYING.

Milk and Its Products. Wing. 230 pages. \$1.00.

Testing Milk and Its Products.—Farrington & Woll. 255 pages. \$1.00.

Canadian Dairying.—Dean. 260 pages. \$1.00.

Cheesemaking.—Decker. 192 pages. \$1.75.

POULTRY.

Poultry Craft.—Robinson. \$2.00.

Farm Poultry.—Watson. 341 pages. \$1.25.

APIARY.

The Honeybee.—Langstroth. 521 pages. \$1.50.

FRUIT, FLOWERS and VEGETABLES.

Vegetable Gardening.—Green. 224 pages. \$1.25.

Flowers and How to Grow Them.—Rexford. 175 pages. 50 cents.

Amateur Fruit-growing.—Samuel B. Green. 5x7 inches; 131 pages, with numerous fly-leaves for notes; bound in cloth, and illustrated. 50 cents.

PLANT AND ANIMAL LIFE.

The Story of the Plants.—Grant Allen. 213 pages. 40 cents.

The Study of Animal Life.—J. A. Thomson. 375 pages. \$1.75.

Insects Injurious to Fruits.—Saunders. 456 pages. \$2.00.

MISCELLANEOUS.

Landscape Gardening.—S. T. Maynard. 338 pages. \$1.50.

Birds that Hunt and Are Hunted.—Nettfe Blanchan. 360 pages. \$2.25.

Carpenters' and Joiners' Handbook. 75 cents.

American Tanner.—Briggs. 25 cents.

Taxidermy.—Hasluck. 50 cents.

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

Books valued at 50c. and under for 1 new subscriber.
Books valued over \$1.00 and up to \$1.50 for 3 new subscribers.
Books valued over \$2.00 and up to \$2.50 for 5 new subscribers.
Books valued at \$4.00 8 new subscribers.

Books valued over 50c. and up to \$1.00 for 2 new subscribers.
Books valued over \$1.50 and up to \$2.00 for 4 new subscribers.
Books valued at \$2.75 for 6 new subscribers.
Books valued at \$6.00 for 12 new subscribers.

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

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

LAST MOUNTAIN VALLEY

The Town of

LUMSDEN

N.-W. T.,

Is Headquarters for

Supplying Settlers

for the Last Mountain Valley country. Best of hotel accommodation, numerous boarding-houses, restaurants, large general stores, four implement houses, two large livery stables, harness and furniture supplies, drug and hardware stores, jewelers, lumber yards, baker, butchers, blacksmiths, flour mill 950 barrel capacity, real estate agents, etc.

Communicate with C. HYNDS, Sec. Board of Trade, or the Mayor.

WHILE THEY LAST

\$29.50 Cash

will buy a High-Grade, Cone Bearing, Drop Head

SEWING MACHINE

with an

Unlimited Guarantee from

Smyth, Hardy & Co.

Box 3, - Calgary, Can.

Cor. 7th Ave. and 1st St., East.

Advertise in the Advocate

QUESTIONS AND ANSWERS.
Legal.

POISONING GOPHERS.
For H. H. L.'s query re poisoning gophers, see Field Notes, this issue.

EXEMPTION FOR DEBT.
Can a machine company compel me to mortgage my homestead after I receive my patent to meet my note? The note is the ordinary kind. Can my land be seized?
X. Z.
Ans.—We believe not, but would advise that you consult a lawyer as to the exemptions allowed in your Province.

ADOPTION OF A CHILD
Will you kindly give me the wording of the form I would have to use to adopt two children, and would they be the same as my own by law?
F. S. L.
Alta.
Ans.—You had better consult your local solicitor in this matter; the form is too lengthy to be given in the "Farmer's Advocate."

NATURALIZATION IN CANADA.
Only aliens require to become naturalized—persons born in a country under British rule are not aliens. Naturalization is necessary in Canada to be able to take out a patent on a free homestead, and in order to have a vote. Real estate can be owned and other business transacted without a person being a British subject. Naturalization necessitates three years' residence and taking the oath of allegiance to King Edward VII. It is usually done before a judge at the court meetings.

True Philanthropy.
Mrs. F. V. Currah, Windsor, Ont., will send free to any woman who suffers from female weakness or painful periods a sample of the remedy that cured her.

"BY THEIR FRUITS YOU SHALL KNOW THEM."

CYPHERS Patent Diaphragm, Non-Moisture, Self-

Ventilating and Self-Regulating INCUBATORS



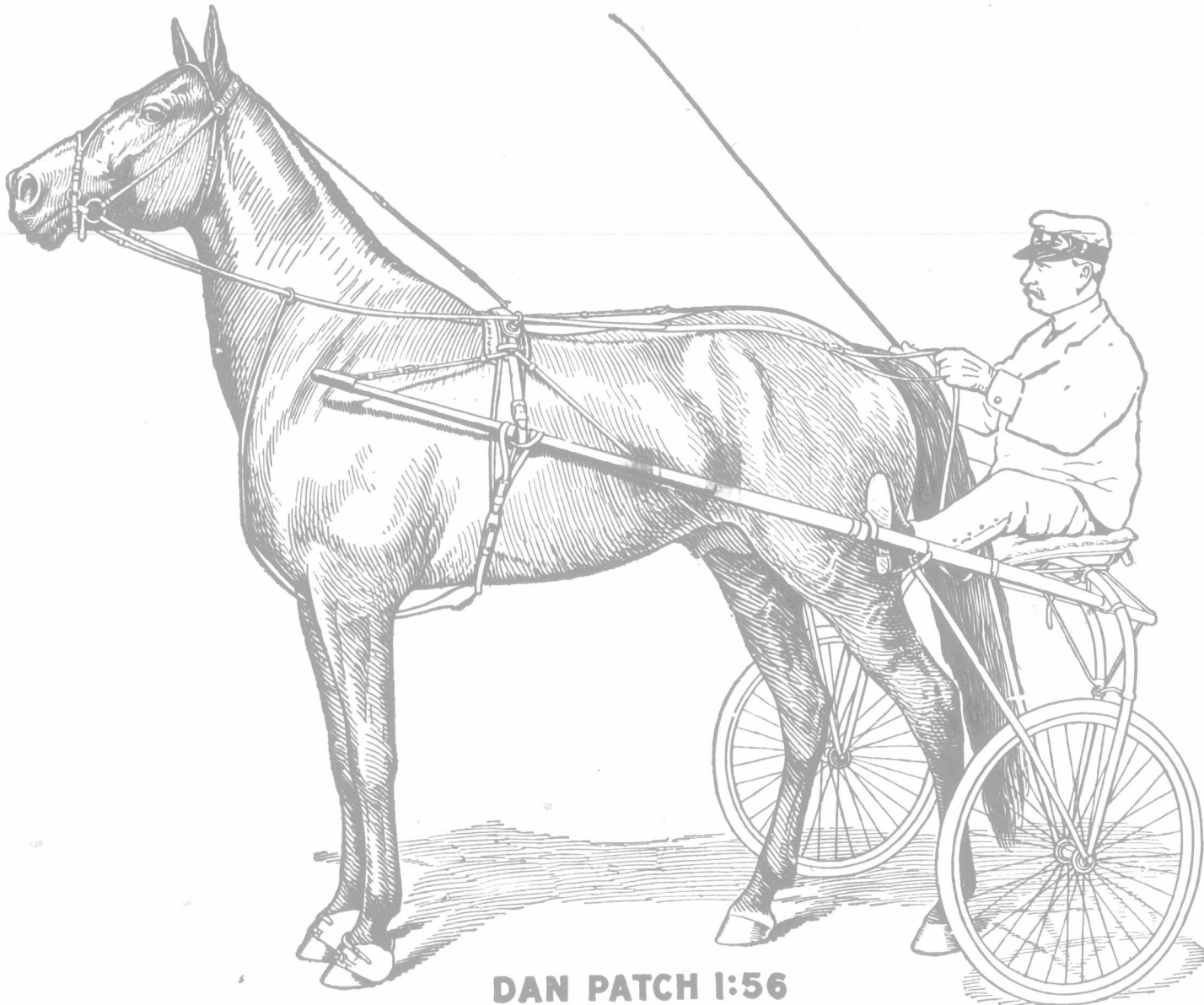
are used on more successful American poultry plants by more American farmers of national and international reputation, more Government Experimental Stations and more public industrial institutions than all other makes of Incubators combined. Our proposition is your chance in a lifetime, as we are clearing our large stock of Cyphers Incubators at greatly reduced prices. Just drop a card and we will write you at length.

ASHDOWN'S, - Winnipeg.

TRADE NOTE.

PATMORE NURSERIES.—The scarcity of fruit is a drawback on the prairies, and to buy fruit to preserve for winter use is costly. Rhubarb and raspberry make an excellent mixture for preserving, in the proportion of 1 lb. of raspberry to 4 lbs. of rhubarb. Every farmer can grow these, if he has a small plot of raspberries of hardy varieties like the Turner or Reider, he can pick a few pounds of berries every 1-2 days during July and August, and from a dozen good rhubarb plants, ought always to be able to pull sufficient stalks to preserve with the berries. But remember, you cannot expect plants to last forever. Both rhubarb and raspberries will run out in a few years, so watch your plants, and see that a young plantation is prepared to keep up production when the vigor of the old plants is exhausted. Now is the season to think of this, not in July or August when you want the fruit. See what the Patmore Nurseries are offering.

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



DAN PATCH 1:56

BEAUTIFUL COLORED PICTURE OF DAN PATCH MAILED FREE

The Picture we will send you is a large reproduction of the above engraving, printed in six brilliant colors, without any advertising. It is the finest picture of this famous pacing stallion in existence and is worthy of a place in any home.

MAILED FREE WITH POSTAGE PREPAID

WRITE US AND ANSWER THE FOLLOWING QUESTIONS—

1ST. HOW MUCH STOCK OF ALL KINDS DO YOU OWN. 2ND. NAME THIS PAPER.

ADDRESS THE OWNERS AT ONCE INTERNATIONAL STOCK FOOD CO., TORONTO, CAN.

"3 FEEDS FOR ONE CENT"

DAN PATCH RESTORED TO HEALTH IN SIX WEEKS.

DAN PATCH GIVEN UP TO DIE

Office of the Kansas City Veterinary College, 1330-36 East 5th Street. ROBERT C. MOORE, D.V.S., PRES. HENRY C. BARBOCK, M.D., D.V.S., V-PRES. BENJAMIN F. KRAPP, D.V.S., V-PRES. SISCO STEWART, M.D., V.M. M. W. SAVAGE, Minneapolis, Min. Secy and Treas. and Dean of Faculty. Dear Sir:—I first saw your horse Dan Patch, about 10:30 a. m. Sept. 13th 1904. He was suffering severe pain in the abdominal region caused by impaction of the bowels probably caused by eating oat chaff. His pulse rate was 72 per minute and his temperature 103. The character of the pulse was weak. The condition gradually grew worse during the afternoon until about 4 p. m. the pulse rate had reached more than 100 and his temperature was 105. The heart grew so feeble that the pulse could not be taken at the jaw and the rate could not be determined by listening to the heart beats. A cold perspiration covered the entire body much of the time and the pain was almost continuous. The visible mucous membranes were highly injected, which with the high temperature showed undoubted evidence of the inflammatory condition existing in the abdominal cavity. At this time owing to the inflammatory condition and the extreme weak heart, the prognosis was very unfavorable. From 4 to 6 p. m. I had little or no hope of his recovery. About 7 p. m. a slight improvement was noticeable and his condition gradually improved. Veterinarians in attendance: Very truly yours, K. C. MOORE, D.V.S., K. C. Moore, Pritchard & Kinsley.

HIS WONDERFUL RECOVERY

In four days from the time he was given up to die by three high-class Veterinary Surgeons we shipped Dan Patch from Topeka to our "International Stock Food Farm" at Savage, Min., and commenced feeding him three times the usual quantity of "International Stock Food" and giving it to him four times per day. He received his strength very rapidly and in three weeks from the first day of his sickness he paced a mile at Springfield Ill., in 2:04. This was in the face of a cold wind and over a track that was not in shape for extreme fast miles. Dan was shipped from Springfield to Memphis and in six weeks from the date of his sickness he astonished the world by pacing a mile in 1:56 without wind shield. "International Stock Food" is a remarkable vegetable preparation to give permanent strength to the entire system as well as being a great aid to digestion and assimilation. It is used and endorsed by a majority of the great trainers and is in constant use on most horse-breeding farms. Dan Patch has been fed "International Stock Food" every day since we bought him two years ago for \$60,000. Since that time Dan has broken 7 world's records and has been extra strong and vigorous. Owing to his great constitutional strength he was able to withstand his severe sickness. You could not ask better proof of the superior merits of "International Stock Food" which you can feed at a cost of

3 FEEDS FOR ONE CENT.

INTERNATIONAL STOCK FOOD CO., TORONTO HIGH RIVER SCHOOL OF AGRICULTURE, High River, Alta. Dear Sir:—I thank you for your letter of the 16th, and for all the trouble you have taken to bring the "International Stock Food" to notice. The merits of the food for horses in a poor condition were not unknown to me before your communication came to hand, but I had not given it close attention as a possible medicine for other animals in trouble. A recital of the food with a pen of pigs suffering from what I diagnosed as "Erysipelas Pleuro-Enteritis" certainly proved most successful. After losing two hogs within three days out of a pen of seven I commenced feeding your Stock Food liberally to the remainder, all of which had refused to eat the ordinary food and were sick. On the fourth day a third hog died, but the remaining four rapidly recovered and are now well. I took the precaution to feed "International Stock Food" to all the pigs on the farm and in adjoining pens during this outbreak, and quite believe have saved myself from serious loss by using your remedy. I am dear sir, Yours faithfully, (Sgd.) O. H. HANSON, Director.

YOUR MONEY BACK IF THEY FAIL TO CURE

If "International" Preparations were not up to the standard we could not afford to make such an offer. We hereby agree to forfeit \$1000.00 if we ever fail to do as we say.

- "International Stock Food" "International Heave Cure" "International Hoof Ointment" "International Silver Pine Healing Oil"
"International Poultry Food" "International Colic Cure" "International Pheno-Chloro" "International Quick Cleaner"
"International Louse Killer" "International Harness Soap" "International Compound Absorbent" "International Distemper Cure"
"International Worm Powder" "International Foot Remedy" "International Gall Cure"

Prepared and Sold on a "Spot Cash Guarantee" by INTERNATIONAL STOCK FOOD CO., Toronto, Can.

Mr. Arthur Johnston, of Greenwood, Ont., changes his advertisement in this issue. He reports sales of seven very fine young bulls during the past few weeks, most of them fit to head first-class Shorthorn herds, both in quality and breeding. He says: "We have still a good lot fit for immediate service, as follows: one five-year-old imported roan bull of most fashionable Scotch breeding; one four-year-old imported red-roan bull, equally fine Scotch breeding; one three-year-old roan bull, and two yearling imported red bulls. Besides these imported bulls, we have a capitally bred Crimson flower bull, now 22 months, roan in color, a first-class bull and a fine breeder. Probably one of the best bulls in the herd is a fourteen-months

dark roan Bessie bull, clear imported Scotch, of the richest breeding. Besides these, we have a number of younger bulls from imported sires and dams, four of them fit for service immediately."

SUGAR-BEET PROSPECT IN S. ALBERTA.

