

ines

hat we have
ndon Coiled

g, Man.
on, Can.
land, Ohio.

lan
e

5, 10, 15,
E POWER.

WRITE

ELACHLAN
SOLINE
GINE CO.,
LIMITED,
Queen St. E.,
TORONTO,

atalogue and
s.

tal Wheels
WAGONS

any axle, of any
hth or width of
trouger, lighter
than wooden
& the thing for
Our

N CITY
Y WAGON.



venient for farm
workmen, and of
arry four to five
de with full de-
-m

el Co., Ltd.,
TO. ONT.

WAGONS
EST

on Co.
ONT.

OGS.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.
 VOL. XXXVIII. WINNIPEG, MAN. FEBRUARY 20, 1903. LONDON, ONT. No. 568

CONTENTS OF THIS NUMBER.

EDITORIAL.	PAGE.
THE STALLION SYNDICATE	145
TELEPHONES FOR FARMERS	145
SIFTINGS	145
BY THE WAY	146
RAILWAY REGULATION AND THE FARMER	146
GRAIN GROWERS ORGANIZING	147
A WORD OF ADVICE TO YOU	147
PLAN OF AGRICULTURAL COLLEGE	147
OUR IMMIGRATION NUMBER	148
RAILWAY TAXATION	148
"IMMIGRATION NUMBER" OF "THE FARMER'S ADVOCATE"	148
OUR SCOTTISH LETTER	148
HORSES.—STALLION PRICES	149
SPRING STALLION SHOW AT TORONTO	149
BONE DISEASES OF HORSES' LEGS	149
LORD ABERDEEN [203] (ILLUSTRATION)	149
CORONATION, IMP., [354] (ILLUSTRATION)	150
STATKLY CITY [1362] (10466) (ILLUSTRATION)	152
WOODROFFE PLOWBOY [226] (ILLUSTRATION)	153
THE PERCHERON STALLION AURORE 29384 (45733) (ILLUSTRATION)	154
STOCK.—THE RANCHING OUTLOOK	150
A HEAVY CROP OF LAMBS	150
THE RANGE STEER EXPERIMENT; PROFIT IN HOES	150
CANADA'S BEEF IN GREAT BRITAIN	151
A STRONG BACK (ILLUSTRATION)	151
CARE FOR THE EWES	151
A USEFUL TYPE (ILLUSTRATION)	151
WHEN PIGS SHOULD BE MARKED; SIX BUSHELS A DAY	151
SUBSTITUTE FOR MILK IN FEEDING CALVES	152
MR. WILLIAM LINTON (PORTRAIT)	152
TIDY ABERKIRK 182 (ILLUSTRATION)	152
NONPAREIL 5TH = 37124 (ILLUSTRATION)	152
FARM.—AGRICULTURAL STUDENTS' WESTLY COLLEGE (ILLUSTRATION)	149
FARM IMPROVEMENTS AT SMALL COST	152
TELEPHONES IN RURAL DISTRICTS	153
TELEPHONES INCREASE LAND VALUES	153
TELEPHONES MUST COME	153
TELEPHONES IN RANCH COUNTRY	153
GRAIN MARKETS BY TELEPHONE	153
TELEPHONE INFORMATION NEEDED	153
WIRE FENCES COULD BE USED	153
BACK NUMBERS REQUIRED	153
MANY ADVANTAGES	154
STRUCK A TELEPHONE SNAG	154
MR. DOOLEY ON OATS AS A FOOD	154
SCHOOL OF ANATOMY (ILLUSTRATION)	154
PREPARATION FOR SEEDING	154
GASOLINE ENGINES FOR THRESHING	154
GASOLINE ENGINES DEFENDED	155
FOXHOUND PUPPIES (ILLUSTRATION)	147
DAIRYING.—VALUE OF A DAIRY COW	155
POULTRY.—VIRIDEN POULTRY SHOW	155
EXTERNAL PARASITES ON POULTRY	155
CHICKENS ON THE FARM	155
MAKE THE POULTRY PAY	156
TEACHERS AND SCHOLARS.—THE NATURE STUDY OF INSECTS	156
INTERIOR OF MANUAL TRAINING SCHOOL, WINNIPEG (ILLUS.)	156
MANUAL TRAINING	157
THE IMPROVEMENT OF RURAL SCHOOLS IN CANADA	157
"ALL ABOARD" FOR THE WEST (ILLUSTRATION)	157
THE SCHOOL PREMISES	158
HORTICULTURE AND FORESTRY.—TREE PLANTING FOR FUEL	158
QUESTIONS AND ANSWERS.	
VETERINARY: COFFIN-JOINT LAMENESS; BAD BREATH—EMBOLISM; BARREN HEIFER; MAMMITS; INDUCING GESTRUM IN COWS; LAME MARE—PRICE OF PORK—TO KILL Lice ON HORSES; MILK FEVER; UNTHRIFTY MARE; LAME HORSE FOR	158
MISCELLANEOUS: HARDY CLIMBER—TREES AND SHRUBS FOR LAWN—TREES FOR AVENUE; GREEN FODDER—BEST FOODS FOR USE; PRAIRIE AND OAT HAY; YOUNG PIGS DYING; BARLEY AND WHEAT HAY; YOUNG PIGS DYING	159, 160
FIELD NOTES.	
CANADIAN AYRSHIRE BREEDERS' ASSOCIATION ANNUAL MEETING; HOW THE COLT WAS SHOD; A VIRIDEN FARM; PROVINCIAL PLOWING MATCH; CALGARY EXHIBITION; PINCHER CREEK; THE ELDER FARM RESIDENCE (ILLUSTRATION); "IMMIGRATION NUMBER" OF "THE FARMER'S ADVOCATE"; RESIDENCE OF LIEUT. C. E. IVENS (ILLUSTRATION); COMMISSIONER PETERSON RESIGNS; IN THE RANCH COUNTRY; BRITISH EMIGRANTS; CANADIAN HACKNEY HORSE ASSOCIATION ANNUAL MEETING; CANADIAN SHIRE HORSE ASSOCIATION ANNUAL MEETING; HOLSTEIN BREEDERS MEET; CLYDESDALE BREEDERS' ASSOCIATION ANNUAL MEETING; DOMINION CATTLE BREEDERS' ANNUAL MEETING; DOMINION SWINE BREEDERS' ANNUAL MEETING	160, 161, 162
MARKETS.	
WINNIPEG MARKETS; BRITISH CATTLE MARKETS	162
MONTREAL MARKETS; CHICAGO MARKETS	162
HOME MAGAZINE.	
THE FAMILY CIRCLE	163
TEIGNMOUTH VIEW, DEVONSHIRE, ENGLAND (ILLUSTRATION)	164
TEIGNMOUTH BRIDGE, DEVON, ENGLAND (ILLUSTRATION)	165
THE QUIET HOUR	165
THE CHILDREN'S CORNER	166
GOSBLY	168, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180
PRIZE LIST, SPRING STALLION SHOW	170
TRADE NOTES	169, 171, 175
ADVERTISEMENTS	111 to 144, 166 to 181

BELL ART Pianos and Organs

LAST LONGEST AND YIELD BEST RESULTS BECAUSE THEY ARE MADE FROM BEST MATERIALS, IN THE MOST CAREFUL MANNER.

THE NEW ORGAN FOR HOME USE IS THE

BELLOLIAN

ANYONE CAN PLAY IT WITHOUT STUDYING MUSIC.

Bell Organ & Piano Co. (LIMITED),

GUELPH, ONTARIO.

CATALOGUE No. 40 FREE ON REQUEST.

BANK OF HAMILTON

HEAD OFFICE: HAMILTON, ONTARIO.

Paid-up Capital, \$2,000,000;
Reserve, \$1,500,000;
Total Assets, \$19,000,000.

BRANCHES IN MANITOBA and N.-W. T.,

WINNIPEG

(CORNER MAIN AND McDERMOT STREETS;

C. BARTLETT, AGENT),

PILOT MOUND,

BRANDON, MANITOU,

CARMAN, MORDEN,

HAMIOTA, STONEWALL,

PLUM COULEE, WINKLER,

INDIAN HEAD, N.-W. T. MOOSE JAW, N.-W. T.

Deposits Received and Interest Allowed

GENERAL BANKING BUSINESS TRANSACTED.

Collections carefully and promptly effected at all points in Canada. Savings Banks at all Offices. Correspondence solicited.

PLEASE MENTION FARMER'S ADVOCATE.

THIS IS THE BEST FARMER'S PAPER IN WESTERN CANADA.

The Best Watch for the Money.

We will sell you a gent's genuine Waltham stem-wind 17-jewel movement in an open-face nickel case for \$11.00, or in a 20-year gold-filled case for \$15.00. A special guarantee goes with each watch. Our repairing department is as efficient as can be. A post card will bring you a mailing box.

D. A. REESOR, "The Jeweler,"
Brandon, Man.

Official Watch Inspector for the C.P.R. Issuer of Marriage Licenses.

To build up the West support its institutions.

THE MANITOBA FIRE ASSURANCE CO'Y

ESTABLISHED 1886.

Head Office: Winnipeg.

Full Government deposit. Licensed by Territorial Government. Special inducements to Farmers to insure in this Company. Reliable, energetic agents wanted in unrepresented districts.

HON. H. J. MAUDONALD, K. C., President.

J. T. GORDON, M. P. P., Vice-President.

H. H. BECK, Managing Director.

Address all communications to Managing Director, WINNIPEG, MANITOBA.

Perpetual Motion.

When George Stephenson was asked, "Do you believe in perpetual motion?" he replied, "Yes, if you lift yourself by the waist-band of the trousers, and carry yourself three times round the room."

Just so, and a woman would just as soon believe that she has not to pay dearly for common premium soaps, in the low quality of soap, in ruined hands and clothes. She would be kept in perpetual motion trying to do with common soap what she could so easily do with Sunlight Soap—Octagon Bar. 216

R. A. BONNAR,

Barrister, Notary Public, Conveyancer, Etc.

Office 494 1/2 Main St., Winnipeg, Man.

Special attention to collections. Solicitor for "Farmer's Advocate," Winnipeg.

DR. BARNARDO'S HOMES.

The managers of these institutions invite applications from farmers and others for the boys and youths who are being sent out periodically from their English training-homes. The older boys remain for a period of one year at the Farm Home at Russell, during which time they receive practical instruction in general farm work before being placed in situations. Boys from eleven to thirteen are placed from the distributing home in Winnipeg. Applications for younger boys should be addressed to the Secretary, 115 Pacific Avenue, Winnipeg, or P.O. Box 206, and for older boys, possessing experience in farm work, to Manager, Dr. Barnardo's Farm Home, Barnardo, Man.

DEALERS:

Here is a trio that cannot be beat.
MANITOBA PUMPS,
 Guaranteed the fastest stock pumps in the Northwest.
CANADIAN AIRMOTOR WINDMILLS
 Made to stand our Western winds.
NEW TORONTO GRINDERS,
 10 to 50 bushels per hour. Easy running and fast grinding.
 We have many other things for you to handle. Write us. Catalogues upon request.

The MANITOBA PUMP CO.,
 Box 301. BRANDON, MAN.

SOMERVILLE



Steam Marble and Granite Works,
 BRANDON.
 MONUMENTS, HEADSTONES, MANTELPIECES, CEMETERY FENCING TABLETS, ETC.

ROSEBAY AVE., BRANDON, MANITOBA.
 Represented by W. Somerville, M. E. Buckman, P. A. Ferguson, A. McCaughey.
 107 WEST VICTORIA STREET, WINNIPEG.

E. J. C. SMITH,

Agent for Canadian Kodak Co.
 Supplies of all kinds.
 Printing and finishing for amateurs.
 276 SMITH ST., WINNIPEG.
 Send for Catalogue. Established 1895.

English Flat Coated Retriever Pups

TWO MONTHS OLD.
 By Imp. Winnipeg Carlo (C. K. C. 5589).
 Imp. Nita (C. K. C. 5594).
 Champion Right-away Tattle. Black Drake. Pharoah.
 Carlo is a winner of 7 first prizes and 9 specials.
 A. H. M. OLARK, 55 Sherbrook Street, WINNIPEG, MAN.

DEERHOUND PUPS

From my celebrated dog, General, and prize-winning bitch, Jess. General stands 33 in. at shoulder, and Jess 31 1/2 in. Apply to
 DR. O'BRIEN, Dominion City, Man.

THE Farmers' Account Book

Specially ruled and printed headings. Enables you to keep systematic track of your affairs. Sent, post-paid, on receipt of price, 75c.
 The FORD STATIONERY CO.,
 Box 344. WINNIPEG, MAN.

20,000 GREEN

Tamarack Fence Posts

All lengths and sizes, in car-load lots, at Sinnott station, C. P. R. Apply to
 JOHN LARSON, St. Owen's P. O., Man.

WOODSTOCK STEEL WINDMILLS

Galvanized or Painted.
 For Power or Pumping.
DANDY Windmill

with Graphite Bearings, runs easy and controls itself in the storm.
 GRINDERS, PUMPS, WATER TANKS, DRINKING BASINS AND SAW BENCHES.

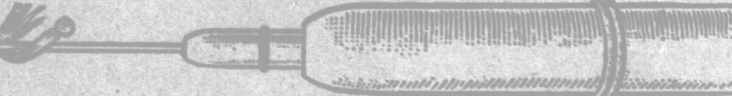
WOODSTOCK WIND-MOTOR CO.,
 WOODSTOCK, ONT. (Ltd.)

PLEASE MENTION FARMER'S ADVOCATE.

"BLACKLEGINE"

Pasteur Blackleg Vaccine, Quite Ready for Use.

This is in the form of a cord impregnated with the Vaccine. Each dose is separate and applied with a special needle. The dose is hitched on to a notch in the needle and then inserted under the skin at the shoulder. The needle is provided with a detachable handle. Vaccination with "Blacklegine" is as rapid and easy as taking a stitch. There is no dissolving, or mixing or filtering a powder; no injecting or trouble in measuring doses; NO EXPENSIVE SYRINGE OUTFIT OR INJECTOR.



BLACKLEGINE OUTFIT, SHOWING NEEDLE INSERTED IN HANDLE AND DOSE OF VACCINE ATTACHED READY FOR VACCINATING.

PRICES: "SINGLE BLACKLEGINE" (for common stock) No. 1 (ten doses), \$1.50; No. 2 (twenty doses), \$2.50; No. 3 (fifty doses), \$6.00. "DOUBLE BLACKLEGINE" (for choice stock) (first lymph and second lymph, applied at an interval of eight days), \$2.00 per packet of 20 double doses. BLACKLEGINE OUTFIT (handle and two needles), 50 cents.

PASTEUR VACCINE COMPANY,
 153-160 E. Huron St., CHICAGO, ILL.

BLACKLEGOIDS

BEST PREVENTIVE OF BLACKLEG.

Blacklegoids afford the latest and best method of vaccination against blackleg—simplest, safest, surest. They are always ready for use; no filtering, measuring or mixing is necessary. Accuracy of is always assured, because each Blacklegoid (or pill) is exactly sufficient for one inoculation. Administration with our Blacklegoid Injector is easy. The operation need not consume one minute. Blacklegoids are sold by druggists; ask for them.

Our newly printed eight-page folder on the "Cause and Nature of Blackleg" is of interest to stockmen. Write for it; it is free.

PARKE, DAVIS & CO. WALKERVILLE, ONT.
 Eastern Depot: 279 St. Paul St., MONTREAL, QUE.



"My owner uses a U. S. Farm Separator and feeds me on the warm, sweet skimmilk."
 "I wish my owner used one, but he does not, and I am fed cold, sour skimmilk, which accounts for my poor condition."

MORAL: If dairymen wish to raise healthy calves and also to get all the cream out of the milk,

BUY A U. S. SEPARATOR

It holds the World's Record for Clean Skimming, and the skimmilk is in the best condition for feeding

For Canadian trade we transfer our Separators from Hamilton, Montreal, Sherbrooke and Quebec. Address all letters to Bellows Falls, Vt. Write for Illustrated Catalogues

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

Government Co-operation in Tree Planting

NOTICE is hereby given that all those who wish to avail themselves of the co-operation of the Forestry Branch of the Department of the Interior, in setting out shelter belts or plantations on their farms in Manitoba and the Northwest Territories in the spring of 1904, must have their applications forwarded to the Superintendent of Forestry at Ottawa, before March 1st, 1903. All applications received after this date will be held over till the following year. For circular and information as to the free distribution of trees, apply to the Superintendent of Forestry, Ottawa.
 E. STEWART,
 Superintendent of Forestry.
 Ottawa, November 25th, 1902.

THE PRIVATE SECRETARY.

A Unique Combination
 Ready reckoner, (ACCOUNT BOOK), File for receipts, Conveyancer, etc., without folding. On order for six years. Indelible pencil. Thumb indexed. Turn up any part in an instant. Pocket size. Price, \$1.00. Five copies to agents, \$3.00. Agents wanted.
 R. N. LYONS,
 GRISWOLD, MANITOBA.

WE LEND Trust Funds

AT LOWEST RATES OF INTEREST ON FARM PROPERTIES.
 WRITE US FOR FULL INFORMATION.
 GOOD RELIABLE AGENTS WANTED.

National Trust Company,
 LIMITED.
 PAID-UP CAPITAL, \$7,000,000. OFFICE AND SAFE DEPOSIT VAULTS, RESERVE, \$270,000. 323-325 Main St.

British Columbia Farms.

Mild climate, the best dairying country in North America. No blizzards. No cyclones. No droughts. No hot winds. No summer frosts. No cloudbursts. The heaviest crops per acre in Canada. We make this statement without fear of contradiction. Cool nights and good water. The best prices for all kinds of farm produce. THE CALIFORNIA OF CANADA, with land at one-tenth the price. Write for farm pamphlet to THE SETTLERS' ASSOCIATION, BOX 540 VANCOUVER, B. C. Please refer to this paper.

A MACHINE

to weave your own fence of
 Called Hard Steel Spring Wire. 32 inches high, at 25 Cts. Per ROD. \$25 buys wire for 100 Rod Fence. Agents Wanted. Catalogue FREE. GARTER Wire Fence Machine Co. Box B. Ridgeway, Ont.

Maple Syrup Evaporator.

Not a single feature of the "Champion" Evaporator could be dispensed with and leave a perfect Evaporator. Durability, rapidity, and high quality of product, with saving of fuel, are its features. Our sectional pan system makes it easy to handle, and everlasting. Write for catalogue, state number of trees you tap, and an estimate of your requirements will follow.

THE GRIMM MFG. CO.,
 84 WELLINGTON ST., - MONTREAL.

STAMMERERS

THE ARNOTT INSTITUTE, BERLIN, CANADA. For the treatment of all forms of SPEECH DEFECTS. Dr. W. J. Arnot, Superintendent. We treat the cause, not simply the habit, and therefore produce natural speech. Write for particulars.

Range Name Competition.

In response to ads. offering prizes for a name for our new range, over 20,000 names were submitted.

After eliminating those which had been used before, and repeaters, we selected a list and submitted them to a committee of Toronto advertising experts.

The name decided upon is

Pandora Range,

which was suggested by three ladies: Mrs. Geo. McQuillan, 306 Givens St., Toronto; Miss E. C. Boland, "The Oaks," Vandeleur, Ont.; Mrs. J. Bews, 304 Victoria Ave. N., Hamilton; each of whom will be given a range.

- 2nd Prize.—Lady Bristler—Mrs. A. Isaac, Port Hammond, B. C.
- 3rd " —Hibiscus—Mrs. H. Wooding, 1746 St. Hubert St., Montreal.
- 4th " —Savalot—Mrs. M. Maltby, Manor, Assa., N.-W. T.
- 5th " —Trojan—Mrs. J. R. G. Bliss, Miniota, Man.
- 6th " —Terrapin—Mrs. A. J. MacNeill, Orwell, P. E. I.

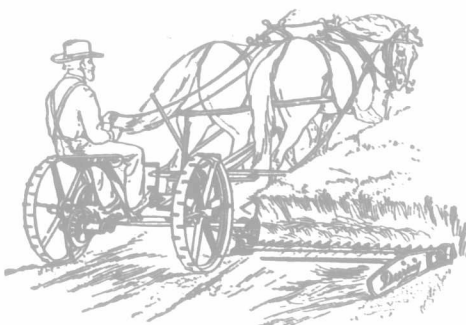
The PANDORA RANGE is nearly completed, and will be equipped with many ingenious and entirely new devices for easing the work of cooking, reducing fuel bills, and preparing meals in a hurry, while it has a compact and artistic appearance decidedly its own.

Will be placed in stock by every enterprising stove-dealer in Canada within three months.

Ask for and insist on seeing the PANDORA RANGE before buying any other. If your dealer has not placed it in stock, write to us for catalogue.

The McClary Mfg. Co.

London, Toronto, Montreal, Winnipeg, Vancouver; St. John, N.B.



Canadian Farmers Are Pleased
WITH
DEERING IDEAL MOWERS AND RAKES,

Binders, Reapers, Corn Binders, Shredders, and Binder Twine,

WHICH IS NOT SURPRISING, as they have always been an "Ideal" line in every sense of the word.

The name DEERING stands for all that is good in harvesting machinery, and will continue to do so.

The Deering Line of Cultivators and Seeders

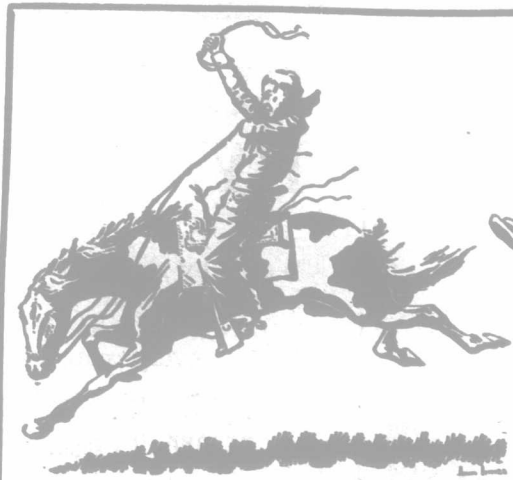
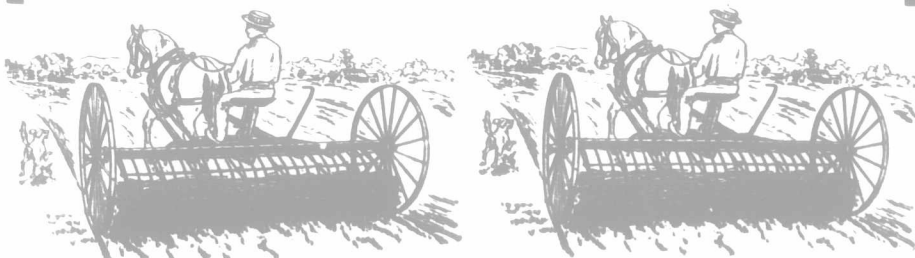
are also ideal machines, made in Canada, and contain every modern and up-to-date improvement.

Write to the nearest Canadian Branch for "Golden Era" booklet, or obtain it of your local agent.

DEERING DIVISION

International Harvester Co'y of America.
CHICAGO, U. S. A.

Toronto. London. Montreal. Winnipeg. Regina.



**A
Tough
Hide
Makes
Tough
Leather**

and a Western Bronco's hide is the toughest worn by any animal of his weight.

"Pinto Shell" Cordovan is tanned from his hide by the H.B.K. Co., by their own process, without oils or minerals.

Used only in H.B.K. mitts and gloves.

Water, wind, boil, scorch and cold proof.

Never cracks or hardens, never tears or rips, always soft and flexible.

Sold by all dealers. See this trade mark  If your dealer has not got them, write us and send his name. Every pair branded "Pinto Shell" Cordovan by

Hudson Bay Knitting Co.

20 St. George Street, Montreal. 128 Princess Street, Winnipeg.
Makers of Warm Clothing, Mitts, Gloves, Underwear, Sox, Moccasins, etc. 101

THOMPSON SONS & CO., Ship your grain to a strictly
Grain Commission Merchants, Commission House.

Winnipeg, Man.

BANKERS: UNION BANK OF CANADA.

Highest prices obtained. Quick returns. Write for terms and shipping instructions. Please do not wire for track bids.

When Buying a

Wagon

Ask your dealer for one manufactured by

**THE MILNER
PETROLEA WAGON
COMPANY,
LIMITED.**



They are perfect in design. Unequaled in quality of material and workmanship throughout.

FACTORY AND HEAD OFFICE:

PETROLEA, ONT.



BUYING WATCHES BY MAIL

There is absolutely no risk in buying an **EATON** Watch by mail. We guarantee our watches to give satisfaction or money refunded. We give a written guarantee to that effect. That is why this watch offering should interest every man reading this paper.

FIRST, It's a trustworthy, guaranteed time keeper
SECOND, It's easily worth half as much again as we're asking

The Case is a 14-K gold filled case, guaranteed for 20 years' wear, and may be had plain, engine-turned or engraved finish. (The cut shows one of the engraved designs.)

The Movement is a 7-jewel, London nickel, with cut expansion balance, exposed wind wheels, or a 7-jewel, Waltham movement, both being stem wind and stem set.

7.35

Upon receipt of **\$7.35** this watch will be sent postpaid to any address in Canada with the understanding that money will be refunded if it isn't satisfactory.

(We can give you the same movements in a heavy Sterling silver case, plain or engine-turned, for **\$6.15**, postpaid.)

This offer is only good for this month. Send your order at once, and remember:—

MONEY REFUNDED IF YOU'RE NOT SATISFIED

THE T. EATON CO. LIMITED
TORONTO CANADA

Mail Orders Filled Promptly



McLaughlin Vehicles

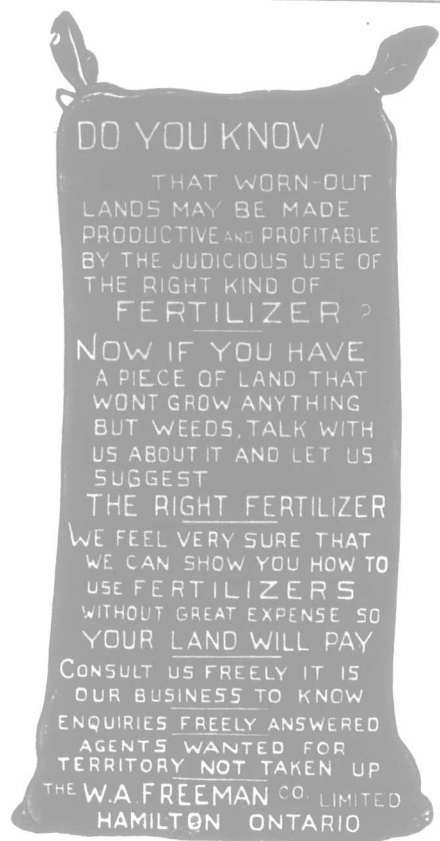
HAVE A REPUTATION THROUGHOUT THE DOMINION FOR

DURABILITY, COMFORT & STYLE

not approached by other makers.

Send for catalogue showing 100 varieties to select from

McLaughlin Carriage Co.
 OSHAWA, ONT.



DO YOU KNOW

THAT WORN-OUT LANDS MAY BE MADE PRODUCTIVE AND PROFITABLE BY THE JUDICIOUS USE OF THE RIGHT KIND OF FERTILIZER?

NOW IF YOU HAVE A PIECE OF LAND THAT WON'T GROW ANYTHING BUT WEEDS, TALK WITH US ABOUT IT AND LET US SUGGEST THE RIGHT FERTILIZER

WE FEEL VERY SURE THAT WE CAN SHOW YOU HOW TO USE FERTILIZERS WITHOUT GREAT EXPENSE SO YOUR LAND WILL PAY

CONSULT US FREELY IT IS OUR BUSINESS TO KNOW ENQUIRIES FREELY ANSWERED AGENTS WANTED FOR TERRITORY NOT TAKEN UP THE W.A. FREEMAN CO. LIMITED HAMILTON ONTARIO

PLEASE MENTION FARMER'S ADVOCATE.

E. O'REILLY

GRAIN DEALER WINNIPEG, MAN.

QUOTATIONS furnished ON ALL kinds of GRAIN in CAR LOTS. Prompt adjustments. Correspondence solicited.

REFERENCES: THE MERCHANTS' BANK OF CANADA.

Ask For

Ogilvie Oats

DELICIOUS FLAVOR. FREE FROM HULLS. WARRANTED PURE.

Put up in all sized packages.

Ogilvie's Hungarian

AS NOW MANUFACTURED

The great FAMILY FLOUR.

Insist on getting "OGILVIE'S," as they are Better than the Best. Have no equal.

To Farmers in the Edmonton District:

We are importing a carload of choice seed oats,

SWEDISH MILLING

Which will be sold at cost in quantities of 25 bushels.

Send in your orders early.

THE BRACKMAN-KER MILLING COMPANY, LIMITED,
 STRATHCONA, ALTA.

I WILL CURE YOU OF Rheumatism

ELSE NO MONEY IS WANTED.

After 2,000 experiments I have learned how to cure rheumatism. Not to turn bony joints into flesh again, that is impossible. But I can cure the disease always, at any stage, and forever.

I ask for no money. Simply write me a postal, and I will send you an order on your nearest druggist for six bottles Dr. Shoop's Rheumatic Cure, for every druggist keeps it. Use it for a month, and if it succeeds, the cost is only \$5.50. If it fails, I will pay your druggist myself.

I have no samples, because any medicine that can affect Rheumatism quickly must be drugged to the verge of danger. I use no such drugs, and it is folly to take them. You must get the disease out of the blood.

My remedy does that, even in the most difficult, obstinate cases. No matter how impossible this seems to you, I know it and I take the risk.

I have cured tens of thousands of cases in this way, and my records show that 39 out of 40 who get those six bottles pay gladly.

I have learned that people in general are honest with a physician who cures them. That is all I ask. If I fail I don't expect a penny from you.

Simply write me a postal card or letter. I will send you my book about rheumatism, and an order for the medicine. Take it for a month, as it won't harm you anyway. If it fails, it is free, and I leave the decision with you. Address Dr. Shoop, Box 52, Racine, Wis.

Mild cases, not chronic, are often cured by one or two bottles. At all druggists'.

The "Coming" and the "Gathering" of Butter.

Churn, churn, churn for hours, and the butter will not come, and at last when it does come it will not gather. Oh, the work, and the worry, and the trouble is all in the feed. In June, when nature feeds the cows, things are different.

There is no trouble then about slow-coming or slow-gathering butter. The air is full of the aroma of sweet plant life, and the young grass is tender and sweet to the taste. Nature furnished a perfect food that is perfectly assimilated, and with perfect assimilation the animal functions work to perfection, and a perfect milk is the result. We cannot have June grass and sweet-smelling herbs in winter, but we have (for practical purposes) a perfect substitute in Herbageum. When fed regularly every day, Herbageum supplies the pure aromatic qualities of a June pasture, and thus insures the thorough assimilation of the dry, odorless winter food, and with thorough assimilation there is no difficulty about the "coming" or the "gathering" of butter.

This matter has been tested by many, and from among many reports we give the following:

"Some time ago, I exchanged a dry cow for a new milch one, the party with whom I traded saying, "If she is not satisfactory, bring her back." I afterwards learned this was because two other parties had her and could not make butter, as it would not gather. At the first churning my wife churned for hours, and, while the butter formed, it would not gather. I then began with Herbageum, and the next churning was satisfactorily completed in half an hour, and we have had no further trouble. It has proved of great value in strengthening cows weak in the legs." James Ray, Margaretville, N. S.

"I find that when I feed Herbageum to my milch cows during the winter the cream separates better from the milk, and the butter separates more quickly from the cream, and I can churn in at least one-third of the time." Mrs. Michael Fitzpatrick, Osceola, Ont.

"We find that by using Herbageum for our milch cows in the winter butter can be brought in just about one-third of the time, and consider that the time gained in churning is worth more than the price of the Herbageum, besides which, the butter is a better color. This opinion formed from repeated observations." Wadleigh & McMannis, French Village, Que.

FARMER'S ADVOCATE

AND HOME MAGAZINE

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

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. XXXVIII.

WINNIPEG, MAN., AND LONDON, ONT., FEBRUARY 20, 1903.

No. 568

Editorial.

The Stallion Syndicate.

During the last few weeks certain journals claiming agricultural patronage in this country have been most scathing in their criticism of the stallion syndicate. Every man who proposed to sell horses to companies of farmers has been, regardless of his reputation or methods of business, branded as a swindler, and, hence, deserving of a wide berth.

Now, although we have no intention of defending the syndicate system of selling stallions, yet we do feel that a great injustice has been done to firms now operating in this country whose record for uprightness and the practice of sound business principle is of the best. On the other hand, the first denunciation of the faker at so late a date is to be wondered at.

True it is, that a good deal must be said on some subjects before some readers begin to pay attention, but scarcely an issue of the "Farmer's Advocate" has appeared since November 5th of last year in which some warning has not been given to those who were likely to be approached by sharp dealers in shoddy horseflesh. Not only has a firm stand been thus taken in this matter, but we have absolutely refused to accept several hundred dollars in advertising from firms whose reputation we were not prepared to vouch for, and already scores of farmers in Manitoba and the West have reason to regret the day when the representative of some of these concerns set foot upon their farms.