The Knight Sugar Company has secured contracts with the farmers along the St. Mary's line for 4,500 acres of sugar beets this season, and seeding operations will soon commence. This is one-third more than was planted last year, and as greater care is being taken in the preparation of the soil this year than ever before for this crop, the tonnage is expected to easily double that of the last fall, when three million and a quarter pounds of sugar were manu-

factured. This company has at the present time 250 head of beef stock fattening on the beet pulp stored in the big silo of the factory, affording a practical demonstration to the stockmen of the value of this by-product as a finishing food. Experiments here and at the sugar beet factories across the line show that a steer cannot eat more than a hundredweight of the pulp daily, which at the present selling price of 50 cents a ton makes the feed-bill 2 1/2 cents a day. At the American factories, the pulp is sold at \$1 a ton, and the supply is invariably contracted for early in the summer, as the stockmen find that even at \$1 a ton, pulp is the cheapest fattening feed they can secure. As yet the farmers here have not taken advantage of the opportunity of buying this pulp, but many will do so this fall.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

MANGE IN LIVE STOCK.

Is it possible for cattle to get mange from horses that are affected with the complaint? What is the best treatment for cattle that have the mange in a place like this, where there are no facilities for dipping cattle? W. R.

Athabaska Landing. Ans.—Yes; it is possible, depending on the variety of the mange parasite, of which there are three. Some of the dips advertised in this paper, or oil of tar, 1 part, and linseed oil, 20 parts. Write Dr. Rutherford, V. D. G., Ottawa, for his bulletin on mange.

DISLOCATION OF HIP JOINT.

A cow fell down with her legs out at each side of her, and she couldn't get up. She was found out at the stack, and had to be hauled up to the stable, and is not able to be up yet. G. O. T. Dauphin.

Ans.—Without an examination, it is not possible to accurately diagnose this case; suspect dislocation of the hip joint. In such cases recovery is very rare, and the animal might as well be slaughtered.

A WASHY MARE.

What shall I do for a mare that scours badly on the road and also a little in the stable, and also passes dead worms? The mare is due to foal in August, is seven years old, and otherwise in good condition. H. E. Hazlemere, B. C.

Ans.—The worms may have caused this trouble. Feed dry bran; limit water before work; use crushed oats, and if the mare's mouth has a sour smell, mix two ounces of baking soda in the feed daily.

EQUINE SYPHILIS (DOURINE).

(a) How long will a mare go after being in contact with the disease before showing positive symptoms, and how can it be detected?

(b) How can it be detected in a stallion, and can he be cleansed of it, and how?

(c) Does your book called "Veterinary Elements" treat on this? J. D. W. Assa.

Ans.—(a) The disease may, according to the best authorities, be latent in the system for one year.

(b) Recovery is very rare. Disease takes eight months to two years to run its course. Inflamed condition and enlargement of the sexual organs, followed by red spots or blisters on the outer surface of the horse's yard. Sometimes a slimy discharge is seen; difficulty in urinating is noticed also. The above symptoms showing in 11 to 20 days after cohabiting with an infected mare. Between the fortieth and sixtieth day, elevations similar to nettle rash appear over the croup, neck, shoulders, chest and belly, and occasionally excessive itchiness of the skin. This disease is incurable, considered from the practical standpoint, and the Dept. of Agr., Ottawa, must, by law, be notified.

(c) No; because the disease is incurable, and is comparatively rare in Canada or the U. S.

Messrs. Bell Bros., Bradford, Ont., breeders of Shorthorns, write: "Our stock have wintered well. Our Shorthorns are bred from such noted families as the Stamfords, Rosebuds, Miss Ramsdens, Strathallans, Strawberry, etc. Have for sale some nice young cows with calves at foot, by Queenston Archer, also some choice heifers by Heir-at-Law =34563= and Gladiator (imp.) 32064. Our stock bull, Queenston Archer, by Derby (imp.), and out of Veronica (imp.), by Brave Archer, is leaving some grand calves, which will make their mark in the show-ring."

Prof. Osier, of Minnesota State Experimental Farm, Crookston, formerly of ex-Premier Greenway's Prairie Home Stock Farm, Crystal City, Man., has been appointed manager of Sir Wm. Van Horne's stock farm at St. Andrew's, N. B. Mr. Osier left for the east on April 1st.

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



WESTERN BROME GRASS

FORMS A CLOSE, TENDER, LASTING SWARD

The Most Perfect Western Pasture Grass

Produces a heavy aftermath
of

Succulent Leafy Shoots

GOVERNMENT EXPERIMENTAL FARM REPORT

The ability of WESTERN RYE GRASS to produce good pasture during long periods of drought far exceeds that of any other cultivated variety. It is thoroughly permanent and grows with wonderful rapidity, producing heavy crops and luxuriant pasture

The value of Western Brome Grass to Farmers and Ranchers cannot be over-estimated

QUESTIONS AND ANSWERS. Miscellaneous.

GROWING TIMOTHY.

With the probability of dry weather, would you advise sowing timothy? Have bromus and rye grass. M. O. Alta.

Ans.—Yes; we would make an earnest effort to get it to grow, as it is a very palatable hay and easily cured.

TO AVOID ABORTION IN MARES.

Would it be safe to breed mares this year? Had three in foal and they all lost them. The first one carried hers four months. I took her to town (25 miles) and had her shod that evening to prevent slipping. She repeatedly threw herself back on halter while being shod, and lost her foal before morning. The next one lost hers about a month later, and the third followed suit a month later again. They all stand in same stable, are fairly well-bred Clydes, six and seven years old; and anxious to breed them, if it would be all right. Sask.

SUBSCRIBER.

Ans.—Yes, if they have completely recovered from the abortions. If got with foal this season, give to each, starting a week before the accident this year, half-ounce doses of fluid extract of black haw three times a week until they have safely passed the danger period. Feed moderately and regularly, avoid big drinks of ice-cold water, and use bran to keep from becoming constipated.

HATCHING QUESTIONS.

1. Is not the temperature of a setting hen the same all through incubation, whether the embryo in the egg is living or dead?

2. Would it not be better to have the thermometer in an incubator just off the eggs rather than upon them in case some of the embryos should be dead?

3. My eggs have all dark shells, and it is almost impossible to test them. My tester is a tin lamp chimney with a dark cloth over a hole in the chimney, and a hole in the cloth through which to test the eggs. Is there a better one, or is there a better way I could tell a live embryo from a dead one? AMATEUR.

Ans.—1. Yes, but much depends upon the weather and the length of time a hen stays off.

2. No; the rules for temperatures given by incubator manufacturers apply to thermometers in contact with the egg. There might be a greater variation be-

tween that of the egg and that of the atmosphere an inch above than between two eggs, one having a living and the other a dead embryo.

3. That is about the best tester you could have.

BUILDING ROOT HOUSE.

1. What would be the best way to build a root-house, and to have it as near as possible to the barn, so as to take out the roots say twice a week for use for the cattle? There is no hill round the buildings, nor on any other part of the farm.

2. Did any one of the readers ever learn, by experience, that German millet hay causes abortion with cows?

3. Which is the best kind of early potatoes for market purposes, and where can they be obtained in large quantities? Rosser.

SUBSCRIBER.

Ans.—1. I saw a very fair root-house at the Manitoba Penitentiary at Stony Mountain some years ago. It was built, if I remember right, on almost level ground, three feet of the depth was below the level of the surrounding land, and the other three feet six inches was above the surface. The sides were built

of cedar and tamarack logs, and roofed with the same material. The outside of the logs on the roof and the sides were covered with sod, two feet thick. This building apparently gave good satisfaction, but would not prove a success if the soil was badly saturated with moisture.

2. I have never heard of millet causing trouble in cows, although quite recently I have been a little suspicious of millet, and think it just possible that an over-feed of it would possibly cause the trouble.

3. For the Red River Valley soil, early ripening, dry potatoes should be selected, even if the yield is less. I consider Early Ohio and Bovee two of the best varieties for that class of soil. For Western Manitoba, the Early Rose type of potato nearly always gives good satisfaction. There are a great many varieties of this type, all fairly early and light red in color, productive and of good quality on fairly light soil. Although such varieties as Late Puritan give immense yields in all parts of the Province, they are too late for this climate, and seldom become fully ripe when the fall frost is here. S. A. BEDFORD.

Legal.

THE LAW RE ROAD ALLOWANCES.

What is the law in the Territories regarding road allowances? I have been told that I can fence to my stakes on the east and north sides of my section, but that I have to leave ninety feet on the west and south; is this right? W. C. T. Assa.

Ans.—You may fence up to the stakes on the east and north side of your section, but on the south and west you must leave sixty-six feet, unless it may be a very old survey where ninety-nine feet is allowed. We cannot tell you whether this is an old survey or one of later date. This information you can obtain from the Department of Public Works, Regina.

OWNERSHIP OF HAY.

A bought farm from B in August, 1904, and mentioned to B that whatever hay was on land to not cut or sell it, as A lived in another part of the country, and between the time that A bought the land, and contract, abstracts, etc., signed, B gave permission to C to cut hay on the land, and C put up six big stacks and fenced hay after A moved on to the land. Is A entitled to any part of the hay, and, if so, what part, as all hay was cut on farm? G. J. Assa.

Ans.—If bona fide sale was made in August, B had no right to sell the hay. A should not have allowed C to fence the stacks, as by doing so, it might be construed as an admission that the hay belonged to B. B's rights should have been immediately repudiated, and the hay taken possession of by A, letting B and C fight the matter out between them.

The modern highwayman approached in an automobile, ran down the citizen and then demanded his watch.

"You are taking advantage of me," protested the citizen.

"Not at all," assured the highwayman. "I want your watch to time my machine so I will not be arrested for fast driving."

When a Scotch schoolmaster entered the temple of learning one morning, he read on the blackboard: "Our teacher is a donkey." The pupils expected there would be a cyclone; but the philosophic pedagogue contented himself with adding the word "driver," and opened the school with prayer as usual.

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

Drought Defying Frost Resisting

Our Western Brome Grass is specially selected and grown for Manitoba and the Territories.

14 lbs. (bushel) \$2.25. 50 lbs., \$7.50.
100 lbs., \$14.00.

The Steele-Briggs Seed Co.

LIMITED

Canada's Greatest Seed House

Winnipeg, Man.

Impurities in the Blood

TELL OF TORPID, SLUGGISH LIVER
ACTION AND INDICATE THE
NEED OF

DR. CHASE'S KIDNEY-LIVER PILLS.

There is no getting round the fact that the liver is responsible for the impurity of the blood in the spring.

Awaken the liver to action by the use of Dr. Chase's Kidney-Liver Pills and you at once remove the cause of the ill and discomforts of this time of year.

Coated tongue.
Bitter taste in the mouth.
Shortness of breath.
Gas on the stomach.
Dull, sick headache.
Biliousness.
Irregularity of the bowels.
Weak, dizzy feelings.
Irritable temper, discouragement and despondency.

These are some of the most common indications that the liver is failing to filter the poison waste matter from the blood.

Dr. Chase's Kidney-Liver Pills cleanse the system thoroughly and well, by causing a free action of the bowels.

By their direct and certain action on the liver they purify the blood and bring about a good flow of bile into the intestines—the only means by which constipation can be actually cured.

Dr. Chase's Kidney-Liver Pills are an indispensable family medicine of proven worth. One pill a dose, 25c. a box, at all dealers, or Edmansons, Bates & Co., Toronto. The portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

At one of the Western army posts in the days of the Indian fights, there was a young lieutenant, who was careful to see that the regulations relating to saluting were faithfully observed. One day a soldier, who was leading an obstreperous mule to water and had both hands fully employed in the task, was met by the lieutenant. The soldier, who had an occupation which demanded his undivided attention, failed to salute the martinet, who immediately called him to account for his remissness.

"Why do you not salute an officer when you see him?" he demanded.

"You hold this mule and I will," calmly returned the man.

But the lieutenant did not insist, and the regulations were broken.

HAS BEEN ALL RIGHT EVER SINCE

T. H. Belyea, P. M., Proves That
Dodd's Kidney Pills Cure
Permanently.

Some Years Since He Used Them Now and
He Has Had Good Health Ever Since—
Story of Well-known New Brunswick
Man.

LOWER WINDSOR, Carleton Co., N. B., April 10.—(Special).—"Yes, I have good health ever since I used Dodd's Kidney Pills." The speaker was Mr. T. H. Belyea, postmaster here, and one of the most highly respected men in this part of the country. Asked to give his experience with the great Canadian Kidney Remedy, Mr. Belyea continued:

"I had been troubled with my kidneys for a number of years. I tried several kinds of plasters and other kinds of medicines, but did not seem to get any lasting benefit. Hearing Dodd's Kidney Pills so highly recommended, I decided to try them and they made a complete cure of me. That is two years ago now, and as I said before I have had good health ever since I used Dodd's Kidney Pills."

Dodd's Kidney Pills cure once and for all. There is no stage or form of Kidney Disease that they do not cure completely and permanently.

QUESTIONS AND ANSWERS. Miscellaneous.

FEEDING BRAN.

What is the best proportion to mix bran and oats for horses? I am short of oats, and will have to mix something with the oats. J. C. Assa.

Ans.—About one-third bran to two-thirds oats. If the grain is mixed with cut sheaf or straw, the horses will get more out of it than if they ate it mixed. Barley or mill feeds may also be used instead of bran.

Veterinary.

NASAL DISCHARGE.

In October last I had one mare start to cough slightly; soon a lump appeared about the size of a hen's egg under the throat, between that forked bone, on the left side; then she started discharging from the left nostril, and continued till several days ago. The discharge was of a dirty color, a great deal like a slate. About eight weeks after the first one, another one came down with the same thing, she running at the right instead of the left nostril, and neither discharges only at one nostril; both are discharging at the present time. What is the matter, and what is best to do for them? A SUBSCRIBER.

Ans.—Report the case to the R. N.-W. M. police. Nasal discharges should all be considered suspicious until it is settled that such are not cases of glanders. If these cases had been strangles (distemper), the enlargements under the jaws would have burst, and the discharge stopped ere this.

THE SPICE OF LIFE.

An old woman went to Mr. Murphy's grocery store early one morning.

"Good morning, Mr. Murphy," she said.

Murphy was busy writing and made no reply. "What are you doin'?" persisted the old woman in her efforts to be sociable.

"I'm making out a list."
"What kind of a list?"
"A list of men in this block that I can lick."

"Is Dinnis, my husband, on it?"
"He is. His is the first name."

With that the old woman went to look for her husband to tell him that Murphy was going to "lick" him. Dinnis heard the news, and then hurried to Murphy's store.

"Murphy," he said, I understand that you're makin' out a list of men you can lick."

"I am," answered Murphy.
"Is my name on the list?"
"It is. It's the first one."

"I'll have you understand that never yet lived a Murphy that could lick an O'Brien," said Dinnis, taking off his coat. "And you can't lick me."

"In that case," said Murphy, "I'll scratch you off the list."

AGGRESSION.

What time I led a bachelor life,
Exempt from carking care and strife,
I had the wardrobe all
Within its precincts ample spaced
The hooks were with my garments graced,
Hung ready for my call.

I took a wife, and I agreed,
Though 'twas not written in the screed
That joined us two as one,
That she might have an even half
To store her varied female chaff—
And thought the thing was done.

She took the half and stored the stuff,
Sweet heaven knows she had enough
Of waists and skirts and such!
But then began in Russian wise
To slow extend her boundaries,
I thought, a deal too much.

In vain I strove! By day and night,
As stubborn as a Muscovite,
She pressed on my frontier;
Until one morn quite boldly she
Annexed in its entirety
The space I held so dear.

And now where once were hung my things
Her large assortment gayly clings,
And naught to change can awe her,
And I, in need of some attire,
Kneel down and search, while I perspire,
The bottom bureau drawer.



A Comparison The Plum in the centre is a Cheney, grown in Brandon Nur cry, 1904. The two outside plums are grown and imported from California.
The Cheney Plum is very hardy and productive, bears early, and is of good size and quality.

We have this Spring a very complete line of

NURSERY STOCK

We offer 2,000 Crab Apple Trees at 50c. per tree. Currant Bushes, best varieties, 2 years old, at \$1.50 per doz. Raspberry Plants, best varieties, at \$3 per 100. Peony, 15 named varieties, at 25c. and 35c. per plant. Also hardy Shrubs, Roses and perennial flowering plants

Seedling Trees, Maple, Ash, Cottonwood, etc., at \$5.00 per 1,000.