The reason for the presence of so many horse-dealers is not difficult to trace. The prosperity which this country is experiencing and the disposition of farmers to engage more generally in stock-raising have caused an unprecedented demand for stallions, and hence firms whose business it is to deal in these animals have come even considerable distance to share in our markets. It is unfortunate, however, that among the number should come those whose record for business integrity has never been of the best, and when they appeared in Canada West, more unscrupulous means of disposing of their stock than ever before adopted have been used, with the result that hundreds are now interested in a bundle of horseflesh that is neither an ornament in the ranks of the class to which it belongs nor destined to sire good stock, should it happen to be a getter.

In some cases most fraudulent means have been used to induce men to give their signature to documents, little knowing that in so doing their name was being attached to an order to pay. Instances of the work of these fakers have come to our notice, that, for downright swindling, is almost without a parallel, and it is to be hoped that when some of the cases come before the courts of the Province, that such an example will be made of the guilty parties as will forever rid our prosperous West of these bloodsuckers. Meanwhile, we trust that those who have occasion to become interested in the purchase of a stallion for the improvement of the equine race in their locality will proceed with caution, having their eyes wide open; and when a bargain is completed, that it may be with a reliable company of some standing, whose advertisement no paper need be ashamed to carry, and with whom no one need be afraid to deal.

Telephones for Farmers.

Of the many valuable productions which the inventive and scientific mind has placed before the world during the last two decades, few have proved of more practical value to mankind than the telephone. When first introduced, few dreamed that it would so revolutionize the methods of business as it has. At first it was adopted by the man of commerce as a convenience, and later it became a necessity, until it is safe to say that in the average business office in such a city as Winnipeg, the "phone" is used from fifty to one hundred times daily.

To farmers the advantages of a properly organized telephone system may be even greater than to those having their occupation in a town or city, and it is surprising that lines have not been more generally erected throughout the country. The chief difficulty appears to have been lack of reliable information on the subject, and a supposition, generally, that the cost of erection and maintenance would far exceed the material benefits to be had therefrom.

Through a number of letters received in response to an enquiry directed to farmers interested in this subject in Manitoba and the Territories, and published in another column, we believe that the people in the rural districts of this country are prepared to appreciate the value of a telephone system if constructed in their district, and would be willing to contribute to its construction, provided instruments and other materials could be had at a reasonable cost. In many sections in the United States the farmers have organized small companies, and are running so successfully their own telephone system that no one would think of disposing of his line.

In Western Canada the reasons for having rural telephones are even greater than in more thickly settled countries, many farmers being far from town and far from each other, but of course this inconvenience also means greater expense in putting up a line. As to the actual cost of construction, we find that first-class instruments, ready to be put up, without the services of an electrical expert, may be had in the City of Winnipeg for fifteen dollars, and insulators and pins four cents each. The amount of further expenditure will depend entirely upon the completeness of the system desired. In many States of the Union farmers are using the barbed wire fence for most of the lines, and report a fairly satisfactory service. At the Experimental Farm, Brandon, Superintendent Bedford some time ago had connection with the town by means of a wire fence, but in a recent interview stated that it could not always be depended upon, and that he found the present system where poles were used very much better. In some cases good lines have been erected by stringing a special wire to scantling, which were fastened to the fence posts, and extending high enough that no animal could reach it from the ground. There is no reason why this method should not prove satisfactory, for short distances at least.

In putting up a permanent and independent line, telephone companies use about thirty-two cedar poles, twenty-five feet long, per mile. These can be laid down anywhere in Manitoba for \$1.65 each, and in the Territories for \$2.00. They also

use about No. 9 wire, which runs about 330 feet per mile, and costs about six cents per pound, but a lighter wire, costing much less per foot, is said by some authorities to give better results. This cost, however, can be very largely overcome where fences can be made use of. The cost of maintaining a telephone system amounts to practically nothing. A new battery may be bought for sixty cents, and outside of that there is nothing in particular to go wrong.

A farmers' line is nearly altogether a matter of organization. All that is necessary is for a few to get together, organize a little association, and interest everyone in the district to join. When their line has reached town the business men will be found ready to make connection, because their interests will be at stake.

After looking carefully into this question, the "Farmer's Advocate" believes that the time has come when a campaign in favor of farmers' telephones should begin. Conditions everywhere, we are aware, may not justify their erection, but in scores of districts of this country they would be a boon to the farming classes, and we hereby extend an invitation to our readers to give their views upon the subject. A number have already done so, and their ideas are almost unanimously in favor of having lines constructed, provided the cost were not too high. Nothing can do more to dissipate the social isolation surrounding so many farm homes and encourage the development of an enlightened and homogenous agricultural people.

Siftings.

The first thing toward bettering a condition is to recognize it.

The greatest success is being accomplished by those who are putting the most thought into their work. Are you one of them?

While the Grain-growers' Association is being organized in your district don't stand back and say it will be a good thing if properly managed. Get in line, and use your influence toward making it accomplish something worth while.

If there is any subject which you desire to see discussed in these columns, say so, on a card addressed to the "Farmer's Advocate," Winnipeg. We mean to make this journal suit everyone who reads an agricultural paper.

Marconi has shown to the world that wireless telegraphy "is no dream." Surely it is time that the farmers of this country should enjoy the advantages of a rural telephone system in their home, or at some convenient center. Read what thoughtful men are saying on this question in another column.

Never sign a paper for a stranger, is a good motto in these days of prosperity, when so many suckers are searching for the financial blood of the agricultural classes.

In a few more weeks the season for soil cultivation and sowing will be here. Labor is going to be as scarce as ever, and hence every movement likely to save time when the busy time arrives should be performed without delay.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN MANITOBA
AND N.-W. T.

PUBLISHED SEMI-MONTHLY BY
THE WILLIAM WELD COMPANY (LIMITED).

WESTERN OFFICE:
IMPERIAL BANK BLOCK, CORNER BARNATTYNE AVE. AND MAIN ST.,
WINNIPEG, MANITOBA.

EASTERN OFFICE:
CARLING STREET, LONDON, ONT.

LONDON (ENGLAND) OFFICE:
W. W. CHAPMAN, Agent, Mowbray House, Norfolk street,
London, W. C., England.

1. THE FARMER'S ADVOCATE is published on the fifth and twentieth of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
2. TERMS OF SUBSCRIPTION—\$1.00 per year in advance; \$1.50 if in arrears; sample copy free. European subscriptions, 6s. 2d., or \$1.50. New subscriptions can commence with any month.
3. ADVERTISING RATES—Single insertion, 10 cents per line, agate. Contract rates furnished on application.
4. THE ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages must be made as required by law.
5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrearages are paid and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to this office, either by Money Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention.
9. LETTERS intended for publication should be written on one side of the paper only.
10. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
11. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
WINNIPEG, MANITOBA.

By the Way.

With continued prosperity, we are going to have in Western Canada that which is known to no other country in the world except England—an agricultural aristocracy.—T. C. NORRIS, Griswold, Man., M.P.P.

There is no reason why a boy should not be in position to advise his father regarding a weed or an insect, just as at present he is supposed to be able to help him in arithmetical problems of the farm.—ALEX. MCINTYRE, Vice-Principal Normal School, Winnipeg.

Last fall we picked 22 barrels of ordinary apples and 23 of crabs from our orchard. One tree, a Transcendent, yielded five barrels.—A. P. STEVENSON, Nelson, Man.

The Agricultural College should be located in a district where crop failures are practically unknown, and that is Portage la Prairie.—F. W. BROWN.

When well conducted, plowing matches do more to increase the interest in good cultivation in the district in which they are held than any other factor.—D. R. NOBLE, Blyth.

We never could get large, vigorous, spring litters from our sows until they were compelled to spend the winter around the straw stack, and allowed plenty of exercise.—S. A. BEDFORD, Brandon.

A good stock bull, if carefully handled, should remain a sure-getter and be useful in a herd for several years.—JNO. E. SMITH, Brandon.

Has not the Government power to regulate and control and tax elevators as well as transient traders, hotels, etc? If one-half of the crop in the Northwest is still in the farmers' granaries and elevators, a tax of one cent a bushel would realize sufficient to erect fifteen standard elevators next summer. Shall not a start be made, and cement ordered for the foundations, and lumber, nails and the necessary machinery for at least ten elevators? Increased railway equipment and ex-

tension is assured; and also immense increased areas to be broken up and put under cultivation, and the thirty-six million bushels of to-day will be a hundred million bushels in three or, at most, in five years from now, if a gracious overruling Providence will grant us propitious seasons. It will be a paying business. The increased elevator capacity will be necessary and required. Will not the Government and our M.L.A.'s rise to the occasion and come to the rescue? Time is essence.—WM. WATSON, in Moose Jaw Times.

* * *

The farmer uses his expensive machinery not more than two or three of the twelve months of the year, and it is hardly to be expected that he will tolerate much longer the action of a railway company that has received from the people nearly, if not quite, in lands and cash twice the cost of the road.—T. J. COLLYER, Welwyn District, Assa.

* * *

Our rural schools cost us a good deal, and compared with towns and cities are miserable failures. They need an entire change of system.—H. NICHOL, Brandon.

Railway Regulation and the Farmer.

[Written for the "Farmer's Advocate."]

The general movement for improved railway regulation, which has led to the organization of the Railway Commission in England, and to the various commissions to be found in the United States, has not, in its outcome, by any means, accomplished all that was anticipated. But while the commissions have not solved all the difficulties which called them into existence, any careful investigation of the evidence will substantiate the conclusion that they have done much to better the conditions. The central question in all matters of regulative policy turns on the matter of railway rates. No hard and fast criterion of the reasonableness of a rate can be referred to. Rate systems based entirely upon the distance principle, or upon the cost principle, fail because they do not take into consideration other essential factors. A rate is essentially a compromise. In dealing with the regulation of the arrangements arising out of such compromises, it is but natural that difficulties should have arisen. Then again, in the work of the commissions, certain difficulties have arisen because of weaknesses and defects in the laws from which they obtained their origin; the question has been further complicated by the lack of any clear line of demarcation in regard to the relationships between the commissions and the judicial bodies which, in the last resort, have to pass upon their decisions. The detail concerned with these matters may be found in my reports to the Department of Railways and Canals. Reference is made to these matters here simply to indicate that some of the admitted defects in the commission system and its working have been attributable to difficulties in the problem itself; others to lack of clear statements in the enacting laws themselves.

The transportation problem is the problem of most urgent interest in Canada to-day. To state this should be but a truism, which should be part of the ready change of current Canadian thought. The transportation problem has its general and its particular aspects. Canada is at present in its empire-building stage. The development desired depends upon a harmonious organization of the transportation system. As trade stands in Canada to-day, only one-half of the total value of exports is attributable to products connected with the farm. The prices of Canada's agricultural products are determined in the world market, and it has to face there the competition of other countries. To put the matter in the shape of a concrete example, much attention is being devoted to the expansion of wheat production in the Northwest; and for years the settlement of the Northwest will be bound up with the exploitation of its grain-producing powers. One of the competitors Canada has to face is the Argentine Republic. The wheat production of that country, while it is not great as compared with that of the United States, shows such signs of increase as warrant the statement it will have a steadily increasing effect upon the world value of wheat. In point of railway transportation, Argentina is

well supplied—much better supplied, proportionately, than Canada. With one-third of the land area of Canada, it has sixty per cent. of the railway mileage of Canada. Although the ocean carriage from Argentina to Europe is long, at the same time the greater part of the wheat-producing area is situated not more than 150 miles from tide water. In consequence, the wheat has the advantage of a short rail haul, and at the same time, while it has the disadvantage of a longer ocean journey than Canadian wheat, it goes forward at low ocean rates.

The discussion with reference to railway regulation in Canada has been occupying the public attention for nearly thirty years. In the period succeeding Confederation, the earliest project for the more effective control of railways is contained in the bill introduced in 1873 by a representative of agricultural interests, Mr. Oliver, of Oxford County, Ontario. This bill provided for equal mileage rates. Its aim was to afford better regulation of traffic on railways. Like the contemporary legislation which Mr. Reagan, the father of the Texas Commission, was urging in the United States, this provided for no special tribunal to enforce the provisions of the proposed law. The subsequent history of the movement toward expansion of regulative policy in Canada; the discussion under the leadership of Mr. Dalton McCarthy, in the period 1880-86; the hosts of petitions which poured in from the counties of Ontario in favor of the law, which he modelled upon the English Railway Commission legislation; the report of the Royal Commission; the increasing of the regulative powers of the Railway Committee of the Privy Council, and the more recent movements for more effective regulation, are a part of the history of the regulative movement with which all should be acquainted.

The investigation which, under the direction of the Department of Railways and Canals, was conducted during the summer of 1901, found that the leading grievances existing were concerned with, (1) classification, (2) distributive rates, (3) car lot and less than car lot shipments, (4) excessive rates and discriminations, (5) competitive versus non-competitive rates, (6) American rates and Canadian rates, (7) minimum weights. Of the matters under these headings, that concerned with the relation existing between American rates and Canadian rates is especially complained of by the farmer. The situation of certain portions of Canada is such that nature makes the Canadian railway system an integral portion of the American railway system in regard to the movement of through traffic. Any policy which would deprive the Canadian railway of the right to participate in this traffic would not be to the general interests of Canada. At the same time there should be taken into consideration, as an essential factor in the export rate for the Canadian farmer, the geographical advantage he possesses as compared with his competitor in the Western States.

The argument for a more specialized method of regulation gathers cogency from the fact that the rate question is a compromise and that railway transportation occupies a position different from that of other enterprises. It is the basic industry on which the expansion of industry and the enhancement of values of the products of all industries depend. In its nature it is much more monopolistic than other businesses. Parliament has recognized the futility of endeavoring to regulate the railways through general regulations. It has given up its witless dependence upon the clause of the earlier years of the railway act which gave it power to regulate rates when dividends exceeding fifteen per cent. were earned. It has contented itself with assisting railway enterprise. The movements which transferred the work of regulation to the smaller body, the Railway Committee of the Privy Council, recognized the necessity of having a small body to deal with the matter of regulation. But although the useless body that some discussion would claim, and although it, and its presiding officer, has been especially active in connection with matters of regulation during the past six years, at the same time the political tenure of its members, and the quality of function possessed by them, places obstacles in the way of their dealing successfully with the matter of regulation. The arguments for regulation are so well established that there

is no need for dealing with this phase of the question; it is the matter of how the regulation should take place that is important. The members of the Railway Committee have not the opportunity to obtain the specialized information which is necessary. With the expanding railway system of Canada, a need of regulative policy based on consecutive policy is necessary.

In the older days equity was measured by the length of the Lord Chancellor's foot. In Canada the regulative policy has depended upon the Minister of Railways and Canals for the time being. To cite one example of the importance of specialized information: Is the Canadian farmer subjected to unfair competition because of the way in which the Canadian railway arranges the rates on his product, as compared with the rates given his American competitor? Can this be determined without adequate information with reference to the facts in dispute, which would entail inquiries precluded by the engrossing political duties of the Railway Committee? This question and the many others difficult—some impossible of solution—demand the constant regulative attention of a tribunal whose members shall be fitted by technical equipment and non-political tenure to deal with the matter.

One thing that must be constantly borne in mind is that, though a railway commission, with the proper powers and judiciously manned, will undoubtedly be of benefit, at the same time it is futile to hope that it will create such a condition that everybody will be satisfied. The matter of rate regulation is a matter of compromises, and it is as essential to keep in sight the rights of the railway as it is to pay attention to the rights of the shippers. It was after a searching investigation by the Cullom Committee that the act to regulate commerce was enacted and the Interstate Commerce Commission was appointed. The wise words with which this committee closed its report will bear constant iteration: "That a problem of such magnitude, importance and intricacy can be summarily solved by any master stroke of legislation is beyond the bounds of reasonable belief. That a satisfactory solution of the problem can ever be secured without the aid of wise legislation the committee does not believe.

S. J. McLEAN.

Leland Stanford University, California, January 22nd, 1903.

[Editorial Note.—Prof. McLean, author of the foregoing, was born in Simcoe County, Ont., Canada, in 1871, and graduated from Toronto University in 1894; pursued graduate studies in economics in Toronto, Columbia and Chicago Universities until 1897, when he received the Ph. D. degree from the latter. From 1897 to 1902 he was Professor of Economics and Sociology in Arkansas University. He specialized in transportation, and has contributed articles on this subject to leading reviews and magazines. In 1899 he made a report to the Canadian Minister of Railways and Canals on railway commissions in England and the United States, and in 1901 acted as a Special Commissioner on railway rate grievances. At present he is Associate Professor of Economics, and head of the department of Economics and Social Science in the Leland Stanford (Jr.) University, California.]

Grain Growers Organizing.

As an additional indication of the determination of farmers to avail themselves of the advantages of united action in securing and maintaining their rights and privileges, it has been decided to organize the Manitoba Central Grain-growers' Association at Brandon on March 3rd. Sessions will be held at 2 p.m. and 8 p.m., and several prominent speakers will take part. There should, and doubtless will, be a large and representative gathering.

You can never do your friend or neighbor, who ought to have a first class farm paper, a good turn more cheaply than to send us his name and P. O. on a post card. It will bring him a free sample copy of the "Farmer's Advocate."

A Word of Advice to You.

Almost every reader of the "Farmer's Advocate" in Western Canada has a friend or relative now residing in Great Britain, in Europe, in Eastern Canada or in some of the States of the Union who at the present time, when the illimitable wheat fields and stock ranges of the West have sprung into prominence, is deeply interested in the possibilities so closely associated with our Western country.

It is within your power to intensify and focus this interest by placing in his hands the LATEST, MOST UP-TO-DATE AND RELIABLE LITERATURE and information in the West. Such action on your part does not require much effort, since all who are interested in the welfare and future of the West, whether Government official or periodical, will cheerfully co-operate with you and furnish you, or forward to your friend direct, information or literature bearing upon this most vital subject. If you have not already done so, take the necessary step at once. It might be the means of bringing a "new light"—a bright ray of sunshine—into the possibly now cheerless future of your friend or relative. Remember, you have done well here; so "do unto your neighbor as you would he should do unto you." Send us the names and addresses of such persons and we will be pleased to forward them, gratis, a copy of our Immigration Number.



FOXHOUND PUPPIES.
Owned by R. H. Readhead, "Bow Hill," Calgary.

Plan of Agricultural College.

At the opening of the Manitoba Legislature on February 12th, the speech from the throne, by Lieut.-Gov. Sir Daniel McMillan, K.C.M.G., contained the following announcement: "My Government have decided to recommend to you the establishment of an agricultural college, whose special object will be the development of those industries that will promote the interests of the farmers and stock-raisers of the Province."

When the agitation in favor of an Agricultural College took active form about two years ago, and it became evident that the time had arrived when a school fitted to give practical instruction in the various branches of agriculture should be built and supported in this Province, the "Farmer's Advocate," with great care and after considerable deliberation, prepared a plan which it was believed would suit Manitoba's needs and conditions. At the request of numerous farmers who are taking an active interest in this question, we again publish an outline of what we still believe would be best suited to the requirements of this country.

In drafting the scheme herewith submitted, we have endeavored to make a careful study of the various Agricultural College courses of the continent, and to keep in mind the conditions of this Province, and while necessarily imperfect, the general outline will, we believe, commend itself to the Government and to the up-to-date farmers of

the Province. We may at once assume that the initial outlay will be considerably larger than that needed annually; in fact, it can be stated broadly that whereas an agricultural school with say 320 acres of land can be put into operation for about \$50,000 to \$60,000, the necessary annual expenditure will only amount to \$15,000. The initial outlay would be somewhat as follows: 320 acres of land, costing from \$10,000 to \$16,000, depending on the location; a building three stories and basement, containing lecture rooms and offices, laboratories and gymnasium, library, reading room, and fittings, would cost about \$25,000; farm barns for horses and cattle would cost \$3,000; for sheep and swine, poultry and farm implements, \$750 each. It must be kept in mind that the Province cannot afford elaborate buildings, neither would it be wise to erect such. In addition, the farm would need to be stocked with representatives of some of the breeds of cattle suited to the Province, say a bull and three cows of four or five breeds, which would cost in the aggregate about \$3,000, all of which would be used for teaching purposes. Horses would be required for the farm work and for instruction, say two teams of Clydesdales, \$800; one team of lighter horses, \$250; sheep representatives of one of the long and of the medium woolled breeds, of each one ram and ten ewes, which could be got for about \$250; while the breeds of swine, one boar and two sows of reasonable quality, of say three leading breeds, could be got for \$150. One hundred dollars invested in utility breeds of poultry would be ample for a start. Good specimens of other breeds of live stock could be rented for breeding and instruction purposes. Implements, harness, etc., would call for another \$1,000, making a total cost of somewhere in the neighborhood of \$60,000.

Given such an equipment, what would be taught, what teaching force would be required, and what would be the cost? In the first place, the course should be one of two years, of 16 to 18 weeks each, starting, say, November, and ending in March, thus allowing students to be home during the busy season, and permit the college force to do some experimental and outside work during the summer vacation. While other institutions have a large teaching personnel, at the start the force could consist of four professors and three instructors, one of the professors being appointed Controller of the Institution: First, a Professor of Agriculture, to teach the principles of soil cultivation, the growing of farm crops, cereals and grasses, drainage, silos, etc., and the principles of agricultural physics, such as draft of implements, roadmaking, meteorology, construction of implements, applied agricultural chemistry, showing its relation to the preservation of soil fertility; judging of cereals, etc. A Professor of Horticulture and Botany, taking up the teaching of plant life, small-fruit culture, gardening, forestry, the identification and destruction of weeds, prevention of smut, rust and other fungous diseases of plants, and the judging of roots and vegetables; he could, during the summer, have full charge of the tests belonging to his department and supervise provincial weed inspection. A Professor of Animal Husbandry would be necessary to teach the principles of breeding and breeds of live stock, feeding of animals, elements of veterinary science and bacteriology, and to have charge of the live stock of the farm. A Professor of Dairying, to teach farm dairying, factory work in butter and cheese, and attend to inspection during the summer. Men who would be thoroughly posted in their work and energetic could be secured for \$1,500 per year. An instructor in farm economics, farm bookkeeping, drawing and parliamentary practice could be got for \$1,000 a year, being also bookkeeper and secretary of the College. A carpenter and blacksmith would also be needed during the school term, to give instruction; each could be got for \$75 a month, say \$750 for the two men for the course. The stock would need attention by skilled men, a horseman, cattleman, and a man to look after sheep, swine and poultry, each at \$40 a month. Wear and tear, incidentals, printing and advertising would bring the total to \$15,000 yearly.

It may be stated that the College need not be expected to pay its way; no school, college or university is expected to; neither would it be fair to expect an agricultural school to do so. The following schedule will suffice to show how the

students' time might be occupied during the winter term: A first-year man, Monday morning at 8 o'clock would meet the Professor of Animal Husbandry for a lecture on breeding; at 9 a.m., the Professor of Agriculture, to be instructed in the physics of agriculture; at 10 a.m., the Horticulturist, for instruction in plant life (applied botany, seed germination and testing combined); 11 a.m. to 1 p.m., laboratory work in agricultural physics and plant life; 2 to 4 p.m., stock judging, blacksmithing, carpentering or farm dairying. In the second half of the term, the day would be divided up similarly: In the morning, lectures on feeding of animals, agricultural physics, veterinary science, plant life, dairying, farm book-keeping; the afternoons again being spent in stock judging, farm dairying, shop work, etc. The second-year man would take more advanced work, such as lectures on feeding, veterinary science, farm economics, stock judging, from 8 a.m. until 1 p.m. daily; and from 2 until 4, agricultural physics and horticulture; from 4 to 5.30 p.m. being spent at stable management, including practical feeding, etc., nursing animals, farm mechanics (running farm engines, windmills, grinders, applying the brake tests, etc.), fitting horses, cattle, sheep and hogs for the show-ring and showing them, making rope halters, etc. The student would in the second half of the term have lectures on bacteriology, parliamentary practice (organizing school meetings, etc.), breeds of live stock, applied agricultural chemistry, and have two hours' stock judging every morning, the first four days of each week.

Any young man of average ability could take such a course as above outlined if he gave strict attention to business. It will be noticed that no provision is made for instruction in grammar, arithmetic, and composition, as the present public-school system should be ample to meet the requirements along these lines.

At the present time over \$6,000 goes annually to Government work in dairying, and \$2,000 to weed inspection, which money could be diverted to the College, the work being done more effectively by the College staff.

Tuition should be free, minimum charges being made for laboratory material supplied to students.

At the College creamery during the summer, investigations could be conducted with the view of throwing light on the problems now confronting the butter and cheese makers of the Province.

While the question of agricultural education has been discussed for several years, the above is, we believe, the first attempt to formulate a plan in anything like detail suited to Western conditions. We shall, however, be pleased to receive criticisms with a view to getting a fuller expression of the opinions of the people most interested.

Our Immigration Number.

Prompted by the good results following the Immigration Number of the "Farmer's Advocate" as published on May 20th, of 1902 we have decided to issue a similar number on March 20th of this year, 1903, with a bona-fide circulation of 25,000 copies. Of this number, 13,000 copies will circulate over Western Canada, covering a constituency lying between Port Arthur and the Pacific Coast, among the regular readers of the "Advocate," while 12,000 copies will be placed in the hands of intending settlers now residing in the Northern States of the Union, in Great Britain, or in Europe, who have designated their interest in the West by correspondence with land officers and Government officials in Canada, or otherwise.

We know of over 900 settlers who came into Canada last year who had previously received a copy of the Immigration Number of the "Advocate" of May 20th, at the homes in their native country. From the marked degree of appreciation, on the part of Government officials, for the Immigration Number of the "Farmer's Advocate" last year, we feel safe in concluding that it did good in missionary work, and if we can again be the means of starting another "human wave," of still greater dimensions of settlers, rolling into the West, our object will be accomplished.

Reader, you have a friend interested in Western Canada who would feel greatly indebted to you if you cause a copy of the Immigration Number to be sent to his address. A postal card with his name and address, mailed to the "Farmer's Advocate," Winnipeg, Man., will bring a copy absolutely free. Send it today.

Railway Taxation.

[From our Eastern edition.]

The thanks of the country are due Mr. H. J. Pettypiece, M.P.P., and the Canadian Magazine, for an informing article on the above subject in the February number. The masses of the people in Canada do not realize the present condition of affairs, which is largely the result of weak legislation and prodigality in public aid to railway construction. Mr. Pettypiece first shows that there is no legitimate objection to taxing railways and that, if anything, they should bear the heavier share of the burden, compared with other properties. But what is the fact? The Grand Trunk Railway in the Province of Ontario represents a capital of over \$241,000,000, assessed at \$6,525,504, or 2½ per cent. of the capital, and pays only \$134,624 taxes, Provincial and municipal, or 50 cents on every \$1,000 of capital. The farm wealth of Ontario is represented by \$1,000,000,000 capital, assessed at \$450,000,000, or 45 per cent., and pays \$4,621,803 in taxes, or \$4.62 on every \$1,000 of capital. Therefore, \$1,000 worth of G.T.R. property is assessed at \$27.50, and pays 56 cents in taxes, while \$1,000 worth of farm property is assessed at \$450, and pays \$4.62 in taxes!

It is also shown that the rate of taxation in Canada is far below what is levied in other countries. Take the G.T.R. from Chicago to Portland: The 510 miles in the States pays annually \$200,000 taxes, or \$400 per mile, while the 628 miles in Canada pay only \$31,400, or \$50 per mile. At the same time the rates charged for hauling Canadian products are far higher than the rates on United States products.

The net earnings of United States railways in

"IMMIGRATION NUMBER" OF "THE FARMER'S ADVOCATE."

Dear Reader,—

You have a friend who intends to settle in Western Canada this year. He may at present reside in Great Britain or in one of the neighboring States of the Union. At any rate, he is interested in this Great and Glorious West.

Send his name and address, and we will be pleased to mail him, absolutely FREE, a copy of the Immigration Number of The Farmer's Advocate and Home Magazine for 1903, which is to be issued on March 20th.

It will contain such reliable information regarding the vast resources of the West, descriptions of the various fertile districts and most important details in wheat-raising, mixed farming, ranching and stock-raising, profusely illustrated, as will prove most instructive to the settler. Address

"FARMER'S ADVOCATE,"

Winnipeg, Man.

1900 was \$1,180 per mile, and of Canadian roads \$1,212, so our roads are able to pay taxes.

The people of Canada have practically built the railways, through the aid given by the Dominion and Provincial Governments and the municipalities as follows:

Cash subsidies and bonuses	\$225,000,000
Loans and subscriptions	27,000,000
Land—52,000,000 acres at \$2.00	
per acre	104,000,000
Lines already built	35,000,000
Total	\$391,000,000

Canada has some 18,500 miles of railways. Leaving out the 1,500 miles of Government railways, the subsidies amount to nearly \$19,000 per mile, which in many cases would have built the roads. On top of these immense subsidies the railways are paid annually by the country \$1,350,000 for carrying the mails. The interest charge on subsidies, loans, etc., amounts to \$9,000,000 annually. Why should they not pay their fair share of the taxes?

On top of these immense subsidies the railways are paid annually by the country \$1,350,000 for carrying the mails. Why should they not pay their fair share of the taxes?

WHAT SHOULD BE PAID.

The total railway wealth of Canada represents a capital of \$1,043,000,000, and pays less than \$500,000 in taxes, or less than one-half of one mill on the dollar. If the railways merely paid a fair share of taxation on the capital donated to them by the people, the revenue from that

source would amount to over \$6,000,000 annually.

If the Indiana law were in force in Canada, the railways would pay in taxes at least \$7,600,000 annually.

If the Connecticut law were placed in operation in Canada, the annual tax on the railways would be over \$10,000,000.

If the Wisconsin act were applied here, the amount would be \$2,920,000.

If the railways here paid the average U. S. rate of \$255 per mile, the total would be \$4,845,000.

If the G.T.R. paid the same rate in taxes in Ontario as it did last year in Michigan, \$507 per mile, the total would be \$1,345,071, instead of the comparatively insignificant sum of \$134,624, which is now paid by that corporation. And, besides, both passenger and freight rates are lower in Michigan than in Ontario.

OTHER DISCRIMINATIONS.

But even this does not complete the list of discriminating inequalities which exist between Ontario and Michigan. In Michigan the railways are operated under the control of a State Commissioner, and have to provide suitable cattle-guards at all crossings, maintain watchmen at town and village crossings, keep farm crossings in repair, construct culverts across their tracks for public and private drains, and in other ways give due consideration to the welfare of the general public. In Ontario the public welfare is the last consideration—or rather, it is not taken into consideration at all. Level and dangerous crossings are left without cattle-guards or watchmen; drainage laws are a dead letter, and a railway can, and often does, block the drainage system of a whole township, while farmers have no rights in the matter; there are no regulations regarding speed and time of trains; cars are sometimes supplied when they are needed, and sometimes they are not; and the excessive rates are a burden on many lines of business.

The respective conditions which obtain in Ontario and Michigan will be found to exist generally in Canada and the United States, and the question may well be asked in respect to Canada: "Does the country own the railways, or do the railways own the country?"

Our Scottish Letter.

BRITISH-CANADIAN UNITY.

Since my return from Canada on 1st Jan., I have been kept exceedingly busy, and have had little leisure to devote to correspondence. I am, however, in arrears to your readers, and send this off somewhat hurriedly, so that you may not think I have altogether forgotten you.

Canada has a great future, and the impression on my mind is that Great Britain will need to realize this more than she hitherto has done. The intense loyalty of the Canadians to the British flag is a national asset of which the most should be made. Two reasons appear to me to demand closer attention to Canada on this side of the ocean. The necessity for maintaining an all-British road to the East is the first, and the necessity of maintaining an all-British source of food supply is the second. In times of peace the world jogs along all right, and everybody wants to sell to Great Britain. But in a time of war it might be the highest form of strategy to starve out the people of this tight little island. Doubtless the British navy could keep the seas clear for the transit of British food, but it might pay Britain's enemies not to send their surplus goods this way. Canada can feed Great Britain's millions for many a year to come. She should be encouraged to do so, and it will pay British statesmen to foster the Canadian sentiment of loyalty and forward this great cause in every way. At present you have a big handicap in the monopoly of one line to the Northwest. I heard some extraordinary stories about the charges for interior traffic on the C.P.R. If they be true, or half true, the sooner you have another trans-continental competing route the better.

The situation regarding the food supply of Great Britain is quite intelligible. The population of this country is so great that even were its agricultural possibilities developed to the fullest degree there would still be abundant room for Canadian produce. Under no conditions could we feed our population. Consequently, the British farmer, being at the door of the best market in the world, ought always to be able to hold his own and have the best price for his produce. It is true that he cannot profess to have this at present. To the average mortal it is an astonishing fact that there are square miles of derelict land within thirty miles of the City of London. But this is due to a variety of causes, quite apart from the question of proximity to market. If there was not a superabundance of food coming from abroad, that land would soon be under cultivation. It would be under cultivation now were the conditions of land and tithe-tenure here such as admitted of its free cultivation. Again,

it must be remembered that here we have a demand for land for other than agricultural purposes. The trend of things at present creates the impression that the Highlands of Scotland are to be converted into one huge sporting run. There is no way of hindering this transformation while conditions remain as at present. But in a time of national stress and difficulty many things would be altered and the end would be a vast upheaval in the conditions upon which land is here held. If the British farmer keeps in the front so far as quality is concerned, he does not need to fear any foreign competitor. He is at the door of the market, if only his stuff be the finest. After he has done his level best there is abundant room left in this big market for Canada and Britain's other dependencies. It is right to encourage these and not the strangers to feed us, and in the development of Canada Great Britain has a splendid opportunity for keeping the world at bay and riveting her hold on the Greater Britain across the seas. This she can do by the most enduring bond of mutual economical interest.

SCOTLAND YET.

Horses.

Stallion Prices.

To the Editor "Farmer's Advocate":

The exceptionally high prices which heavy draft stallions are at present commanding in Manitoba and the West strikes one as out of keeping with the ruling prices elsewhere. No doubt it is the prosperity of this country which makes such a condition of affairs possible. The wide-awake speculator in horseflesh is ever ready to float his stock where it will give the quickest and best returns for the money invested therein, and so this year more than ever we find him after a share of our rich harvest, intending to safely spout it into the granary vaults of his deep-seated pockets, and in doing so is carefully employing all the latest devices which he believes will further his purpose.

Nevertheless, it is true that this stallion business is necessarily an important one. More heavy draft stallions are required throughout this country, and that honest horse-dealers are justly entitled to a fair share of the national wealth which is freely circulating through the commercial veins of our land, no one will dispute, yet, according to prices which we believe are being paid this season for some stallions, more than a just profit is being realized by unscrupulous men. The palming off of an inferior animal, or the rating of a good one much higher than his merits entitle him, is apparently becoming more common. Thus it is that the honest, industrious but ill-informed buyer does not receive good value for his hard-earned cash.

Co-operation among the farmers when purchasing so lightens the payments individually that in prosperous times less attention is paid to this matter than it deserves, and often, for the same reason, the animal in question is accepted largely on the merits claimed by the seller. This is not businesslike to begin with. The individual conformation and value of pedigree is often not understood by a majority of the buyers, so that many serious mistakes are made in selecting suitable draft sires. The prices paid are generally sufficient to purchase the best quality going, but this is not what is usually got.

Buyers should be exceedingly careful, whether purchasing as a syndicate or as individuals, to see that the stallion is equal both in conformation and pedigree, and to the price which it is necessary to pay. The safest way is to deal only with such firms, or breeders, as are noted for square dealing.

OBSERVER.

Spring Stallion Show at Toronto.

In previous years horsemen in Ontario and Quebec have been handicapped in the trade in stallions on account of not being able to get their horses before the public in the most propitious times. Owing to this fact it was decided to hold a show of heavy draft stallions in Toronto on the 4th, 5th and 6th of February. The show came off as advertised, and those participating have no reason to regret their venture. Several horsemen from Manitoba and the Territories were in attendance, and were surprised at the immense size and splendid quality of the horses imported and bred by the Eastern breeders and dealers.

The principal exhibitors were Graham Bros., Morris & Wellington, Smith & Richardson, Robert Ness, Robert Beith, M.P., Robert Davies, O. Sorby, J. B. Hogate, H. Boag, J. G. Clark, and Geo. Isaac. Mr. Joseph Watson, of Lincoln, Nebraska, made the awards in all classes.

The Clydesdales were more numerous than the Shires (there were no classes for Percherons), but those wanting ton horses of either of the breeds exhibited had not far to seek. The sweepstakes for best Clydesdale was won by Graham Bros., with Stately City (imp.), and in Shires by Morris & Wellington, with Coronation, an immense sized colt, rising two years old, recently imported. One

of the best classes of the show was the two-year-old Canadian-bred stallions. The judge hesitated some time before he finally placed in the lead Macqueen 2nd, sired by Macqueen, with Sorby's Charming Prince next. Other classes showed more distinctly the extreme types, but taken altogether the success of the show was pronounced this year, and is assured for years to come. The prize list will be found on page 170.

Bone Diseases of Horses' Legs.

The bones of the limbs of horses are subject to a variety of diseases, some of which are liable to cause permanent and in some cases incurable lameness, hence must always be considered an unsoundness, while others are not so serious, seldom or never cause permanent lameness, and in many cases are not considered as constituting unsoundness.

While it is seldom wise for an unprofessional man to attempt treatment in a case of lameness caused by disease of bone, especially where a joint is involved, it is well that all horsemen should understand the nature of such diseases and be able to recognize them when present. In order to be able to appreciate them and understand their nature, a slight knowledge of the structure of bone and its fibrous covering is necessary.

Bone is composed of two modifications of tissue; the external portion, varying in thickness in different parts of the bone, appears hard and compact, and is called the compact tissue; internal to this is a much less dense, somewhat friable tissue, composed of plate-like structure with small spaces, called cancellated tissue. In the long bones of the limbs this tissue surrounds a space called the medullary canal, which contains the marrow. Bones that are known as flat or irregular bones do not contain a medullary canal. All bones are covered with a tough, fibrous membrane, called the periosteum. This membrane does not exist over that portion of a bone that helps to form a joint; at the same time, the surface of one bone does not come in direct contact with that of another in a healthy joint. In order to avoid the friction that this would produce, the opposing surfaces of all bones concerned in joints are clothed with a special covering, called articular cartilage. Each joint is enclosed by sac-like ligament, called the capsular ligament, the internal surface of which is supplied with cells which secrete and supply to the joint for lubrication, a fluid called synovia or joint oil. In the majority of bone diseases, especially those of the joints, inflammation is set up, by concussion or direct injury, in the cancellated tissue of the bone; this extends and involves the compact tissue and the articular cartilage, the latter is destroyed. As a result of the inflammatory process, a soft material, called an exudate, is thrown out; the articular cartilage being destroyed, the bones come in actual contact with each other, and this, with the inflammation present, causes lameness. When this

cartilage is destroyed it will never be reproduced. Lameness will continue so long as this condition exists. The exudate spoken of has a tendency to become ossified (converted into bone), thus uniting all the bones involved into one. This process is called ankylosis. When this process is completed inflammation ceases, hence pain is no longer present, and if the joint or part of the joint affected be not one of extensive motion, lameness disappears, and even a stiffness is not noticed. Nature will, in many cases, effect a cure in this way, but the process is materially assisted by what is called counter-irritation, or producing a superficial irritation by applying blisters or the hot iron (which is called the actual cautery), followed by blistering. This counter-irritation increases the internal inflammation, hastens ankylosis, and, as a consequence, the subsidence of inflammation, and in the majority of cases lameness ceases. Having briefly described the anatomy of the parts and the nature of the disease, without using more technicology than necessary, we will now speak of some of the diseases.

ANKYLOSIS OF THE KNEE.—This is not of common occurrence, but occasionally met with. Inflammation is set up in some of the bones of the knee; there is, in most cases, no swelling noticed, but the horse goes lame. If severe he will stand with his knee semi-flexed, when in motion he travels quite lame and flexes the knee as little as possible, the lameness increases on exercise and is particularly severe when trotting down hill. Manipulation of the parts causes pain and forcible flexion (by flexion we mean bending so as to fetch the bone of the forearm and that of the cannon as close together as possible) causes acute pain, so much so that the animal will frequently rear off the other leg. After a time a greater or less enlargement will be noticed, at first of rather a doughy feel, but gradually becoming harder as the process of ossification advances. In the meantime ankylosis is taking place, and when these two processes are completed inflammation ceases, and he will no longer go lame, but may go more or less stiff, according to the portion of the joint that is ankylosed. In the knee there are really three articulations. The small bones of the joint consist in seven and sometimes eight, arranged in two rows. The lower end of the large bone of the forearm articulates with the upper surface of the upper row, and here is where the greatest motion exists; in the articulation between the rows of bones there is less motion and in that between the inferior surface of the lower row and the upper ends of the cannon bones still less. The bones concerned in the lower articulation may be completely ankylosed without materially interfering with action. If the middle articulation be involved, stiffness will be noticed, and if the upper articulation, there will be a stiff knee. With a healthy knee it is an easy matter to flex the limb until the heel of the foot touches the point of the elbow; where ankylosis exists this is not possible, and the closeness to this con-



AGRICULTURAL STUDENTS, WESLEY COLLEGE.

First row.—J. W. Dunfield, Ridgeland, Man.; S. A. Sweinsson, Glenburn, Man.; A. J. Handford, Holmfeld, Man.
Second row.—Bjorn Jonasson, Baldur, Man.; W. H. Hill, Miniota, Man.; K. Murchison, Petrel, Man.; A. Barrett, Winnipeg, Man.
Third row.—J. Stephansson; H. Arason, Glenburn, Man.; W. H. Olson, Winnipeg, Man.

tact will depend upon which articulation is ankylosed.

Treatment for this trouble depends upon the progress the disease has made when treatment commences. If before alteration of structure has occurred, rest and hot poultices or fomentations, with cooling lotions, as one composed of one ounce each, sulphate of zinc and acetate of lead to a pint of water, will usually succeed in allaying the inflammation and effecting a cure; but if the disease has reached that stage in which the articular cartilage has become destroyed, it is not possible to effect a perfect cure, as this structure cannot be reproduced, and treatment must be directed to hasten on the process of ankylosis. This is done by counter-irritation, either by blistering or the actual cautery followed by blistering. The latter is the most satisfactory, but should be employed only by a veterinarian. In the meantime the animal must have rest, else the whole joint may become involved. It is usually necessary to give at least two months perfect rest, longer if possible.

I will speak of other bone diseases in future issues. "WHIP."

Stock.

The Ranching Outlook.

Prominent among the subjects for comment in the agricultural press of late has been the outlook for the rancher on the plains of our great Northwest. Speaking from the standpoint of a resident of the rich and thriving territory of Assiniboia, I venture the assertion that there is not only room for extensive development in the range industries already established in this portion of the West, but a sound prospect of profitable business for a large number of newcomers into the ranching field.

Instances are sometimes cited, to the detriment of this most important branch of agriculture, where the rancher is being crowded back from his former grazing grounds on the prairie by the grain and mixed farmer and compelled to take refuge, as it were, in the nearest hills. True, there have been cases where the rancher, for the sake of convenience or for some temporary reason, has grazed his herd in and around the sloughs adjoining wheat land, and in some of these cases he has had to retire before the steady advance of the plow and the steady sweeps of the self-binder. True, also, that he repaired with his herd into the hills. But he would surely not have been a rancher worthy of the name had he erected his shack and corral anywhere but in close proximity to those very hills.

Easterners there are, and others also, who seem to labor under the impression that this vast

Western prairie is one level, unbroken wheat field. Others, who have crossed the wide belt and have seen the numerous ranges of rolling, gravelly, and sometimes stony, hills and miniature mountains which here and there break across the level expanse, are apt to look upon these districts as being a huge amount of territory useless except as a means of increasing the business of the transportation companies. Yet, often, concealed in the hollows among these barren-looking hills can be found some of the best-bred, largest, fattest, sleekest and most profitably-raised herds of horses, cattle and sheep in the world.

While it would be useless for the rancher to attempt to hold wheat land against the advance of the wheat farmer, so would it be utter nonsense for us to think of the wheat farmer driving the rancher out of business by invading his birthright, the hills. While fertile spots are not unknown, yet wheat could not be grown in sufficient quantities in or transported with sufficient ease from the hill districts to make it a paying venture. But down among the gravelly, round-topped peaks are thousands of little fertile "sloughs," which in dry seasons are filled with water in the larger ones and with tall, rank grass in the smaller ones, and in wet seasons with water in nearly all, while an almost unlimited supply of "prairie wool" grows on the hills around them. Year after year, millions upon millions of tons of these nutritious fodders grow up, wither and lie down to rot on the hundreds of thousands of acres of unoccupied ranch land in these Territories; yet, prospective ranchers hesitate to launch into the business for fear of being "crowded out" in the near future by the man with the plow.

Sufficient has been said by competent writers on the subject to prove what large profits can be reaped from this branch of agriculture in the West, and it remains for the prospective rancher to load his cars and direct his course to the ranch country without delay, the sooner to appropriate the large and certain revenue which awaits him in the hill districts of our great Canadian Northwest.

CHAS. J. GREEN.

Assiniboia.

A Heavy Crop of Lambs.

Mr. W. A. Treewecke, an English breeder of Oxford Down sheep, reports, in the Live Stock Journal, the following remarkable fall of lambs from the first 100 ewes in his flock having lambed this winter, viz., 194 lambs from the 100 ewes, made up as follows: 9 triplets, 76 twins, 15 singles, one ewe had three dead lambs, two others had two each, and five lambs have since died from different causes, two ewes have died since lambing. With the 98 ewes there stands to-day 182 lambs, as follows: 5 triplets, 74 twins, 19 singles. The ewes are all in very fine condition with plenty of milk, and both ewes and lambs are doing first-rate. So far not a gallon of cow's milk altogether has been used.

The Range Steer Experiment.

Readers of the "Farmer's Advocate" who are engaged in ranching may be interested in the progress that is being made by the range steers which were sent from the Territories to Ontario to be fattened and prepared for the spring market. These steers, 24 in number, were sent east last December and exhibited at the Guelph Fat Stock Show, where many commented upon their lack of quality and poor condition, and said that they would never do well as feeders. However, the steers at the time had just come off the train and could not be expected to compare favorably with the best Ontario stockers.

It was arranged that ten should be fed at the Experimental stables at the Ontario Agricultural College, Guelph, and the remaining fourteen by Major Hood, a cattle feeder about two miles north-west of the city. However, in removing the animals from the Fat Stock Show building to the Ontario Agricultural College, one of them managed to get away and had to be shot and butchered. The remaining nine were safely stabled, five running loose in one pen and four in another. At first they seemed somewhat averse to eating much, and for some time made very little gain. They got nothing but hay for a couple of weeks. Then they were given some pulped roots, and later on meal was added to their diet. Thus, by degrees, these wild range steers were taught to eat and relish stable food. The five are now apportioned 60 pounds of hay, 80 pounds turnips and 20 pounds of meal per day, while the four in the other pen get 50 pounds of hay, 75 pounds of turnips and 16 pounds of meal per day. Their average weight on the market scales in Guelph last December was about 975 pounds, but their gains are not known, as they are rather too wild to admit of regular weighing. However, judging from appearances, they have done as well as ordinary Ontario steers would do since the beginning of the year. Some of them are rather rough-looking, and not of the build desired by feeders, but taking them on the whole, their general conformation is good.

There are some points which are detrimental to their progress as feeders, and which it seems could be overcome. For instance, they should be taught to eat some meal before being shut in a stable. Then, again, they should all be dehorned before leaving the ranges, because in any bunch of steers there are always two or three which persist in knocking the others around and cheating them out of their share of feed. With more attention to these points, and care in selecting the steers, it is thought that it will pay to finish the range steers in the Eastern Provinces and make them of export quality. However, when this experiment is completed we will know more definitely regarding the success of such a business.

Agricultural College, Guelph. A. J. H.

Profit in Hogs.

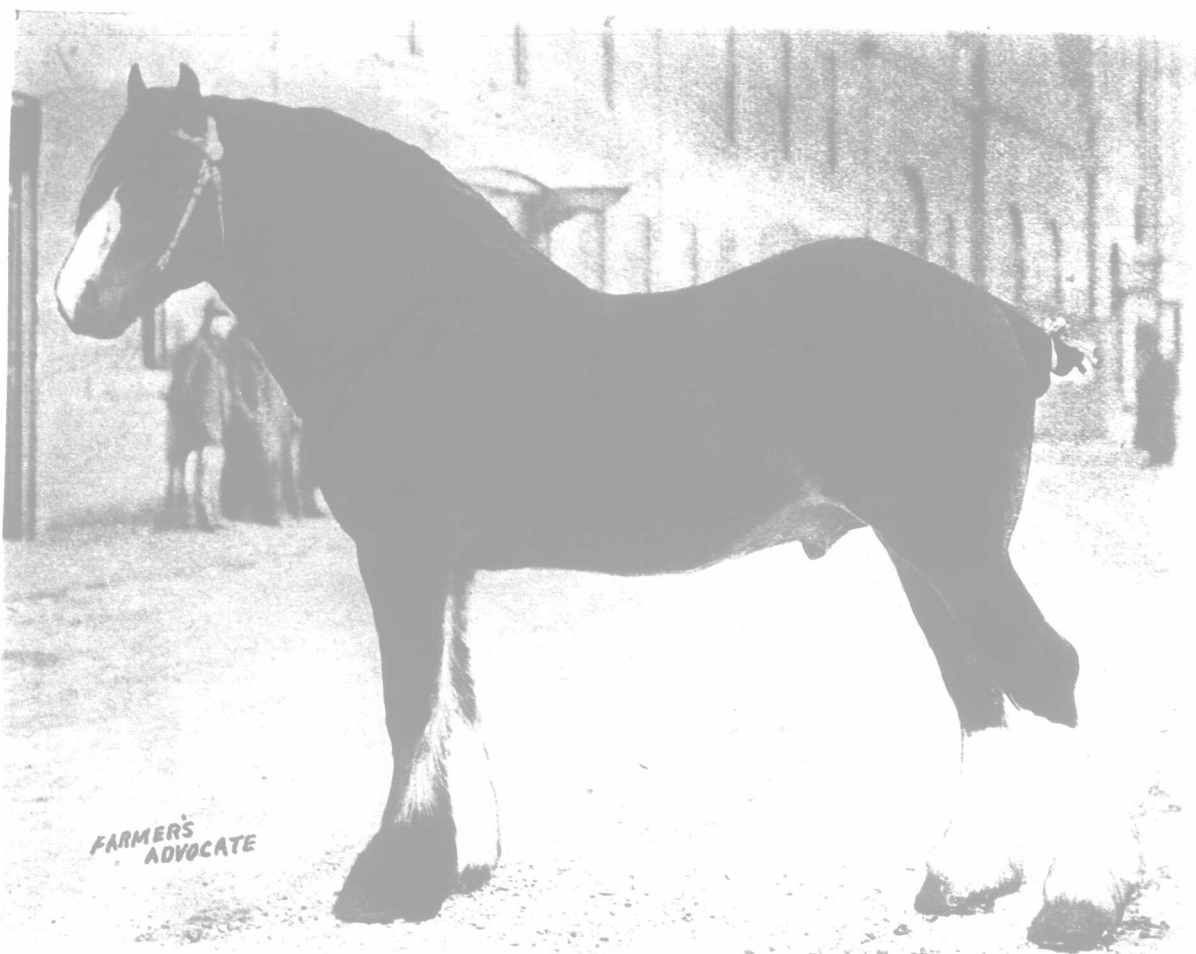
It is very evident that all farmers of the West are not fully awake to their privileges, when our packing-houses have to bring in hogs from the East to keep them running. Many farmers have gone in extensively for hog-raising, but it is surprising how many have "no use for hogs," especially when we consider the remuneration which hog-raising offers. It has been the experience of many successful farmers, with whom wheat has been a specialty, to find hogs more profitable than cattle. Where wheat is the main product of the farm, cattle are kept on a plot of land for pasture. This after a time becomes run out. Cattle will not do well unless some provision is made for renewing their pasture from year to year.

Hogs, while they require fresh pasture from time to time, do not need such a large acreage. They require less labor and less room for winter quarters than cattle. They mature in seven or eight months, therefore there is less risk connected with them. Pigs that are farrowed in April, if properly handled, may be marketed at 200 pounds without having any more expensive accommodation than a cheap outhouse or shed shelter.

Farmers who have poor luck with pigs are usually those who think they have done all that is necessary when they have thrown them enough chop to stop their squealing. But it is care in the details of management that brings the profit. The sow should be prepared for nursing the little fellows before they are farrowed. She should have room for exercise, to keep her in a healthy condition, and should get a liberal allowance of bran, so that she will have a good supply of milk. Points of prime importance after farrowing until maturity are: Selection of feed to suit stage of development; care in not over-feeding; regularity in feeding; good supply of pure water; no sour swill; cleanliness in accommodation; plenty of sunlight and good ventilation in piggeries; good pasture and room for exercising. Care in these details of management add little or nothing to the expense, and add everything to the profits.

Mackenzie, Man.

C. L. S.



LORD ABERDEEN [2616].

Clydesdale stallion, 5 years old. Winner of second prize in Canadian bred class, Spring Stallion Show, Toronto, 1903. Sire Hurworth (imp.) [240]; dam by Hard Times (imp.) [1169]; grandam by Spot-man (imp.); great-grandam by Netherby (imp.).

THE PROPERTY OF MITCHELL BROS., YORKTON, ASSA., N.-W. T.

Canada's Beef in Great Britain.

To the Editor "Farmer's Advocate":

After seeing our beef cattle at the ranch, the wharf and the lairages, the market is the court of last resort. Smithfield is the great dead-meat market of London. To see it at its best necessitates an early morning visit, the bulk of the business being done between six and eight a.m. Canadian is neither a common nor popular name with which to brand beef in this market. Opportunity is afforded to make comparisons between British, Canadian and States carcasses, in which Canadians take third place. Hung up, it requires no trained expert to see glaring faults. The side from the Canadian bullock is thin over the loin and over the foreribs, and tapers off at the haunch or ham. The flesh of the Canadian is paler and lacks the brightness in color possessed by its rivals. This paleness is a constant feature, so I was informed by the dealers, who also state that the Canadian carcass does not cut up as well as the American. At one stall the salesmen state that occasionally they get a Canadian carcass as good as any, which goes to show that it is quite possible for the Canadian beef-grower to put just as good an article on the market as anybody else.

The editor of the Meat Trades Journal, a man thoroughly in touch with the meat markets of Great Britain, says: "London is the best market in the world for the best stuff. Housekeepers find that good beef is more economical to buy than inferior quality stuff; there is less waste!" The merits and demerits of Canadian beef came up for discussion and elicited from him the opinion that Canadian bullocks had three main faults, lack of finish, poorly bred and were too old; fortunately, all faults that the beef-grower at home can remedy. He expects beef to go higher, and drew attention to the price of rumps and loins to the trade, 7s. to 7s. 4d. per stone (8 lbs.), or 21 to 22 cents a pound wholesale. In the Smithfield market Canadian beef is hard to find; lots of American and Danish beef was to be seen, carrying the labels of the meat inspectors of those countries. Armour and Swift are the hieroglyphics stencilled on innumerable boxes, and those names speak volumes as to the trend of the beef trade. Canadian beef, being inferior, is consumed at other British markets where the highest quality meat is not called for. The Meat Trades man tells me it is impossible to make a \$1.00 out of Irish stores, and a Glasgow commission man attributes that to the prevalence of Galloway blood in those stores, which he says accounts for the slow maturing tendency and lack of quality in the Hibernian.

At Islington is London's big live cattle market, called the Metropolitan Cattle Market, yet one does not find the best stuff there. The north countrymen ship carcasses now, beef trains being run every night on the trunk lines, the L. & N. W., the Midland and Great Northern.

At Islington one may meet with men up in all phases of the meat trade, and in conversation with a leading commission man I got the same verdict pronounced against the Canadian bullock—lack of finish! Those three words have been quoted so often as to be rapidly becoming tiresome to both reader and writer, and yet, in heart-to-heart talks, only cold facts and the unvarnished truth are of any value. We have no cause in Canada to pat ourselves on the back over our beef production. The commission man just mentioned, does not consider it possible to land grass-fed stuff, after the long journey by rail and boat, in anything like the finish that grain-fed stuff is, and the sooner grass-fed stuff stops coming, the better for the Canadian reputation. In order to retain what finish the grass-fed animal has, it should be tightened up with grain, before shipping. As every cattleman knows, grass is a very loosening diet; in England bullocks finishing on the grass are fed cotton cake to tighten them up and prevent them losing ground. The solely grass-fed carcass is watery, and does not weigh out with the grain-fed carcass of the same size. I am informed that taking two average sides of Canadian and States bullocks, appearing to be equal in size, the latter will outweigh the former, often two stones (16 lbs.). One reason for the butchers' preference, and the cause, the States bullock is grain finished.

Compared with the United States, our beef trade is a one-horse concern, with neither credit nor profit to producer, dealer nor consumer. A complaint made against some Canadian carcasses is the yellowness of the flesh, which may be due to the dairy ancestry of some of these cattle. This idea is borne out by the fact that such carcasses are from brindle cattle, or others bearing the hall-marking of dairy sires. The Canadian grain-fed steer, if a good one, is often prepared during June, July, August: to the States beast, the Canuck's carcass is less oily, keeps better in muggy (close, damp, hot) weather. The variety of grains fed, as compared with the corn diet of the Yankee, may account for this. A complaint occasionally heard is that cows and heifers arrive

at the lairages in calf, some calving on arrival; such means total loss of the dam and calf, because all cattle have to be slaughtered at the lairages within ten days after arrival there. If cows are far advanced in pregnancy, they are condemned, and rightly so, by the meat inspectors. Volumes might be written on the beef trade, yet only a few important things need to be ob-



A STRONG BACK.

The kind the Britisher wants. Fed for Smithfield by Jno. Turner, Cairnton, England.

served to give us a large share of the Briton's cash meat bill:

- 1st. The use of pure-bred bulls of the beef breeds only, and those bulls to be of the early maturing, heavy fleshing sort, with short faces, prominent eyes, well-filled neck veins, plump briskets, broad chests, and a spring of forerib that makes a back of equal width all through, thickly covered, straight back and loins, square rumps, carrying the meat to the hocks.
- 2nd. The growth of the bullock must suffer no hindrance from calfhood to maturity.
- 3rd. The bullock must be finished, not marketed half fat; "bacon hog standards do not apply to beef cattle!"
- 4th. The paying bullock will be the table-backed sort, well filled in the twist and breeches, and with a thick, even covering of mellow flesh, quite half way down the ribs. NOMAD.

Care for the Ewes.

The ewes in the sheep flock which will be due to produce early lambs need a little extra care and feed as the lambing time approaches. If they have not been receiving roots, a moderate supply of these will help to keep up their vigor and health, while a light ration of oats and bran will provide the necessary milk supply, as well as give



A USEFUL TYPE.

A Smithfield competitor that will dress a high percentage of valuable meat.

strength to both the ewe and her lamb. If the most of the ewe flock are not likely to lamb near the same time, it may be well to divide the flock and feed more liberally those that are more forward in pregnancy, as those due later may become over-fat if they share in the better feeding. See that all cracks or openings in the walls of the pen which let in cold drafts are closed as the

lambing season approaches, and have provision for closing all outer doors at night. A supply of light, low hurdles, about six feet in length, should be provided for making pens in which to confine for a day or two the ewe and her newborn lamb or lambs, so that they may become acquainted. This may not be necessary if the lambs come strong and able to help themselves, but any that are weak or that are neglected by the dam will need some such provision, and especially in the case of twins, which are liable to get separated and one to be disowned by the mother. Confinement in such close quarters, however, should not be continued many days, for exercise is good for both the ewe and the lambs, and the former will feed more contentedly and with less danger of over-eating if faring with the other members of the flock.

When Pigs Should be Marketed.

Generally speaking, our hogs are marketed just when the hogs are fit and the prices right. Unfortunately these two conditions do not always exist at the same time, and whether it will pay to keep the hogs for a better market, or let them go at existing prices, is often a "knotty" problem. In this connection a study of the cost of producing a pound of gain in a hog over 200 pounds, as compared with the cost of a pound in a lighter hog, will be of interest.

In Denmark extensive comparative experiments were carried on to determine this point. The results are summarized in the following table from Prof. Henry's work:

	Weight of pigs in lots.		
	1.	2.	3.
	75-115 lbs.	115-155 lbs.	155-195 lbs.
Average feed required to produce 100 lbs. gain	437	465	499
	4.	5.	6.
	195-235 lbs.	235-275 lbs.	275-315 lbs.
Average food required to produce 100 lbs. gain	543	624	639

There is noticed throughout a steady increase in the food required to produce a pound of gain, with the increasing weight of the animals. The conclusion we would draw is that where the feed can be fed to light hogs it will in most cases pay to sell the heavier ones as soon as they are fit, or at about 200 pounds, provided the markets did not promise an immediate substantial rise.

Six Bushels a Day.

Prof. F. R. Marshall, in the Chicago Live Stock Report, writing of a recent visit to Canadian breeders, recites the following account of an incident related to him by Lt.-Col. McCrae, of Guelph, as occurring at a New Brunswick farmers' meeting he attended as a speaker not long ago:

In New Brunswick the audiences insist on speaking of turnips by the barrel, and it was very difficult to make them believe that turnips could be grown and fed in large quantities, until, in an upper county, in the far-off spruce woods, there was a meeting convened in a settlement of Scotch emigrants, who understood and appreciated the cultivation and feeding of turnips. In a crowded hall, the speaker told a story of turnip-feeding, which he had heard from Arthur Johnston, of Greenwood, Ont. Mr. Johnston had visited Aberdeenshire, purchasing Scotch Shorthorns, and at the home of Mr. Campbell, Kinellar, he mentioned to Mr. Campbell that he thought his aged bull, Vermont, was in higher condition than they cared to see useful sires in Canada. Mr. Johnston said, "I think him much too fat." "Fat!" said Mr. Campbell, "Fat! he has had naething all winter, naething but a pickle oat straw, and six bushels neeps (turnips) a day." "Six bushels!" says Mr. Johnston, "Could he eat that?" "Yes," answered Mr. Campbell, "every day." Mr. Johnston took the trouble to visit the byre at feeding time, and saw Vermont get his two bushels three times a day. When this story was told to the New Brunswick audience, a man in the back part of the crowded hall called out, "I think you are wrong, there, sir." "Well," answered the speaker, "I am telling you the story as Mr. Johnston told it to me." "I worked for Mr. Campbell," said the man. "Oh, did you? Did you feed the cattle?" "Yes, but I didn't give them six bushels a day." "How much did you give them?" "Just a barrowful to two." "What were you feeding?" "The steers and heifers fattening for the London market." "How much would they weigh?" "I do not know, perhaps 1,100 or 1,200 pounds." "How old were they?" "About

thirty months." "How often did you feed a barrowful?" "Three times a day." "How much was in the barrow?" "I do not know, I think about three bushels." The audience, which had listened to the dialogue with intense interest, now saw the joke, and burst into roars of laughter, for four and a half bushels per head per day to young feeding steers was quite as much in proportion as the six bushels to the 2,500-pound bull.

Substitute for Milk in Feeding Calves.

To the Editor "Farmer's Advocate":

Doubtless some of your English readers will recollect that about the year 1864 or 1865, a terrible plague, or rinderpest, broke out amongst the cattle in England, which was of such a virulent and deadly nature that treatment was quite useless once a beast was attacked, the consequence being that very few cattle were left alive in the country, but in the Sister Isle (Ireland) there was fortunately no outbreak, and Irish cattle took a jump to more than double their former price.

Before this calves, especially males of common stock, were not considered valuable enough to justify the trouble of rearing them, and thousands of new-born calves were knocked on the head at birth, but when, owing to scarcity, cattle took a rise in price, people who before destroyed their calves turned their attention to rearing them, and to discovering a substitute for milk, so that they could sell their milk and rear the calf at the same time. I am aware of several substances being tried, amongst them being clover hay boiled, and the liquor given to the calves. This did fairly well, but the best results were had by using cocoa. Cocoa shells were selling at the time from three to four cents per pound, and many people used it instead of tea or coffee. The treatment of cocoa-shells is alike, whether intended as a human beverage or calf feeding. The process is to put about a quarter of a pound of the shells into a kettle holding about two gallons of water; fill the kettle with water, bring it to a boil, then place it on the back of the stove, where it can simmer for about two hours or longer, then pour off enough for one meal, sweeten with sugar until it is about the same as new milk, then add about one pint of skimmed milk, or less will do if that much is not to spare. The kettle need not be emptied, indeed it is better not, but put a little more shells into it, and fill the kettle with boiling water, and let it boil and simmer as before, and by this means the calf's feed is always ready. I experimented with this substance myself a couple of years ago, and I intend to do the same this season.

The calf I experimented with was from a good grade Shorthorn cow and a pure-bred Shorthorn bull. It was not on account of the scarcity of milk, but for the purpose of demonstrating to

some of my neighbors the benefit of the cocoa. I first procured twenty pounds of shells from the T. Eaton Co., of Toronto, at three cents per pound, and put two large fistfuls into a number nine tin kettle full of water, and treated as above (I may say that I fed the calf on full milk for two weeks), I then drew off enough liquor for one meal, made it as sweet as new milk, and then added one pint of skimmed milk, and when cooled

[For the benefit of those who may not have seen the 1898 report of Experimental Farms, I give Mr. Shutt's report in full]:

COMPOSITION OF COCOA SHELLS.

"This is a waste or by-product from the cocoa and chocolate factory. A sample received from Halifax, N.S., with a request for a report on its feeding value, furnished the following data:

	Per cent.
Moisture	5.12
Albuminoids (flesh-formers)	16.42
Fat	12.92
Carbohydrates, sugar, etc.	45.43
Fiber	13.17
Ash or mineral matter	6.92
Fertilizing constituents—	
Nitrogen	2.63
Phosphoric acid98
Potash	2.59

"The analysis makes clear that it contains a high percentage of albuminoids, and is also rich in fat—two of the most important constituents of a feeding stuff, providing it is fairly digestible, a point upon which we have no information, save that cocoa butter or fat is readily assimilated—this refuse material is a concentrated feed of high order. If ground to the condition of fine meal, I am of the opinion that its digestibility would be much increased, and that it would prove serviceable as furnishing a part of the concentrated portion of the ration. The quantity that could safely or profitably be fed per diem would have to be ascertained by actual experiment; probably about two pounds per day, with other meal, would be the limit. Again, it is not known whether it would impart any flavor to the milk or butter produced, but we would not expect to find any, if used in the amount already indicated.