Write for Price List before you order to

**H. L. Patmore, Brandon Nursery,
BRANDON, MAN.**

WORK HORSES

Saddle or Driving

Horses for any Purpose Will be Greatly Benefited by the Use of

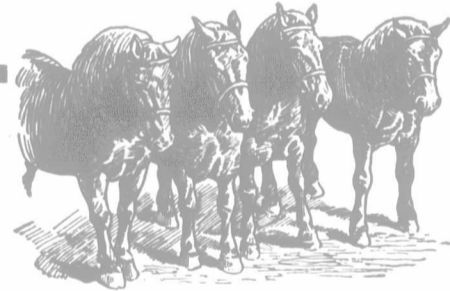
Prussian Stock Food

It is a superior remedy for all ailments peculiar to horses, as well as a preventive of disease, a renovator and conditioner. It tones up the stomach, assists digestion, regulates the bowels, stimulates and corrects the action of the liver, removes all poisons from the blood, destroys worms and bots and regenerates the system. It will loosen the hide, the staring coat will become sleek and glossy, the head will become erect, the eyes clear and bright, it will infuse new life into the gait. Equally good for cattle, hogs and sheep. 25-lb. pails, 1,200 feeds, \$3 50; pkg., 50c. and \$1.

Prussian Heave Powders, a certain remedy for heaves, coughs, distemper, epizootic, etc. Price, 50c. pkg.
PRUSSIAN WORM POWDERS will expel worms and bots from horses.

Prussian Barbed-Wire Liniment and Prussian Spavin Cure are guaranteed remedies. Tens of thousands of horsemen use Prussian Stock Food and the other Prussian specifics regularly. They have been on the market for 15 years. Ask your dealer for free copy of our Stockman's Handbook, or send for it to PRUSSIAN REMEDY CO., 20-24 Chicago Ave., St. Paul, Minn.

For Sale by G. OLAFFSON & CO., Agents for the Province of Manitoba.



Best for Winter Use

"I fed Prussian Stock Food to my horses during last winter, and they kept in healthy condition all the time, and came through in fine shape for spring work, and I gave them far less feed than I ever gave them in a winter before."—H. W. LOOKER, Bloomingberg, Ohio.

"I have used several 25-lb. pails of Prussian Stock Food in feeding my horses. It is the very best thing that can be given to horses, either for farm work or road driving, as it keeps them healthy and in prime condition all the time."—JAS. MERWIN, Trempealeau, Wisconsin.

This is the Month You'll Need It

Did you ever notice that about this time of the year your horses and cattle usually have more ailments and injuries than at any other time? Of course you will see to it that you have

DR. CLARK'S WHITE LINIMENT

handy in the stable. This is the safest, surest and quickest all-round liniment on the market, and you get about a pint of it for 50c.

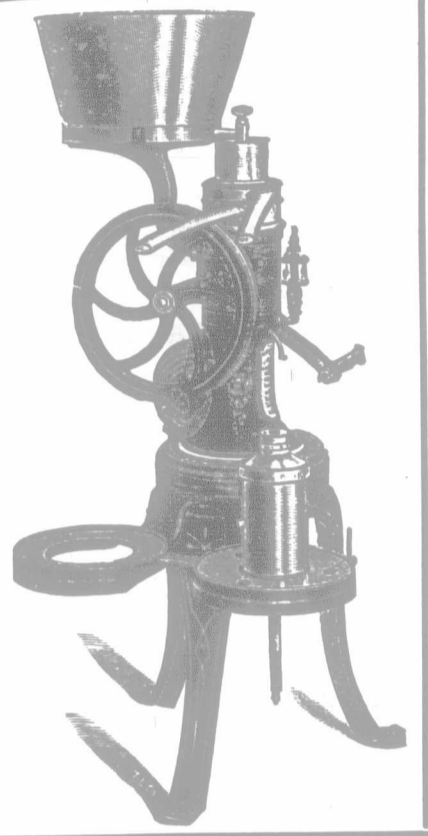
SOLD BY ALL DEALERS.

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

ADVERTISE IN THE FARMER'S ADVOCATE.

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

NATIONAL GREATNESS



Depends on the Prosperity of the Farmer.

The prosperity of the farmer depends largely on having a

National Cream Separator

which will save time and labor, and insure additional profits in the dairy.

Many a farmer has lost the price of a Separator by delaying purchase. Buy now. The National soon

Pays for Itself.

We know the merits of our machine, fear no opposition, and solicit a free trial.

Don't worry about the price, the extra cream will settle for the National.

The RAYMOND MFG. CO., Limited, P. O. Box 518, WINNIPEG, MAN.

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

ALABASTINE

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

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

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

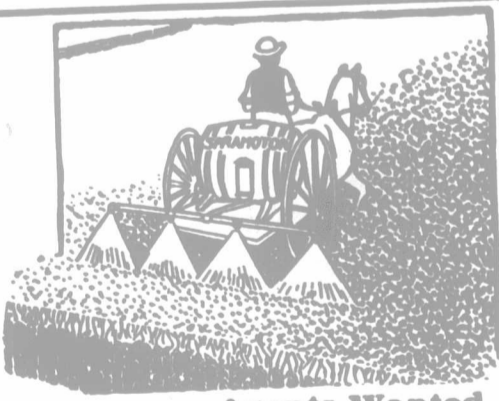
You Can Kill Mustard Absolutely Free

In a field of growing wheat without injuring the grain, through using the

Spramotor

The proof is positive and the results sure. The improvement in the crop will more than repay you for the trifling expense and the investment in the Spramotor. Write for full particulars; free Booklet D.

SPRAMOTOR CO., 68-70 King St. London, Ont.



Agents Wanted

GOSSIP.

The Jersey breeders of the U. S. are already making preparations for the attempt of their lives to push the Jerseys to the front at the forthcoming Lewis & Clark Exposition, at Portland, Oregon, this summer. They have already brought to Portland, in addition to Loretta D. (which is owned there), the following Jersey cows from the St. Louis demonstration: Brown Lassie Duchess 2nd, Eurybia, Ovozan 23rd of the Hood Farm and Zalo of Menlo, Dorinda Darling, Prize May, thereby giving them the first, second, third, fourth and fifth, ninth and

twenty-fifth leading Jersey cows at St. Louis.

These cows were brought to Portland by express, and placed on the Crystal Spring Farm, owned by the Ladd Estate, and it is said further that the United States is to be searched by experts for any other fine specimens, and if found will be taken to Portland and there placed in the hands of experts to be prepared for the coming contest.

The Briton—Well, 'ugging is 'armless, haffer hall!
The Yankee—You're wrong, friend—huggin' is arm-full.

GOSSIP.

John—Can you tell me how they get the water in the watermelon?

Sam—No, sah.

John—Why, they plant the seed in the spring.

At the Delta Farmers' Institute, W. H. Ladner, Ladner's Landing, B. C., gave an address recently on treating grain to prevent smut. Mr. Ladner stated that smut could be prevented in grain by using lime on the seed. He had experimented with this and found it more effective than bluestone or formalin. He used a small proportion of salt with the lime, which he found increased its efficiency.

A RANCHER ON THE BULL QUESTION.

Regarding range bulls, I do not see how we can very well improve on the present system, which is a great improvement on the old one of leaving them on the range all the year round. Nowadays most ranchers gather them in the fall, shelter and feed them more or less during the winter, and herd them separate from all other stock till between the 1st and 21st of July, when they are scattered all over the range. I think, myself, there is a great deal of unnecessary talk about Eastern bulls not being fit for Western range conditions: the trouble, or it seemed so to me, was after the bull had put in a good summer's work, he needed to be taken up and taken some care of, for no animal on the range I have noticed dies more easily than a spent bull. As regards the price of bulls, or what you care to pay for them, is to my certain knowledge a very hard question to answer. I have used myself good grades, low-down, blocky, and paid \$25 to \$40 for same as calves, and several times I have sold my two-year-old steers for beef. They had been well wintered when taken from the cows, but when outfits put up 1,200 tons of hay and have 13,000 to 15,000 cattle, they cannot do the same as us smaller men, and as for myself they are perfectly welcome to all the high-priced pure-bred bulls. I myself would much rather spend the difference in feed and shelter. GOOD CARE.

HOW MANITOU CREAMERY MEN FEEL.

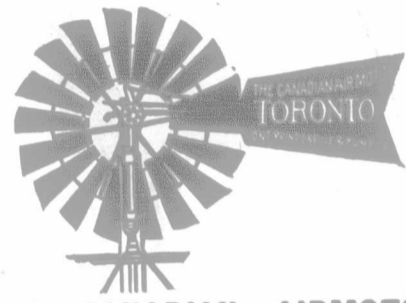
There was a fair attendance of shareholders and patrons at the annual meeting of the Manitou Creamery and Cheese Factory Company, held in Spedding's Hall on Saturday afternoon last. Mr. Wm. Story, chairman of the Board of Directors, occupied the chair, and the Secretary-Treasurer, Mr. Jas. Boyle, presented his report for the season of 1904. At the beginning of the season, there were neither supplies nor cash on hand with which to commence work. At the close of the season, there was \$79.10 in the treasury, and butter boxes, parchment paper, salt, fuel, etc., to the value of over \$89 on hand after having paid the patrons 12 and 15 cents per pound for the summer and fall butter respectively.

That confidence in the creamery has once more been established, that it is now in good shape for the opening of another season, and that a good market for all the butter that can be produced is assured is due to the untiring efforts of Mr. Story and Mr. Boyle, who have spent lavishly, not only of their own time, but of their own funds as well. Mr. Story explained fully the schemes resorted to by buyers in Winnipeg to secure the produce of the factory at prices from three to four cents lower than what the butter was really worth, and how they had found it necessary to look elsewhere for a market, eventually shipping the butter to the coast. Another season this difficulty will not have to be faced as the superior quality of the product of the factory is now recognized in Winnipeg and good prices offered for all that can be turned out.

Messrs. Boyle and Story, while declining to act on the board another year, finally acceded to the wishes of the meeting, and consented to do so on the understanding, however, that they receive some remuneration for their time and trouble. Mr. Findlay McDonald, the third member of the Board, withdrew and Mr. Jas. Fargey was appointed in his place. The creamery will open in the spring with bright prospects, and the indications are that a more liberal patronage than ever before will be accorded it next season.

Fistula and Poll Evil

Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 16 to 30 days. Fleming's **Fistula and Poll Evil Cure** is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it. FLEMING BROS., Chemists, 46 Front Street, West, Toronto, Can.



THE CANADIAN AIRMOTOR

The Best—Nuff said.

Pumps We have just got out a special line for our Western trade. If you want something extra good in a pump, send for our new Pump Catalogue.

Stickney Gasoline Engines All sizes. Nothing better made. Send for our new Engine Catalogue—it tells all about them.

Horse-powers The B. Bell & Son line of Horse and Tread Powers, Feed Cutters and Land Rollers.

Ontario Wind Engine & Pump Co., Limited, Winnipeg.

THE FIRST ANNUAL MANITOBA AUCTION SALE

PURE-BRED CATTLE

Will be held in the new C. P. R. Sale Pavilion, WINNIPEG

Commencing on May 31st

under the auspices of the LIVE STOCK ASSOCIATIONS. Entries close April 16th. Catalogues issued after that date. Entries should be in early.

Reduced Rates for Passengers and Stock. Single return fare for passengers. A uniform rate of \$2.00 per head on stock from seller's station in Manitoba or Territories east of Regina.

Stock delivered to buyer's station in Manitoba or Territories east of Regina for \$2.00 per head. West of Regina, \$5.00 per head.

For entry forms and full particulars apply **GEORGE H. GREIG,** Secretary Live Stock Associations, Winnipeg.

Go to Calgary!

If you ever expect to buy some good hard winter wheat lands at low prices, and on easy terms. NOW IS THE TIME.

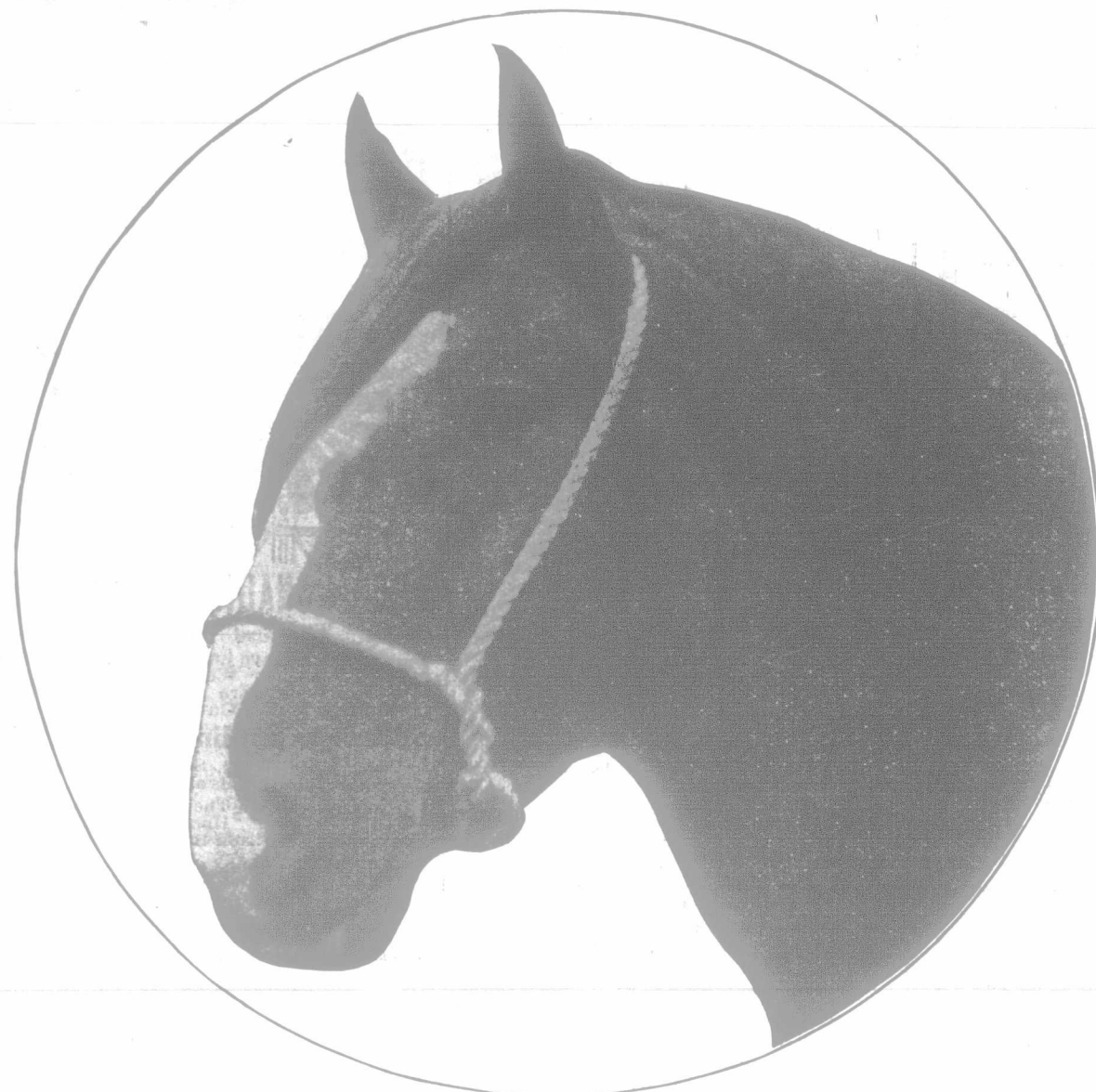


We have the only large tract of first-class HARD WINTER WHEAT LANDS in Alberta, containing 100,000 acres of strictly high-grade wheat lands, specially adapted for raising hard winter wheat, also oats or barley; from five to twenty miles from Calgary, GOOD MARKETS, MILD CLIMATE. Good class of settlers coming in. Close to schools, colleges and churches. Write for booklet and maps, mailed free of charge.