"Attention is directed to the richness of this material in fertilizing constituents, more especially nitrogen and potash. These, for the most part, would be recovered in the solid and liquid excreta of the animals to which it is fed."

The above report, just quoted, will go a long way in proving my contention that a decoction of cocoa is the best substitute for milk to feed to calves. Since Mr. Shutt made the above report I had some correspondence with him on this same subject, and I am certain that any one interested writing him will receive more information on the subject. I may say in conclusion, that the 20 pounds of cocoa shells sufficed to feed the calf until weaning time, with the addition of five pounds linseed meal—or an outlay of eighty-five cents.

J. J. SHAIL.



MR. WILLIAM LINTON.
President-elect of the Dominion Shorthorn Cattle Breeders' Association.

to blood heat fed it to the calf. I continued with this until she began to eat coarse feed and chew her cud, when I began to add a little well-boiled linseed meal. She was never troubled with scours, was always hearty, and was admired by all who saw her, and some people, who did not know how she was fed, thought she was let run with the cow. A neighbor bought her, and some time after, she having her first calf, he decided to go to Manitoba. I offered him a good price for the heifer, but he would not sell her.

Mr. F. T. Shutt, the Chemist of the Central Experimental Farm, in his annual report for 1898, in dealing with the subject of cocoa shells, says

Farm.

Farm Improvements at Small Cost.

Beginnings are important periods in the history of any undertaking, and anyone who starts on a farm with the intention of making a success has advanced many steps towards that goal if he outlines and adopts a definite plan regarding buildings, etc. This done, each improvement will fit in its proper niche as part of the original plan, and can, as circumstances permit, be constructed without weakening the usefulness of any previous undertaking. It is very important too that the adaptability of a soil for certain crops, and the market for farm products, be early considered. Thus it is that a farmer living a long distance from a railroad can more profitably raise cattle than wheat. Again, a man whose farm is not as productive as he desires, can, by stock feeding, add fertility to it, whereas if he grew wheat continually for sale he would soon exhaust a soil already low in plant food.

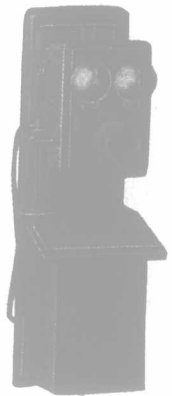
Thoroughness in every detail, whether it be soil cultivation, animal feeding, or the keeping of the farm free from weeds, is another long step toward the desired goal. Beautifying the home surroundings by setting out wind-breaks and small-fruit and ornamental tree plantations also is a strong improving factor that will well repay in succeeding years. All wooden buildings should be painted, not for appearance sake alone, but because increased durability sufficient to more than pay for the extra cost will be given. Machinery, implements, stock, etc., all require care and housing at certain times, and if such is not given them the owner suffers financially, and marks of permanent improvement are to that extent lacking. Good wells, suitable fences and a well-filled garden are individually evidences of advancement, that, although not costly, yet mark the pulse of progress. Literature of the right stamp is worthy of a place, and good agricultural papers, if read, are by no means the least important handmaids which the farmer has to help him toward success at small cost.

The name and P. O. address on a post card will bring a sample copy of the "Farmer's Advocate," free, to your friend or neighbor who would appreciate and be helped by a really first-class agricultural paper.



CORONATION, IMP., [354].
Two-year-old Shire stallion. Winner of first prize and championship, Canadian Spring Stallion Show, Toronto, 1903.
IMPORTED AND EXHIBITED BY MORRIS & WELLINGTON, FORTNELL, ONT.

Telephones in Rural Districts.



This subject, along with rural mail delivery, is one of great importance to the farmers, and should receive a trial in some district in our Province as an experiment. There is no doubt but that it would prove a success, as in some of the Prairie States, with similar conditions to ours, it has become very popular.

Rural telephones and rural mail delivery should supplement each other. For instance, in case of a break in machinery, the farmer could telephone to his implement agent or hardware man, and the rural mail carrier brings a duplicate of the broken part to the farmer, perhaps only two or three hours after the break, thus saving the farmer a trip. Some of the benefits of the rural telephone would be as follows: If a physician is wanted the telephone saves much valuable time, perhaps a life, probably a fifteen mile ride on a stormy night. If the farmer's wife is lonesome she can take down the telephone receiver and visit with any of her neighbors for many miles around. If the farmer wants his neighbors to help him to thresh, he can summon them in as many minutes with the telephone as it would require hours without it. The farmer could keep posted on the markets every day. He could get the probs. through the weather bureau, letting him know if a blizzard was approaching, thus giving him time to prepare for it.

These are only a few of the benefits to be derived from it. If the instruments could be put into residences either on an associative or co-operative plan, at about one dollar per month rental, the majority of the farmers would put them in. The difficulty would be to get enterprising men to take it up and promote it. The capital stock would have to be raised among the farmers to a great extent, and at present it is too much of an experiment for the farmers to invest in it. It is like every other movement, the people will have to be educated along that line.

Brandon Elect. Dist. J. E. TOLTON.

Telephones Increase Land Values.

Telephones in rural districts would benefit the farmer in much the same way that they would benefit other business men, by keeping him in closer touch with the markets, with his neighbors, and with the world at large. It would also benefit him socially, and for those who live far from town it would be a great saving in time and horseflesh. Often they could call a doctor or Vet. on short notice, and thereby lives might be saved that otherwise would be lost. It would also increase the value of farm land, and would help to make the farmer and his family take more interest in their work.

If farmers were sure that they would get full value for the money invested, and that the lines could be operated under some co-operative plan, they would be more likely to take an interest in the matter. As a class farmers are slow to move in matters of that kind, even if they were able to see that it would benefit them. As far as I am concerned, I am strongly opposed to granting a franchise of that kind to any company and let them charge what they like for their service, and I think that is the feeling with a great many. If some of the monopolies that now exist were abolished, and freight rates about cut in two, farmers would enjoy such prosperity that the cost of installing a telephone service or the risk of its not being a success would not concern them very much.

Marquette Elect. Dist., Man. GAVIN STRANG.

Telephones Must Come.

I believe rural telephones would be a great benefit to farmers in their business and as a social medium with one another. They could keep posted on the markets without leaving home, and judge when to buy or sell, often saving valuable time in making enquiry about markets in the fall when very busy. Vets. could be called in case of valuable stock being sick, and doctors in case of sickness in the family, often saving time and a hard drive. They could be as early posted on local or outside, social or political news, as those living in cities. Neighbor could talk to neighbor, and make life in the country more attractive.

I think if the instruments could be furnished and connected at low cost, it would soon be well patronized by farmers, as they would soon see that it would pay, besides being such a social convenience. The companies at present operating seem to want too much for the service, and the business needs a good shaking up. If a place like Brandon had its own telephone service, it would be much easier for the farmers to get connection than now. I think it is one of the things that has to come amongst the farmers soon, and be considered a necessity.

Brandon District. H. NICHOL.

Telephones in Ranch Country.

I believe telephones, if generally erected throughout the district in connection with Cochrane and Calgary, would be of great value. Roads are bad, storms are bad, and a telephone would put a farmer in connection with the market and the railway, giving him almost as much advantage as living in the city, without losing the time going there.

The knowledge of when trains were expected would also be of great advantage, but as a means of communication one with another, it would not be of much value, and I am afraid there would not be many farmers willing to pay much for a telephone. They are of the class who prefer to use their neighbor's.

The chief difficulty would be the great distance of line between ranchers, making the cost excessive. Timber rots quickly here, and the renewal of poles would be a big item. I should be only too glad, however, to have a line erected.

G. E. GODDARD.

Grain Markets by Telephone.

I believe, most emphatically, that telephone lines would be beneficial to the farmers of this country. Day by day, and as often through the day as they wished, the farmers could keep posted as to the state of the different grain and other markets along the line, also which of their neighbors were delivering grain at certain points on certain days, and what days the elevators which they patronized would be best prepared to handle their grain. Repairs in seeding, harvest and threshing time could be ordered out from town, along the railway lines, thus saving money by saving time for the outfits at work.

In the case of sickness in families, such delay and valuable time might often be saved in procuring medical aid. Social intercourse among both young and old in the country, and between them and their town friends, would become more general, to the betterment of all concerned.

The farmers of this portion of the West are an intelligent, up-to-date, reading class of citizens, having numerous clubs, literary and debating societies in their midst, and it is my belief that, at a reasonable cost, the older settlers would patronize the telephone at the beginning, the later ones in the course of a short time. The cost of construction would probably be the largest obstacle in the way of rural telephones in districts where farm residences are far apart and no timber is obtainable except from a great distance by rail.

Assiniboia. CHAS. J. GREENE.

Telephone Information Needed.

I certainly believe that if telephone lines were erected, connecting the farm homes with the towns and villages throughout the Province, it would be of great benefit to the farmers, as it would help to break up the isolation in which the farmers are generally living at present, and bring us in touch with the world's daily life, in both social and commercial circles, and give us the benefit of the market report at our home, thus often saving a trip to a blockaded market.

If the instruments could be purchased at a reasonable cost, I am of the opinion that the farmers would take advantage of them, and form circuits all over the Province, to place themselves in touch with the markets. The chief drawback at present is the lack of information to be had on the subject. With a good live factory for the making of instruments, etc., in Winnipeg, I fancy that there would soon be a boom in the erection of telephones for farmers' use. I am glad to see the "Farmer's Advocate" taking up this subject, as it will be a great benefit to the farmer.

G. S. MCGREGOR.
Macdonald Elect. Dist., Man.

Wire Fences Could be Used.

I have been trying to get my neighbors interested in the telephone movement for some years, and only the other day wrote away for quotations on instruments. As we have just got a branch line of the C.P.R. built through this section of the country, I am going to try again to get telephone lines to that point, and would be glad if you could give me any information as to prices of reliable instruments. Of course we can use the wire fences for the greater part of the distance, consequently cost of poles and wire will be almost eliminated.

The telephone would be useful for the receipt of market quotations, summoning a doctor, besides innumerable trips to town would be saved. The chief difficulty in getting lines started would be the want of initiatory movement among the farmers, and in many cases ignorance of the advantages to be gained. I was glad to see in your last issue that you had taken up the need of co-operation among farmers.

F. J. COLLYER.
Welwyn Dist., Man.

Back Numbers Required.

Owing to the heavy demand for back numbers of the "Farmer's Advocate" during the past year, we find ourselves short of copies of the issues of February 5th and April 5th, 1902, for binding purposes. Readers having copies of either or both of those numbers in good condition and clean, which they can spare, will confer a favor by kindly sending us a post card to that effect.



STATELY CITY [1362] (10466).
Clyde-dale stallion. Winner of first prize and championship, Canadian Spring Stallion Show, Toronto, 1903.
IMPORTED AND OWNED BY GRAHAM BROS., CLAREMONT, ONT.

Many Advantages.

I have often sighed for the convenience of a telephone system, and have racked my brains for a feasible plan of establishing it. Its social and commercial advantage to the farmer cannot be doubted. Orders of all sorts, repairs, cars, etc., could be given from home. In cases of sudden illness to man or beast, the professional man could be summoned at once. Cattle buyers and butchers could communicate with you from the village, and save time and expenses, and therefore give more for good stuff. These are a few of the visible commercial advantages, while socially still greater things might be said.

With respect to their establishment, the idea is new to the majority here, and I think would take some working-up, and before I, for one, undertook to discuss it seriously, I would require to have the probable expense to be incurred by individuals at my finger ends. The best way of not introducing any reform is to agitate for it before you are master of all the expenses it would entail.

ARTHUR C. HAWKINS.

Lisgar Elect. Dist., Man.

Struck a Telephone Snag.

Down in the Province of Ontario, what is called the Markham and Pickering farmers' telephone system was established in York County not long ago. Its wires extend about thirty miles. To complete its efficiency, the promoters sought access to the C.P.R. station at Locust Hill, where many of them do business. To their amazement, they were refused permission by President Shaughnessy, on the ground that the exclusive privilege of using their stations had been granted to the Bell Telephone Company, on condition of its giving a free service to the C.P.R. The farmers propose attacking the monopoly in the courts, in order that public rights may be maintained. It is contended that it is actionable under the code, as an interference with the course of public business.

If you will send us on a post card the name and P. O. address of some friend or neighbor not receiving a first-class agricultural paper, and who would appreciate such, we will forward, free, a sample copy of the "Farmer's Advocate."

Mr. Dooley on Oats as a Food.

Mr. Dooley's latest is a satire on the numerous "breakfast foods" so widely advertised. Invited to breakfast with his friend Joyce, Mr. Dooley is served with something he likens to "Mush, be hivers!" "Says Joyce, 'It's a kind iv scientific oatmeal,' says he. 'Science,' says I, 'has extracted th' meal'.....Somewan discovered that



SCHOOL OF ANATOMY.
Preparing the pork for summer.

th' more ye did to oats th' less they tasted, an' that th' less anything tastes th' better food it is for th' race. So all over th' country countless machines is at wurruk removin' th' flavor fr'm oats an' thurnin' thim into breakfast food. Breakfast food is all ye see in th' cars an' th' billboards.....Hogan tol' me he was out in Decatur th' other day an' they was eighty-seven kinds iv oats on th' bill of fare.....People don't have anny throuble with their digestions fr'm atin'. Tis thinkin' makes dyspepsy! worryin' about th' rint is twenty times worse fr' a man's stomach thin plum puddin'. What's worse still is worryin' about dygestion."

"Joyce tells me his breakfast food has made him as sthrong as a horse," said Mr. Hennessy. "It ought to," said Mr. Dooley. "Him an' a horse have th' same food."

Preparation for Seeding.

BY S. A. BEDFORD, EXP. FARM, BRANDON, MAN.

The adage that "a battle well planned is half won" holds good in agriculture, as in many other lines of activity, and it is an excellent idea to plan out the year's work on the farm some time in advance, and there is no better season for this work than during the slack time of winter. It not only permits of more thought being given to the work, but also affords an opportunity to select and carefully prepare the different kinds of seed, grain and grasses required.

In my own work I have found a rough sketch of the farm very useful, thus showing the shape and size of each field, the character of the soil, and the kind of grain grown on it for the past eight or ten years.

Most farmers acknowledge the advantage of a proper rotation of crops, but claim that they have not sufficient time at their disposal to plan a suitable rotation; this is no doubt true if the work is put off until the rush of seeding takes place, but the work should be done by the end of February by the latest.

Among the many advantages of a well-arranged rotation, we have only time to notice the following: It assists in keeping down weeds; it distributes the farm work over the year, and thus helps to solve one of the most difficult problems met with in the West. As the different farm crops do not all require plant food in the same proportion, a rotation of crops, therefore, economizes plant food. Then plants vary in the depth of their root system, and the deep-rooted ones bring up plant food that the shallow ones cannot reach.

Some crops suffer from disease and insect enemies, while others escape. For instance, the Hessian fly was somewhat injurious to wheat in certain parts of the Province last year; if wheat is again sown on the land this year we may expect that the eggs deposited in the stubble last fall will hatch out, and the injury will be repeated; but let the land be sown with oats, which are not subject to injury from the Hessian fly, and there will be no loss from this cause. For the same reason, rotation of crops lessens the risk of injury from the attacks of parasitic fungi.

The choice of a rotation will depend largely on the market demand, the character of soil, the freedom of the land from weeds, and on the system of farming followed; for instance, where cattle are largely kept, the plan of rotation will differ somewhat from that of a grain farm.

Wheat being the principal crop of this country, we will deal with it first. This grain succeeds best on a strong clay loam, rich in humus, but at the same time this soil must be well pulverized and compact, so as to make a fine and solid seed-bed. More failures in wheat-growing in the West originate from an unsuitable preparation of the soil than from any lack of plant food; a loose, open condition of the soil permits of rapid evaporation, and although the wheat plant may make a quick growth early in the season, the supply of moisture is soon exhausted, and growth is checked at the most critical period of the plant's growth, and the yield of grain greatly reduced. From the above it will be seen that wheat has the first claim on the summer-fallow, and also on well prepared backsetting, but if the latter has been broken late, or only roughly backset, it may be wise to use it for the oat crop. This will give additional time to prepare the land, and, besides, oats do not demand such a finely pulverized soil as wheat.

In the Western portions of the Province, it is sometimes found profitable to sow two crops of wheat in succession after summer-fallow, the second one being sown on the burnt but unplowed stubble. Where the conditions are favorable, this plan often gives a large return for very little labor, and the grain usually stands up well, but it seldom succeeds in the Red River valley or on similar strong soils. Such soils require plowing before every crop; neither can it be recommended anywhere unless the summer-fallow has been well done, and the land quite free of weeds and couch grass.

Gasoline Engines for Threshing.

To the Editor "Farmer's Advocate":

I am pleased to see in your issue of 20th January, the articles of Messrs. John Renton and J. D. Miller, on the use of gasoline engines on the farm. There is no subject you can discuss that can be of greater interest to the farmers of the Northwest than that of threshing. Both your correspondents indicate that, in their opinion, gasoline is the coming power for this purpose, and it is to be regretted that they did not enter into greater detail as to their experience in its use. Farmers want all the information they can get on this subject, and if you can place before them the experience of farmers who have used these engines for threshing, and give makers' prices for the different powers, etc., you will be doing a service to many who in the last two seasons have suffered great inconvenience and loss from want of adequate threshing facilities.

WM. WALLACE.



WOODROFFE PLOWBOY [2296].

First-prize Canadian bred Clydesdale stallion, Canadian Spring Stallion Show, Toronto, 1903.
OWNED BY J. G. CLARK, OTTAWA.

Gasoline Engines Defended.

To the Editor "Farmer's Advocate":

Sir,—In your issue of January 20th, Mr. John Renton signs an article on gasoline engines. Now, while I agree with Mr. Renton in the main, there are some of his ideas with which I decidedly disagree. He says "their power is usually over-rated." While this is the case with some of the inferior engines, it is not true of the standard makes. He also says: "As would naturally be expected, the larger engine adds materially to the fuel cost, and for this reason a size too small is bought." Here again Mr. Renton is mistaken. No matter how large the engine is, it only consumes gasoline in proportion to the amount of power developed; one-eighth gallon per horsepower per hour being the average quantity of gasoline used.

Of course, gasoline engines are like all other machinery, made by different people and in different quantities. Speaking of middlemen's profits, Mr. Renton says he believes they are larger than the manufacturers'. Now, if Mr. Renton were buying direct from the manufacturer, he would find that, counting in his time and trouble, the cost would be greater than it is when he buys from the Winnipeg dealer. This statement may appear rather strange to some farmers, but it is true, nevertheless, for the Winnipeg dealer buys in large lots, and thereby saves a considerable amount in the freight rates, and, besides, by taking a number of engines he buys at a lower price from the manufacturer than any man who wants only one engine can buy. In the portable gasoline engines for threshing now on the market, there will surely be large improvements, and, in fact, there are improvements on those of this year over last year's engines. It is not the portable engine which is of most use to the farmer, but the stationary gasoline engine is a great time and money saver. With it he can crush his feed, saw his wood, pump water, run the cream separator, and put it to many other uses. As far as power goes, instead of being less than the rated power, as is claimed to be the case by Mr. Renton, reliable firms always quote the quality of goods correctly, and in most cases engines over six h.p. will develop about 25% more power than they are rated at, if put to their utmost capacity.

Winnipeg. CLARENCE VERMILYEA.

Dairying.

Value of a Dairy Cow.

The true value of a dairy cow lies altogether in her power to produce dairy products—milk, cheese or butter. The fact that she is a cow counts for nothing, although it is about the only claim to value which a countless number of animals possess which are kept for dairy purposes in Manitoba and the West. The cry which we are continually hearing that "dairying does not pay" comes very largely from the owners of such specimens. Not that we believe dairying to be at present more profitable than some other lines of farming, but one thing, at least, of which we are certain is that if a better class of dairy cows were kept throughout this country less complaint would be heard. Too many farmers keep a few cows merely as a side issue. They believe milk is a good thing to drink and butter very nice on the farm table. Even the amount allowed to the children and hired help has to be measured out. They, therefore, pay but little attention to the amount of milk which each cow produces or to the quantity of butter-fat which it contains. We would suggest that every reader who owns a milch cow consider for a moment: Does she really pay for the expense of keeping her? There are a few practical dairymen at present in Manitoba making profits from their herds, but they have long ago disposed of the scrubs. The statement has been made, on good authority, that the average milch cow of Canada costs her owner from

\$5.00 to \$10.00 each year more than she produces. If you have on your premises one of these inferior types, take the first profitable opportunity to dispose of her and purchase something with milk-producing blood in its veins. A few extra dollars invested in good milking cows may place the dairy department of the farm on a paying basis.

Poultry.

Virden Poultry Show.

The tenth annual Provincial Poultry Show, held this year for the first time in the enterprising little town of Virden, was the usual success. Over sixty individual exhibitors made entries, some to the number of sixty or over. While this did not mean a larger exhibition than was held last year at Winnipeg, yet an improvement in the quality of the birds shown was noticeable in many of the classes. Considerable competition existed between the various breeders of utility birds for honors in their respective classes, while in the varieties best known for their beauty the aspirants for first place were of the usual number.

In turkeys, geese and ducks the exhibition was not so strong as it should have been, owing very largely to a few extensive breeders absenting themselves on account of the cost of shipping. The principal contributors to the show outside of Virden came from the Brandon and Winnipeg districts, although not a few prizewinners hailed from other points.

The farmers from the country surrounding Virden gave the show liberal support, and the receipts amounted to almost two hundred dollars. The exhibitors reported a lively demand for pure-bred stock for breeding purposes, and not a few sales were made to those who very wisely have decided to improve the quality of their flocks. A great interest was taken in the display of dressed poultry, which in future should be given more attention by the association.

Shows of this kind do a good work in interesting the people of the district in which they are held in poultry-raising. The industry is destined to become more prominent in this new country, and the small grant made annually by the Provincial Government for its encouragement could not be more wisely expended. When we consider that last year 350,000 pounds dressed poultry were shipped into this Province, and that less than one-tenth of that amount was produced for sale within our own borders, the importance of the situation is apparent.

External Parasites on Poultry.

The parasitic infestation of poultry causes far more loss than most breeders imagine. Birds are rarely examined, and, therefore, the cause of their poor condition is rarely ascertained. The chief parasites of poultry are insects, mites and worms, and these comprise three distinct groups: (1) Fleas (Pulicidae); (2) lice (Mallophaga); (3) mites (Acarina). Fleas and lice are true insects, having the six insect legs; mites are quite distinct from true insects, having four pairs of legs. Some of the worst mites and fleas have a piercing and sucking mouth; the bird lice have biting mouths and thus differ from ticks found on animals. Those pests with piercing mouths cause irritation and rob the blood, thereby weakening the birds; on the other hand, the biting lice only cause severe irritation, which keeps the birds restless. Different birds have different species of lice: for instance, duck lice cannot live upon fowls, and vice versa; and, moreover, different species favor particular parts of the bird's body, the favorite "haunts" being the head, neck, rump and under the wings. Some mites live entirely upon and under the skin; some, like ticks, their heads against the skin and bodies erect; whilst one special kind, the "Lipeurus," lives between the barbs of the feathers; thus poultry-breeders must notice all these little details, and thereby keep their fowls in a healthy condition, as all these parasites are encouraged by dirt to a very great extent.

Fleas belong to the order of flies (Diptera). They feed upon the blood, one species only living upon the fowl, viz., the bird flea (Pulex gallinae), which attacks most other birds. The hen flea abounds in dirty fowl runs, and especially in straw nests. The adult flea is dark in color and has no wings. Like all fleas, they have very sharp, piercing mouths, and generally attack the birds at night, and it is on this account that they are not noticed on the birds. Bird lice (Mallophaga) are quite distinct from human lice (Pedunculidae), and from mammalian lice (Hemato-perius). These bird lice have not piercing mouths; they bite and subsist upon the productions of the skin and fragments of feathers. They cause violent itching and bite sharply, and when in large numbers must cause great pain. When the feathers are infested with lice they show notched edges. There are eight different kinds of lice which attack fowls, and it is, therefore, very hard sometimes to have a perfectly clean bird.

These lice are caused either by insufficient or too uniform food, damp, dirty, dark or badly ventilated runs. They irritate severely and inflame the skin, causing stunted growth, and sometimes killing the birds.

All parasites flourish on unhealthy birds, so a



THE PERCHERON STALLION AURORE 29884 (45733).

Prize-Winner at the Show of the Societe Hippique Percheronne, Mortagne, 1902. Imported by Dunham, Fletcher & Coleman, Oaklawn Farm, Wayne, Du Page County, Illinois.

healthy bird is never likely to be attacked by all these pests, and great care ought to be taken, as, of course, they spread to a very great extent. Mites are very small, and have four pairs of legs. Some live on the birds at night, like the common fowl mite (*Dermanyssus avium*); others are permanent parasites, as *Sarcoptes*, living at the base of the feathers, and others again live under the skin, forming scabby growths. These have a pricking mouth, with which they torment the bird, especially at night, causing loss of condition and hindering setting, etc. Of these mites, the most injurious is the red or common fowl mite. It is yellowish white to dark red in color, according to the amount of blood it contains, drawn from the birds.

Those keeping poultry should, therefore, exercise great care in keeping the roosts clean, and when a bird is noticed to be ailing in any way, it should be examined and treated immediately. If such is done, farmers will find that their birds will fatten quicker and grow faster, and their extra care will certainly bring more money into their pockets.

CHAS. HARTLEY RUSSELL.
Brandon Elect. District.

Chickens on the Farm.

While crops of wheat can be produced in such abundance as they have been the last few years in Manitoba and the Territories, it may be difficult to convince the majority of farmers that chicken-raising is worthy of any greater attention than it at present receives, and yet the fact remains, when all things are considered, it is bringing, with good management, quite as large returns for the capital and expense involved as any industry within the range of agriculture. Poultry-keeping for profit can only be carried on by those who are disposed to pay strict attention to business, and the reason why many believe it is not worth any active effort is because they have around their farmyard a little flock that has been bred in any haphazard way, possesses no particular laying qualities, and receives no special care or management. In summer they lay a few eggs for table use, and in winter they produce nothing.

To make good profits it is not necessary to have an elaborate plant, consisting of costly buildings and high-priced birds. Comfortable buildings are, of course, a good thing to have, but they need not be erected on an expensive scale. The first essential is a class of fowl best suited to produce what it is intended to sell. For the farmer who would make most of present conditions in this country, such breeds as the Rocks, Wyandottes and Orpingtons are to be recommended. These lay a fair number of eggs and produce chickens that are in demand for table use. If your present flock is not all that you would desire it to be, a few dollars spent in early spring in the purchase of eggs for hatching, or in securing some new blood, in the form of a male bird or two, from some reliable dealer, will be well spent.

Make the Poultry Pay.

When farm help becomes scarce, and when all other branches of farming are in a prosperous condition, as at the present time, the poultry of the farm are very apt to be neglected. It is felt that there is not much in hens and that they are too small a business to engage attention, and this condition continues, until in a short time poultry-keeping, from sheer neglect of the many, becomes immensely profitable to the few. This condition is all very well for these few, but why should the many neglect their poultry? It is true that compared with a cow or a horse a hen is of very little value, but to have a constant supply of fresh eggs and dressed poultry is one of the things that adds very much to the comfort of farm life. Porridge, ham and eggs and toast make one of the best breakfasts that can be served, but without the eggs it lacks its best ingredient. Do not neglect the hens this spring, but make all arrangements now to lessen the work of caring for them in the busy season. Have the house cleaned up, cull the flock, renovate the nests, whitewash the house, and get the hens started to lay now, so that there will be early cockerels for the table and early pullets for next year's work. And when the hens are laying do not barter the eggs off for other kinds of food; there is nothing more wholesome or cheaper than good fresh eggs. A member of the Farmers' Institute staff of lecturers recently said: "Do not leave the small affairs of the farm to rush into something big, but carry on the small branches of farming just as assiduously as the larger, for in these the profits increase in greatest proportion to the work required. Last year I asked my girls to keep a strict set of accounts with the hens for a whole year, and they surprised us with a balance in favor of each hen of 90 cents, after labor and feed had been credited." But in this case the money return was not the only recompense for the expenditure, for market values of poultry and eggs do not represent their true worth when fresh upon the farmer's table. There is something in the business, "dig it out."

Teacher and Scholar.

The public school, its associations and improvement are subjects of growing interest and vital concern to every farmer's family in the West. We should be pleased to receive concise communications of a helpful and suggestive nature for this department of the "Farmer's Advocate" from those interested.

The Nature Study of Insects.

Usually, teachers feel quite at a loss how to approach this subject. Where to begin and what to do are matters that oppress, but in no other subjects should they feel more at their ease. The trouble has been that the field is so wide, the helps so technical, and the previous training so inadequate that it has seemed impossible to bring the subject into any fruitful relation to elementary teaching. Leaving out all anatomy and classification and taking the common forms alive and at work, no study can furnish more fascinating or more valuable lessons.

In all nature-study, the teacher requires an aim—some goal to reach. What should be the purpose here? Information regarding insects is not sufficient. Something higher is needed to give vitality to the work. Has the teacher ever examined into the remarkable interrelation of the several parts of the world of nature? The flowers and the insects, the insects and the birds, the insects and the plants, the plants and the soil, are all bound together in a complex activity, each one influencing the others and affecting the general welfare of man. The human side cannot be left out of nature-study. For elementary

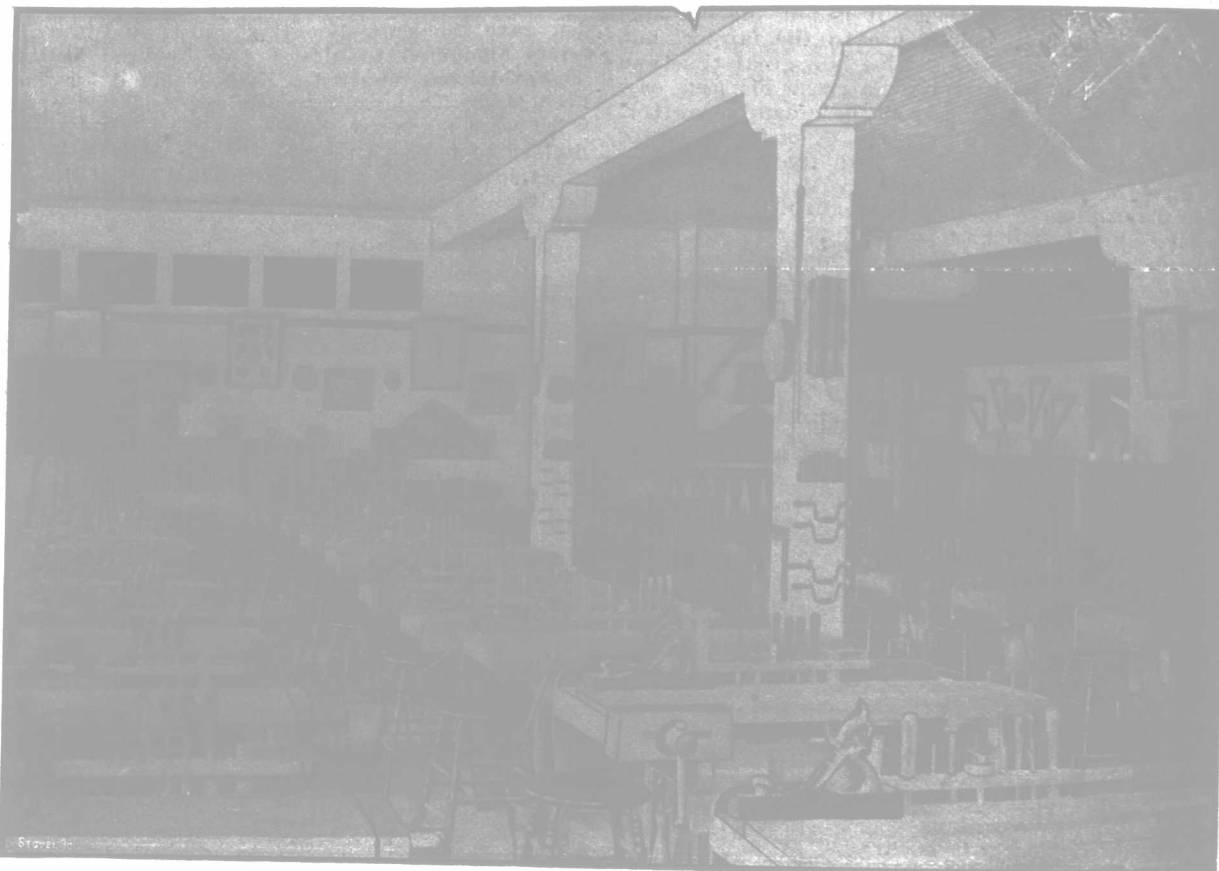
about this insect. This will give you a foundation to work upon.

(2) Obtain a collection of eggs.
(3) Observation work in connection with the hatching, the wrigglers, and the mosquitoes.
(4) The relation of the insects to water, man, cattle, etc.

(5) How can the mosquito be removed? This, roughly speaking, is the "plan of campaign." You may have to assist the children in the finding of the eggs.