Calgary Colonization Co., Limited, Calgary, Alta.

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

HIGH-CLASS STALLIONS



Clydesdales, Percherons and Hackneys.

J. A. S. MACMILLAN

IMPORTER AND BREEDER.

Box 413, Brandon, Man.

OUR MOTTO: "Nothing but the best,"
as the following prizes will show.

Also guarantee every stallion as a sure foal-getter. Our record of Stallions sold as producers cannot be beaten. Syndicates and individuals wanting a stallion would do well to communicate with me before purchasing elsewhere.

Mares and Fillies always on hand. Prices right. Terms easy.

Noted Prizewinners Sold:

CAIRNHILL

The Champion Stallion of America and Canada for 1903.

PLEASANT PRINCE

1st Prize, Aged Class, Dominion Exhibition Winnipeg, 1904.

1st Prize, Aged Class, and Diploma all ages, Brandon Fair, 1904.

ST. CHRISTOPHER

1st, Winnipeg Fair, 1901. 1st and Cup, Brandon Fair, 1901.

PILGRIM

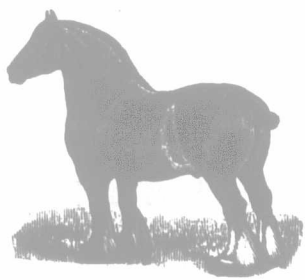
1st and Cup, Winnipeg Fair, 1900.

BURNBRAE

1st at Pan-American, Buffalo. 1st and Sweepstakes, Winnipeg and Brandon, 1898.

FONTHILL STOCK FARM

50 SHIRE HORSES AND MARES to choose from.



MORRIS & WELLINGTON,

FONTHILL, ONTARIO



FOR SALE: The Clydesdale Stallion FITZPATRICK 3951.

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

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

CLYDESDALE STALLIONS

Eight stallions and stud colts by the famous sires, Benedict, Baron's Pride and Lord Lyndoch, ranging in age from two to seven years, for sale during the next six weeks. Prices, \$500 to \$1,000, cash. Address,

BROOKSIDE FARM COMPANY
Fort Wayne, Ind.

D. FRASER & SONS

EMERSON, MAN.
Breeder and importer of Clydesdale horses, Shorthorn cattle, Southdown sheep, Yorkshire, Berkshire, Tamworth and Poland-China pigs.

FOR BEST VACCINATION AGAINST
BLACKLEG
Use Only the Vaccine Made by the Discoverer, namely,
"PASTEUR"
"BLACKLEGINE" is the best and most convenient.
Pasteur Vaccine Co., Ltd., Chicago, New York, San Francisco

QUESTIONS AND ANSWERS. Veterinary.

INDIGESTION.

Two-months-old calf has sunken eyes, will not drink, and is bloated and humped up. It has been getting separator milk and whole oats. A. W. M.

Ans.—This is indigestion, probably caused by the whole oats. Oats for calves should be finely chopped, and the hulls sifted out. Purge him with 4 ozs. raw linseed oil. If he will not drink, drench him with new milk, with about 1/2 of its bulk of lime water. If he will drink, give about that proportion of lime water in new milk. Give 20 grains each gentian, ginger and nux vomica twice daily. V.

STEADILY LOSING CONDITION.

I have a horse which is steadily going down in condition; even on the coldest days he would sweat badly, and get washy after being driven three miles. Appetite is good, and otherwise seems to be in fair health. Feed hay, oats (1 1/2 gals.) and prairie hay. Had teeth fixed in fall. Have not seen any sign of worms. H. W.

Ans.—If this horse has a heavy coat, it would be a good plan to clip him. Feed the following: Nux vomica (pulv.), 1/4 a dram, morning and night, and mix through feed daily 2 ounces of bicarbonate of soda. Once a week give as a drench a pint of raw linseed oil.

ANOREXIA.

A mare eleven years old has had the mange this winter. She seems to be nearly over that, the new hair is coming out again, but she won't eat any grain. I have tried giving it to her every way, but she will not eat it. She has got down very thin. I saw the veterinary about her, and he gave me some medicine to give in her drinking water, but it does not seem to do her any good. Can you tell me anything that will be good for her? W. R. J.
Boyne Valley.

Ans.—Take fluid extract nux vomica, 2 ounces; fluid extract gentian root, six ounces; whisky, pint and a half; mix together, and with a syringe or bottle, give two tablespoonfuls twice daily in half a pint of water.



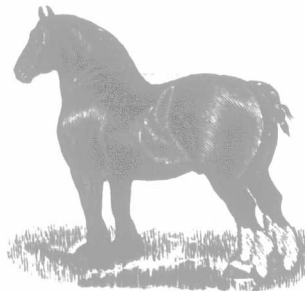
Craigie Mains Clydesdales and Shorthorns,

FOR SALE:

Clydesdale Stallions from 2 to 7 years old, also some good bargains in fillies and mares. Over forty to select from, all of A1 breeding.

Shorthorns.—A few extra choice heifers and one richly-bred young Cruickshank bull, sired by the noted Clipper Hero.

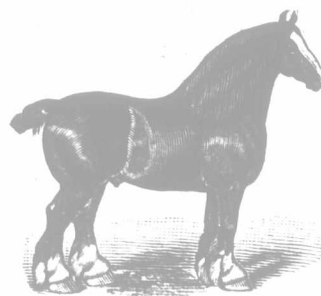
A. & G. MUTCH, Lumsden, Assa.



Clydesdale Stallions

Our third consignment since Toronto Fair has just arrived, per S. S. Athena, from Glasgow, which includes several of the best colts ever landed in America. Prices right. See this lot. om

JAMES DALGETY, London, Ont.



SIMCOE LODGE STOCK FARM

CLYDESDALES

Any persons wanting to purchase Clydesdale fillies and stallions for breeding should call on us before buying elsewhere, as we always have a number of prize-winners in our lot.

HODGKINSON & TISDALE
BEAVERTON, ONT.

Long distance Phone in connection with Farm
70 miles north of Toronto, on Midland Division of G. T. R.

Special Notice to Our Readers.

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

FARMER'S ADVOCATE AND HOME MAGAZINE.

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

AMERICA'S LEADING HORSE IMPORTERS

AT THE GREAT ST. LOUIS WORLD'S FAIR WERE AWARDED
THE PREMIER CHAMPIONSHIP OF PERCHERON HORSES.



Summary of Winnings:

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

McLAUGHLIN BROS.,

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

WHAT A HORSE'S LEGS

are to a horse—so is

STEVENS' OINTMENT

to a horse's legs. Get a box now! Then it will always be ready at a moment's notice. It keeps its strength for generations. Cures

**Splint, Spavin,
Curb, Ringbone,**

and all enlargements in horses and cattle.
75c. small, \$1.50 large box, at Chemists,
or direct from

Martin, Bole & Wynne Winnipeg, Man.
Wholesale Agents. om



50 Years'
Success!!

Hawthorn Bank Stock Farm

**CLYDESDALES
AND HACKNEYS**

Come and get a choice of this magnificent new importation before they are all gone. Come and get a mare that will be a credit to yourself and to the breed, or a young stallion that will grow into money.

A SAMPLE OF THE GOODS:

NORMAN (11838), Male, Bay, foaled 6th of June, 1901.
Bred by Sir James Duke, Bart, Loughton, Shortgate, R. S. O., Sussex.
Sire Black Prince 10164.

- 1st dam Loughton Queen (11310), sired by St. Lawrence 3220.
- 2nd dam Marie Stuart (8326), sired by Darnley 222.
- 3rd dam Jean of Balquidroch (5400), sired by Marquis 1215.
- 4th dam Rose (5399) sired by Duke of Edinburgh 246.
- 5th dam Jewel (273), by Renfrew-hire Jock 686.
- 6th dam Jewel, sired by Sir James (780).

SHORTHORNS

Bulls and heifers for sale, both imported and home-bred; some toppers in the bunch; all good colors. If you are in the market for either Clydesdales or Shorthorns, don't buy before you see me.

JOHN GRAHAM, -- Carberry, Man.

ALEX GALBRAITH & SON

Never in all the years that this firm has been in the business of importing high-class stallions have they been in a position to offer such a **uniformly select lot** as at the present time.

Write for Catalogue to

BRANDON MANITOBA

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

QUESTIONS AND ANSWERS.
Veterinary.

INDIGESTION.

Nine-months-old colt occasionally turns his head to flank, paws and kicks a little. B. S.

Ans.—This is due to indigestion. Purge with six to eight ounces raw linseed oil; follow up with half a dram each ginger and gentian in damp food night and morning. Feed on small quantities of good clover hay and scalded chopped oats and bran. See that he gets regular exercise. V.

INAPPETENCE.

My calf did well until about five weeks ago; since when it will eat nothing but straw. J. B. R.

Ans.—It is probable it was over-fed when quite young. Purge it with six ounces raw linseed oil. Then take one ounce each sulphate of iron, gentian, ginger and nux vomica; mix, and make into twenty-four powders, and give a powder three times daily in half a pint of cold water as a drench. Feed on new milk and good clover hay in reasonable quantities. V.

UNTHRIFTY COLT.

Three-year-old driver, getting regular exercise, and being fed on hay, oats, bran and boiled barley, does not thrive. He is hidebound, and hind legs swell, and he has scabs around the fetlocks. Give treatment for a speedy recovery. M. W. M.

Ans.—The colt is sadly out of condition, and the symptoms indicate worms. Speedy cures cannot be effected in such cases. It requires time and care to restore such an animal to good condition. Get 1 1/2 ozs. each sulphate of iron, sulphate of copper, tartar emetic and calomel; mix, and make into 12 powders; give a powder night and morning. Give nothing to eat for 10 hours after he takes the last powder. Then, give a purgative of 7 drs. aloes and 2 drs. ginger. Feed bran only until purgation commences. After purgation ceases, give 1 dram each of gentian, ginger and nux vomica, three times daily. Exercise him daily, and feed as you have been feeding. Apply oxide of zinc ointment to the scabs and cracks. V.

PROBABLY TUBERCULOSIS.

Cow seems stiff and grunts while eating or chewing her cud. She eats well, and her bowels are natural; but she is failing in flesh and getting weak. She has a desire for chewing bones and wood. M. V. M.

Ans.—I am of the opinion she has pulmonary tuberculosis, and, if so, she will not get better. As her appetite is good, and her bowels normal, we must conclude that the grunt and stiffness are not due to digestive trouble. I would advise you to have her examined by your veterinarian. If you decide it is stomachic trouble, and decide to treat her yourself, give her 2 lbs. Epsom salts, and follow with 1 dram each sulphate of iron, gentian, ginger and nux vomica three times daily. The abnormal appetite is due to a want of phosphates in the system, and can be corrected by giving her all the salt she will eat, and 1 dram phosphate of lime three times daily. V.

DISTEMPER—CHRONIC COUGH.

1. Several of my horses have had distemper, and two of them continue to cough for six weeks after recovery.
2. Give treatment for distemper. W. C. S.

Ans.—1. Chronic coughs resulting as a sequel to distemper are hard to treat. Give each horse a ball composed of the following every morning, viz., 2 drams solid extract of belladonna, 1 1/2 drams gum opium, 1 dram camphor, and 30 grains powdered digitalis, mixed with sufficient treacle to make it plastic.

2. Distemper is liable to many complications, which require treatment according to symptoms. Treatment for an ordinary case of what is called regular strangles or distemper, consists in good care, blistering the throat with equal parts spirits of ammonia, oil of turpentine and raw linseed oil, applied twice daily until the parts are blistered; giving internally 3 to 4 drams hyposulphite of soda, and lancing the abscesses as they form. V.

HORSE OWNERS! USE

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

Bog Spavin
Lameness resembles bone spavin, but the bunch is in front of the true hock joint, a little to the inner side, and is soft and yielding, hardening sometimes as the case grows old.
Fleming's Spavin Cure (Liquid) is a special remedy for the soft and semi-solid bunches that make horses lame—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It isn't a liniment to bathe the part, nor is it a simple blister. It is a remedy unlike any other—doesn't irritate and can't be irritated. Easy to use, only a little required, cures the lameness, takes the bunch, leaves no scar. Money back if it ever fails. Write for Free Horse Book before ordering. It tells all about this remedy, and tells what to do for blemishes of the hard and bony kind.
FLEMING BROS., Chemists,
46 Front Street, West, Toronto, Can.

THICK, SWOLLEN GLANDS

that make a horse wheeze, have Thick Wind or Choke-down, can be removed with

ABSORBINE
or any Bunch or Swelling caused by strain or inflammation. No blister. No hair gone and horse kept at work. \$2.00 per bottle. **ABSORBINE, JR.,** for mankind, \$1.00 delivered. Cures Gout, Tumors, Varicose Veins, Etc. Book free. Made only by **W. F. Young, P. D. F., 46 Monmouth St., Springfield, Mass.**
Canadian Agents, Lyman, Sons & Co., Montreal.

**FOR SALE:
Cleveland Bay Stallion**

8 years old, 16 1/2 hands high, weighs 1450 lbs.; considered by competent judges to be the finest horse of his breed in Canada. Registered in Ontario Stud Book. Is now being wintered near Winnipeg and is in perfect condition. Pedigree and full particulars may be had on application to
P. O. BOX 539.

WINNIPEG, MANITOBA.

A chance of a lifetime to buy a well-bred 3-year-old

Clydesdale Stallion
right. **CANADA'S PRIDE** (4947) C. C. S. B. Bay, with white star, near forehead and both hind pasterns white. Acclimated and sure winner, or come and see.
ROBERT ELLIOTT, Box 91, Neepawa, Man.
C. P. R. and C. N. R. stations.

Clydesdale and Hackney Stallions

On four horses shown at the Dominion Exhibition this year, I won 8 prizes—two championships, two diplomas, three firsts and one second; also at Calgary the gold medal given by the Clydesdale Society of Great Britain for best Clydesdale, besides numerous other first prizes. If you want a young horse that will make you money, and at a right price, write or see me.
WILL MOODIE, De Winton, Alta.

STALLIONS FOR LAND.

Fifty Percheron, Shire and Hackney Stallions to trade for good land or city lots in Western Canada. Won more Premier Championships at World's Fair, St. Louis, than any other exhibitor; ages 3 to 7 years, good colors, choicest breeding.

LEW W. COCHRAN,
CRAWFORDSVILLE, IND.
FOR SALE: The registered champion
HACKNEY STALLION
CONFIDENT SQUIRE.

A good actor, sound, and a proved stock getter. Champion at Winnipeg, 1901; at Brandon, 1904. Price and terms right.

SAM. MACLEAN, Franklin, Man.
KELWOOD STUD FARM
Importers and breeders of Thoroughbreds. Also Buff Orpingtons and Game fowls.

THE STALLIONS:
"Kelton," Imp. "Abbeywood" at stud. Fee, Thoroughbred, mare, \$25 to 1 sure. Mares from a distance kept at \$2 per month.
DALE & PULFORD, South Qu'Appelle, Assa.

Save yourself from disaster
by insuring your crops
against hail with

THE
**Manitoba Farmers' Mutual
Hail Insurance Company**

As a sensible business farmer you
cannot afford to lose \$1,000.00
for \$28.00, the cost to our
members last year for
200 acres.

DIRECTORS:

D. W. McCuaig, Jas. Steedsman, Deloraine.
Portage la Prairie. George Carefoot, Virden.
John Vance, Brandon. J. K. Hall, Gladstone.