When they have once studied the eggs, they will wish to find them in the swamps. What advice shall you give? Have them place shallow pans of soft water (the more rank the better) on the lee side of the house over nights in the height of the season. In the morning, sooty spots will be seen on the water-surface. Remove these and place in a sealer containing soft water. Bring to the schoolhouse, and place where the light of the sun will not be too strong. Obey nature in this particular. Cover the mouths of the sealers with cheese-cloth, and make your observations. To assist, note the following:

What is the shape of the egg-mass?
How many eggs in each?
What is the color?
Why are the masses arranged like a boat?
How many hours were the eggs in hatching?
From which end did the wrigglers escape?
How did they behave on their escape?
Compare this with the young lamb, the young chicken, etc.
What is the appearance of a wriggler?
Is it easier for him to rise or to sink?
Is it fond of coming to the surface?
Can you find a reason for this?



INTERIOR OF MANUAL TRAINING SCHOOL, WINNIPEG.

study one must select just those things that stand in fundamental associations with life and about which the children can find something worth while to do. Has the teacher ever thought that elementary agriculture grows out of this practical phase of the study? It is possible and desirable to arrange all nature work so that many of the facts and principles of this "oldest of arts and most recent of sciences" may be grasped and an interest aroused which will lead pupils who expect to become farmers to appreciate the problems of the farm and to feel the need of a special study and training for that work. At the same time, those who do not afterward follow this occupation will gain a useful training and will better appreciate the dignity of the farmer and the grade of intelligence needed in his profession.

In thus relating your nature-study to what is practical you not only provide your pupils with a standard of measurements, but you may also train the intellectual faculties, increase the interest of your pupils in their school work, stimulate a real love for nature and cultivate a love and an appreciation of the beautiful.

We may suppose now that you have an aim in view. With what insect shall you begin? Take one that is common, one that has present an interesting life-story, a story easily read. The mosquito will answer the purpose. In your treatment, remember that you are to suggest and to guide, the scholars are to do the seeing and the thinking.

How shall you conduct the work?

(1) Find out what the children already know

Do the wrigglers show signs of fear?
Can you find what they live on? To help here, smell the water in the course of a few days after the wrigglers have been at work.

What do the wrigglers do of service to the water? Later, when the pupils have studied this insect in its native haunts, and they will do this if the work at school has been effective, they will be ready to discuss with profit such a question as: the place of the mosquito in nature.

The question of "remedies" is one adapted to the older pupils. As an experiment, have the pupils add a few drops of coal oil to a bottle containing several wrigglers. Watch what happens. Get the pupils to make the inference. Is it practicable? When should it be applied? Again, obtain the nature of the seasons for the past three or four years. Were all equally favorable to mosquito life? Which was best, and why? Infer another remedy here. Finally, have pupils watch for mosquito enemies, particularly the dragon-flies.

It is unnecessary to mention that the above work may be made the basis of both oral and written composition, and provide valuable training in drawing.

The teacher who has worked out carefully the story the mosquito has to tell will have no difficulty in understanding and will have no aversion in wishing to understand the round of life in the case of the house fly, the house moth, the potato beetle, the grasshopper, the aphid fly, and the caterpillar.

ALEX. McINTYRE,
Vice-Principal Normal School.

Manual Training.

The human mind is creative as well as acquisitive. The child's mind cannot be trained according to the laws of its growth unless the creative activities be brought under systematic training in at least equal measure with the acquisitive powers. Both these kinds of training should be continued from the earliest to the latest stage of education. The scheme of education which trains only the acquisitive power is fatally one-sided and partial. The theory of human development, of which manual training is an important factor, is that labor is honorable, and that all laborers, whether clergymen or carpenters, teachers or tinsmiths, cooks or concert-singers, should have the fullest opportunity of development, physically and morally; that the woman who is a true home-maker is more worthy of esteem than the mere woman of society whose only claim to notice lies in her extravagant expenditure of money.

That youth is not rightly trained for citizenship whose acquirements consist of memorizing dates, terms and events, and who enters upon his duties with a contempt for manual pursuits; and the young woman is ill-fitted to be a home-maker who is satisfied with mere book-learning and looks upon housework as drudgery and something beneath her dignity.

By manual training, when properly used, is meant the training of the pupil's powers of expressing thought by delineation or drawings, and by construction or making. Drawing and form-study should be supplemented by constructive work of some sort or grade, be it kindergarten or clay-work, wood-working, sewing or cooking.

City children are like plants in a greenhouse, or like animals in cages, developing abnormally under abnormal conditions. The balance between learning and labor has been in their case upset and learning has taken the whole time. The children of the farm have the advantage, provided that their intellectual training is properly maintained. Their affections and sympathies are drawn out towards animals, and the assistance which they are required to give in the various kinds of work going on about them serves in some degree to teach them hand-craft. Perhaps in this lies the explanation of the fact that both in our own land and in the neighboring Republic, a large proportion of our best and ablest men and women have come from the farm.

The Chinese furnish an example of a nation educated, intelligent, and having skill and adaptability in a marked degree, with a country whose natural resources are abundant, yet whose civilization is at a low ebb and non-progressive. Seemingly they forget to esteem the laborer more highly than the product of his labor. As a nation they set great value upon learning, but their system is so cut-and-dried and given to the pupils as a mould into which they must fit themselves, that there is no scope for originality or progress.

To a certain degree we are making the same mistake by training the memory and reasoning powers, while, for lack of manual training, we are ignoring the practical powers of judgment and executive faculty.

"The exercises in manual training," says the Boston Course of Study, "are a means not only of physical and intellectual but also of moral culture. They train to habits of accuracy, neatness, order and thoroughness; they exercise the judgment, will and conscience; they present an incentive to good work in all directions, and offer a moral stimulus and preparation for usefulness in the home and in the community." The Boston teachers testify to the value of manual training as follows: "The beneficial effect of this work upon the pupil is surprising; whereas, before, there had been cases of truancy that were considered incorrigible, and corporal punishments were a daily necessity, after its introduction not a case of truancy occurred, nor was corporal punishment once necessary."

Prof. Felix Adler, of New York, says: "Manual training means the training of the intellect as well as of the hand. It connects logically with object-teaching. The old object method was to teach the child to observe, but manual training teaches not only to observe but to create."

The fact that children should have manual training creates the need for qualified teachers, and to prepare such Normal Industrial Schools have been established in different countries. In our own land, the premier Province in this movement was Ontario. The Ontario Normal School of Domestic Science and Art, in affiliation with the Ontario Normal College, is the training school for teachers of this subject in public and high schools. Sir William Macdonald, in addition to his gifts to establish a manual training school for boys in different parts of the Dominion, has given \$125,000 for the purpose of erecting a suitable building for the training school at the Ontario Agricultural College, Guelph. Until this building is ready, the school will be continued in Hamilton. Nova Scotia has a training school for teachers in connection with the Normal School

at Truro. Ottawa, Toronto, London and Montreal have also made progress in the introduction of this training into some of their schools.

In connection with this work in Ontario, we are proud of the able part taken in it by Mrs. Hoodless, of Hamilton, the first Treasurer of our National Council of Women of Canada, who for the past ten years has devoted much of her time and energy to the advocacy of this system of education. Manitoba University has included domestic science in its course of study, and has an accomplished teacher of this subject on its staff. We have been told that during the approaching session of Parliament, the Premier intends introducing legislation for the establishment of an Agricultural College in Manitoba, which shall include a course for women in domestic science, horticulture, etc. We hail this information with delight, and trust that such a college may be speedily established. J. McEWEN. Tullichewen, N. Brandon.

The Improvement of Rural Schools in Canada.

BY JAS. W. ROBERTSON.

[Prefatory Note.—In writing these articles on the Improvement of Rural Schools in Canada, I hope to contribute some information, argument and suggestion to help on the movement. It is to be understood that I personally, as a citizen of Canada, and not officially as Commissioner of Agriculture and Dairying, am responsible for the opinions expressed in them. I propose to deal with the subject in five main divisions, viz., (1) Improvements in Organization, (2) Consolidation of Schools, (3) Courses of Study, (4) Plans Under the Macdonald School Funds, and (5) Some Ways in Which Improvements can be Continued and Extended.—J. W. R.]



"ALL ABOARD" FOR THE WEST.
Photo of German family, taken at Immigration Sheds, Winnipeg.

**(Third article.)
COURSE OF STUDY**

This article will not discuss the place and share in the school course which should be accorded to instruction in religion, morality and civics, but I would not think of suggesting a programme of studies with these left out. If a particular text-book for the children may be indicated as the best, the Bible is, for those subjects, matchless in matter, beauty and strength.

Every child begins life helpless, ignorant and selfish. All experiences which help it out of that state are educational in the right direction. Only subjects, lessons and exercises which lead out the powers of body, mind and spirit towards ability, intelligence and unselfish service are worthy of a place in an educational course.

The methods of instruction should arouse the children to acquire information and power, and as these are gained, should direct them to pursue further studies in science, literature and history. The immediate aim of the course should be to increase the ability of the pupils to think, to observe, to investigate, to understand and to do, all as means towards the formation of good characters and right habits.

It is the duty and privilege of the teachers to guide and train the pupils to apply their new knowledge (very little, it may be, from day to day) to the doing of something which the pupils know to be useful and beautiful. The so-called practical work is what makes the other work, with books and symbols, vital to the children and so ministers to the growth of the one-and-indivisible in their bodies, minds and spirits.

All work in the course should be arranged in such a manner that the difficulties of each part of it may be presented, graduated to suit the ever-growing capacity, intelligence and strength of the learners.

Thus progress would be indicated and measured, not so much by quickness of perception and a good memory for names, facts and rules as by habits of thoroughness, truthfulness, accuracy and self-reliance.

All this would not imply that the school course, or curriculum should be burdened with more studies or subjects. On the contrary, by getting rid of some of the formal informational studies from books, in so far as they have been separated from the activities and curiosities natural to children, and judiciously correlating all subjects with practical work, there would be a fair chance for ordinary children to get a really helpful education. All subjects of the school course would have a definite meaning and real value to the children, when taught and studied in constant relation to what they knew and understood to be real in their own lives, their doings and their surroundings. I wish there were a shorter, simpler word than "environment," and then I would use it in saying that such a course of study would lead to ability in overcoming obstacles and in controlling self and environment.

THE READJUSTMENTS.

To what essential part or parts of the present course of study should any new subjects or new methods be adjusted? The notion has been spread by the catchy sounds of "the three R's (reading, 'riting and 'rithmetic)" that these are still the most important parts of an elementary school course. That has done our schools and children much harm. Most errors are done up in catchy or sonorous phrases.

NATURE STUDY SHOULD BE CENTRAL, WITH MANUAL TRAINING AND DOMESTIC ECONOMY ON EITHER SIDE OF IT. These provide for the "three H's in education,"—the training of the Head, the Hands and the Heart into intelligence, ability and unselfish service. These three, Nature Study, Manual Training, and Domestic Economy, are not fads

in any sense. They are fundamental to the maintenance of civilization and the upward progress of the individual and the race. We are part of Nature; life itself is sustained by natural processes; therefore, a study of Nature is necessary. We are the tool-using, weapon-using, instrument-using creatures on earth, and Manual Training makes for mental power through those agencies. We seek to make comfortable, happy homes, and science and art in Domestic Economy enlarge our ability to gain and enjoy that chiefest earthly goal.

NATURE STUDY.

In a recent address in London, Sir George Kekewich, Secretary of the English Education Department, is reported as having said: "The study of Nature is the essence of all true education, and it is somewhat remarkable

and not perhaps creditable to our common-sense that we should have failed to fully realize it until the twentieth century."

In the English schools, Nature Study goes under the name of "Object Lessons on Science" or "General Elementary Science." I hope, however, that it will not be mistaken, in the rural schools of Canada, for the study of elementary science as classified into text-books on Botany, Geology, Physics, Biology or Hygiene.

Nature Study is not for the purpose of acquiring information about soils, plants, animals and inorganic things; it is rather a means of training the personal power of the pupil into a condition of symmetry and maturity, through a knowledge of and sympathy with those things acquired by doing something with them.

Nature Study would not crowd out any essential branch of learning from the common schools, but, on the other hand, it would stimulate an interest in all subjects as the pupil discovered their relationships to his daily life and the world about him. The improvement in the school course is to be made not so much by a change of curriculum as by a change in the methods of treating the various subjects. For instance, let a pupil plant ten grains of wheat in a row, ten grains of Indian corn in another row, ten seeds of potatoes in another row, and ten seeds of clover in another row. Let him pull up one plant of each row every week and find out for himself, under the guidance of a competent teacher, what had happened in the meantime. Further, as far as he was able, let him make drawings of the plot of ground and of the plants, and a written statement of the progress and growth as he was able to observe it from week to week. If then his lessons in reading and in arithmetic should have a direct bearing upon this Nature

Study work, would not such a course give an intelligent boy or girl a great amount of exceedingly valuable education?

Instances might be multiplied, sufficient to fill the time-table for the whole of the school year. A little reflection would bring these to the mind of every teacher of experience.

Nature Study lessons should follow the seasons of the year. The out-of-doors part of them is not the least valuable. Only in advanced work do chemical or physical apparatus become necessary. A circular issued by the English Board of Education in April, 1900, has the following recommendation: "The teacher should, as occasion offers, take the children out of doors for school walks at the various seasons of the year, and give simple lessons on the spot about animals in the fields and farmyards, about plowing and sowing, about fruit trees and forest trees, about birds, insects and flowers, and other objects of interest. The lessons thus learnt out of doors can be afterwards carried forward in the school-room by reading, composition, pictures and drawing."

In a most excellent paper on "THE VALUE OF NATURE STUDY IN EDUCATION," read by James Fletcher, LL. D., before the Royal Society of Canada in May, 1901, he stated:

"Objects for study abound without stint in all places and at all seasons of the year—spring, summer, autumn or winter, it is all the same—for Nature itself is the book, and every commonest object inside the school and out is a text for a sermon—the very wood of the school-room floor, of the desks or the furniture, the chalk used on the blackboard, even the speck of dust floating in the sunbeam, the light itself; outside, the drop of rain, the flake of snow, a stick, a straw, a stone, a fallen leaf, a twig of any tree, a winter bud or a piece of bark, a bird, a beetle or a butterfly, a frog, a snake, or even a toad. Everything is worthy of study from many points of view, and has a multitude of mental uses and direct lessons to teach."

"The scope of Nature Study should as much as possible be confined to the simple elements of knowledge. It should not be taught to the scholar by the teacher, but studied by the teacher with the scholar, the teacher merely using his or her superior knowledge and experience in directing and encouraging the scholars to strive to learn for themselves from and of all things which come before them; in a word, to be self-dependent and not to trust too much to what they find in books written by others, but to examine and consider everything for themselves."

(To be continued.)

The School Premises.

Manitoba is practically a new country, but educationally it is fully abreast of the times. However, in the matter of rural schools, further advances are needed. More than a quarter of a century has elapsed since many of our first schools were established, yet, in most instances, they represent but a speck on the broad expanse of prairie. No trees, no shrubs, no flowers, and, in many cases, not even a fence bears evidence of that progressive spirit which is supposed to dominate the actions of all Western people.

Thousands of prospective settlers are considering the advantages which Western Canada has to offer, and one of their first considerations in choosing a farm is the presence of a good school. Hence, from a purely business standpoint, our school premises should receive our closest attention. The schoolroom is the place in which children between the ages of six and fourteen spend half their waking hours. It is the place where ideas are originated, impressions made and purposes formed, and the place where character is moulded, and the beginning of that citizenship to which, in a few years, the destiny of our country must be entrusted. This is the period in our lives when environment has a most powerful influence on character. Then we are more profoundly influenced by what we see than what we hear, and an impetus is given to our lives which will in the future act either for good or for evil. Hence, it behooves us as parents and teachers, at this period of the year, to consider plans whereby we may make our school grounds brighter, more beautiful and more attractive.

To be permanent, improvements must not be left to the teacher alone, trustees and parents must take the initiative, and they will always be sure of the hearty co-operation of the teacher. Then there will be a definite plan of improvement which will not be materially affected by a change of teachers: each successive teacher will have a foundation to work on, and will be glad to add his influence and enthusiasm towards making the school surroundings beautiful and attractive. The pupils will become imbued with the same spirit, will feel that the school is theirs and its success depends on their efforts. The school will become a central power, and stand next to the home and the church in the development of that character and steadfastness which never despairs even when facing defeat.

In a future issue we will offer suggestions on:
(1) How to beautify the school premises; (2) Schoolroom decoration.

Horticulture and Forestry.

Tree Planting for Fuel.

[Paper prepared by Rev. J. Fotheringham, Grenfell, Assa., for the annual meeting of the Western Horticultural Society, Winnipeg.]

Tree-planting for other purposes is highly, and not too highly, recommended. Around our own farmstead it has proved valuable. Many of our first chickens on the open prairie became blind from exposure to the sun. When the trees and shrubs came, they proved a sure remedy. The hawk lost his chance of getting a hen for his dinner when she had trees and shrubs to fly under. There she had shade and shelter and good scratching ground. Robins and other birds came to sing among the branches, and prairie chickens came to supply the pot. Even the Baltimore oriole paid us a visit, and flashed from branch to branch around the house in the early morning, with its animating cry—wake up, wake up, wake up, sirrr. The wind-swept snow was arrested and the buildings were saved from drifts. Storms came and unroofed buildings elsewhere, but ours were safe, while the trees threw the wind upward and over them. The trees, being planted closely and growing without pruning, soon furnished branches and shoots that became dead, and were cut and gathered for summer fuel, and higher branches were taken for the same purpose. The larger trees became capable of supplying sap for syrup and sugar. For beauty, shelter and utility in many ways, the surrounding trees added hundreds of dollars to the value of the farm.

As to planting for fuel, I do not undertake to speak as an expert, but I venture some suggestions which may be utilized and improved upon. The fuel question has become important, not alone from the coal strike. In almost all the older parts of Ontario, the land of splendid forests has become so denuded that not only has agriculture been interfered with by alternate droughts and sudden downpours and floods, but the farmer has to depend mainly upon coal for fuel. In a large part of our Western country our bluffs have been destroyed, or so nearly so that coal is rapidly coming into use. Our soft coal is quickly consumed, and the expense—\$7.00 a ton—is a serious item, especially to the new settler who comes in with little else but the spirit of work and enterprise.

The evil can be mitigated by raising wood. The easiest way is by sowing the seed, and the seed I would principally recommend is the native maple. For speedy results young trees may be planted, and, planted as hedge rows, they would help to arrest snow and shelter the small seedlings the first year or two. I think it very advisable, when sowing maple seeds, to plant rows of corn or something else, to be left to gather snow about the maple plants. The plants quite exposed, say on rising ground, are very apt to be killed the first winter, and if transplanted at a year old, they are not so hardy as when larger.

The first step is to select the land for planting. Of course, there should be a good shelter around the buildings. Elsewhere on the farm may be selected more, in blocks or strips, according to the kinds of land and trees to be utilized and the various ends to be gained. The land should be cultivated from grass and weeds, and well pulverized. The rows may be four feet apart, allowing cultivation by horse. Little furrows may be opened by hand garden plow, and the seed sown at once while the earth is wet. I have taken a tin fruit-can, without top and bottom, fastened thereto a handle some three feet long, and made for it a bottom of pasteboard, with one or two holes of proper size to let out the seed. Filling this seeder, you can walk along the furrow and shake in the seed in any desired quantity. After the seeder comes the coverer, with a wooden hand rake, back down, and draws the wet damp earth over the seed, gives it a pack, and so walks on at a good rate, making a good job. The earlier the seed is sown, the better, if you only escape the late frosts, which would kill the little plants. Cultivation should be kept up till the trees can take care of themselves, to keep down weeds and keep the land mellow, so preventing the escape of moisture. If the plants come up too thick, thin out while small, but keep them pretty close, for transplanting and thinning for fuel later on. I have had them grow four or five feet in the third year. The fourth year you can begin to have summer fuel by thinning out. Take a block and use a hatchet, and cut them into short bits. They will do for all the lighter cooking, and, in winter, for kindling coal fires. As time goes on you will have them larger till you leave them four feet apart in the row. By and by you may cut out alternate rows and have good-sized firewood. You can cultivate these vacant rows and replant, and the young trees will stretch up all the more for having large trees near them.

Thus, ten acres may keep you going, and perhaps your children after you. This is not all con-

jecture, for I have seen something of what I say. Along with maple you may raise native ash, and provide excellent timber for handles and other uses. You may get cottonwood and Russian poplar to grow faster than maple, but let some one more experienced advise you as to their utility.

Questions and Answers.

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

2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.

3rd.—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, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

[Answered by our Veterinary Editor.]

COFFIN-JOINT LAMENESS.

Some time ago I asked you about a horse that was lame in the nigh front leg. You kindly answered in the Christmas number, saying you thought it coffin-joint lameness. I tried the directions you gave; I think that is the disease. Please say what you advise? Sometimes the horse is not lame at all, then he will go lame for a spell.

Dauphin Dist.

BEN BRAY.

Ans.—Keep the hoof from becoming too dry, by applying a flaxseed meal poultice, twice or thrice a week; shorten the toe as much as it will bear and apply a shoe with a low toe and moderately high and bulky heels. Benefit is sometimes derived from the application of a blister around the coronet. This disease is often incurable, and the most that can be done is to give temporary relief. In certain kinds of feet it is sometimes advisable to perform the operation of neurotomy, which deprives the foot of all sensation, and thereby removes, for a time at least, all lameness. This operation, of course, can only be performed by a qualified person.

BAD BREATH—EMBOLISM.

1. A fourteen-year-old mare has very bad breath, although she is in fair condition, and I am feeding her oat straw and oat sheaves and a few oats, and at times she feeds good, at other times she does not care to eat.

2. I took her out the other day, hitched her up, appearing as well as usual, and I had just gone about twenty rods when she appeared to get stiff, and more so on hind leg, and as I went on she got so bad she fell down and was in very great pain. She has done this twice.

Mariposa, Man.

J. A. W.

Ans.—1. The bad breath is probably due to a caries tooth. Examine the teeth carefully, and if a decaying tooth is observed, the only remedy is its extraction, which is sometimes a rather difficult operation, and for its accomplishment it is necessary to have suitable instruments and a person who is qualified to use them. If, however, it is a split or broken tooth, and the portions are quite loose, its removal is not generally attended with much difficulty.

2. I think the trouble is an obstruction of the circulation by a blood clot, technically called an "embolism." I have met with three cases with symptoms similar to those which you have described, when on post-mortem examination, and found the clot to be in the iliac artery. If such is the case with your mare, I know of no remedy, and she is likely to die during an attack.

BARKEN HEIFER.

I have two three-year-old heifers that cannot be got in calf. They are in good condition, get plenty of oat straw and spring water. I have a splendid Shorthorn bull that has given good satisfaction, so I don't leave the blame to him. Can you tell me what to do? They come around regular, but don't hold.

Wetaskiwin Dist.

WM. CAMPBELL.

Ans.—The causes of barrenness are various, but if there is no organic defect in the generative organs of your heifers, the difficulty may be overcome by toning up their systems, including a change of food. Oat straw and spring water, although good as far as they go, do not contain a very large percentage of system-building properties. I would advise you, if possible, to give good hay instead of the straw. Give to each animal fourteen ounces of Epsom salts, four drams each of nitrate of potash and ground ginger. Dissolve all together in one quart of boiling water; add half a pint of molasses, and give in one dose. After the purgative has ceased to operate, give, morning and evening, for ten days, in bran mash, containing two or three quarts of crushed oats; sulphate of iron, nitrate of potash, pulverized gentian and fenugreek, of each two drams. Continue the bran and oats ration, at least once a day, till the grazing season comes around. Try change of bull.

LAME MARE.

I have a mare which has been lame for about a year. She got lame standing in the stable. It has never been swollen; it seems to be in the fetlock joint. She is not very lame only when trotted; she feels and looks well, eats heartily; she is eleven years old. The lameness does not get any worse. What is the matter with it? Can she be cured, and if so, what would be the best thing to do for it?

WELL-KNOWN FARMER.

Glensmith, Man.

Ans.—Your description of the case is not sufficiently plain to warrant me in giving my opinion as to the location of the lameness. Please answer the following questions: Is the lameness in a fore or hind leg? Is it a right or left leg? Does the animal stand with the foot pointed forward, backward or straight? Is the hoof of the lame limb contracted? What is your reason for supposing that the ailment is in the fetlock joint?

APOPLEXIA IN HENS.

I found a hen dead in the yard; her comb looked fresh. I opened her and found she was very fat, also an egg, as if it had broken in her. I feed nearly all wheat, part raw, and part cooked with some bran. Will you kindly let me know what could be the cause of her death?

Indian Head, Assa.

SUBSCRIBER.

Ans.—The hen has in all probability died from apoplexy, caused by overfeeding. Little can be done for this disease in the way of cure, because death is very sudden. In breeding fowl, it can be prevented by not allowing the birds to become too fat. If the egg was really broken before she died, it must have been due to an accident of some kind.

PROBABLY LUMP JAW.

I have a young cow, four years old, which has a lump under her jaw (on left side) about the size of a goose egg; lump is very hard. I thought it might be lump jaw coming on. Do you think it would affect the milk? As I only bought the cow last week and don't know if she received a blow on the jaw or not, what treatment would you prescribe?

2. Where milk is scarce, is there any kind of meal can be mixed with milk to make it better for calf two weeks old?

3. What harm does it do a cow to eat her afterbirth?

Baldur.

NEW SUBSCRIBER.

Ans.—1. The location and hard nature of the lump points very strongly to a case of "lump jaw," and I would advise you to treat it as such. Give in mash, or dissolved in a pint of water, morning and night, until lump disappears: 1 1/2 drams iodide of potassium, or, if you prefer it, you may try either Fleming's or Mitchell's Lump-jaw Cure, to be had at drug stores. As long as the location of the disease is circumscribed, and the animal remains in good health and condition, the milk will be quite wholesome.

2. As a substitute for whole milk, linseed meal may be supplied to calves with very satisfactory results. For a calf two weeks old, a tablespoonful twice a day may be fed, the amount being increased as the age advances.

3. When a cow eats her afterbirth, the chief danger is derangement of the digestive tract, with indigestion as the result. Cows which have been supplied with food containing the proper mineral constituents, seldom consume this effete matter.

INDUCING ESTRUM IN COWS.

I have a Shorthorn bull which I have been using the last two years, and intend selling in July. My cows are all to calve before the 15th of June. I always let the calves suck all but four cows, which milk and make butter for the house. Kindly let me know through your paper how I would get all my cows with calf before the first of July, 1903? Last year some of my cows did not come in heat till two months after calving.

Ans.—Cows that are nursing calves do not, as a rule, come in heat as soon after calving as those that are milked by hand. It is not unusual for cows suckling their calves to go two months before coming in season. The only treatment we can suggest to bring them in season earlier is liberal feeding, keeping the calves separate from the cows, allowing them to nurse only twice a day after they are a month old. Weaning the calf from the cow, and feeding it by hand, would probably hasten matters; or two calves could be nursed by one cow that is in calf. This would call for generous feeding of both cow and calves.

MAMMSTITIS.

Cow's udder swells and remains swollen for a few days, and as soon as the swelling disappears the milk will have lumps in it for two or three weeks. N. K.

Ans.—The repeated attacks of inflammation of the udder without apparent cause indicate tubercular disease of the gland. You had better have her tested with tuberculin, and if she react destroy her, as if she has this disease the milk is not fit for food. The lumps are the result of the inflammation. Treatment consists in purging with 2 lbs. Epsom salts and 1 oz. ginger, feeding lightly, and following up with 2-dr. doses nitrate of potash three times daily. Apply hot poultices to the udder. Change three times daily, and milk each time. Also rub well with camphorated oil.

LAME MARE—PRICE OF PORK—TO KILL LICE ON HORSES.

1. I have a mare coming four years. Last July she got her foot very badly cut on a wire fence; there is a new hoof coming, about as long as the old one, but it is hard work for her to walk. Should I leave the old hoof on until it drops off of itself, or should I try to cut it off now?

2. What is best to put on horses for lice?

3. Could you tell me what should be the difference in price between live pork and dressed pork? If dressed pork is worth 7 1/2 cents, what should live pigs be worth per pound? Is it the rule to dock five per cent. for shrinkage when selling pigs at live weight, or should a person get full weight?

Sintaluta.

S. W. B.

Ans.—1. Serious injuries of the foot sometimes cause an excessive growth of horn and more or less disfigurement of the hoof. The hoof should be shortened and otherwise cut away so as to bring it as near as possible to its natural size and shape, taking care not to approach too closely to the sensitive parts.

2. Wash well with a decoction of stavesacre seeds, made by boiling in the following proportion, an ounce of the seeds to a quart of water. Rub the animal until dry.

3. Live weight pork is worth about twenty per cent. less than dressed pork. That is, eighty pounds of dressed pork is as valuable as one hundred pounds of live pork.

MUD FEVER.

1. Three-year-old Clyde colt has something like scratches. His legs are cracked from the heels up; he bites and irritates them.

2. How will I treat my hogpen, which is infested with vermin?

SUBSCRIBER.

Ans.—1. Your colt has mud fever, which is really scratches extending up the limb. Heavy



TIDY ABBEKIRK 1492.

Record, 505 lbs. 15 ozs. milk, 20 lbs. 15.54 ozs. butter, in 7 days. HOLSTEIN COW, BRED AND OWNED BY MR. H. BOLLERT, CASSEL, ONT.

horses with beefy legs and coarse hair are predisposed to this trouble. Give him a purgative of nine drams aloes and two drams ginger, follow up with two ounces Fowler's solution of arsenic, night and morning, given as a drench in half pint cold water. Apply the following lotion to the limbs three times daily: Sulphate of zinc and acetate of lead, of each one ounce, carbolic acid one dram, water one pint. Do not wash the legs.

2. Whitewash it, or spray with kerosene emulsion, coal oil or a ten per cent. solution of carbolic acid.

UNTHRIFTY MARE.

Six-year-old mare is in poor condition; hide-bound, hair dry and starey. Was fed on ear corn and timothy hay; eats very little hay, refused to eat the corn. I gave her whole oats, then boiled oats. She is driven a little occasionally, and sometimes stands two or three days. E. S.

Ans.—It is probable your mare's teeth require dressing. This is often the case, even with young horses, and if so she will do no good until you have it attended to. Give her a purgative of eight drams aloes and two drams ginger, follow up with one dram each, sulphate of iron and gentian, twice daily. Feed hay of good quality and crushed oats, give a carrot or a turnip once daily, and a feed of bran twice weekly. Give regular exercise, and gradually increase the grain ration as her appetite improves, but at no time give more at a meal than she will eat heartily.

LAME HORSE.

My four-year-old horse pulled his right shoulder

out of joint about three months ago. He is still lame. SUBSCRIBER.

New Westminster, B.C.

Ans.—You are mistaken about the condition. The shoulder joint is not dislocated, if so he would not be able to move the limb at all. Dislocation of this joint is very seldom met with. He has probably sprained the muscles of the shoulder and requires a long rest and repeated blistering. Blister in the same manner as is advised for curb in this issue. If there is a veterinarian near you, you had better let him see the horse, as it is impossible for me to make a correct diagnosis from the symptoms given.

Miscellaneous.

HARDY CLIMBER—TREES AND SHRUBS FOR LAWN—TREES FOR AVENUE.

1. Is there any climber sufficiently hardy to stand our severe winter? I wish to use it to cover side of veranda.

Elkhorn.

2. I wish to plant some trees and ornamental shrubs for lawn purposes. Can you recommend anything suitable and at the same time hardy in this climate?

Pipestone, Man.

3. From your experience, what would you consider the best avenue trees for Manitoba, and how wide apart should they be planted?

Pilot Mound.

Ans.—1. Our native Virginia creeper, which is often found growing wild in many parts of the Province, is excellent for this purpose. It grows readily from cuttings, and if planted in rich, moist soil, soon covers the side of a building, frequently growing from six to eight feet in one year, when well rooted.

2. Some of the best trees for lawn purposes are as follows: White spruce, white birch, cut-leaved weeping birch, dwarf birch, Ginnalian maple, tamarack, mountain ash (native), laurel-leaved willow.

Among the most suitable shrubs are: Lilac, bush honeysuckle, Caragana, snowball, Rosa Rugosa, Spiraea in variety, flowering currant. For the best results, each plant should be surrounded with a circle of cultivated soil; this circle should be increased in size as the plant grows.

3. On fairly rich black loam soil, by far the best avenue tree is our native white elm, found growing along the principal rivers in Manitoba. They can be grown from the seed, which ripens in June, or young trees may be dug up from the bush; they should be planted fully 30

feet apart, and kept well cultivated for the first ten years. The pruning should be done gradually, otherwise the trunk becomes too spindly. On lighter soil the native ash-leaf maple is fairly satisfactory. They should be planted from 25 to 30 feet apart.

GREEN FODDER—BEST FOODS TO USE.

1. Would Hungarian and oats sown together make a good general feed for horses and cattle? Would barley be better with the Hungarian than oats? How much seed of each kind should be sown to the acre?

2. Have plenty oat, wheat and barley straw, some prairie hay, also barley and oats that are worth, say 22 cents per bushel, to which would have to be added cost of crushing, say 7 cents per bag. Would it pay to buy bran at \$10 per ton to feed milk cows under these conditions? Give proportions of each to feed as a ration, with and without the bran.

Ninga.

Ans.—1. We would advise using oats in preference to barley, when the crop is to be cut green for fodder. Twelve pounds of Hungarian seed and one bushel of oats per acre will make a very good mixture for horse and cattle feed. Peas and oats make a splendid fodder when cut green. About one bushel of each per acre should be sown.

2. With grain at the price you mention, oat and barley chop, equal parts, would be worth \$12 per ton, and chop, two parts oat and one barley, would cost \$13 per ton. It will pay you at these figures to feed your cows bran. Two of oats to one of barley gives best results as a dairy meal

ration. Barley is of more value than oats, when the object is to form flesh, but as a milk producer it does not nearly equal oats. If your cows are of good size, and in comparatively full milk flow, seven pounds of oats, four of barley and four of bran would be a good ration, and if you wished to do without the bran, five of barley and ten of oats.

PRAIRIE AND OAT HAY.

Could you give me any information as regards upland prairie hay? Does it increase its feeding quality for cattle by being put up and kept over for a year? Does it increase the quality of oat hay to cut with a binder and keep over a year? Would you advise salting it?

F. H. GOWERS.

Ans.—No kind of hay can be improved in quality by keeping over a year. Grass cut on the prairie makes the best hay when put up in hand-cocks and allowed to remain for a few days and then stacked. The same may be said of oat hay, and our experience has been that the longer they are kept over one year the less the feeding value.

The question of salting has been for some time unsettled in the minds of many good haymakers, and it is doubtful whether hay well made can be improved in quality by salting. Where it has become bleached by rain before stacking, a liberal application may assist in restoring the color and making it slightly more palatable to stock, but otherwise the advantages are slight.

YOUNG PIGS DYING.

We had a litter of pigs which were farrowed on or about the 6th of December, in a fine, warm stable, where cattle, horses and pigs were all under one roof. When about two weeks old they started to die off, until none were left. When they were dying their ears turned a very dark pink. They would lie down on the straw and scarcely move, and when we would lift them up they would scarcely squeal at all, but would lie with their eyes shut. People said that it was the sow's milk that was killing them, so we took them off the sow and fed them by hand; we gave them different things, but to no avail. Before they died they became very, very fat. The sow was fed on spelt chop. This is the first litter we ever lost, and we have raised hogs for years. What was the cause of their death, and what is the best thing to do if such occurs again?

Shoal Lake, Man.

J. A. B.

Ans.—Your little pigs have died from heart failure, caused by an overgrowth of fat around the heart. The sow is evidently a good suckler, which is a very valuable quality in such a breeding animal. Had the little fellows been obliged to take exercise, such as they would if outside in summer time, no trouble would have ensued. Where there is danger of this condition being repeated, we would advise turning the sow out nearly every day for two or three hours, and when the weather is moderately warm the little pigs, when ten days old, should go out with her for a while. Some recommend cutting the tail off and thus causing bleeding as a cure. Our own experience has been that this is the best thing to do if exercise cannot be given.

BARLEY AND WHEAT HAY.

Would beardless barley fed as hay (ripe grain and straw), be good for horses? Would green wheat hay be better than green oat hay for work horses, and would wheat hay be injurious fed in large quantity?

C. P.

Cochrane, Alta.

Ans.—Hay made from beardless barley would make nutritious fodder for horses, and would be a fair substitute in the absence of meadow hay. It would not, however, be any better nor perhaps quite as well relished by the horses as that made from green oats.

While hay made from wheat cut when in blossom, would not be injurious if fed to horses in large quantities, yet oat hay is to be preferred. It usually yields a heavier tonnage per acre, and is more palatable to stock.

YOUNG PIGS DYING.

I have weaned quite a few pigs, some three weeks old and some six weeks old, and have lost a good many of them, about half. They get scours, pine away and die. I feed them milk, shorts and flour, mixed together. Please let me know what is the cause of them dying?

A SUBSCRIBER.

Ans.—Injudicious management and feeding probably accounts for this trouble. Pigs should not be weaned younger than at six weeks old, and better at eight weeks. In cold weather the milk fed them after weaning for some time, should be warmed and fed little at a time and often. No more should be given than they will clean up, and if any be left over it should be removed from the trough. Shorts, or better, a mixture of shorts and sifted oatmeal, in moderate amount, may be fed with the milk, or dry in a separate trough, and later ground barley may profitably take the place of oats in the mixture. A clean, dry bed is indispensable, and a mixture of wood ashes and salt should be kept in a low box in the pen.

Field Notes.

Canadian Ayrshire Breeders' Association Annual Meeting.

The fifth annual meeting of the Canadian Ayrshire Breeders' Association was held in Montreal on Friday, February 13th, 1903, at 2 p.m., President F. W. Hodson in the chair. The secretary-treasurer's report, which was on motion adopted, showed receipts from all sources, \$2,368, and expenditures \$1,579, leaving a balance on hand of \$782.89; 1,650 pedigrees and 477 transfers were recorded in 1902, an increase of 174 over that of the previous year. The president delivered a lengthy address.

A letter was read from Mr. E. B. Elderkin, of Amherst, N.S., asking for a grant from this association towards the prize list of the Maritime Provinces Winter Fair. After a short deliberation, the following resolution, moved by M. H. Parlee, seconded by Wm. Stewart, was adopted: "That this association vote the sum of \$50 towards the prize list of the Maritime Provinces Winter Fair, to be made up in the following manner: That the fifty cents per member now given to make each member from the Maritime Provinces members of the Cattle Breeders' Association, go towards making up this prize, and the balance be supplemented from the general funds of this association, the classification to be left in the hands of the Directors of the Maritime Winter Fair, and all animals competing must be registered in the Canadian Ayrshire Herdbook."

W. W. Ballantyne moved, seconded by J. C. Smith, "that the balance of the money from the other Provinces—paid in by this association to make each member a member of the Cattle Breed-

ers' Association—be donated to Guelph and Ottawa Winter Shows, and it be left in the hands of the delegates from this association to arrange the money in the prize list." Carried.

In order to stimulate a demand for Ayrshires in the West, it was resolved: "That Winnipeg and Calgary exhibitions shall each receive a grant of \$25 from this association, to be given for the best pair of Ayrshire animals, composed of a bull one year old and over and a female over two years, the ages to be computed according to the rules of the exhibitions, and it be left in Mr. C. W. Peterson's hands to say whether the amount voted to Calgary shall be given at the Spring or Fall Show. All animals competing must be owned by exhibitor and recorded in the Canadian Ayrshire Herdbook."

The next matter under consideration was the advisability of having a Derby class at some of the large exhibitions. It was thought best to commence with one fair, and the following was adopted: "That one of the large fairs in Canada be asked to make a Derby class for three-year-old Ayrshire heifers in milk, that the rules and regulations regarding this Derby class be furnished to the secretary of the fair making the class, and that the entrance fee for each animal be \$5.00."

It was moved by J. G. Clark, seconded by J. C. Smith, "that the Derby class shall be held in Ottawa." Carried.

It was on motion decided "that this association devote the sum of \$50 to Mr. Westervelt's scheme for interprovincial trade, as outlined in his annual report."

On motion of W. W. Ballantyne, seconded by A. Hume, it was resolved "that the Canadian Ayrshire Breeders' Association offer a sweepstake-

prize of \$50 at the Winter Fairs at Guelph, Ottawa, and Amherst, N.S., providing a registered Ayrshire cow wins the sweepstakes in the dairy test over all pure-breds."

A resolution, noting with satisfaction the marked progress made by the Toronto Industrial Exhibition Association in the way of erecting new buildings, etc., and approving of the proposed Dominion Exhibition at Toronto in 1903, was unanimously adopted.

The following resolution, moved by Senator Owens, seconded by Alex. Drummond, was adopted: "That this association, at this their annual meeting, express hearty approval of the stand taken by the Farmers' Associations and other Canadian associations in representing to the Federal Government the urgent necessity of the appointment of an independent railway commission, and that at least one representative of our great agricultural interests be appointed on the proposed railway commission."

J. G. Clark moved, seconded by W. W. Ballantyne, "that the Canadian Ayrshire Breeders' Association petition the Government for assistance in making a creditable exhibit at the St. Louis Fair." Carried.

It was the general opinion of the meeting that it was desirable to have an "Advanced Registry" as suggested in the President's address, and on motion it was left in the hands of the revising committee, with power to act.

The matter of a standard of excellence, as a guide in judging Ayrshires, was introduced by Mr. William Stewart, of Menie, and after discussion it was resolved: "That the matter of working out a standard of excellence be left in the hands of the Revising Committee; that a copy of this standard as soon as completed be sent to every breeder; that the letters received from the breed-

ers, expressing their opinions, be collected and brought before the committee and then before the annual meeting next year."

Officers for 1903.

President, Senator Owens, Montreal; Honorary President, F. W. Hodson, Ottawa; 1st Vice-President, Alex. Hume, Menie.

Vice-Presidents.—Ontario, J. Lockie Wilson, Alexandria; Quebec, Robert Ness, Howick; Manitoba, Geo. Steele, Glenboro; Assiniboia, J. C. Pope, Regina; British Columbia, A. C. Wells, Chilliwack; Prince Edward Island, Jas. Easton, Charlottetown.

Life Members.—Hon. Thos. Ballantyne, Stratford; Jos. Yuill, Carleton Place; Jas. McCormack, Rockton; John Morrin, Belle Riviere, Que.; Jas. Drummond, Petite Cote, Que.; Thos. Irving, North Georgetown, Que.; David Benning, Williamstown.

Directors.—Ontario: J. G. Clark, Ottawa; Wm. Stewart, Jr., Menie; A. Kains, Byron; W. W. Ballantyne, Stratford; A. Hume, Menie; J. C. Smith, Hintonburg; F. W. Hodson, Ottawa. Quebec: Jas. Boden, Ste. Anne de Bellevue; T. D. McCallum, Danville; Senator Owens, Montreal; R. Hunter, Maxville; R. R. Ness, Jr., Howick; Nap. Lachapelle, St. Paul l'Ermite; W. F. Stephen, Trout River.

Eastern Secretary, J. P. L. Berubo, Montreal, Que.; Secretary-Treasurer, Henry Wade, Toronto, Ont. Delegates: To Industrial Exhibition, W. W. Ballantyne and Wm. Stewart, Jr.; Western Fair, A. Kains and Geo. Hill, Delaware; Ottawa Winter Fair, J. G. Clark and J. C. Smith; Ottawa Exhibition, F. W. Hodson and Jos. Yuill; Sherbrooke, Que., T. D. McCallum and Robert Ness; Quebec, Nap. Lachapelle and A. Drummond; Dom. Cattle Breeders' Association, W. W. Ballantyne and H. Wade.

Judges recommended.—Toronto Industrial, W. W. Ballantyne and A. Kains; reserve, A. Drummond, Ottawa Central, Thos. Bradshaw; reserve, A. Hume. London Western, A. Drummond; reserve, Geo. McCormack, Rockton. Sherbrooke Exhibition, Jas. Boden; reserve, Jas. Bryson, Brysonville, Que. Quebec Exhibition, Thos. Drysdale, Allan's Corners, Que. reserve, Nap. Lachapelle.



NONPAREIL 57TH = 37124 =.

Shorthorn cow, sired by Lord Stanley = 17819 =, junior champion, World's Fair, Chicago. BRED AND OWNED BY J. & W. RUSSELL, RICHMOND HILL, ONT.

(See Gossip, page 176.)

How the Colt was Shod.

The methods employed by some blacksmiths in shoeing colts for the first time should not be tolerated by horse owners. In an Alberta town the writer witnessed an ordeal through which a colt was put that showed an ignorance of horsemanship that a farmer's fourteen-year-old boy should be ashamed of. The colt was rather nervous, but showed no signs of ugliness. To begin with, a bag was tied over his head, thereby preparing the colt to be on the lookout for some injury. A rope was then tied from his neck to the hind foot, and the end taken hold of by three men, who held his foot suspended in midair like a tin monkey on a string. The smith, trembling visibly, now started to work as though he were handling a bomb which was liable to explode at any moment. The colt instinctively knew of this and expected treachery. After plunging around a minute or two, he broke his tie-rope and then there was trouble. Shoes were finally put on, but the colt was dripping with perspiration, and it will be many a day before he forgets the episode, or, in other words, he will expect the same treatment every time his foot is taken up, and will naturally resent it.

On the other hand, a far worse-behaved animal was shod in another shop without a rope or hobble of any kind, except his tie-rope. The work was done in half the time, and in such a manner that the horse learned there was nothing to fear, and after a few lunges was fairly quiet. This smith went to work quite unconcernedly and as though there was nothing unusual to be done, and the horse, which had previously given trouble to other horseshoers, seemed to have confidence in this man, and when he found that he was being treated kindly he gave very little trouble. There was no shouting or jerking, but everything was done in a quiet, masterly way.

A Virden Farm.

The farm of Lieut. C. E. Ivens is located about seven miles west of Virden. About 100 head of cattle are kept, 20 of them milch cows, 20 feeding steers three years old, and the balance young things. For roughage, rye and timothy hay, and straw, are used. The meal ration of the feeding steers is composed of wheat, oats and barley, equal parts by measure. Five pounds of this mixture per steer per day was the amount given at the start. This will be gradually increased until a 15-pound daily ration is reached. Sixteen horses are kept on this farm, 12 of them old enough to work, and during the winter months all the grain crushing is done with the old-fashioned horse-power. This provides exercise for the horses at a time when they often suffer for lack of it, and at the same time grinds all the meal that is needed on the farm.

Implements are housed on this farm, and for that purpose a good building 50 by 20 is in use; at any time when needed this can be converted into a temporary granary. Next year, Mr. Ivens intends building another to hold his separator, engine and a few other articles which it is impossible to get into the present one.

This farm consists of eight hundred acres, 130 of which is kept in grass. Each winter the manure is hauled direct from the stables, and, as a rule, between 50 and 80 acres is covered. The plan of rotation followed is two crops of wheat, one of oats, and one of barley, seeding to grass with the latter. Sometimes it is more difficult to get a grass catch with barley than with wheat, owing to the fact that at the time most barley is sown the ground is usually much drier, and consequently a smaller percentage of the seeds germinate.

Provincial Plowing Match.

The date of the next Provincial plowing match for Manitoba has been fixed for July 7th, at the Experimental Farm, Brandon. Owing to the postponement of last year's final match, the local champions of 1902 will compete with the winners this year at the various district matches, and hence the contest ought to prove unusually interesting. There is also a probability of a special class being opened for the champions of previous Provincial matches. These winners are Wm. Croy, Brandon; Jas. Sutherland, Beresford; and Andrew Elliott, Routhwaite.

Plowing matches are doing much in the districts wherever held to increase the interest in good cultivation, and it is to be hoped that their numbers will increase and the skillful moulder of the soil receive due encouragement and honor.

Calgary Exhibition.

At a meeting of the Inter-Western Pacific Exhibition Company, held at Calgary some time ago, it was decided to hold the annual Summer Fair from the 30th of June to the 3rd of July. It has now been found that the above dates would clash with those recently selected for the Edmonton Exhibition. Another meeting, therefore, took place on Saturday last, at which it was unanimously decided to change the dates of the Calgary Exhibition to the 7th, 8th, 9th and 10th of July, in order that there may be no clashing of dates with the northern show.

Pincher Creek.

Fall wheat grown successfully for past 18 years. White variety yields 50 to 60 bushels per acre, and the red, from which good patent flour can be made, runs 35 to 40 bushels per acre; percentage of spring wheat required to mix with red is very small. Samples of wheat grown here were exhibited by C. P. R. over N.-W. T. and Manitoba last year.

Mixed farming very successful, ranching on large scale gradually dying out. Good timothy and hay country; ready market in East Kootenay for all produce; short haul; 600 in town.



THE ELDER FARM RESIDENCE, Virden District.

"IMMIGRATION NUMBER" OF "THE FARMER'S ADVOCATE."

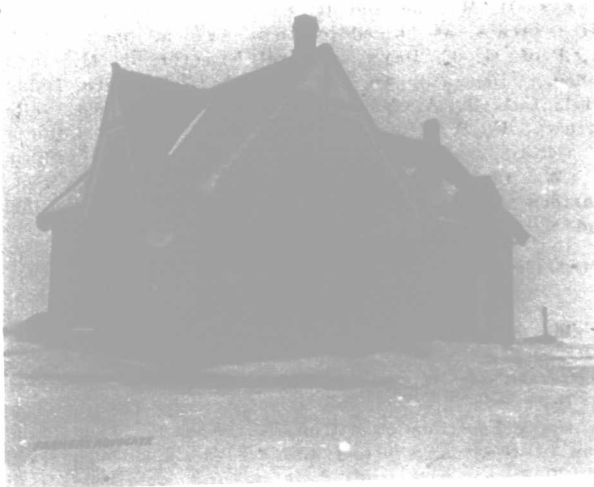
Dear Reader,—

You have a friend who intends to settle in Western Canada this year. He may at present reside in Great Britain or in one of the neighboring States of the Union. At any rate, he is interested in this Great and Glorious West.

Send his name and address, and we will be pleased to mail him, absolutely FREE, a copy of the Immigration Number of The Farmer's Advocate and Home Magazine for 1903, which is to be issued on March 20th.

It will contain such reliable information regarding the vast resources of the West, descriptions of the various fertile districts and most important details in wheat-raising, mixed farming, ranching and stock-raising, profusely illustrated, as will prove most instructive to the settler. Address

"FARMER'S ADVOCATE,"
Winnipeg, Man.



RESIDENCE OF LIEUT. C. E. IVENS, Virden, Man.

Commissioner Peterson Resigns.

Chas. W. Peterson, Deputy Commissioner of Agriculture for the N.-W. T., has resigned that position to become secretary of Calgary Board of Trade and manager of the Northwestern Pacific Exhibition. He will still retain his connection with the Live Stock Association as secretary.

British Emigrants.

The indications are that there will be a considerably larger influx of Britishers to Canada this year than has been the case for some time. During the month of January, nearly fifteen hundred have started, and the number is expected to increase as spring approaches.

In the Ranch Country.

DIDSBURY.

Five years ago where the town of Didsbury now stands there was little more than open prairie. Today there are three general stores, one drug store, one hardware, two lumber yards, four implement dealers, one bank, blacksmith shops, and various professional men, all doing a good business. The town is located in a good farming district, on the C. & E. Railway, 48 miles north of Calgary. A fair is held on the last Tuesday in each month, under the direction of the Didsbury Board of Trade. On these occasions farmers bring in their cattle, and buyers, knowing this, are prepared to purchase the stock offered for sale.

Three miles from Didsbury, D. F. Shantz owns a number of fine Shorthorns and good Clydesdales.

CALGARY.

The City of Calgary is located in a fine cattle and ranching country, on the main line of the C. P. R., 840 miles west of Winnipeg, and is a terminal point of the C. & E. Railway and of the Macleod branch of the C. P. R. On the streets of Calgary there is always a stir, and business is brisk in all lines. A new building is being erected for the Canadian Bank of Commerce, and when finished will be a credit to the city.

OKOTOKS.

Okotoks is a smart town, 27 miles south of Calgary on the Macleod branch of the C. P. R., and is situated in that part of Alberta which may be termed the rancher's paradise. One of the finest places in the district is owned by Mr. Geo. Hoadley, one mile west of the town. Mr. Hoadley has a ranch of 800 acres, all fenced and replete with the best of buildings. The house on this ranch is 40 x 50 feet, three stories high, and beautifully situated on the banks of the Sheep Creek River. On the ranch are 300 Shorthorn grade cattle, 150 horses, and a number of Berkshire pigs. Mr. Hoadley handles a large number of horses and cattle for the local and Manitoba trade.

The Rose Valley Ranch, on Tongue Creek, six miles southwest of Okotoks, is owned by Messrs. Pugh & Livingstone. Among their stock are to be found 500 range cattle, 40 registered Durhams, 10 pedigreed Clydesdale horses, 110 range horses.

H. J. Proctor, of the Royal Hotel, owns a ranch three miles north of Okotoks, on which he has 16 Standard-bred horses of trotting stock. Mr. Proctor is now using Sam Hazard for breeding purposes, while some of the horses used in the past were Chic Macgregor, Hodgen, Bob Kirk and John L. Mr. Proctor has some very likely colts, and in another year or two expects to make things go some.

On his ranch, five miles west of Okotoks, Jas. Rodgers keeps 350 range cattle, 40 pure-bred Polled-Angus and 150 horses, mostly Clydesdales. Mr. Rodgers owns 1,920 acres of land, and grows a great deal of Bromegrass.

Mr. John Quirk owns two ranches of 3,000 acres in all, one being situated 20 miles west of Okotoks, on the south forks of Sheep Creek, and the other farther up on the north forks of the same river. He owns 2,000 head of range cattle and 100 horses.

Eight miles west of the town, Robt. Turner has a nice bunch of sheep, fifty of which are pure-bred Shropshires. He also has seven registered Clyde stallions, one registered Hackney stallion, 33 registered mares, 100 head of fine range Clydes, and 40 Shorthorn cattle. Mr. Turner sells only geldings, and keeps all the mares for breeding purposes.

John Little has 25 pedigreed Shorthorns, two registered Clydes, twelve range horses, and a number of range cattle on his ranch, 14 miles south of Okotoks, near Sheep Creek.

F. M. McMahon & Son are progressive ranchers who recently settled in Alberta. Having first traversed a large portion of the United States looking for the best ranching country, they visited Alberta, which was nearer their ideal than anything they had ever seen. Their home ranch of 900 acres, nine miles north of Okotoks and 18 miles south of Calgary, is all improved with buildings and fencing, while their 2,500-acre ranch, 35 miles southeast, is fenced and has some buildings on it. They have 3 pedigreed Herefords, 300 range cattle, 5 pedigreed Clydesdales, and 60 range Clydes. Mr. McMahon, Sr., has been in the stock business for 35 years, and claims that the finest beef cattle are secured by breeding Herefords up to about three-fourths, and then crossing with pure Galloways.

W. McCamon, of Winnipeg, was on the ground very early this year and took out two cars of export cattle off the grass on February 3rd. Although it was early in the season for grass cattle, those shipped by Mr. McCamon were all in first-class condition.

C. VERMILYEA.

One cent invested in a post card, one moment to write on it the name and P. O. of some friend or neighbor who ought to have a really first class agricultural paper, and one moment to drop it in His Majesty's mail bag, will bring in return a free sample copy of the "Farmer's Advocate."

Canadian Hackney Horse Association Annual Meeting.

The Canadian Hackney Horse Association met during the show week. The report of the secretary-treasurer, Mr. H. Wade, showed a good margin financially, and 20 new animals registered. Provision was made to offer a cup as a special prize at the Calgary show, and \$50 apiece was voted to the Spring Horse Show and the Toronto Industrial Exhibition. The proposal to hold a Dominion Exhibition next year was heartily endorsed. The officers elected were: T. A. Graham, Claremont, President; E. C. Attrill, Goderich, First Vice-President; E. C. H. Tisdale, Beaverton, Second Vice-President, and Henry Wade, Toronto, Secretary-Treasurer. The directors are: H. N. Crossley, Rosseau; R. Beith, M. P., Bowmanville; R. W. Davies, H. M. Robinson, Dr. Andrew Smith, R. Bond, Geo. Pepper, all of Toronto; R. Miller, Stouffville, and Dent Dalton, Delhi. The Provincial representatives are: R. Davies, of Toronto; Jas. A. Cochrane, of Hillhurst; A. M. Rawlinson, of Alberta; J. A. S. Macmillan, of Brandon, and J. R. Frink, of New Brunswick. The representatives to fairs are: Toronto—E. C. H. Tisdale and Geo. Pepper; Western Fair, London—Adam Beck, M. P. P., and E. C. Attrill; Ottawa—R. Beith, M. P.; Montreal Spring Horse Show—R. Ness, Howick; Woodbridge—John Macdonald, John Holderness and Robert Bold. Thos. Graham and H. N. Crossley were appointed delegates to the Horse Breeders' Association.

Canadian Shire Horse Breeders' Association Annual Meeting.

On February 5th, the annual meeting of the Canadian Shire Horse Breeders' Association was held in Grand's Repository, Toronto. The President, Mr. W. E. Wellington, in his annual address, called attention to the importance of registering all eligible animals. A good year's business has been done, and the Association are in a healthy state. The question of placing import duties upon horses coming from the United States was freely discussed, and a committee was named to bring before the Canadian Horse Breeders' Association a resolution expressing the opinion of the meeting. The officers elected for 1903 are: President, Mr. W. E. Wellington; Vice-President, Mr. James M. Gardhouse, Weston; Second Vice-President, Mr. William Hendrie, Jr., Hamilton; Directors—Messrs. James Henderson, John Gardhouse, H. N. Crossley, Hogate, Wilkie, Barry and Bawden; Secretary-Treasurer, F. C. Wade; Delegates: To the Industrial Exhibition, Messrs. H. N. Crossley and John Gardhouse; to Western Fair, London, Messrs. F. C. Wade and Hogate; Central Fair, Ottawa, F. C. Wade; Horse Breeders' Association, Messrs. J. M. Gardhouse and Henderson.

Holstein Breeders Meet.

The annual meeting of the Holstein Cattle Breeders' Association of Canada was held in the Palmer House, Toronto, on the 3rd inst. Nineteen hundred and two has been a growing year for the Association; the registration of animals has largely increased, 29 new members were admitted to the Association, and there is a substantial surplus in the treasury.

Prof. Dean, of Guelph, addressed the meeting, calling attention to certain weak points in connection with the seven-day tests, and recommended that they consider some method whereby thirty-day tests could be made, and, where practicable, whole-year tests. He further pointed out to the breeders that he could not guarantee to get men to do the work of testing for the same salary as they have been accustomed to pay. The meeting considered this question, and decided that each individual would have to arrange with the Professor the details of his test.

The Association voted the following amounts to the different fairs, to be awarded as special or supplementary prizes: To the Toronto Industrial, \$100.00; to Ottawa, \$100.00; to the Western Fair, Guelph, \$100.00; to Amherst Winter Fair, \$50.00; to Brandon Fair, \$25.00; to New Westminster, \$25.00.

The fixing of the date of the next annual meeting was left with the executive to arrange to have it at the same time as the other live-stock associations meet.

A resolution endorsing the movement to hold a Dominion Exposition in 1904 was unanimously carried.

The grant of \$5 to breeders towards defraying the expense of a first test will be made during 1903. The fee for the registration of animals over one year will be the same as last year.

On account of the unsatisfactory arrangement of railway rates, the Association joins in a memorial to be presented to Parliament asking for a railway commission.

After much discussion, the majority of those present decided in favor of reverting to the three-judges system at the Toronto Industrial Fair next fall.

The officers for the coming year are: President, H. Bollert, Cassel, Ont.; 1st Vice-President, Jas. Rettie, Norwich, Ont.; 2nd Vice-President, M. Richardson, Caledonia, Ont.; 3rd Vice-President, R. A. Stevenson, Ancaster, Ont.; 4th Vice-President, A. C. Hallman, Breslau, Ont. Directors: G. A. Gilroy, Glen Buell; Geo. Rice, Currie's Crossing; Ed. Adams, Toronto; B. Mallory, Frankfort; Secretary-Treasurer, G. W. Clemons, St. George; Auditors, Wm. Suhring, Sebringville, and J. H. Patten, Paris. Representatives: To Toronto Industrial Fair, Messrs. Ellis and Adams; to Western Fair, Messrs. H. Bollert

and G. W. Clemons; to Ottawa, Messrs. J. A. Richardson and G. A. Gilroy; to Winnipeg, Messrs. Harriot and Munroe; to Amherst, Messrs. Logan and Cane; to Quebec fairs, Messrs. Herrick and Sweet.

Clydesdale Breeders' Association Annual Meeting.

On the 3rd inst., the annual meeting of the Canadian Clydesdale Breeders' Association was held in Grand's Repository, Toronto. The report of the Secretary-Treasurer, Mr. H. Wade, showed a surplus on hand of \$1,051.10; 694 pedigrees were recorded in 1902, and 278 were transferred from the Scotch Studbook to complete the pedigrees of imported animals. During the past year there has been a very marked increase in the number of imported mares, which will do considerable toward improving the breed in this country. It was decided to abolish the method of recording Scotch ancestors in the appendix. In future, such records will be embodied in the main body of the Studbook and assigned a Canadian number. Fifty cents each will be charged for ancestors so recorded. After considerable discussion, a resolution asking Parliament to restrict the importation of Western States ranch horses into Canada was adopted.

The officers elected for the ensuing year are: President, Wm. Smith, Columbus, Ont.; Vice-President, F. W. Hodson, Ottawa; Vice-Presidents for the Provinces: Ontario, O. Sorby, Guelph; Quebec, Robt. Ness, Howick; Manitoba, J. A. S. Macmillan, Brandon; Alta., J. A. Turner, Calgary; Assa., A. Mutch, Lumsden. Delegates to Fair Boards: Toronto Industrial, Robt. Beith, M. P., and Wm. Smith; Ottawa Central, Peter Christie and D. McCrae; Western Fair, London, Alex. Innes and Jas. Henderson; Quebec and Sherbrooke, R. Ness and Geo. Stewart; Horse Breeders' Association, P. Christie, Wm. Smith and F. Richardson. Directors—Jno. Bright, Geo. Gormley, Jno. Vipond, Thos. Graham, Peter Christie, J. M. Gardhouse and Henry Boag. Mr. Wade continues as Secretary-Treasurer for another year.

Dominion Cattle Breeders' Annual Meeting.

The annual meeting of the Dominion Cattle Breeders' Association was held in the Palmer House, Toronto, January 29th, and was largely attended by members. The address of the President, Mr. Arthur Johnston, was congratulatory on the flourishing condition of the cattle business in the Dominion. The report of the Secretary-Treasurer, Mr. A. P. Westervelt, which was adopted, showed the society in a prosperous condition and recommended renewed efforts for the extension of interprovincial trade in live stock.

A resolution to memorialize the Dominion Government to use its influence with the British Government towards securing the removal of the embargo on Canadian cattle was, after considerable discussion, withdrawn, the prevailing opinion being that no good was likely to be accomplished by its adoption.

The election of officers for 1903 resulted as follows: President, Arthur Johnston, Greenwood; Vice-President, A. W. Smith, Maple Lodge. Vice-Presidents for the Provinces: Ontario, H. Wade, Toronto; Manitoba, Hon. Thos. Greenwood, Crystal City; Northwest Territories, O. W. Peterson, Regina; Quebec, H. D. Smith, Compton; Nova Scotia, E. B. Elderkin, Amherst; New Brunswick, Thos. A. Peterson; P. E. I., F. G. Boyer, Georgetown; British Columbia, G. H. Hadwen, Duncan's; Newfoundland, Hon. Thos. C. Duder, St. Johns. Representatives of Breed Associations: Shorthorns, John Isaac and T. E. Robson; Aberdeen-Angus, Jas. Bowman and J. W. Burt; Galloways, D. McCrae and R. Shaw; Representatives of other breeds, as named by their Associations; O. A. C., Prof. G. E. Day; General Director, J. M. Gardhouse. Delegates to Fair Boards: Toronto Industrial, Col. J. A. McGillivray and A. P. Westervelt; Ottawa, F. W. Hodson and N. F. Wilson; London, R. Gibson and T. E. Robson; Ontario Winter Fair, G. W. Clemons, John Bright and J. T. Gibson; Eastern Ontario Winter Fair, the President, J. G. Clark and N. F. Wilson; Brantford, G. W. Clemons.

Dominion Swine Breeders' Annual Meeting.

The annual meeting of the Dominion Swine Breeders' Association was held at the Palmer House, Toronto, January 30th, 1903. The President, Major G. B. Hood, in his address, congratulated the members on the prosperous condition of the trade, the steadiness of the market, and the creditable class of hogs exhibited at the leading fairs, and suggested that early action be taken to prepare for an exhibit at the St. Louis Fair.

The report of the Secretary-Treasurer, Mr. A. P. Westervelt, which was adopted, showed the Association in a very prosperous condition, the financial statement showing receipts of \$6,496.87, expenditures \$4,997.84, and a balance on hand of \$1,499.03. On motion, \$75 was voted towards payment of wages of man in charge of stock shipments in Government car.

The executive was instructed to carry out the suggestions of the secretary's report re interprovincial trade. A motion favoring the holding of a Dominion Exhibition this year was carried, and in that event \$300 was voted towards prizes on condition that Toronto Exhibition increase its list by that amount. It was decided that the judges in bacon classes at the Winter Fair should be two breeders and one packer.

Following are the list of officers elected for 1903: President, Maj. G. B. Hood, Guelph; Vice-President, Thos. Teasdale, Concord. Directors representing breeds: Berkshires, Geo. Green, Fairview; Yorkshires, J. E. Brethour, Burford; Chester Whites, R. H. Harding, Thorndale; Tamworths, J. C. Smith, Hintonburg; Poland-Chinas, W. M. Smith, Scotland; Duroc-Jerseys, W. N. Tape, Bentpath; Essex, Jos. Featherston, Streetsville; O. A. C., Prof. G. E. Day; General Director, Wm. Jones. Delegates to Fair Boards: Toronto Industrial, D. C. Flatt, R. P. Snell; Ottawa, J. E. Richardson, A. P. Westervelt; London, Geo. Green, D. DeCourcy; Peterboro, R. Vance; Guelph, G. B. Hood, Jas. Anderson.

Markets.

Winnipeg Markets.