W. C. GRAHAM, J. H. SCHULTZ,
Manager. General Field Manager.
Box 513. WINNIPEG, MAN.

CLOSING-OUT SALE

OF

Democrat Wagons

Manufactured from the very best stock.

B Standard wheels, Duplex gear, steel axles
and tires. Body 6 feet, with two seats,
cushions and lazy backs. All ready to paint,
\$48.00. If wanted painted, \$9.00 extra. Pole
\$6.00 extra.

We guarantee these wagons to be the best
value for the price of anything in Manitoba.
They will soon go at that price, so will have to
order quick or they will be gone.

We guarantee them as represented or
no sale.

**R. McKay, Brandon,
Manitoba**

I CURED MY RUPTURE

I will show you **FREE**
how to cure yours



"I was helpless and bedridden for years from a bad rupture. No truss
could hold. Doctors said I would die if not operated upon. I fooled
them all and cured myself by the Rice Method. I advise all ruptured
persons to use this method," writes Mr. Robt. Howard,
Muskoka Co., Ont. A **Free Trial** of this marvellous Method sent
Free to all who write at once, giving description of their case. Thousands
have been cured and **IT WILL CURE YOU.** Write to-day.

Dr. W. S. Rice, 2½ East Queen St. Toronto, Ont.
Block (285)

Advertise in the Farmer's Advocate.

DON'T BUY GASOLINE ENGINES

UNTIL YOU INVESTIGATE "THE MASTER WORKMAN," a two-cylinder gasoline engine superior in all one cylinder engines; revolutionizing gas power. Costs Less to Buy and Less to Run. Quickly, easily started. No vibration. Can be mounted on any wagon at small cost—portable stationary or traction. Mention this paper. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mfrs., McHugh & 14th Sts., Chicago. THIS IS OUR FIFTY-FIRST YEAR.

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

QUESTIONS AND ANSWERS.
Miscellaneous.

NUMBER OF MARES FOR A STALLION.

How many mares is a good, strong three-year-old stallion (Clydesdale) good for in a season, to do justice to mares and horse? M. S. W. Livingstone.

Ans.—We consider forty to sixty clean, open mares as sufficient for a horse of that age in order to ensure a satisfactory percentage of foals. Some people allow a greater number, but the results they get are not always satisfactory, due to a low-foaling percentage. Occasionally a horse will be extra sure, in spite of a heavy season; but it is not safe to take the risk.

KEEPING EGGS.

Will you kindly give me the best way to preserve eggs in summer? Is water-glass a good preservative? J. S.

Ans.—Experiments go to show that a solution of waterglass (sodium silicate), one part waterglass to eight parts water, is the best preservative for eggs. Simply make the solution, keep it in tubs made by cutting a kerosene barrel in two; then clean the eggs and put them in as laid. Good results are also obtained from using a solution of lime water. Slack some lime, then add it to water until no more will go into solution. Dry preservatives, such as bran, salt, grain, etc., are not so satisfactory as the liquids.

WORK IN B. C.

A correspondent asks about the opportunities for working men on farms in the New Westminster district of British Columbia.

Ans.—In British Columbia we have the unfortunate circumstance of cheap Oriental labor competing with native whites, consequently wages for manual labor are low, and besides whites do not care to work with the Japs or Chinese. This, by the way, is another reason why the lumber men of B. C. should be able to place lumber on the prairie market cheaper than can the American, for the United States Government practically prohibits the employment of Oriental labor in the woods and mills of the Pacific Coast States.

Veterinary.

MUSCULAR ATONY AND NERVOUS IRRITABILITY.

The muscles of my horse's shoulders and elbows, and sometimes those of the neck, tremble, especially after drinking cold water or after exercise. H. M. D.

Ans.—This is due to want of muscular tone and irritability of the nerves, and will probably disappear when he is put to regular work. Give him regular but not excessive exercise, and gradually increase the amount of exercise day by day. Rub the muscles well three times with camphorated liniment, and give him 4 drams bromide of potash three times daily. V.

INDIGESTION IN A SOW.

Three-year-old sow farrowed during the night. At 7 a. m. fed her a little chop (wheat and corn) and bran mixed with kitchen slops; did not feed again until 8 p. m., when I gave feed of sloppy shorts (a gallon or more), which she ate up clean. Next morning she refused to eat, and for forty-eight hours neither ate nor drank; she then drank about a quart of milk and water, and since then for three days she drinks only a little, and hardly eats at all. The first two days she seemed constipated, but is not so bad now. She has been suckling 9 pigs all the time, and they are looking fairly well. Sow was in good condition when she farrowed. Was the trouble indigestion? What is the best treatment? B. C. D. C. H.

Ans.—Judging by the symptoms, it was a case of indigestion. Would advise in future to rely on shorts in moderate quantities, and cut out the chopped wheat and corn. Give brood sows plenty of exercise, a light but nutritious diet, and you will have little trouble.

**Gapey
Chicks**



This is the most notorious, wide-spread and destructive parasitic disease of poultry. Feed Dr. Hess Poultry Pan-a-ce-a regularly as directed, beginning when the chicks are a week old and continue until they are well feathered, and if you have loss from Gapes, Indigestion, Leg Weakness and the like, the written guarantee says you get your money back.

**DR. HESS
POULTRY
PAN-A-CE-A**

is the scientific poultry tonic and reconstructive, formulated by Dr. Hess (M.D., D.V.S.). It not only prevents and cures diseases, but makes the young grow fast, healthy and strong. Costs but a penny a day for 30 to 60 fowls.

1-2 lb. package 35c; 5 lbs. 85c; 12 lbs. \$1.75; 25-lb. pail \$3.50. Sold on a written guarantee.

Send 3 cents for Dr. Hess 48 page Poultry Book, free.

DR. HESS & CLARK
Ashland, Ohio, U. S. A.
Keep your poultry free from lice with Instant Louse Killer.

It's
it's an honest
well made Revolver
that's Safe to use and
Simple in construction.
write for Catalogue #6
HARRINGTON & RICHARDSON ARMS CO.
WORCESTER MASS

MOUNT FARM BERKSHIRES

CHOICE-BRED STOCK

now for sale;
PAIRS SUPPLIED NOT AKIN.

Inspection requested, and correspondence invited
and promptly answered.

C. G. BULSTRODE,
Mount Farm. QU'APPELLE, ASSA.

YORKSHIRES

We are now booking orders for
spring litters.

The females in our herd in
1904, at the Dominion Exhibi-
tion, took two first prizes, two
seconds, one third and the
Junior Championship.

We have still a few Barred
Rock cockerels left. Prices reason-
able while the supply lasts.

WALTER JAMES & SONS,
Rossier. - - - Manitoba

Advertise in the Advocate

GOSSIP.

The prices of Southern Alberta land are low now, but when the crop of winter wheat will yield in value from three to five times the first cost of the land, it can be very readily seen that lands which are now worth from \$10 to \$15 an acre will be eagerly sought after at \$40 and \$50.

"CAUSTIC BALSAM GIVES UNIVERSAL SATISFACTION.

Wapella, N.-W. T., Canada,
April 22, 1904.
The Lawrence-Williams Co., Toronto, Ont.:

Please send me by mail any nice show cards or advertising matter so I can make a good show. I have sold quite a lot of GOMBAULT'S CAUSTIC BALSAM, and it has given universal satisfaction. Yours for push and sales.

JAMES A. MACDONALD.

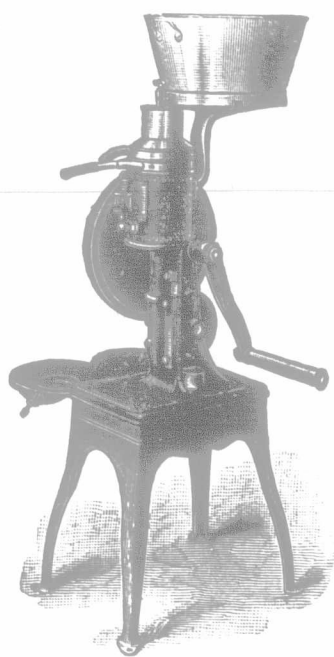
At the Provincial auction sale of cattle, held at Guelph, Ont., on March 22nd, under the auspices of the Guelph Fat-stock Club, 48 bulls sold for an average of \$73.78; 18 females brought an average of \$76.12, and the 61 head sold made an average price of \$74.77. The highest price was \$250 for a Hereford bull, Forest Pride, contributed by John A. Gowanlock, Forest, and purchased by Robert Hanna, Bostock, Ont. The highest price for a Shorthorn bull was \$125 for Prince of Chesterfield, contributed by John Currie, Eramosa, and purchased by Jas. Auld, Eden Mills.

At a meeting of the cattle committee of the Western Fair Board, held at London, March 25th, the prize list was revised, the only change of importance made being in the herd prize for Holsteins, which will this year be graded: herd, namely, one bull, one cow four years old or over, two-year-old heifer, yearling heifer and heifer calf. The following were appointed judges: Shorthorns—John Isaac, Markham; reserve, Jas. Douglas, Caledonia. Herefords, Angus and Galloways—R. J. Mackie, Oshawa; Walter Gooding, Guelph. Jerseys and Guernseys—Rock Bailey, Union; J. L. Clark, Altona. Ayrshires—Jas. Boden, St. Anne, Que.; Geo. McCormack, Rockton. Holsteins—B. Mallory, Frankfurt; M. Richardson, Caledonia.

TRADE NOTES.

A KNOTTY PROBLEM.—A good test of a piano is its ability to remain in tune, and this problem is nearer solution in the Gourlay piano than any other now on the market. When it is considered that the tension on the strings and pins of a seven-and-a-third octave instrument is from eighteen to twenty-two tons, the layman can realize that it is no common task to prevent these strings and pins from "giving," and thus lowering the pitch. The Gourlay has in its construction a pin block which is unaffected by temperature and solid as Carlyle's "Frederick the Great." The string which can depend for support on a pin set like an immovable rock need not fear the varying humors of the weather man.

LAND AT CALGARY.—The Calgary Colonization Company, Limited, of Calgary, Canada, who under the name of the Canadian Land and Investment Co. have been operating successfully during the last two years in procuring new settlers to the High River country, are now directing their attention to the disposing of a hundred thousand acres of first-class winter wheat farming lands near the city of Calgary, having practically disposed of their holdings in the High River country. As one result of their success in bringing well-to-do farmers from the States into the High River district, it is noted that over forty car-loads of immigrant movables, consisting of horses, cattle, farming implements and household goods, have been unloaded at High River from one locality alone in southern Iowa. These represent only a small number of the persons who have purchased lands in the High River district recently.



DE LAVAL SEPARATORS

The Kind the Creamerymen Use.

TO THOSE WHO SHIP CREAM it is essential to profit that transportation charges should not be paid on skim milk.

TO THOSE WHO CHURN it is equally desirable that they have a rich cream, thus avoiding loss of product in the buttermilk and time spent in churning.

MECHANICAL AND NATURAL LAWS, as applied to centrifugal separation, make it impossible for a separator bowl of the hollow type, or one containing a perforated plate, or a series of them, to deliver a heavy cream without loss of butter-fat.

DE LAVAL SEPARATORS, by reason of their inimitable skimming device, the "Alpha Disc" and "Split Wing" shaft, stand absolutely alone in their ability to deliver a smooth, heavy cream without loss in the skim milk or in the bowl.

The De Laval Separator Co., 248 McDermot Ave.,
WINNIPEG, MAN.
TORONTO CHICAGO SAN FRANCISCO
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WE'VE GOT THE SEEDS RIGHT NOW

"As good as your money and will make you money."



OUR **RED FIFE WHEAT**

is the purest we have ever seen.

Also **Preston Wheat.**

RED CLOVERS and ALFALFA

of the strongest vitality.

Half freight rates from Brandon.

ORDER NOW

Catalogue for the asking.

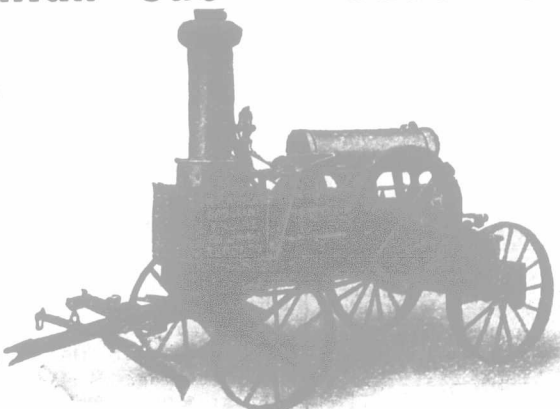
Seed Wheat
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Portable
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Complete
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Write for Catalogue and particulars to
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W. G. WILCOX & CO., Our Western Agents, Box 818, Winnipeg, Man.

ADVERTISE IN THE ADVOCATE

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

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

Aberdeen-Angus CATTLE.

Herd headed by imported Leader of Dalmeny. My cows are sired by the leading bulls of America. I have a fine lot of young cows, bulls and heifers for sale. My bulls are from 12 to 22 months old. Come and see my cattle, or write for prices.

M. G. Willford, Harmony, Minn.

TERRA NOVA STOCK FARM HERD OF ABERDEEN-ANGUS CATTLE.

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

Farmers, why not improve your stock by buying a

RED POLLED BULL?

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

H. V. CLENDENNING Bradwardine, Man.

THE SUNNYSIDE HEREFORDS

Imp. Onward in service. Eight choice bulls of serviceable age; this includes 4 two-year-olds; all are of the blocky, heavy type, at prices that will move them singly or in a bunch. Address, **O'NEIL BROS.,** Southgate, Ont. Lucan Sta., G. T. R.

JOHN T. PARKER, Box 11, Lethbridge, Alta.

BREEDER OF

Alberta Herefords

PRICES RIGHT, TERMS EASY.

Poplar Grove HEREFORDS

Western Canada's leading herd.

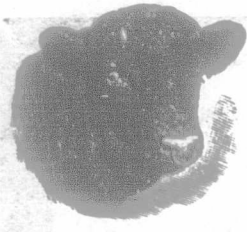
SHEPHERD PONIES J.E. MARPLES DELEAU, MAN.

Prices Reasonable. Terms Easy. Correspondence Solicited.

P. F. HUNTLEY, Breeder of Registered

HEREFORDS

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



SALE OF THOROUGHbred CATTLE

Open to Pure-bred Cattle from all parts

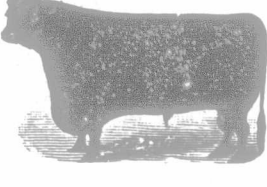
By request, we are holding a sale of Pure-bred Cattle at the Stock-yards, Calgary, on

Monday, Tuesday and Wednesday, the 22nd, 23rd and 24th May

Farmers or ranchers desiring to sell or purchase will find this one of the great opportunities of the season. Don't miss it.

For entry forms, etc., apply to THE SECRETARY

The Alberta Stock-Yards Co. LIMITED
P.O. Box 846, CALGARY.



Pure-bred Cattle Sale

Under the auspices of

THE TERRITORIAL CATTLE-BREEDERS' ASSOCIATION

at CALGARY, on

MAY 16, 17 and 18, 1905

About 500 bulls, cows and heifers of the Shorthorn, Hereford, Angus and Galloway breeds.

IMPORTANT TO BUYERS!

All Association sales are conducted subject to guarantee that all stock purchased will be delivered to the purchaser's nearest railway station in the Northwest Territories and the mainland of the Province of British Columbia, upon payment by the purchaser of a uniform fee of \$2 per head.