Cattle.—The cattle market remains comparatively quiet. For choice butchers' steers 4c. is being paid, while the ordinary stock is going at 3½c. and down to 2½c., according to quality. Nothing worthy of note has been done of late in stockers, and the general impression is that Ontario stuff cannot be bought at paying prices. Yearlings are worth about \$14 to \$18 each, and two-year-olds from \$18 to \$22. Milch cows are very scarce at \$38 to \$50.

Sheep.—There has been no receipts worthy of mention lately, but enquiries continue. Off cars, 3½c. to 4c. would be paid for fat ewes or wethers, and 4½c. to 4¾c. for lambs.

Hogs.—The hog market remains practically unchanged, with a firm tendency, receipts being rather moderate. Good bacon type, weighing from 160 to 240, bring 6c. per pound, while light weights and heavies are going at about 5c.

Horses.—There is an increasing demand for good farm horses. Those which are coming in are principally from Ontario and the Dakotas. Prices are likely to be firm.

DRESSED MEATS.

Beef.—Prices are showing a firmer tendency, the visible supply is light, and little is coming in from outside points; 6c. to 7½c. lb. are the ruling figures.

Mutton.—There is a good demand at prices ranging from 8c. to 8½c. per pound, with lamb 11c. to 12c.

Hogs.—The demand is increasing, and prices show an upward tendency, 7½c. being paid for good quality.

DAIRY PRODUCTS.

Butter.—The supply of butter is moderate, but the general quality is not what it ought to be. For choice separator butter in bricks 21½c. is being paid, with 14c. to 18c. per pound for fresh tub-packed. Fresh creamery butter is going at 24c.

Cheese.—The receipts of cheese are very light, and choice is worth from 12c. to 13c.

POULTRY AND EGGS.

The receipts of dressed poultry have fallen off until very little is appearing, chickens being 9½c. to 11c. per pound, ducks 9c. to 10c., geese 9½c., and turkeys 14c. to 15c. Eggs guaranteed as fresh bring 50c. per doz., with ordinary stock 24c.

GRAIN MARKETS.

Wheat.—The local wheat market has been rather inactive, in sympathy with American movements. Spot 1 hard is quoted at 73½c., with 1 northern two cents lower. The crop reports of the world appear to favor a slight increase rather than decline in prices.

Oats.—Prices for oats are firmer, although the visible supply is large. No. 2 white are worth about 28c. to 29c. on the track here, with feed from 26c. to 27c. per bushel.

Barley.—Little, if anything, is being done in barley; malting brings 32c., and feed 25c. to 26c. per bushel.

Spelt.—Little being offered, at 30c. per bushel.

Mill Feed.—Bran remains in good demand at \$16 per ton, and shorts \$18. Oat chop is quoted at \$19 to \$20; ground barley, \$16.50; ground spelt, \$16; and oil cake, \$25 per ton.

British Cattle Markets.

London, Feb. 16.—To-day Canadian cattle are quoted steady, at 10½c. to 12c. per lb. (dressed weight); American cattle, 11c. to 13c. per lb.; refrigerator beef is quoted at 8½c. to 8¾c. per lb.

Liverpool, Feb. 16.—Canadian cattle 6¼d.; trade firmer.

Montreal Markets.

Montreal, Feb. 16.—Prime beefs more plentiful than since the new year, and sold at from 5c. to 5½c. per lb.; pretty good stock sold at from 3½c. to 4½c., and common stock at from 2½c. to 3½c. per lb. Sheep sold at from 3½c. to 3¾c.; lambs at from 4½c. to 4¾c. per lb. Fat hogs at from 6c. to 6½c. per lb., weighed off the cars.

Chicago Markets.

Chicago, Feb. 16.—Cattle—Good to prime steers, \$1.40 to \$5.40; poor to medium, \$3 to \$4.25; stockers and feeders, \$2.30 to \$4.50. Hogs—Mixed and butchers', \$6.75 to \$7.15; good to choice heavy, \$7.10 to \$7.35; rough heavy, \$6.85 to \$7.05; light, \$6.45 to \$6.80; bulk of sales, \$6.85 to \$7.10. Sheep—Sheep and lambs steady to higher; good to choice wethers, \$4.75 to \$5.50; fair to choice mixed, \$3.50 to \$4.75; native lambs, \$4.75 to \$6.75; Western lambs, \$4.75 to \$6.60.



Travelling Notes.

I think that a Canadian whose body is in England but whose heart is in Canada may claim to have in some sort solved the problem of how to be in two places at one time. I know I am in England, and when I am spoken to by one or another around me, I respond "yes" or "no," as the case may be, and yet all the same I seem to see the dear faces and to hear the dear voices of the loved ones across the broad Atlantic, as if I were amongst them too. Thanks to the admirable postal service between the mother country and her colonies, and the swift delivery of our letters, the pain of separation is reduced to a minimum, and even when there is some cause for anxiety, no one is kept very long in suspense. Then the news, how quickly it flies across the water. Already all the happenings which have marked the close of the year have reached the readers of the "Farmer's Advocate," so you know all that the cable could tell you about each, and later on the columns of the Canadian daily papers will fill in some of the details; but all the same, Mollie has done a little gleaning for her dear readers, which she hopes may not be without interest for them. She has learned something of the wonderful machinery which is set in motion to ensure the delivery of those millions of Christmas greetings, letters, cards and big parcels which are transmitted through the post. It seems that when Christmas day falls on a Thursday it is heavier work for the employees. The public only begins to post on the previous Monday, instead of on the Saturday, as it would were Christmas day on Wednesday. So this year St. Martin's-le-Grand and Mount Pleasant had to concentrate their energies. Six thousand five hundred extra men were pressed into service—eight or nine battalions—and the battalions, we are glad to learn, were drawn from those who have done no less useful service under arms. From Monday to Saturday, customs officers were busy night and day assuring themselves that the treasury was not losing from one hand what it was gaining with the other. Altogether we have evidence of plenteous goodwill and compliments flying about the world, for Mount Pleasant—the name has a generous flavor—had to receive and distribute over a million and a half of parcels during the week. Anything that gives employment to some even amongst the big army of the unemployed is indeed a boon; so the Christmas greetings, like "mercy," have, let us hope, not only carried with them a double blessing, to giver and receiver alike, but have been the means of shedding a ray or two of sunshine upon the dark lots of those who had well-nigh despaired. My last letter told you something of the distress which has clouded the lives of so many of our fellow creatures this exceptional winter, and day after day brings further harrowing revelations. "I dunno what a dinner is," cries one woman, "I ain't 'ad a dinner I dunno 'ow long." A city missionary exclaims, "There are parts of my district that I can't, I daren't, go into. How can I distribute tracts and give religious exhortation to people who haven't a bit of fire in the grate, and whose children are crying for food?" (The London City missionaries are not allowed to distribute alms, though indirectly they help and befriend the poor, as mediums under ordinary conditions.) "See that row of houses there?" says the missionary. "Look at those windows—the blinds all down, and the bits of curtains drawn across. Know what that means? It means that they're cleared out; furniture's all gone—quite stripped," and so forth, and so on, alas! alas!

The name of the Rev. Peter Thompson, a Wesleyan minister, frequently appears as a trusted distributor of money, food and clothes contributed by those who not only sympathize but help, and amongst these are often "the poor helping the poor," many of the gifts being gifts of self-denial. Several stories, marking his individuality, are told of him, and one he tells of himself when he was a lad on a Lancashire farm, and had charge of a bull to be exhibited at the Preston Agricultural Show: "No sooner had I taken him in hand than he showed his ill-temper, to which I replied with a cut of the whip. This thoroughly upset him, and he suddenly turned round and faced me, and stubbornly refused to change this attitude, and went backwards. After following him

a long distance up the ring, and beyond where the judges stood, I pulled him in, and he then made a furious rush at me. In a moment I jumped on to his head, and he carried me along with him for some distance. Then I saw that he was taking me with all his strength right against the grand-stand. I just looked and saw how to manage him in this danger, and, in a twinkling, I clutched hold of his nose-ring, and throwing myself off his head, I vigorously twisted the ring in his nostrils and forced his head upwards. He bellowed terrifically, but I held him until two friends took charge of him."

It was quaintly observed of Mr. Thompson that probably he became the better missionary in the London slums, where moral stamina and sometimes physical force is almost a necessity, because he had one time "fought with wild beasts at Ephesus."

But it is time I should get out of the clouds and into the sunshine, for, indeed, we have sunshine even in winter in England. A friend from the South tells that amongst her New Year's greetings have come two lots of sweet-scented violets, grown in open gardens in Somerset and Devon, and gathered within one day of the New Year, with more to come, "perhaps on to Whitsuntide." A writer in a daily paper says: "Although snow lay on the Mendips, a posy of flowers of surprising variety might have been made from the garden of a Somerset farmhouse and the fields and hedges adjoining within the last week of the old year. Of course, the stars of yellow jasmine are only seasonable, but violets, pansies, primroses and polyanthus are at least unusual flowers in the week after Christmas. In the meadows there were to be seen belated blossoms, both of the buttercup and daisy, and the spring stems of gorse were tipped with golden flowers. In crannies of stone walls the graceful tendrils of the ivy-leaved toadflax were adorned with their tiny flowers. When to all of these is added the crimson of holly-berries and the hips of the dog-rose, it will be seen how varied a nosegay might be made up."

But my allotted space is already over filled, so I can add nothing but good wishes for a happy, prosperous, blessed New Year, to the readers of our Home Department of the "Farmer's Advocate," from their affectionate friend and occasional correspondent—

MOLLIE.

The Blue Dress.

BY SUSAN HUBBARD MARTIN.

She was waiting in Madam Jackson's dressmaking parlors, where the large easy chair nearly enveloped her small, shrinking figure. She was not old, not more than thirty-five, but already the bloom and beauty of her youth had gone. There were streaks of gray in her brown hair; fine lines revealed themselves under the sad eyes. The cheeks were pale and a trifle sunken, and the hands folded over a parcel in her lap, were rough and calloused. Whoever she was, life had gone hard with her.

Madam Jackson came in. "You wished to see me?" she asked.

Madam Jackson was a large, imposing-looking woman, clad in a rich black dress.

The little woman rose timidly.

"Yes," she answered. "I—I want you to make me a dress if you will. I've made all my own clothes ever since John and I were married. They haven't been very many, either," she added. "But this is something different. We live on a farm, and we raise fruit and vegetables for market. Every year John has said to me, 'Well, Lottie, I guess this fall we can afford that blue dress.'"

She unrolled her package carefully and smoothed out the cloth it contained with a tender hand.

"I was to have had this blue dress the second year we were married," she explained. "I was young then—but somehow something always happened. Often we'd have a dry year, then again we'd have to buy an extra plow, or maybe a cow would die, or something else would come up, so I never was able to get the dress until now, and we've been married sixteen years. The last thing John said to me when he gave me the money was, 'Now, Lottie, don't buy anything but a blue dress, and just forget how long you've waited for it.'"

"I'm afraid, though," she added, with a wistful little sigh, "it's too late to look well on me. You see, getting up at half-past two in the morning to be ready for market will make any one old, and I've worked hard. Sometimes we have six men to cook for; that is in the busy season."

Madam Jackson took the roll of cloth in her hands. It was a soft, beautiful blue, fine and rich in texture, but it could make a dress suitable only for a young girl; some one with rosy cheeks and golden hair and dimples. It was so far from being appropriate for the little, stooping figure opposite!

Madam looked kindly at the pale little woman. "I'm afraid," she began, "you'll find this color a little trying. A black or a gray or perhaps a dark brown would be more becoming. You understand—"

The woman clasped her hands. "Don't say it!" she cried. "Yes, I understand, but if you only knew how all these years I've wanted that blue dress! Something different from anything I've had. Ah, you needn't tell me! I know I'm faded and old, but, oh,

I do want that bit of color for my own! If I can't wear it, I can at least look at it."

A large tear shone in worldly Madam Jackson's eye—and she was not much given to tears. "Very well," she answered; and then followed a discussion of lining and thread.

The woman came again in a few days to have the dress fitted. In one hand she carried a basket of purple grapes with the bloom still on them.

"I've brought you these," she said to the dressmaker. "I picked them myself early this morning."

"Thank you so much!" was the warm answer. "I dearly love grapes, and those are especially fine." In a few minutes the blue dress went on over the thin little figure. Somehow its bright hue seemed a mockery. It brought out so clearly the gray hairs that would have been softened by a more sober color. The pale cheeks, too, looked whiter than before.

The little woman saw her reflection in the tall mirror opposite, and sighed.

"You were quite right," she said, slowly; "a darker color would have been best, and yet—somehow I couldn't give it up. I've thought about it so much all these years. Why, often when the work was hardest and the days longest, I've said to myself, 'Never mind, Charlotte, some of these days you are going to have a beautiful blue dress,' and the hope of it somehow kept me up."

"I understand," Madam Jackson said, gently.

In a few days the dress was done. The customer came for it one morning, in a wagon driven by a tall, broad-shouldered man with a rugged, weather-beaten face.

"Her husband," thought Madam Jackson, looking out of the window.

The pale little woman came hurriedly in. "John came with me to-day," she said, smiling, "and the dress—oh, isn't it beautiful!"

The blue gown lay across a chair. Madam Jackson had done well with it. It was finished off with silk of the same shade, and there was a pretty lace collar and soft, fine ruffles of lace at the wrist.

"You must let me see you in it before you go," Madam Jackson said.

As the dress was being fastened, a faint color stole into the woman's white cheeks.

"Isn't it pretty?" she whispered, wonderingly. "The very prettiest thing I ever had. It seems wrong somehow for me to have it now. Somebody young and beautiful ought to wear it. If only I could have had it years ago!"

Madam Jackson's deft fingers were busy with the brown hair touched with silver, combed so severely back.

"You must not wear your hair quite so plain," she said. "A looser effect softens the face wonderfully. There, that is better."

She straightened the lace at the throat and settled the skirt. "Wait a moment," she added, stepping into the next room. When she returned, she held a dainty lace-trimmed handkerchief, fine as a spider's web. She tucked it into the rough little hand. "A present from me," she said, lightly. "When you wear the dress you must carry that."

Over the thin face there crept a beautiful flush. "Is that for me?" she said in an awestruck voice. "Oh, thank you, thank you!"

There was so much radiance in the look that Madam Jackson was startled, and then a wonderful thing happened. For the moment it seemed as if the years had rolled back, and the worn face shone with its lost beauty and its lost youth.

The eyes were very bright, a tender smile hovered over the tremulous mouth, and Madam Jackson saw what the woman must have been long ago, before the hard years had robbed her of her bloom.

"I wish John could see me," the little woman whispered.

As if in answer to her wish, there came a knock at the door. Madam Jackson opened it quickly.

"Come in, won't you?" she said, pleasantly. "Your wife is anxious to have you see her in her new dress."

The man entered. When the blue-gowned, radiant vision faced him, he started. "Why, Lottie," he said, "why, my dear, is it really you?"

"Do you like it, John?" she said.

"Like it! Why you look just as you did when we were married, only, somehow, sweeter and dearer," and then, regardless of Madam Jackson in the background, he took the small woman in his arms and kissed her on her glowing cheeks.

A few minutes later Madam Jackson stood at the window and watched them drive away with the blue dress carefully wrapped up. The flush still lingered on the little woman's face as she waved a last good-bye.

Madam Jackson waved back. She knew that before long the flush would fade from her friend's cheek, the lines would come back, the cares return. The burdens must be taken up again.

There would come, too, the weary hours and the lonely ones that must be lived through. The blue dress would be folded away as something sacred, seldom worn, but never forgotten. There would be something beautiful at least to look at in the bare old farmhouse.

As the rattling wagon disappeared, Madam Jackson turned away from the window with a smile that was half a sigh.

"That blue dress—it was a success, after all," she murmured.

Nelson and the Coxswain.

Just before the Battle of Trafalgar a mail was sent from the English fleet to England, and word was passed that it might be the last chance to write before the expected engagement. The letters had been collected from the ships, the letter-bags were on the vessel which was to take them, and she had got some distance on her way, under full sail, when Lord Nelson saw a midshipman approach and speak to Pasco, the signal officer. Then Nelson showed the side of his nature which so often won the sailors' hearts.

Pasco uttered an exclamation of disgust and stamped his foot in evident vexation. The admiral called him and asked what was the matter.

"Nothing which need trouble your lordship," was the reply.

"You are not the man to lose your temper for nothing," rejoined Nelson. "What was it?"

"Well, if you must know, my lord, I will tell you. You see that coxswain?" pointing to one of the most active of the petty officers. "We have not a better man on the Victory, and the message which put me out was this: I was told that he was so busy receiving and getting off his mail-bags that he forgot to put his own letter to his wife into one of them; and he has just discovered it in his pocket."

"Hoist a signal to bring her back!" was Nelson's instant command. "Who knows that he may not fall in action to-morrow? His letter shall go with the rest."

The despatch-vessel was brought back for that alone. Captain Mahan tells this story on the authority of the son of Lieutenant Pasco, who used to say that the sailors idolized Nelson. Evidently it was with reason.

To get absolute rest for mind and body at night is the necessary thing for the preservation of health.

The bright eye and clear skin which characterize youth can only be retained in that way.

Many bad habits and positions are formed during sleep. Some persons assume an attitude which cramps the chest so that respiration is not full and complete. The shoulders should not be drawn forward or the arms folded tightly over the chest. A narrow bed is preferable for growing girls. The pillow should be small and hard. A large, soft pillow should not be tolerated by any girl who desires to have a head well set on her shoulders.

The bed clothing should be light but warm, of such a nature as to allow the air to pass through it freely. If the air in a bed, which soon becomes saturated with the perspiration from our bodies, does not pass off, it makes us uneasy and restless, and sound sleep is impossible.

Wisdom of Louise—On Valentines.

There is an ugly brass knocker on the side casing of the door of Louise's den. I hate the thing, for it grins in the most exasperating way, whether she is in or out, and I always give it a vindictive bang, as if to get even with it.

So I gave it a good hard knock, and put my hand on the door knob. There was no response, yet I knew Louise was there.

So I pushed the door open. There she stood. As a housekeeper would say, "the room was a sight to behold," and despite her former lecture on the subject, Louise was hardly "dressed up."

"Well," I said, advancing into the chaos, "what is it now, Louise, a church fair or a nonsense party?"

"Neither," she replied gaily. "Valentines, my child, valentines. Have you forgotten that the good Saint's Day is not far off?"

"Well," I retorted, "what of that? Are those pictures, cardboard, sealing wax and ribbons to be converted into valentines, pray? I don't suppose these kisses are?" and I helped myself to a fat pink one, as I made room for myself on the edge of the couch. But she made a dive at me, and caught the kiss while still intact.

"That's part of this very valentine," she said, examining it on every side for possible injury. "Just you watch."

On a square of heavy white egg-shell cardboard, she was pasting another square of blue paper, the center of which she had torn out heart shape, leaving jagged edges where it was torn, and thus revealing the egg-shell surface beneath, heart shaped. Near the apex of the heart she tied two candy kisses, passing white baby ribbon directly through the cardboard, so as to hold them in place. In the lobes of the heart she printed exquisitely with ink:

"I send you this with my best wishes,
Also with my sweetest kisses"

"There!" she cried, holding it up. "You needn't say that isn't original, for it is, and I'm going to send it to Aunt Mirandy Brannon."

"Mirandy Brannon," I echoed after her, "For goodness sake, Louise!"

"Oh, you needn't laugh," she said, turning to me with a bit of fire in her eyes, "but I tell you it is people like her who appreciate things of this kind. People don't outgrow sentiment, if once it is in them, and the older they grow the less they get and the more hungry they are for it. I tell you, Harriet, we don't half appreciate the loneliness of some lives in this respect. We are young and full of gaiety, and we think that the sweet things of life are ours by the right of youth. Somehow we forget that the heart stays young, though the body may grow old, and I can just imagine the pushed-out-of-the-way feeling one must have to see us young folks all exchanging these silly things, with never a thought of them and their craving affection.

"Take Emily, she'll have dozens of valentines, and she won't care half as much for them all combined, except, perhaps, Tom's, as Mirandy will for this bit of pasteboard sent by a foolish girl. It's the being thought of that counts. I have a whole list"—she turned the page of her note-book where I could see names written—"of people whom

I call my valentines. They are old folks, and neglected folks, and every one of them will be more pleased over the solitary valentine that I shall send them, than you can possibly imagine.

"All of them old ladies? Mercy, no! I have quite as many dear old men on the list, and I send them a box of candy or a bunch of violets—yes, even the men, you scoffer, you, for I tell you"—Louise's voice grew earnest—"I tell you sentiment craves sentiment, and I've seen tears start in the eyes of more than one old man on account of my little valentine remembrance. It is even different from Christmas, for Valentine's day is distinctly sentimental, and as I said before, sentiment never grows old, or the heart too old for it.

"Try it yourself, and see."—[Harriet C. Cox.

Something About Devonshire.

NO. I.

It has given me such sincere pleasure to receive messages from the Gloucestershire folks who, on both sides of the Atlantic, are readers of the "Farmer's Advocate," telling me that my little descriptions bring back to their minds scenes dear to them in the long ago of their childhood or youth, that I am going to see whether there may not be some others amongst the settlers of Canada's far-away, big Northwest who may, in the same way, find an interest in what I may have to tell of my pleasant stay in the county of their birth, beautiful, beautiful Devon. I have always loved Devonshire; it is associated with so many happy holiday hours of my long past girlhood. The soft Devonshire accent, with its distinctive pronunciation, sounds very pleasant to my ears. I like to hear my landlady ask me if I would like another "speun" (spoon), or prophesy that to-night there will be a full "meun" (moon). I like to be told that on both sides the Teign there still survive many of the old family of "Oonion," meaning of course "Onion," and that up to some ten years ago a son, or grandson, of the "John Oonion," who used to call me "little Missey," and ferry me over from Shaldon to Teignmouth and back again, still plied the oars of one of the two or three ferry boats, all that were then needful for the few visitors stopping at the little village on the other side of the harbor. Now there is a brigade of ferry boats, and a proprietor to receive your penny when you put your foot upon, or take it off, the ticklish-looking board which is still their primitive gangway, one which, when the waves are rough, seems possessed of a buoyancy which is of itself a warning to tread warily, if you would desire to land dryshod upon the beach. On the Shaldon side there still stands out, in bold prominence, the grand old "Ness," with its rocks large and small, scattered at its base, around which the adventurous may scramble to the sand and shingle beyond, and if the tide still serves, and their spirit of enterprise remains unquenched, they can get around the next headland too, and be well rewarded for the effort. There are still some shells and stones, such as the madrepore and agate, well worthy of the search, but whether it is that years have dimmed my sight, and my poor old back has taken on a stiffness which certainly never troubled me nearly fifty years ago (not a unique experience, by any means!), somehow I cannot find them, and I am the more readily disposed to believe what I am assured is really the case, that there are fewer and fewer of both stones and shells than there used to be. The wash of the waves and the action of the frost upon the soft, red sandstone has, in the course of years, made some changes in the actual outline of the cliffs, but has taken nothing from their grandeur or beauty. Teignmouth and Shaldon have shared long centuries back in various vicissitudes, having twice been nearly wiped out of existence, first by the incursions of the Danes, over 900 years ago, and then later on by the French. Tradition claims that

"In memory whereof, the Cliff exceeding red
Doth seem thereat again full fresh to bleed."

And truly the red of these grand old cliffs is very red indeed. There is a little battery and coast guard station by the lighthouse on the Teignmouth side, but there is no doubt that this is still a most unprotected line of coast, although the men of Devon will prove as valiant as of yore, if ever again called upon to defend it. This is what history tells us of the past:

"When Admiral Tourville was induced by James II. to bring his galleys to terrorize the English, every West Countryman who saw the unwieldy crafts afloat in Torbay imagined himself already a galley slave if something were not promptly done, and 'so,' writes Macaulay, 'the bacon on the ridge above Teignmouth was kindled. Hey-tor and Cawsand made answer, and soon all the hill-tops of the West were on fire. Messengers rode all night, and early the next morning 500 gentlemen and yeomen, armed and mounted, had assembled on the summit of Haldon hill. In twenty-four hours all Devonshire was up.' The Torbay landing being impossible, Tourville, desiring to intimidate the worthies of Devon, chose unprotected Teignmouth, sent off some of his galleys, and after shot and shell had cleared



TEIGNMOUTH VIEW, DEVONSHIRE, ENGLAND.

the way for the landing, 1,700 of his men plundered, devastated and fired the town."

But I am not disposed to linger over what has been, what may be, nor over what never, I hope, will be again. I want to tell something of Devonshire as I find it to-day. I had so often revisited this particular corner of England in my day-dreams, when oceans separated me from it, that it would not have surprised me if I had felt some disappointment in the reality, but it has not been so. Crossing the veldt of South Africa, long before the war, when sleep at last had made me oblivious to sights and sounds which had cruelly kept me wakeful until it was so near dawn that it was not worth while to sleep at all, a dream of the green lanes of Devon, and the beating of the waves upon its shores, would come and come again, probably because I so longed for them and had then so little hope of ever being amongst them, and later on, in Canada, when the first burst of spring would bring us its own sweet buds of promise, I have frequently dreamt of the violets and primroses in the lanes of Devonshire, and would take the rain pattering upon my window panes for the lap, lap, lap of the tiny little breakers upon a sea-girt shore. Well, my wish has been granted, and God has been good to me, not only in giving me back as much recovered health as my years render possible, but in allowing me to retain unimpaired a keen appreciation of the beauties of this very beautiful part of my native land, and of these beauties I shall, I trust, be privileged to tell you something in the next issue of our Home Magazine. H. A. B.

Humorous.

The little daughter of the house sat down beside the minister, and began to draw on her slate. "What are you doing?" asked the clergyman. "I am making your picture," said the child. She worked away earnestly, then stopped, compared her work with the original, and shook her head. "I don't like it much," she said. "Taint a great deal like you. I guess I'll put a tail to it, and call it a dog."

In an Iowa court, recently, a lawyer arguing his case became very earnest. Then he paused a moment, and said: "I see Your Honor shakes your head as to that statement, but I desire to reaffirm what I have remarked." The court retorted: "I have not intimated how I shall construe your evidence or what my decision shall be. Your remarks are uncalled for." "You shook your head," was the reply. "That may be true," retorted the court. "There was a fly on my ear, and I reserve the right to remove it in any manner I see fit. Proceed with your argument."

"Excuse me, but I am in a hurry." "What do you want?" he was asked. "A job." "Do you? Well," snorted the man of business, "why are you in such a hurry?" "Got to hurry," replied the boy. "Left school yesterday to go to work, and haven't struck anything yet. I can't waste time. If you've got nothing for me to do, say so, and I'll look elsewhere. The only place I can stop long is where they pay me for it." "When can you come?" asked the surprised merchant. "Don't have to come," he was told. "I'm here now, and would have been to work before this if you had said so."

"I suppose," said the physician, smiling and trying to appear witty, while feeling the pulse of a lady patient. "I suppose you consider me an old humbug?" "Why, doctor," replied the lady, "I had no idea you could ascertain a woman's thoughts by merely feeling her pulse."

If the two young people of whom "Answers" tells this story were not reconciled by their own absurdity, they at least furnished amusement for others.

They had been engaged, but had quarreled, and were too proud to make up. Both were anxious to have people believe that they had entirely forgotten each other.

He called at her home one day to see her father—on business, of course. She answered the door-bell.

Said he: "Ah, Miss Jepkin, I believe. Is your father in?"

"No, sir," she replied, "father is not in at present. Do you wish to see him personally?"

"I do," he answered, feeling that she was yielding, "on very particular personal business," and he turned proudly to go away.

"I beg your pardon," she cried after him, as he reached the lowest step, "but who shall I say called?"

A county curate in England who was newly married called on a great lady of the village, and, as he presented his wife, introduced her with the flippant and horribly ill-bred quotation, "'A poor thing, madam, but mine own.'" The lady, looking at the curate severely, replied: "Your wife ought to have introduced you as 'A poorer thing, but mine owner.'"

"These aren't the kind of biscuits my mother used to make," he said. "Oh, George," she faltered, on the verge of tears. "Well, they're not," he repeated, emphatically. "They're enough sight better." And then the sun came out again.



TEIGNMOUTH BRIDGE, DEVON, ENGLAND.

THE QUIET HOUR.

Spiritual Insight.

"I fear not Thy withdrawal; more I fear, Seeing, to know Thee not—hoodwinked with dreams Of signs and wonders—while, unnoticed, Thou Walking Thy garden still, commun'st with men, Missed in the common-place of Miracle!"

How often might we echo Jacob's words: "Surely the Lord is in this place, and I knew it not." We talk of a "providential" escape, as though God only occasionally had anything to do with our affairs; even as the Syrians thought that the Lord was God of the hills but not of the valleys, and Balak imagined that if Balaam would come into "another place" God might allow him to curse Israel. When some great trouble comes we can say, "It is the Lord," and perhaps may be able to add, "let Him do what seemeth Him good." But are our eyes open to His presence every day, do we know Him under any disguise?

Sometimes men have what they call "a stroke of good luck," even as the disciples who had been fishing all night without success, and then suddenly caught 153 great fishes. On that occasion only St. John had spiritual insight enough to recognize Him from whom the success came, saying, "It is the Lord." Last month a young engine-driver of my acquaintance broke his collar-bone, and was forced to go to the hospital. A day or two later the engine he was accustomed to drive was involved in a terrible collision, and if he had not been disabled he would probably have been killed. In such a case it is easy to give very hearty thanks for the slight accident which saves a man from a greater; but God does not always lift the veil at once to show us the meaning of what He sends. It is our business to trust Him, even when we do not understand, being very sure that He is planning everything for our best interests.

Saul of Tarsus had his eyes opened to the fact that in persecuting Christians he was persecuting his lawful King and Master. If only our eyes were always open to this solemn truth, how different life would be. We too often forget that our unkind thoughts and words about other people are accepted by Christ as done to Him, just as certainly as the kind acts. How sorry and ashamed we should feel if, when busily engaged in unkind conversation, we should hear His voice saying, "Why persecutest thou Me?.....I am Jesus whom thou persecutest."

Perhaps we don't really believe that this rule applies in such a small matter as ill-natured gossip—but why should it not? If Christ is willing to accept as a gift to Himself such a trifling kindness as a cup of cold water, surely He will accept the small unkindnesses too. Even little children must be treated with consideration for His sake, who has said, "Whosoever shall receive one such little child in My name, receiveth Me."

Then there is another person who is often the target for criticism and abuse, at the hands of many members of his congregation. Let us try to remember the promise, "He that receiveth whomsoever I send receiveth Me," and also the warning, "He that despiseth you despiseth Me,

and he that despiseth Me despiseth Him that sent Me." These rules work both ways, and we have need to pray earnestly that God may open our eyes to see Him everywhere. Those who shall be condemned at the last because they have neglected to supply the wants of their needy brothers and sisters, will answer: "Lord, when saw we Thee an hungred, or athirst, or a stranger, or naked, or sick, or in prison, and did not minister unto Thee?" That is just the point—they do not "see." Don't we fail to see Christ many a time when we should have seen and recognized Him?

There is a story told of a poor shoemaker called Martin, who received in a dream a promise that the Lord Jesus would visit him on the morrow. He lived in a cellar and could only see the feet of those who passed by. Three or four times during the day he saw shabby boots shuffling wearily past the window, and each time he hurried out to invite the tired wayfarers in for rest and food. All day he watched for the expected Guest, and went to bed sad and disappointed because He had not come. Then in a dream the shabby men, women and children he had cheered and helped came one by one, looked earnestly at him, and said: "Martin, dost thou not know Me." Then he understood that Christ had really visited him that day.

Let us pray for clear, spiritual vision, that we may know, to-day and every day, that the Lord is in this place—yes, in your home and in mine—and may leave all our affairs in His hands to dispose of as He sees best. Then only shall we understand the perfect peace of a heart stayed on God, a peace which nothing can shake as long as the trust remains.

"I cannot always see the plan on which He builds my life,
For oft the sound of hammers, blow on blow,
The noise of strife,
Confuse me till I quite forget He knows
And oversees,
And that in all details, with His good plan
My life agrees.

"I cannot always know and understand
The Master's rule.
I cannot always do the tasks He gives
In life's hard school.
But I am learning with His help to solve
Them, one by one,
And when I cannot understand, to say,
'Thy will be done!'"

HOPE,

Length of Rivers.

The longest river in the world is the Missouri River to the Gulf of Mexico, 4,800 miles.
The next longest river in the world is the Nile, 4,200 miles.
The third is the Amazon, 3,750 miles.
The fourth is the Venesol, 3,400 miles.
Then comes the Mississippi, 3,200 miles.
The Yang-tse-kiang, 3,320 miles.
The Obi, 3,000 miles.
The St. Lawrence is 2,000 miles long.
The Yukon is 1,600 miles.
The only river of any importance in Australia is the Murray, 1,500 miles in length.

THE CHILDREN'S CORNER.

Between Ourselves.

The "Hostess" has sent on to me a story written for our Corner by a little Manitoba girl named Jean Murray. It is the story of a child who got lost in her father's two-hundred-acre wheat field and was not found until next morning, when the searchers discovered her lying asleep not a quarter of a mile from home.

Here is a letter which reached me in November, but has been crowded out until now:

West Montrose, Nov. 25, 1902.

Dear Cousin Dorothy:—

I have just finished reading "Our Corner" in the "Advocate," which reminded me that I had intended to write to you to-night.