For catalogues and further information, apply to

C. W. PETERSON, MANAGER, CALGARY, ALBERTA.

BARGAINS IN SHORTHORNS

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

FIFTEEN YOUNGER BULLS

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

JOHN G. BARRON,

CARBERRY, MANITOBA

WE SEND ONE "SAMPLE WATCH" ONLY TO ANY ONE PERSON OUR \$10.50 WATCH, ONLY \$3.65

SAMPLE



But Remember, positively only one order filled for any one person. We are going to send out for "Sample Watches" to the first 100 persons ordering, for don't you know that the money you lose on them will come back quickly, for every person who receives one will rush right off and show it to a score or more friends, telling them of our wonderful \$10.50 Sample Watch. Then the orders will come rolling in on us at an enormous profit to us. We depend on the 100 "Sample Watches" we propose to send out in the next 60 days, at this wonderful cut in price, to bring us fully 1,000 orders at our regular price of \$10.50. We know that you will be so well pleased with the "Sample" that you can't help showing it to Everybody you meet. Genuine American Movement, Full Nickel Case and Jeweled, Tipped, Tested and Regulated, Stem-wind and Stem-set, Patent Safety Pinion, Escapement Hair-spring, Fully Guaranteed. Cases, Double Hunting or Open Face, Finest Gold-plate, closely resembling Solid Gold and fully warranted. Assorted and Elaborately Engraved Designs, Lady's or Gent's Size.

DON'T SEND A CENT OF MONEY No Sir. Not to be Paid until you have first held this "Sample Watch" in your own hands and examined it with your own eyes. Was sold C.O.D. subject to examination, and if, after examination, you think it the best Watch Bargain on earth, pay Express Agent not \$10.50, but our Great Cut Sale Price \$3.65, and Express Charges, and take the Watch. Be sure to give your name, P.O., and Express Office plainly, and state if you want Lady's or Gent's size. Remember, Only One Order filled for One Person. We send Absolutely Free a fine Gold-laid 50-inch Lognetto Chain with Lovely Slide with Lady's Watch, and beautiful Gold-laid Vest Chain, with Gent's Watch, if Cash accompanies order. Send at once—To-day. The National Watch and Jewelry Co., Box 3773 Toronto, Can.

DONALD MORRISON & CO., GRAIN COMMISSION.

416 Grain Exchange, WINNIPEG.

Licensed, Bonded.

Reference, Bank of Hamilton, Exchange Branch.

Advertise in the Farmer's Advocate.

In answering any advertisement on this page.

GOSSIP.

A very successful sale was held recently near Edmonton, at which the Short-horn bull, Gladstone's Choice, sold to a Calgary man. The Seton-Smith Co., of the St. Paul of the Canadian West, conducted the sale, which realized about \$4,500.

We are having most beautiful weather for this season of the year; some work has been done on the land already. Stock have come through the winter in good condition. This is the day for the stock-judging school here. I think a great mistake is made in not having a programme out before the judges come, so that farmers could arrange to attend the meetings most suited to their tastes. It becomes costly for farmers at a distance to attend the first morning and find the judges cannot get here until the train arrives, then have to wait until the finish to get the information sought. In short, farmers won't do it. Lacombe, Alta. OSWALD PALMER.

The printed announcement containing the rules and regulations governing the first annual auction sale of pure-bred cattle under the auspices of the live-stock associations, has recently come to hand. The sale is May 31st, in the C. P. R. sale pavilion. Cheap rates to Winnipeg, both for the prospective buyers and sellers, are announced. Secretary Greig states that "flesh and finish mean dollars to the seller." You can often sell \$10 worth of oats for double or treble the money if you let the animal carry it on its back. Buyers do not like thin stuff, and we do not blame them; in fact, we believe they are right in offering small figures for half-starved stuff, or stuff that will not put flesh on under reasonably favorable conditions. Cattle will be received for the sale only from members of the live-stock associations; membership costs only \$1. The sale committee are Messrs. Barron, Graham, James, and Dr. Thompson. Tickets to the sale will be good from May 27th, until three days after close of the sale—single-fare rates.

HURRAH FOR ALBERTA!

At Calgary, Alta., there were wild ducks and geese here, March 11th, and crocuses were out in bloom a week later. The gophers were out before the first of March, and wheat sowing was in progress the third week of March.

BEST WAY TO PREVENT BLACK-LEG.—Successful vaccination against blackleg has been extensively practiced in this country for over ten years, or ever since the Pasteur Vaccine Co., Ltd., Chicago, New York, San Francisco, etc., introduced the system. They are still the only ones supplying the genuine Pasteur vaccine, that is, the kind made by the discoverers, and to get this it is important to specify "Pasteur" when ordering. You should now vaccinate the fall calves and revaccinate the young animals treated last fall, and the "Double" should be used on choice stock. "Blacklegine" is the trademark name of Pasteur vaccine; ready for use, and is the most convenient, effective and economical, therefore the best obtainable. Write the Pasteur Company as above for their special literature on this subject.

SALE OF HEREFORDS.

Jno. Wallace's dispersion sale of Herefords was not largely attended by outside buyers on account of the snow-storm which raged the day previous, thus preventing many States buyers who were to drive. Twenty head were sold, and brought an average of \$79. Wm. Tait, Pilot Mound, bought for \$95 Milkmaid 2nd, and Milkmaid 4th for \$60. David Waldie, Cartwright, got Jennie Lind at \$70 and Love 3rd at \$65. Waldo Greenway bought Anne for \$100, Florence going to Morris Watts, Cartwright, at \$100, also Lady Bell 4th for \$95. Nancy brought \$50 to the bid of W. Foster, Mather; Jas. Stancomb getting Love 4th at \$98. The eleven-year-old cow, Peach 27th, brought \$59 from Geo. Thomson, Mather; R. McGowan, Cando, giving \$72.50 for Sarah Maud. Wm. Cavers, Clearwater, got Roger, a four-year-old, for \$115. Jas. Stancomb got General, two years old, for \$100. There were seven other bulls and bull calves sold, which averaged \$68. The stock was well brought out, but demand was slow, and the remainder were withdrawn.

kindly mention the FARMER'S ADVOCATE.

Nerve Racked Men and Women

will find Balm for their Terrible Sufferings in MILBURN'S HEART AND NERVE PILLS.

They tone up and strengthen the nerves, build up the muscles of the heart, and purify and enrich the blood. They put the nervous system in perfect working order, and restore health and vigor to both body and brain.

Miss Edythe Lindsay, Stromness, Ont., writes:—

"It affords me great pleasure to say that I have experienced great relief from your Heart and Nerve Pills. For over two years I suffered from violent palpitation of the heart, was very nervous and easily startled. I was in an extremely weak condition before I started to take the pills, but four boxes effected a complete cure. I cannot praise them too highly to those suffering from nervous weakness and heart troubles."

Price 50 cents per box, or \$ for \$1.25. All dealers, or

THE T. MILBURN CO., LIMITED,
TORONTO, ONT.

GREAT ENGLISH REMEDY.

BLAIR'S GOUT AND RHEUMATIC PILLS

The best and surest cure for GOUT and RHEUMATISM. Thousands have testified to it. All stores and the BOLE DRUG CO., Ltd., Winnipeg, and LYMAN, SONS & CO., Montreal and Toronto.

NEEPAWA STOCK FARM

Shorthorn Bulls and Tamworth Pigs for Sale
MASTERPIECE—23750—is a rich red-roan, and is a sure and good stock bull. His sire, Grand Sweep (Imp.)—17098—(64121) was champion bull at World's Fair, Chicago. Dam Mina Wilson 19625. Also three young bulls, 18 to 20 months old. Also pure-bred Tamworth pigs both sexes. If you want something good, call and see us, or write. Stables in town.
A. W. CASWELL, Neepawa, Man.

Scotch Shorthorns

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

P. TALBOT & SONS, - Lacombe, Alta.

Shorthorn Bulls, Heifers and Heifer Calves for Sale.

The get of Sir Colin Campbell (Imp.)—28878—and General—30399—. Cows all ages, in calf or calf at foot. Seventy head to choose from. Three Clydesdale Stallions two and three years old. Also mares and fillies. Leicester Sheep, both sexes. Stock always on hand, m
Geo. Rankin & Sons, Hamiota, Man.

SUNNY SLOPE SHORTHORNS

For sale: Loyalty (Imp.) 40437, also six choicely bred yearling bulls, and ten cows and heifers. The heifers sired by Trout Creek Hero (triple champion at Calgary) and prices reasonable and quality right.

JOHN RAMSAY, Priddis, Alta.

THORNDALE STOCK FARM.

SHORTHORN herd numbers 160, headed by Challenge 30462—and Royal Sailor—37071—. Sixteen yearling bulls for sale, and a lot of younger ones; also females of all ages.

T. W. ROBSON, Manilton, Man.

Grandview Herd.

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

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

Drumrossie Shorthorns

"Drumrossie Chief"—29832—and "Orange Chief"—52066= at head of herd. Young things for sale at all times.

J. & W. SHARP Lacombe, Alta.

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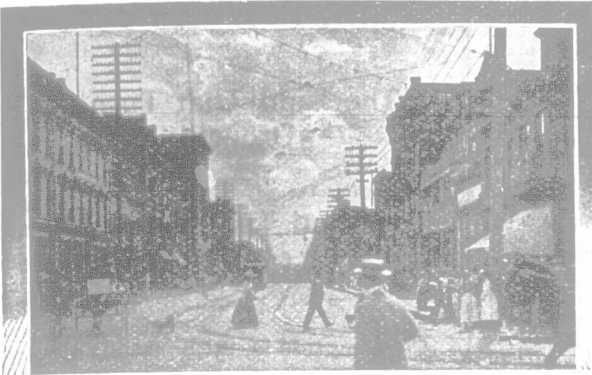
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VANCOUVER, B. C.

Is the most attractive residential city in Canada.



Due to its Climate, Scenery, Educational Facilities and Growing Prosperity. We sell

RESIDENTIAL, BUSINESS and SUBURBAN LANDS.

Correspondence solicited.

MAHON, McFARLAND & MAHON,
Real Estate Brokers. 541 HASTINGS ST.



IDEAL WOVEN WIRE FENCE Made to Last.

This fence is made to keep your live stock in and your neighbor's out. It will do this not only for this year and next, but for many years to come. To do this the fence must be strong and durable. The IDEAL is both, because we use large gauge (No. 9) hard steel wire for both stays and horizontals, securing them with the "Ideal knot that will not slip." The wire is well galvanized, being tested thoroughly by us before being made into fence.

We cannot tell you all about it here, because we have much to say. If you are interested in fencing, write us for our illustrated catalogue. It shows a style for every purpose, and tells you why the IDEAL is the best value. Our catalogue also shows the IDEAL All-metal Farm Gate.

All that is necessary is to send us your address on a postal card. Do it to-day.

The Mcgregor-BANWELL FENCE CO., Ltd., Walkerville, Ont.
MERRICK, ANDERSON & CO., Winnipeg, Sole Agents Manitoba and N. W. T.

Twice the Garden-Half the Work

Planet Jr. Garden Tools have done this for thousands of gardeners, and they'll do it for you. Write for a copy of our finely-illustrated 1905 Planet Jr. Catalog. It describes the entire Planet Jr. line, including seeders, wheel hoes, hand and walking cultivators, one and two-horse cultivators, harrows, etc. Mailed free.

No. 25 Combined Drill is a hill or drill seeder, double wheel hoe, cultivator, plow. It sows, marks, kills weeds, loosens surface, furrows, ridges, etc.

No. 16 Single Wheel Hoe performs almost numberless duties in plowing, cultivating, raking, etc., between or astride rows. Strong, light, durable.

A postal brings the catalog. S. L. ALLEN & CO., Box 1108 Philadelphia, Pa.

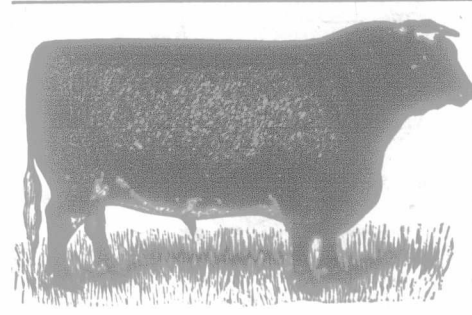
GOSSIP.

James T. Bardolph, Vernon, B. C., writes: "Enclosed please find \$1.50 for my subscription to the 'Farmer's Advocate' to Dec. 31st, 1905. I consider it a first-class agricultural paper, and enjoy reading it very much, but I would like to get the correspondent who wrote an article on 'Hogs in the Okanagan Valley' in one of your September numbers and take him for a drive to the farms around here that go in for hog breeding on a large scale, and I think I would easily convince him that his statement 'that attention is not paid to choosing of brood sows' is certainly wrong, as for quite a few years nearly all the hog breeders around this district have been importing breeding stock from both the States and Eastern Canada, and I think that the breeding stock on the whole in this district is far above the average."

Among the most enterprising of Canadian breeders and importers of Ayrshire cattle is Mr. R. R. Ness, of Howick, Que., who, although quite a young man, has established himself as a first-class judge and breeder of dairy cattle. He has about 60 head now on hand, and anticipates taking a trip across the Atlantic in a few weeks to get some more. The herd is headed by two imported bulls, viz., Barcheskie King's Own 5695, bred by Andrew Mitchell, sire Imperial Chief of Hillhouse 4601, by Prince Imperial of Netherhall, dam Derby 1st of Rigghead 11479, assisted by Monkland Speculation 5666, a fifteen-months-old bull, by White Cockade of Nethercraig 2852, by Cockie's Heir of Chapelton 2200, dam Beauty of Orchardton 9448, by Craig's of Kyle o' Drumjoan 1793, one of the greatest milking stock producers in Scotland. Mr. Ness considers this young bull one of the best dairy sires that has ever crossed the water. He is not only strong in dairy-producing points, but has behind that of a grand pedigree. Some of the cows have been bred to him, and Mr. Ness expects something choice. A draft from this herd was shown at the Dominion Exhibition, 1904, Winnipeg, and landed 7 firsts, 6 seconds, and some third prizes, as well as one champion and one diploma in a strong class. They were then sold to an American who showed them at St. Louis, where they won first for senior herd and first for junior herd for four by one sire, first and third for two produce of one dam, second and third on aged cows, first and fourth on two-year-old heifers, first and fifth on yearling heifers, and first and third on heifer calves, and last, but not least, a premier championship for the most winners in the class bred by one breeder. This latter prize belongs to Mr. Ness, of which he justly feels proud. The lot won over \$2,000 at St. Louis. Mr. Ness imported 26 head last year, and sold over 50 head. The spacious barn in which they are housed is one of solid comfort with room for some 75 head in two rows of stalls, with box stalls along one side, made of wire fencing, suitable for young stock. The wall is a frame with matched lumber both inside and out, with rough lumber and building paper between, with plenty of large windows all round, making the stable both warm and light, so light that one could read the news in any part of the stable, and so warm that geraniums grow luxuriantly in each window. Over this stable is plenty of room for the season's crop, which means a great saving of labor compared with where hay and bedding has to be carried or drawn each day from adjoining buildings or from stacks. The cattle are scarcely ever out of the stable from the time they are taken off the grass in the fall, until they go out in the spring, water being before each animal in the stall so they can drink at will. This farm lies close along side of that of his father, Mr. R. Ness, the well-known horse importer.

GOOD CANADA PANTS.—Every man and boy who reads the "Farmer's Advocate" should read and heed the announcement in this issue of Clayton & Sons, Halifax, N. S., about the "Acadian Pride Homespun" pants. If your storekeeper has not got them, write the firm for them. They are made from pure Nova Scotia wool, and only cost \$2.75. Do not miss the advertisement for particulars.

COOPER SHEEP DIP
Standard of the World
for 60 years. Used on 250 millions annually. One dipping kills Ticks, Lice and Nits. No smell. Keeps flock clean a long time. Increases growth of wool.
Dipping Tanks at cost.
Send for Pamphlet to Chicago.
If local druggist cannot supply send \$1.75 for \$2 (100 gal.) pkt. to
MARTIN, BOLE & WYNNE CO., Winnipeg, Man.
SOLE DRUG CO., Winnipeg, Man.
W.M. COOPER & NEPHEWS, Chicago, Ill.



Arthur Johnston GREENWOOD, ONT.

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

SHORTHORNS

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

CATALOGUE.

H. OARGILL & SON, OARGILL, ONT.
JOHN OLANOY, Manager. om

MAPLE SHADE SHORTHORNS

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

Good Size, Quality, Flesh and Bone.

Inspection invited. Catalogues on application. om

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

PINE GROVE STOCK FARM

ROCKLAND, ONTARIO, CANADA.
Breeders of choice

SCOTCH SHORTHORNS and SHROPSHIRE.

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

T. DOUGLAS & SONS,

Strathroy, Ontario.

SHORTHORNS and GLYDESDALES

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

MAPLE LODGE STOCK FARM

1854.

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

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

For Sale—Some Young Cows, with calves at choice foot, and heifers.

BELL BROS., The "Cedars" Stock Farm, Bradford, Ont. om

\$30⁰⁰ Church Money

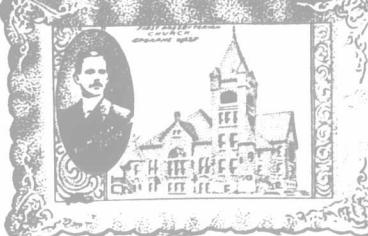
No Investment. No Risk. Send No Money.
If you wish to raise money quickly and easily for any church purpose, send us the photographs of your church and your pastor, and we will reproduce them, together, in carbon photography, on 2.0 satin finished aluminum pin trays, and send trays to you express and duty fully prepaid. Everybody wants this exquisite souvenir of church and pastor, and your members quickly sell them at 25c each. You keep \$30 for your profit and send us \$3 in full payment for the 200 souvenirs. Send photographs (any size) and names to-day. Send no money. Your workers will sell all the souvenirs in ten days as hundreds of others have, and you can send us our money any time within a month. Write and learn success of others.

New Method Co., B. C., Feb. 7th, 1905. ALBANY, N. Y., December 12, 1904.
New Method Co. The 200 Trays received just a week ago are all sold. We had no trouble at all to sell them. In fact, the 200 were not sufficient to supply the demand; so would you kindly send to my address as soon as possible, 100 more the same as the last.—Mrs. Geo. S. PEARSON.

Money-raising Plans for Church Workers. REV. ORAN KRAUCH

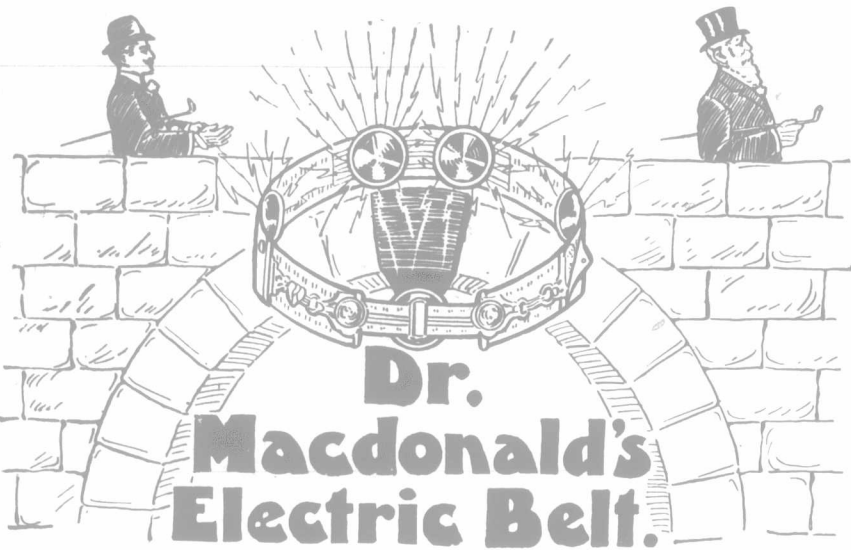
Free Sample Tray on Request.

NEW METHOD COMPANY, (for Church Workers,) 5553 South Park Avenue, Chicago.



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

Why Should Not Your Span of Life Be Three Score Years and Ten?



Dr. Macdonald's Electric Belt.

The keystone to a long span of life is health, and with health any man or woman may reasonably expect to attain a ripe old age. Yet how many nowadays do so? How many fall e'er they are half way across Life's Bridge? Alas! only too many! But there is no need for this. Any man or woman CAN, if they will, increase the length of their span of life, if they will only see that the span is fitted with a good Keystone.

The Keystone of Health.

One drop of prevention is worth a dozen bottles of medicine. Therefore, see that the keystone of your life is secure and strong. Look after your health. Electricity is the greatest force known to man. It outrivals the force of Niagara even, and without it man cannot live. In his daily work, be it in the office, the workshop, or the field, man is constantly using up his natural supply of Electricity. The more strenuous his life, the more electricity he needs to enable him to live to a hale and hearty old age. Perhaps in his youth he has been prodigal.

"The excesses of youth are drafts on our old age; payable with interest about thirty years after date."

(As Colton, the eminent, said). Therefore, see that YOU, who read these lines, have no drafts still unpaid. Store up your Electricity by wearing

Dr. MacDonald's Electric Belt

It will save you from many an anxious moment, and many an hour's pain and sickness; to say nothing of hard cash. If you feel tired and heavy, if your liver is not acting properly, if you have kidney trouble or rheumatic pains, if you have lost your manly vigor, do not hesitate a moment, but get my Electric Belt.

Free Trial for Ninety Days

Not a copper down; simply drop me a postal with your name and I will forward you, at once, one of my latest Improved High-grade Electric Belts Free. You can use it three months, then pay me if cured, and the price will be only half what others ask for their inferior belts. If not cured, you return the Belt to me at my expense. I am willing to trust you entirely, knowing that I have the best and most perfect Belt ever invented, and nine men in ten always pay when cured.

I WILL TRUST YOU—This modern Belt is the only one that generates a powerful therapeutic current of electricity without soaking the battery in vinegar as all other belts do, and it is guaranteed never to burn. It is a certain and positive cure in all cases of Rheumatism, Varicocoele, Dyspepsia, Losses, Weak Back, Nervousness, Kidney, Liver and Stomach Troubles and Weakness brought on by abuse and excess.

I WILL GIVE FREE to each person writing me one copy of my beautiful illustrated Medical Book, which should be read by all men and women. Drop me a postal, and I will send it to you FREE, in sealed wrapper. If you are weak in any way, delay no longer, but write to-day for my splendid book and Belt free. Write to-day.

DR. J. Q. MACDONALD, 8 Bleury Street, Montreal, Que.

TROUT CREEK SHORTHORNS

A few very choice bulls and females, both imported and home-bred, with superior breeding.

SEND FOR CATALOGUE.

JAMES SMITH, MANAGER.

W. D. FLATT, HAMILTON, ONT.

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

Lost, Strayed or Stolen.

Below is to be found a list of impounded, lost and stray stock in Western Canada. In addition to notices otherwise received, it includes the official list of such animals reported to the Manitoba and N.-W. T. Governments. This department, not heretofore published in these columns, is for the benefit of paid-up subscribers to the Farmer's Advocate, each of whom is entitled to one free insertion of a notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

LOST.

INDIAN HEAD, Assa.—Since March 1, 1905, gray horse, coming eight years old, has halter on, branded O on left shoulder; bay mare, white face, coming two years old, had halter on. Peter Zacher (20-15-13 w 2).

INNISFAIL, Alta.—Since last Christmas, gray carriage mare, branded reversed C, bar C, monogram, on left shoulder, and vented on left hip, branded B inside V on right shoulder, had a heavy leather halter, seven years old, about 1,150 pounds weight, about 16 hands high, left foot turned in. Alex. Buckingham (S. 4 5-35-27 w 4).

MOOSOMIN, Assa.—Bay mare, no white, thick in jaw, unbroken; blue roan gelding, broad white stripe down face, fore feet white, hind feet white to hocks; iron-gray mare, three years old, light color about head, hind feet white, to hocks, brand resembling g; buckskin mare, two years old, white stripe down face, white hind legs. \$40 reward for the recovery of the above animals. J. W. Joll.

FRANCIS, Assa.—Team: brown mare, stripe down face, five years old, about 1,050 pounds weight, hind feet white, had leather halter on; light bay horse, about seven years old, about 1,100 pounds weight, small brand on left hip, heels of hind feet white, had leather halter on and rope around neck. E. M. Culler (25-13-13 w 2).

ESTRAY.

CALGARY, Alta.—Since about the middle of February, 1905, red cow, in poor condition, branded V on right hip, and indistinct brands on right ribs, has calf. J. W. Corcoran.

CALGARY, Alta.—Black muley cow, little white on belly, branded 6 on left ribs; two roan yearling steers, brand resembling spade or lazy T triangle on left ribs; three roan yearling heifers, branded N bar. H. C. Coppock, Cannock Chase.

NOELTON, Alta.—Black heifer calf, two or three large warts on neck, no visible brand. H. S. Blois.

ALDINA, Sask.—Since about March 1, 1904, buckskin mare, weight about 800 pounds, white blaze on face, one white foot, branded P B on left shoulder. Crowe Bros.

INNISFAIL, Alta.—Red-and-white heifer, one year old, indistinct brand on ribs. John K. Buckham.

MONTMARTRE, Assa.—Since July, 1904, buckskin pony, weight about 800 pounds, hind feet and left front foot white, saddle marks. Gaspar Saltz (22-11-12 w 2).

HALBRITTE, Assa.—Roan horse, weight about 1,100 pounds, white face, indistinct brand, front feet and right hind foot white, harness marks, had leather halter on; bay horse, 1,200 pounds weight, star on face, brand resembling L, with horizontal bar through, on right shoulder; bay mare, 900 pounds weight, branded inverted Y with two horizontal bars through; sorrel mare, 900 pounds weight, branded H6, monogram, with bar under, on left thigh, colt following. J. M. Young (34-3-13 w 2).

STRASSBURG, Assa.—Since about October 1, 1904, sorrel mare, about eight years old, weight about 900 pounds, faint white stripe down face, black spot on left thigh, no brand visible; buckskin gelding, about four years old, black points, about 900 pounds weight, indistinct brand on left shoulder. C. B. Cummings (4-27-20 w 2).

Since about January 1, 1905, red-and-white heifer, coming two years old, branded O E on left hip, cut in right ear; roan heifer, coming two years old, branded P 7 on right hip, short tail, T. Harkness (35-16-6 w 2).

Macleod, Alta.—Bay horse, gelding, branded L B over 1 33, bar under, on right thigh, brand resembling running V with O under, on right shoulder. G. McFarquhar (16-8-26 w 4).

(Continued on next page.)

Obstinate Coughs and Colds.

The Kind That Stick.

The Kind That Turn To Bronchitis.

The Kind That End In Consumption.

Consumption is, in thousands of cases, nothing more or less than the final result of a neglected cold. Don't give this terrible plague a chance to get a foot-hold on your system.

If you do, nothing will save you. Take hold of a cough or cold immediately by using

DR. WOOD'S NORWAY PINE SYRUP.

The first dose will convince you that it will cure you. Miss Hannah F. Fleming, New Germany, N.S., writes:—"I contracted a cold that took such a hold on me that my people thought I was going to die. Hearing how good Dr. Wood's Norway Pine Syrup was, I procured two bottles and they effected a complete cure."

Price 25 cents per bottle. Do not accept substitutes for Dr. Wood's Norway Pine Syrup. Be sure and insist on having the genuine.

THE T. MILBURN CO., LIMITED, TORONTO, ONT.



The "STAY THERE" Aluminum Ear Markers are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. Fit any part of the ear. Nothing to catch on feed trough or other obstacle. Your name, address and any series of numbers on each tag. Sample tag, catalogue and prices mailed free. Ask for them. Address **WILCOX & HARVEY MFG. CO.,** Chicago, Ill., 194 Lake St.

JOHN GARDHOUSE & SONS Highfield P. O., Ont., Breeders of

Scotch and Scotch-topped Shorthorns, Shire Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (Imp.), Vol. 48, head of herd, Royal Albert (Imp.) 2007, at hand of stud. Farms of Shires from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days.

J. T. GIBSON, Denfield, Ont.

Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from Imp. sires and dams. For particulars write to

ED ROBINSON, Markham Sta. & P. O. Farm within town limits.

For Sale—Shorthorns, imported and home-bred; both sexes; herd headed by Imp. Royal Prince. Also Oxford Down sheep. All at reasonable prices.

JOHN McFARLANE, Box 41, Dutton P. O., Elgin Co., Ont. Stations M. C. R. and P. M.

AYRSHIRES, 4 choice bull calves four to service. Females all ages, bred for size and production. **DAVID LEITCH, Prices right.** Cornwall, G. T. R. **CORNWALL, ONT.** Apple Hill, C. P. R.

140 - JERSEYS - 140 to choose from. 74 First Prizes, 1904. We have what you want, male or female.

B. H. BULL & Son, Brampton, Ont. Phone 68.

Barren Cow Cure makes any animal under 10 years old breed, or refund money. Given in feed twice a day. "With your Barren Cow Cure I succeeded in getting two of my cows in calf—one 10 years old, and had previously been served repeatedly, to no purpose"—says M. E. Reeder, Muney, Pa. Particulars from **L. F. SELLECK, Morrisburg, Ont.**

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The ef weak, d as rain summer from val may hav to act a bodings, friends confiden slightest properly a few h toms va couple o ment ba strong, c the puni forty ye restored world-fa doing so fact, I de this kin more or my Her

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FREE TO MEN UNTIL CURED.

The effect of Electricity upon the weak, debilitated man is the same as rain upon the parched field in summer. He may be debilitated from varicocele, losses, impotency; may have confusion of ideas; fear to act and decide; gloomy forebodings, timid and fretful; avoid friends and company; without confidence in himself to face the slightest responsibility, and let him properly apply Electricity for but a few hours and all these symptoms vanish. A few weeks to a couple of months' use of this treatment banish them forever, and make strong, confident, manly men out of the puniest weaklings. For nearly forty years I have treated and restored weak men through my world-famed invention, and am still doing so with greater success than ever. In fact, I do not expect to fail in any case of this kind, and therefore, as most men are more or less sceptical, I will continue to give my Herculex

Dr. Sanden Electric Belt Free Until Cured.

Not one cent is to be paid me in advance or on deposit. Call or write and get the belt, and use, say, for sixty days, and if cured pay me price of belt only—most

DR. C. F. SANDEN, 140 Yonge Street, Toronto, Ont.
Office Hours: 9 to 6. Saturdays until 9 p.m. (516) Largest and Oldest Electric Belt Establishment in the World.



cases low as \$4; if not cured return the belt and the deal is ended. But I know what the belt will do, and will take the risk of my pay when you are cured. I also give my belts on same terms in Rheumatism, Lamé Back, Stomach, Kidney and Liver Complaints, etc.

As the originator and founder of the electric belt system of treatment, my forty years' success is the envy of many, and my belts of course are imitated. (What good thing is not?) But my great knowledge to advise and direct my patients is mine alone, and free to all who use my belt until cure is complete.

What would you not give to have your old vim back again?

What would you not sacrifice to feel as you did a few years ago; to have the same snap and energy; the same gladness, joyous, light-hearted spirit and the physical strength you used to have? You know you are not the same man, and you know you would like to be. You might as well be. It's easy. I am making men out of wrecks every day, and the above offer must convince you what I feel I can do for you.

Call or send to-day for my belt; or, if you want to look further into the matter, I have the best two little books ever written upon Electricity and its medical uses, and send them free, sealed, upon request.

We Paid \$100,000

For Liquozone, Yet We Give You a 50c. Bottle Free.

We paid \$100,000 for the American rights to Liquozone; the highest price ever paid for similar rights on any scientific discovery. We did this after testing the product for two years, through physicians and hospitals, in this country and others. We cured all kinds of germ diseases with it—thousands of the most difficult cases obtainable. We proved that in germ troubles it always accomplishes what medicine cannot do. Now we ask you to try it—try it at our expense. Test it as we did; see what it does. Then you will use it always, as we do, and as millions of others do. You will use it, not only to get well, but to keep well. And it will save nearly all of your sickness.

Kills Inside Germs.

Liquozone is not made by compounding drugs, nor is there alcohol in it. Its virtues are derived solely from gas—largely oxygen gas—by a process requiring immense apparatus and 14 days' time. This process has, for more than 20 years, been the constant subject of scientific and chemical research.

The result is a liquid that does what oxygen does. It is a nerve food and blood food—the most helpful thing in the world to you. Its effects are exhilarating, vitalizing, purifying. Yet it is a germicide so certain that we publish on every bottle an offer of \$1,000 for a disease germ that it cannot

kill. The reason is that germs are vegetables; and Liquozone—like an excess of oxygen—is deadly to vegetal matter.

There lies the great value of Liquozone. It is the only way known to kill germs in the body without killing the tissues, too. Any drug that kills germs is a poison, and it cannot be taken internally. Medicine is almost helpless in any germ disease. It is this fact that gives Liquozone its worth to humanity. And that worth is so great that we have spent over one million dollars to supply the first bottle free to each sick one we learned of.

Germ Diseases.

These are the known germ diseases. All that medicine can do for these troubles is to help nature overcome the germs, and such results are indirect and uncertain. Liquozone attacks the germs, wherever they are. And when the germs which cause a disease are destroyed, the disease must end, and forever. That is inevitable.

- | | |
|--------------------|---------------------|
| Asthma | Hay Fever—Influenza |
| Abscess—Anæmia | Kidney Disease |
| Bronchitis | La Grippe |
| Blood Poison | Leucorrhœa |
| Bright's Disease | Liver Troubles |
| Bowel Troubles | Malaria—Neuralgia |
| Coughs—Colds | Many Heart Troubles |
| Consumption | Piles—Pneumonia |
| Colic—Croup | Pleurisy—Quinsy |
| Constipation | Rheumatism |
| Catarra—Cancer | Scrofula—Syphilis |
| Dysentery—Diarrhœa | Skin Diseases |
| Dandruff—Dropsy | Stomach Troubles |

Dyspepsia
Eczema—Erysipelas
Fever—Gall Stones
Goitre—Gout
Gonorrhœa—Gleet
Throat Troubles
Tuberculosis
Tumors—Ulcers
Varicocele
Women's Diseases

All diseases that begin with fever—all inflammation—all catarrh—all contagious diseases—all the results of impure or poisoned blood.
In nervous debility Liquozone acts as a vitalizer, accomplishing what no drugs can do.

50c. Bottle Free.

If you need Liquozone, and have never tried it, please send us this coupon. We will then mail you an order on a local druggist for a full-size bottle, and we will pay the druggist ourselves for it. This is our free gift, made to convince you; to show you what Liquozone is, and what it can do. In justice to yourself, please accept it to-day, for it places you under no obligation whatever.

Liquozone costs 50c. and \$1.

OUT OUT THIS COUPON.

For this offer may not appear again. Fill out the blanks and mail it to The Liquozone Company, 458-464 Wabash Ave., Chicago.

My disease is.....

I have never tried Liquozone, but if you will supply me a 50c. bottle free I will take it.

.....

Give full address—write plainly.

Any physician or hospital not yet using Liquozone will be gladly supplied for a test.

Lost, Strayed or Stolen—Cont.

FILLMORE, Assa.—Since about March 14, 1905, small gray horse, indistinct brand on left shoulder, about 6 or 7 years old, blind, leather halter and rope lead. W. C. Hall.

HILLSDOWN, Alta.—Since about three months ago, red-and-white bull, about two years old, no brand visible. Wm. Guynup (N. E. 36-37-25 w 4).

NOELTON, Alta.—Dark red-and-white bull, coming two years old, small no visible brand; blue pinto cayuse stallion, about three years old, left wall eye, no visible brand. H. S. Blöis.

ONION LAKE, Sask.—Since March 2, 1905, small black stallion, about five years old, branded T, quarter circle under, combination, on left hip. W. Sibbald, Indian Agent, Indian Agency.

MOOSE JAW, Assa.—Since about December 1, 1904, red bull, few white spots, branded 3 or 8 N J on left ribs. F. A. Bevitt.

YORKTON, Assa.—Since spring of 1904, red-and-white bull, now over one year old, had hell on, no brand. Frank Paterson.

IMPOUNDED.

RAYMOND, Alta.—Since March 10, 1905, black stallion, three years old, white stripe down face, branded T, reversed P, monogram, on right shoulder, left hind foot white, has old halter on. Village Pound.

WHITEWOOD, Assa.—Dark brown stud horse, two or more years old, white star on forehead, no brand. Arthur Biggins (S. E. 2-15-3 w 2).

SHEHO, Assa.—Since last fall, roan heifer, coming two years old, has horns, no brand visible. Damon Gusick (16-29-8 w 2).

SHEHO, Assa.—Since spring of 1904, red steer, three years old, this spring, white on belly, white on tail, no brand visible. Simeon Barbichuke (6-29-8 w 2).

TRADE NOTES.

ENGLISH COOPER DIP.—In choosing a dip certain points should be borne in mind. Hundreds of decoctions may be termed insecticides, but few only effect the destruction of insect pests without discoloring the wool or setting the animal back in general condition. The enormous sale and long reputation of the well-known English Cooper Dip it is claimed has been won on its freedom from all harmful effects while being thoroughly efficient in the destruction and prevention of disease and insects.

THE DAWN OF A NEW ERA IN THE GREAT WEST.—There is a certain part of this great West that has, until the present time, been practically unknown, owing to its distance from all trails of civilization, but it has been awaiting the settler for many years, and now that the new line of the Canadian Northern Railway has been extended to the Elbow, the second crossing of the great Saskatchewan River, the Mississippi of the North, settlers, the business men, and the home-seekers, will be pouring in to take advantage of the great fertile wheat belt in the valley of the River Saskatchewan, undoubtedly the finest tract of wheat country in Western Canada, towards which all eyes will be turned in a few years. To aid homeseekers, the Canadian Northern Ry. are issuing round-trip tickets from all stations on their line, Gladstone, Neepawa and south, to any point west of Dauphin, as far west as the Elbow on the Main line, and Melfort on the Prince Albert extension at the nominal figure of one single fare. Evidently the railway company expect a good class of travellers on this new line, as they are placing first-class sleepers in the service, and equipment of the very latest design.

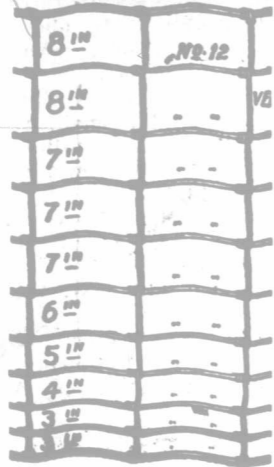
BOOK REVIEW.

Any book reviewed in this department may be ordered through this office.

Many farmers and others not engaged in farming have enjoyed as well as benefited by reading the various volumes on agriculture and kindred subjects of the Rural Science series, not the least interesting of which is "The Care of Animals," by W. S. Mayo, of the Kansas Agricultural College. We note with interest that a volume entitled "Principles of Stock Breeding" is soon to be issued for the same series. The work under review is one of 100 pages, and can be had for \$1.25.

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

PAGE FENCE — The WHITE Brand



All Page Fencing and Gates shipped from our factory in future (except our railroad fencing) will be painted WHITE, a trade-mark as it were, in order that ours can be readily distinguished from others at a glance. There now are other fences which at first appearance look much like ours though they are much different in quality. By coating ours WHITE there can be no confusion among buyers.

While this coating of WHITE gives Page Fence and Gates a distinguishing feature, it will also be a preservative as an aid to the galvanizing in preventing rust. It is now commonly known to everyone that even galvanized wire will, in certain localities, rust.

In addition to these, we are making several other changes and improvements in our goods that will make them still better than ever, and still further ahead of all competitors. Get from us, or local dealers, printed matter explaining everything about our Fences, Gates, Lawn Fences and Netting.

Remember:—Page Fence is WHITE, WHITE, WHITE. And Page Gates are WHITE.

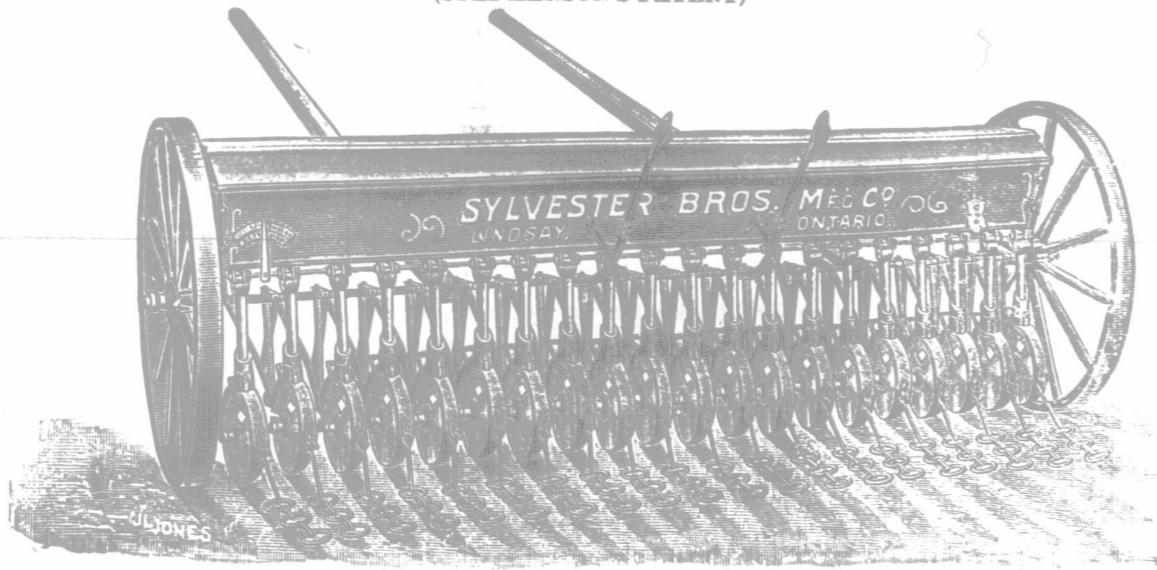
PAGE WIRE FENCE CO. LIMITED

WALKERVILLE MONTREAL TORONTO ST. JOHN WINNIPEG

"Page Fences Wear Best."

The Sylvester Double-disc Drill

(STEPHENSON'S PATENT)



Wide seed-bed, light draft. ONLY drill that gave UNQUALIFIED SATISFACTION this spring in the wet sticky soils of Regina and Indian Head Districts. RECORD FOR 1904: 30% MORE SALES. NOT A DRILL RETURNED. NOT A SETTLEMENT REFUSED. Represented everywhere.

FARMERS—Use Sylvester Double-disc Drill, and get your seed in early and escape the rust and frost. SYLVESTER MANUFACTURING CO., LTD., BRANDON, MANITOBA. Winnipeg Transfer Agents: H. F. ANDERSON & CO.

THE WEEKLY TELEGRAM'S GREAT PREMIUM OFFER

Quick Reference Map of THE DOMINION OF CANADA with Special Maps for MANITOBA and TERRITORIES 22 x 28 INCHES, IN COLORS : : : : : :

Geography should be studied by everyone. You cannot keep in touch with daily events without a reliable reference map. The best and most practical way of educating the entire family, children and grown-ups, is to have the Weekly Telegram's Quick Reference Maps.

An Unparalleled Offer

The Weekly Telegram will be sent for one year— together with a new Dominion of Canada Map and either the Map of Manitoba or the Territories—for only One Dollar. The balance of this year's subscription is FREE. Both new and old subscribers may participate in this great offer.

CUT THIS COUPON OUT

To the Publishers of The Weekly Telegram, Winnipeg, Man.:

Enclosed please find \$1.00. Send to address given below The Weekly Telegram, the map of the Dominion of Canada and the map of _____ (Write Manitoba or Territories)

Name _____

Address _____

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

GOSSIP.

J. G. Washington advises us as follows: "We have sold our imported bull, Argosy =50011= (78247), to McClelland Bros., of Letellier. This bull has left us some of the best stock of any bull we ever owned, his heifers being particularly good. We have also sold one yearling bull, by Argosy (imp.), to W. Merrill, of Ninga. We are getting a lot of enquiries lately. I think the cattle business will improve, as there are a lot of bulls needed by the farmers."

Mr. Macfarlane advises us as follows: "I have formed a partnership with the well-known stockman, Mr. J. M. Paul, of Medicine Hat, the firm name being Paul & Macfarlane. It is our intention to import direct from Scotland and Ontario to the farm, which is situated five miles north-east of the city of Moose Jaw. We purpose holding two or more auction sales each year, due notice of which will be given. Mr. Paul will manage the Western end of the business, myself doing the purchasing in the East and Old Country."

WESTERN VETERINARIANS RETURN TO THEIR FIELDS OF LABOR.

Under the requirements of the Manitoba Veterinary Association Act, any veterinarian graduating since 1897 must do so from a three-year school, consequently men from the Toronto College since that day have to finish elsewhere. Messrs. D. A. McArthur, V. S., Hartney; W. Thompson, V. S., Minnedosa; A. A. Lockhart, V. S., Carnduff, Assa., and I. Z. Woods, V. S., Winnipeg, have recently graduated with the degree of M. D. V. from the McKillip College, Chicago.

WHY HORSESHOES ARE LUCKY.

Here is an explanation of the old horseshoe superstition: "St. Dunstan was a skilled farrier. One day while at work in his forge, the devil entered in disguise and requested Dunstan to shoe his 'single hoof.' The saint, although he recognized his malign customer, acceded, but caused him so much pain during the operation that Satan begged him to desist. This St. Dunstan did, but only after he had made the evil one promise that neither he nor any of the lesser evil spirits, his servants, would ever molest the inmates of a house where the horseshoe was displayed."—Ex.

USES GASOLINE ENGINES.

A U. S. contemporary states as follows: "We use the Fairbanks-Morse, the Waterloo, the Ohio and the Otto engines. None of them give us any trouble whatever, except where we have a man that will get after them with a cold chisel or monkey wrench, the same as he would a cast-iron plow. Then one of us has to go out and use a little emery paper and at times our prayers to get them right again. We find that if we get the engine and get it put up right, that in every case it gives good satisfaction, with the above exception.—The A. Kelly Milling Co., Ltd., Brandon, Man."

WHEN DOCTORS DIFFER.

"Competition between the Ogilvie Flour Mills Company and the Lake of the Woods Milling Company, usually exceedingly keen in the flour trade, is now extending to wheat estimates. The Ogilvie Company made a careful canvass of the West, and announced that, making allowance for seed, the wheat remaining in farmers' hands amounts to only 3,500,000 bushels. 'As a rule,' announces the Lake of the Woods Company, in reply, 'this company does not make a specialty of estimating the wheat crop, except for its own information, but we do not mind mentioning the fact that the farmers of the West hold at least 5,000,000 bushels, and we would not be at all surprised if it amounted to \$6,000,000.'—[News.

A wise commission man opined to the "Farmer's Advocate" that as the wheat was pretty well out of the farmers' hands, it was well to lower the estimates, in order to have a pretext for stiffening up the flour market, and that two opposing forces were at work; one had plenty of wheat and wanted to sell flour, and, consequently, didn't care whether wheat prices went up or not; in fact, would just as soon they did.