I have just returned from a trip to Bracebridge to visit my friend, Hilda Beaumont. You will likely remember, after both of us got first prizes, you said we ought to correspond. We started writing then, and have been ever since. We became quite intimate friends without seeing each other.

Papa was going up to Sault Ste. Marie, so I went with him as far as Bracebridge and spent about a week with Hilda.

I had a lovely time with her. She is very nice, and I am sure I am thankful that you ever mentioned about our corresponding.

Muskoka is very different from Waterloo Co. Here, there is very little water, and in Muskoka there is so much. I had never seen a lake or a very large river before I went up there. The Muskoka River and lake are near Mr. Beaumont's; in fact, the river (at least part) is just in front of their house.

While up at Mr. Beaumont's I went for four steamboat rides, and down to the lake a couple of times in the rowboat. Of course, I was out in the rowboat more than twice. This was a great thing for me, having never seen a lake or large river before. Then we (Hilda and I) went to the top of a very high rock, where we could see quite a distance around. It was just a lovely scene. Of course, this scene would be much prettier in summer, when everything is fresh and green.

I may possibly try the competition later. I think Hilda would be able to write a very good composition on Canadian farm life. I must close. From

HILDA BOWMAN.

Hilda Bowman and Hilda Beaumont won prizes in a "Children's Corner" competition some time ago, and the similarity of name induced them to start a correspondence with each other. As you see, they have, through their connection with the "Advocate," won something worth far more than a prize—I mean a true friendship—and I heartily congratulate them both. No one knows better than I how a friendship begun in girlhood may grow stronger and more precious as years roll on. In my first week of life at a boarding-school in Toronto, my friendship with "Mollie" began. Her kindness to a miserable, homesick child has never been forgotten, and never will. Every year I have learned to value more her true and loyal friendship, and I hope the two Hildas may be friends till death—and beyond it. Of course there are plenty of school-girl friendships which don't deserve to be called such. Girls are often inseparable for a few weeks, and then declare they "can't bear" each other. These quarrels are generally caused by that little member which can do such great things—the tongue.

"I told a secret! It wasn't much
For a little girl to tell
And I only told it, softly and low,
To my intimate schoolmate, Belle.
But the silly secret grew and grew,
And all around it spread,
Until at last it was hard to find
The thing I had really said.
And when I sat in mamma's lap
With all my troubles told,
She said 'twas the 'matter great' that grew
From the 'little fire' of old.
So I learned a lesson well that night
Before I went to bed,
And mamma gave me a rule to keep,
And this is what she said:
'The only way is never to say
A word that can offend.
Not even close to the listening ear
Of the dearest intimate friend."

Have any of you had an experience like that? If you read the third chapter of the epistle of St. James, you will find that he says the tongue is harder to tame than any wild beast. He also says that it can do a great deal of mischief, although it is so small, just as a very tiny flame may start a terrible fire. Now, if you were going to tame a wild beast thoroughly, you would have to begin before it was full-grown; it is also much easier to put out a fire before it gets very big. So you had better begin at once to tame your tongue before it has grown too wilful and strong to be controlled.

"You have a little prisoner,
He's nimble, sharp and clever;
He's sure to get away from you,
Unless you watch him ever.

"And when he once gets out, he makes
More trouble in an hour
Than you can make in many a day,
Working with all your power.

"He sets your playmates by the ears,
He says what isn't so,
And uses many ugly words
Not good for you to know.

"Quick, fasten tight the ivory gates,
And chain him while he's young!
For this same dangerous prisoner,
Is just—your little tongue."

COUSIN DOROTHY.

Grandma's Silver Hair.

She wears no royal robes of silken splendor,
No coronet above her brow so fair,
But fitting crown for face so sweet and tender,
The shining radiance of her silver hair.

She wields no sceptre, save of love and duty—
Our household saint before whose shrine we kneel—
But at her touch earth's common things gain beauty,
And on her head God sets his shining seal.

Around each silver thread is twined a blessing;
Each tiny wrinkle cradles love's embrace;
Time's restless hand has traced, with soft caressing
Life's holy record on the well-loved face.

O diadem of priceless worth and splendor,
Pure emblem of a noble life well spent,
With thoughts of thee, in retrospection tender,
Our dearest hopes and memories are blent.

—Ida Goldsmith Morris

The Three Little Chairs.

They sat alone by the bright wood fire,
The grey-haired dame and the aged sire,
Dreaming of days gone by;
The tear-drops fell on each aged cheek;
They both had thoughts that they could not speak,
As each heart uttered a sigh.

For their sad and tearful eyes descried
Three little chairs placed side by side,
Against the sitting-room wall;
Old-fashioned enough as there they stood,
Their seats of flag and their frames of wood,
With their backs so straight and tall.

Then the sire shook his silvery head,
And with trembling voice he gently said—
"Mother, those empty chairs!
They bring such sad, sad thoughts to-night,
We'll put them forever out of sight
In the small dark room up-stairs."

But she answered, "Father, no, not yet;
For I look at them and I forget
That the children went away,
The boys come back, and our Mary, too,
With her apron on of checkered blue,
And sit here every day.

"Johnny still whittles a ship's tall masts,
And Willie his leaden bullets casts,
While Mary her patchwork sews;
At evening time those childish prayers
Go up to God from those little chairs,
So softly that no one knows.

"Johnny comes back from the billowy deep,
Willie wakes from his battle-field sleep
To say a good-night to me;
Mary's wife and mother no more,
But a tired child whose play-time is o'er
And comes to rest on my knee.

"So, let them stand there, though empty now,
And every time when alone we bow
At the Father's throne to pray,
We'll ask to meet the children above
In our Saviour's home of rest and love,
Where no child goeth away."

—Mrs. H. T. Perry.

Hygienic Chat.

How few things are so dangerous to health as damp clothes. Both outer and under garments should be thoroughly aired before worn, and a new garment should have particular attention paid to it in this respect. Stockings, vests and skirts are all put on, as a rule, just as they come from the shop, and things which have been in a shop for months, probably for winter months, are most liable to be damp.

When garments have become wet while being worn, the wearer should discard them as soon as possible.

Wet clothes should be dried slowly. To put them before a hot fire is to ruin them. Cloth and other materials are liable to shrink and cockle, and boots and shoes contract and become stiff and are generally soiled and useless if quickly dried. Always change damp shoes as soon as may be convenient. When it is not convenient to change, bodily exercise should be taken to ward off ill effects. These will not arise (unless the person be very delicate) if the body and limbs are kept in motion, but if the wearer remains still or dries the clothes while wearing them, colds, rheumatism and other evils will most probably follow.

GOSSIP.

BROWN'S SHIRE STALLIONS.

A representative of the "Farmer's Advocate," while in Brandon recently, called at the stables of Mr. G. E. Brown, Aurora, Ill., who opened a branch stable in the Wheat City some time ago. For many years he has been engaged in importing horses to America, and has sold to horsemen in several States of the Union stallions that have proven sires of the highest merit. Of the contingent brought to Brandon in December last only five remain, and if the quality of these may be taken as an index of the animals which Mr. Brown has always handled there is no reason why his business should not continue to be a success. These are imported young Shires, showing a uniformity of good character that is seldom exceeded in any showing. Natty Easign, a beautiful bay two-year-old, is a tippy fellow, having very strong bone and a well-formed body. Captain Mendors is a brown, four years old, possessing heavy bone and having

grand feet and strong pasterns. He should prove to be a useful stock horse. Moulton Commodore, a bay, rising four years, according to his pedigree, traces back to the finest Shire blood in England. He is a particularly well-muscled horse. His bone is especially strong, his body well quartered, and his action almost an ideal of Shire movement. Director is a dark brown four-year-old, imported last September. This is a very heavy, well-built horse, having a strong back and strong bone throughout. His loin is well-muscled, his feet are good, and the legs have an abundance of hair. It is his action, however, which is most commendable, for he moves with a vim and dash and gets his feet up so squarely for a horse his size that admiration is commanded. His look and action is unusually good.

Although the horses, as above described, possess much that is desirable in a Shire stallion, probably none are more faultless than Clayton Advance, a bay, rising three years old. He truly has grand quality, is well quartered and stands on a set of the finest limbs to be seen under a heavy horse. In action he is

all that could be imagined—high, level and true; just such as the best markets are looking for in a heavy horse, and if all the stallions coming into Manitoba and the West could claim such general excellence as this young Shire it would be well for our horse-raising industry. Mr. Brown is to be congratulated upon his importation and the good quality of his horses generally.

CANADIAN NORTHERN

Winter
Tourist
Excursions

Through Tickets. Lowest Rates.

Best Time to all Points.

OCEAN STEAMSHIP TICKETS.

For full information consult any Canadian Northern Ry. Agent.

GEORGE H. SHAW,
Traffic Manager.

Ferry's
Seeds
the Kind
that Leads
cost more—yield more.
sold by all dealers.
1903 Seed Annual
postpaid free to all
applicants.
D. M. Ferry & Co.,
Windsor, Ont.
Seeds

“EMPIRE”

Easy-Running Cream Separators.

THE SPECIAL FEATURES WHICH DISTINGUISH THE “EMPIRE” FROM OTHER SEPARATORS ARE THESE:

- First—Its extreme simplicity.
- Second—Its entire freedom from complicated parts.
- Third—Its large capacity as compared with weight of bowl.
- Fourth—Its ease of turning as compared with capacity.
- Fifth—Its close skimming.
- Sixth—The ease with which it is cleaned.
- Seventh—Its economy of operation.
- Eighth—Its durability.
- Ninth—Its safety.

FOR CATALOGUE AND PRICES APPLY TO

The **Manitoba Cream Separator Co., Ltd.**
187 LOMBARD ST., WINNIPEG.

GOSSIP.

GALBRAITH'S STALLIONS.

While at Brandon a short time ago, the recent importation of Clydesdale, Shire, Percheron and Suffolk Punch stallions made by Alex. Galbraith & Son was inspected by a representative of the "Farmer's Advocate," and found to be quite equal in quality to the stock upon which this firm has built an enviable reputation among horsemen. For many years the name of Alex. Galbraith & Sons has been synonymous with good Clydesdales in the United States, and when to Canada they decided to extend their trade, the stock shipped northward was found to possess those characters which to judges everywhere are commendable. It will be remembered that in a previous consignment, the first-prize three-year-old, Royal Sturdy, and his mate at the Chicago International Show both found stalls in the Brandon stables. Winners like these cannot be purchased anywhere for a song, and when the expense of importing and selling is considered, it is not altogether to be wondered that large prices should be asked.

In the stables at present are a number of Clydesdales from two to four years of age that are no disgrace to any firm or country. In their breeding, some of the most noted strains are represented. One two-year-old, Golden Rod, a brown, having great bone and thick body, is a grandson of the famous Baron's Pride in old England. Others are direct descendants of a McGregor and a great Darnley, and some were prizewinners among the hills of Scotland.

In Percherons, five from three to four years of age were seen, all of which showed that desirable absence of length and legginess so frequently found in the breed. A better-limbed lot is rarely seen, and their feet were, in general, of the finest quality, and they handled them to perfection.

The lot contains three representatives of the Suffolk Punch, a breed of which but little is known in this country, but noted for their well-developed bodies and splendid staying powers. One of Galbraith's importation, Bently Lord, a

CREAM SEPARATORS

95 per cent. in number of all creameries to-day use

DE LAVAL CREAM SEPARATORS

98 per cent. in volume of all creamery separation is made by DE LAVAL machines.

What the overwhelming majority does every creamery may well follow. And so may every user of a

FARM CREAM SEPARATOR

DE LAVAL "Farm" and "Factory" catalogues are separator text-books—to be had for the asking.

MONTREAL.
TORONTO.
POUGHKEEPSIE.
NEW YORK.
PHILADELPHIA.
CHICAGO.
SAN FRANCISCO.

THE DE LAVAL SEPARATOR CO.

WESTERN CANADIAN OFFICES, STORES AND SHOPS:

248 McDermot Ave., - Winnipeg, Manitoba.

three-year-old, has won several prizes in England, and amongst others was second at the Royal Show.

The only Hackney in this bunch is Clansman, three years old, by Glandower, who, as a yearling, sold for \$5,000. His dam, Nitrate, was first at the Madison Square Show, New York, in a mixed class. He has almost ideal breed conformation, with splendid substance and bone. He also exhibits the kind of action that the market is looking for, and it is no wonder that at the Wisconsin State Fair he carried off the first premium.

Such horses as these when properly mated with the brood mares of this country can scarcely fail to cause an improvement in future generations of the equine race.

JNO. E. SMITH'S SHORTHORNS.

While visiting Brandon a short time ago a representative of the "Farmer's Advocate" paid a visit to that veteran Shorthorn breeder, Mr. Jno. E. Smith, Smithfield Ave. To give a correct and intelligent idea of the many grand representatives of the famous old breed to be found within the walls of this commodious stable would require considerable space. Among those particularly noteworthy was the time-honored bull, Lord Stanley, purchased from the Russells, of Richmond Hill, Ont., now in his ninth year, and rarely has a better animal been seen in any stable. To this day, he stands on his feet equal to any yearling, thus proving that his quality of bone is superb. He has also one of the strongest backs ever seen on a Shorthorn, and in appearance generally would pass for an animal several years younger.

In a row, side by side, stood ten young heifers under a year old, which for uniformity, breed character and general excellence would be hard to equal anywhere in Canada. A few cows were seen with young things at foot, and invariably they were a beautiful red in color, and gave promise of developing into useful stock. All the cows were noticed to be in good breeding condition, and a few of the two-year-olds are in calf to sires that are getting good ones. One old matron was pointed out that has not missed a calf for eleven years. All together, there are in this herd about 125 pure-bred cattle, and of that number more than two score are bulls, most of which are yearlings and red in color. It would be an easy matter, indeed, for anyone requiring a bull to secure satisfaction in this herd, and one commendable feature of Mr. Smith's method of doing business is that every animal on the place is for sale.

In Clydesdales, he has mares, fillies and young stallions which he is offering at prices quite in keeping with their quality. They are all marked by splendid size, a character very essential in this breed, but so often found wanting. However, their size has not been secured at the expense of quality nor typical breed character. Mr. Smith is not asking the high prices for this stock that we are accustomed to read about, and we would advise all intending purchasers to at least give this farm a call before closing a deal.

The first shipment of pure-bred breeding stock to South America since the reopening of the Argentine ports was made February 3rd, and comprised eight Hereford bulls, including two sons of the Protector bull, Wintercott, who was bought for 320 guineas from Mr. Youmans, and will be sent to the Argentine later. Three yearling sons of Clarence, from the herd of Mr. A. R. Perkins, are also included. Other purchases of Herefords have been made for exportation to South America, including Mr. A. P. Turner's two-year show bull, Magnate, who was first at the Royal Show at Carlisle last year.

O. Palmer, of Lacombe, recently sold a nineteen-months Hereford bull to Varney & Galbraith for \$200. Mr. Palmer has, on his farm near Lacombe, 48 pure-bred Herefords.

TO THOSE with a taste for Japans

"SALADA"

CEYLON GREEN tea is delicious. Then it is without paint or adulteration in any form, and of double strength. Sold in the same form as the celebrated "SALADA" blacks, in lead packets only. 25c., 30c., 40c., 50c., and 60c. per pound.



THE **CANADA PAINT CO. LTD.**
MONTREAL AND TORONTO

CAR
ROOF
BRIDGE
STATION

PAINT

VARNISH FOR ALL PURPOSES

For FARM HOUSES
and FARM IMPLEMENTS

The Best Paints are made by

The **CANADA PAINT COMPANY,**

LIMITED.

Ask the local dealer for Shade Cards.

GOSSIP.

The pure-bred sheep trade in Britain is receiving a welcome impetus by the opening of the Argentine ports to the importation of pure-bred stock. Mr. F. Miller, of Birkenhead, recently shipped to the Argentine from Liverpool a large and important consignment of Shropshires, Lincolns, Hampshires and Border Leicesters. The Shrops. were selected from the noted flocks of Mrs. Barrs and Messrs. Minton, Evans and Tanner.

At a sale of Shorthorns from the herd of Geo. E. Ward, Hawarden, Iowa, on Feb. 5th, 56 head sold for an average of \$297, the 42 females averaging \$321. The highest price, \$1,000, was paid by W. D. Flatt, Hamilton, Ont., for the roan three-year-old cow, Imp. Lavender Rose 2nd, by Prince of Sanquhar, and her bull calf. The highest price for a bull was \$1,000, for Select Valentine, a roan two-year-old by St. Valentine, purchased on a mail bid by F. W. Harding, Waukesha, Wis. The 14 bulls sold averaged \$212.

GOSSIP.

Messrs. A. & G. Mutch, of Lumsden, Assa., have purchased from O. Sorby, of Guelph, the grand mare Montrave Geisha (14584), imported last July, and is supposed to be one of the best Clyde mares in America to-day, and is in foal to Baron's Pride. She is of the most fashionable breeding and right type, and should prove a great addition to the well-established stud of Clydesdales at Craigie Mains.

A representative of the "Farmer's Advocate" had the pleasure of inspecting this mare a few months ago, and believes that Mutch Bros. deserve congratulations from all Western horsemen upon their purchase. Experts have pronounced her the best female Clyde that crossed the water last year. She is of that low-set kind that wears, having a smooth body on limbs of the finest quality. She won first and sweepstakes wherever shown in Canada last fall, and her show-ring honors have not all been collected yet.

FAIRVIEW FARM.

About three miles west of Roland, on the C. N. R., is the farm of Wellington Hardy. Here will be found a select herd of Ayrshires, several of them winners at such fairs as Winnipeg and Toronto. The present stock bull is Craigielea of Auchenbrain (imp.) (3302) =1661=, sired by Sir Thomas of Auchenbrain, dam Craig of Auchenbrain. He was bred by Robt. Wallace, Ayrshire, Scotland. Craigielea is a large, masculine fellow, with great heart-girth, a strong back and prime quality. Once he competed for honors at Toronto, and carried off the highest. Several of the matrons of this herd are also prize-winners. Jessie, an exceptionally large, smooth cow of rare milking and breeding type, won first at Winnipeg in her three-year-old form and second the year following in aged class. She was bred by J. Crosley, Campbellford, Ont., and was a show-yard winner before reaching Manitoba. Byron =1477= was her sire, and Fanny by Wellington her dam. Pride of Percy =3535=, sire Byron, dam Dandy Rose by Sir Garnet, took second at Winnipeg in the three-year-old class the same year that Jessie took first. She is a very smooth cow, full of quality, and the right type to breed from. In size, she is slightly smaller than Jessie. Princess Maud =3433=, sire Rob Roy of Barmoorhill, dam Lottie by Royal Chief (imp.), Jess (imp.), by Farcross 3rd, is a very neat animal, possessing grand quality and good points. Pride of Fairview, sire St. Patrick, dam Jessie by Byron, is a fine, large, smooth two-year-old, the makings of a show cow. When shown as a calendar-year calf at Winnipeg she got second. Daisy of Fairview, sire St. Patrick, dam Pride of Percy, by Byron, also won at Winnipeg in a strongly-contested class. She is a large, promising heifer. Pansy of Fairview, sire St. Patrick, dam Primrose, by David, is a very neat heifer of excellent parts. Beauty of Fairview, sire Craigielea of Auchenbrain (imp.), dam Princess Maid, is a strong, outstanding yearling. Famey of Fairview, by same sire, and out of Percy by Byron, is a well-formed calf of good substance. Three fine bull calves by Craigielea of Auchenbrain (imp.), one from Jessie, the frequent winner, and the others from Daisy and Pride, conclude the Ayrshire stock for the present. Mr. Hardy has recently purchased from N. P. Clarke, St. Cloud, a Clydesdale mare of strong points and good Clyde character. Her sire is the far-famed Prince Patrick by Prince of Wales, dam Jennie Mackay by Mackay by Macgregor, grandam Sally by Prince Charlie. This mare is supposed to be with foal to Bright Idea.

A very nice lot of Yorkshire swine can also be seen at this farm. One frequent winner is Lady Jane, sire General Buller, dam Princess Maud by Summer Hill Premier (imp.). Another worthy of note is Maples Rosa Belle, sire St. James Swell, bred by J. E. Brethour, Burford, Ont.; dam Woodbine Rosa Belle, by Oak Lodge King. Princess 2nd, sire Summer Hill Premier (imp.); Lady of Fairview by North Bruce Justice, and others make up this choice herd.

A fine lot of Black Minorcas are also at home here. Intending purchasers should look for Mr. Hardy's ad., which appears elsewhere in this issue.

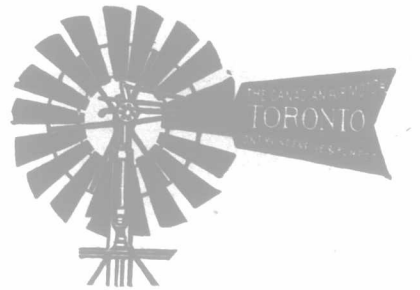
Churn, Churn!

Windsor salt lightens the task of churning butter. Every flake of it dissolves quickly—you'll find no gritty particles in the butter, because Windsor Salt is all Salt.

**Windsor
Salt.**

Best grocers sell it.

WINDMILLS



The Canadian Airmotor

will earn more for you in one year than any other implement.

A Terror to (Grind, Cut Straw, Pulp, and Pump Water.)

Agents from the Atlantic to the Pacific. Write us.
ONT. WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT.
Manitoba agents: Manitoba Pump Company, Brandon, Manitoba.

CONSUMPTION

CAN BE CURED.

Consumption uninterrupted means speedy and certain death. The generous offer that is being made by Dr. Slocum, the great lung specialist. Sunshine and hope for stricken families.

Confident of the value of his discoveries, he will send free four sample bottles upon application, to any person suffering from throat, chest, lung and pulmonary affections.

TREATMENT FREE.

To enable despairing sufferers everywhere to obtain speedy help before too late, Dr. Slocum offers

FULL FREE TREATMENT

CONSISTING OF FOUR LARGE SAMPLES to every reader of this paper.

You are invited to test what this system will do for you, if you are sick, by writing for a

FREE TRIAL TREATMENT

and the Four Free Preparations will be forwarded you at once, with complete directions for use.

The Slocum System is a positive cure for Consumption, that most insidious disease, and for all Lung Troubles and Disorders, complicated by Loss of Flesh, Coughs, Catarrh, Asthma, Bronchitis and Heart Troubles.

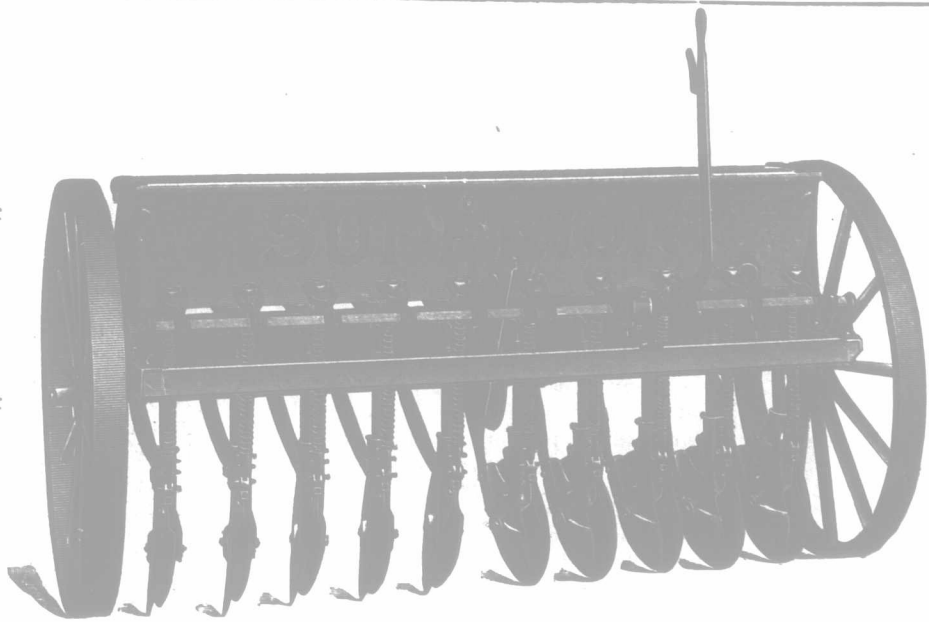
Simply write to the T. A. Slocum Chemical Company, Limited, 175 King Street West, Toronto, giving post office and express address, and the free medicine (the Slocum Cure) will be promptly sent.

Persons in Canada seeing Slocum's free offer in American papers will please send for samples to Toronto. Mention this paper.

STOCK BREEDERS' CONVENTIONS.

At the annual meeting of the Manitoba Sheep and Swine Breeders' Association, opened here on Tuesday, Feb. 17th, addresses were delivered by Lt.-Col. McCrae, of Guelph; Duncan Anderson, of Rugby, Ont., and others. A motion was passed declaring in favor of a winter fair and a stock-judging school for the Province. A detailed report of this and other meetings of breeders in the series will be given in our March 5th issue.

SUPERIOR DISC DRILLS



SUPERIOR DRILLS ARE NOW ON SALE IN CANADA.

THE above illustration shows the SUPERIOR SINGLE DISC DRILL. It is an interchangeable Drill. It can be supplied with Double Discs or Shoes, as purchaser may desire. To change from one style to another it is only necessary to remove draw-bars and discs. The bars bolt to front of frame. SUPERIOR DRILLS are made of the best material. They are strong and durable. They save seed, time, worry and repair bills. They do more work with less labor to both man and team than any other drill. SUPERIOR DRILLS successfully sow all kinds of grain, under any condition of seeding, in every section of the grain-growing world.

WRITE FOR FREE CATALOGUE AND INFORMATION TO
CANADIAN MOLINE PLOW CO., WINNIPEG, MAN.

TRADE NOTES.

TREE PLANTING.—We desire to again draw the attention of farmers in this country to the announcement of the Superintendent of Forestry, E. Stewart, Ottawa, to be found in another column. A splendid opportunity is afforded those who have learned to appreciate a wind-break, of securing trees merely for the trouble of applying. It is necessary that the applications be handed in at once, as those received after March 1st must be held over until next year. Send along your name, you will never regret it.

BRANDON BINDER TWINE CO.—At the annual meeting of the Brandon Binder Twine Co., held in Brandon a short time ago, a large number of stockholders were present to hear the report of the past year's business, which was very satisfactory. It will be remembered that a year ago the brick walls of the factory were partly built and the foundations of the warehouse partly in place. Now, both factory and warehouse, together with offices, coal shed, spur railroad line, machinery—in fact, the whole plant is fully completed in the most thorough manner, and has made 415,800 lbs. of twine, and is now making over three tons per day. The complete plant has cost \$53,386.03, the whole of which is now paid. While the flotation expenses and cost of the plant have all been paid, yet attention is called to the fact that the amount of capital stock paid in by the shareholders does not provide a sufficient working capital for the needs of the business; hence, the directors have made plans for the immediate collection of all balances due on subscribed stock.

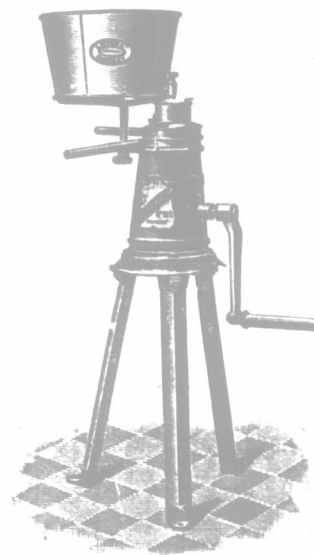
The factory, in its present shape, is in a position to do a good and paying business. Not only will it have a strong influence in keeping down the price of twine, but it will pay good dividends on the capital invested. Yet there are certain very important changes which will largely increase the dividend-paying powers of the company, and which are recommended as follows: The necessary machinery for the manufacture of rope from 1/2 inch to 1 inch in diameter; a machine shop for repairs; that authority be given the Board to make the necessary expenditures for a thorough investigation of the problem of the manufacture of binder twine from Manitoba-grown flax, and to make experiments to that end; and that the manager be requested to visit the flax-growing and manufacturing centers of the world to secure needed information; that the number of directors be increased to nine, with four as a quorum.

THE "ALEXANDRA"



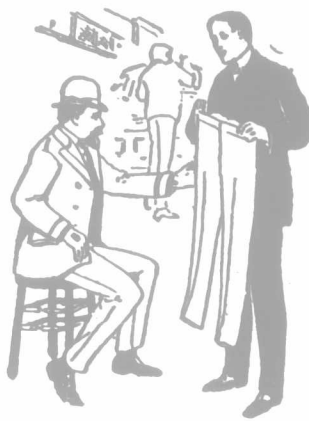
H. I. M. Alexandra.

is the
QUEEN
of
CREAM
SEPARATORS



Write us a post card and get our 1903 Catalogue. Ask for terms and prices on our Cream Separators.
LOCAL AGENTS WANTED IN UNREPRESENTED DISTRICTS.
R. A. LISTER & CO., Limited, 232 King Street, WINNIPEG, MAN.

Canada's Largest Exclusive Men's and Boys' Outfitting Store



A Pair of Pants
Made to your Measure

\$2.75

Hundreds of patterns to choose from—fancy striped worsteds or beautiful all-wool Scotch tweeds. We guarantee to give you a perfect fit or refund your money. The cloth is imported by us from the large West-of-England and Scotch mills and we make thousands of Pairs of these Pants for our pleased patrons; we would like to have you on our list. Our self-measurement chart enables you to take your own measure as accurately as a tailor, and we will send samples FREE on request. Write to-day.

Our Handsome Catalogue for the coming season, containing full description of everything men or boys need to wear, and some things for ladies, will be ready shortly. Send your name and address and we will MAIL IT FREE. It's a money saving proposition to you, for we are manufacturers and sell you at wholesale prices—you can't afford to be without it—it costs nothing to get—WRITE TO-DAY.

PHILIP JAMIESON

Importer and Manufacturer, Toronto, Ont.

It was decided at the annual meeting that the capital stock of the company be increased from \$100,000 to \$200,000, and that \$40,000 of the additional stock be offered at once for sale, and that for thirty days from the date of notice applications for this new issue of stock be received from present shareholders only. This additional stock is needed for the foregoing additions to the factory and for increase in the output of twine to meet present demands. From present appearances, it is evident that the total output of the factory up to the first of next August will be sold before March 1st.

In moving the adoption of the report, the President, N. Wolverton, spoke, in part, as follows:

We consider that the company is to be congratulated on the outcome of the first year's work. Certainly, the plant is one of the most complete and up-to-date in Canada, and has cost less than other plants of the same capacity by many thousands of dollars. Twine was manufactured during two and a half months before harvest and two months after harvest. At first, owing largely to the necessity of training raw hands, not more than 1,000 pounds of twine per day could be made. This output gradually increased until, in December, it reached the full capacity of the factory, viz., three tons in ten hours. Probably the average output did not exceed two tons per day. If, at this low rate, the business actually resulted in a small balance on the right side, the promise for future profits is very bright indeed. The factory is now making about three and a half tons daily. The addition of rope machinery will enable us to use some material that cannot be used in twine, and will turn over our capital more frequently and thus will add to future dividends, while the addition of a shop for repairs will effect a saving of from \$50 to \$75 per month.

Finally, the great problem of making our binder twine from flax-grown in our own fields promises not only to greatly reduce the price of twine, but should keep in our own country from \$150,000 to \$200,000 of hard cash, which now goes to the ends of the earth, never to return. This we deem the greatest and most promising problem now before the farmers of Manitoba.

The following directors were elected for the ensuing year: N. Wolverton, Brandon, Man.; W. T. Johnston, Wawanessa, Man.; J. T. Partridge, Sintaluta, Assa.; J. G. Burke, Elmore, Assa.; Allan Leslie, Chater, Man.; A. McPhail, Brandon, Man.; John Hanbury, Brandon, Man.; Frank W. Smith, Brandon, Man.; E. L. Christie, Brandon, Man.

GOSSIP.

HARTMAN'S SHORTHORN SALE.
On February 24th, as advertised in these columns, the entire herd of richly-bred Shorthorns belonging to Messrs. J. W. Hartman & Sons, Elmhedge, Ont., near Meaford, G. T. R., will be dispersed by auction, owing to a change of business. For many years, Mr. Hartman, Sr., has maintained a strong herd of choice and select Scotch families, on which high-class bulls of the best breeding have been used. The herd comprises representatives of such favorite families as Minas, Mysias, Nonpareils, Miss Ramsdens, Isabellas, Matchless, and other useful sorts, including a capital lot of young cows and heifers in calf or with calves at foot, and some of the cows nursing calves again in calf to the grand old champion bull, Abbotsford, now at the head of the herd, of the choice Cruickshank Village family, sire of a long list of first-prize winners at leading shows. Most of the young things are sired by the late stock bull, May Duke, a son of the Cruickshank Clipper bull, Clipper King, bred by Hon. John Dryden, and of the Watt-bred cow, Mildred 4th by Imp. Hospodar. There are three young bulls, 13 months old, by this sire, good enough for herd-heads. There are also a lot of registered Berkshire sows to be sold, and they are sure to be good ones, as Messrs. Hartman have been breeding from the best herds in Canada. This is certainly one of the best opportunities offered in many years for securing cattle of choice breeding and character. All interested should send for catalogue and attend the sale.

Some watchmakers
harp on Railroad Watches.
More than twenty
Elgin Watches

have been sold for every mile of rail-
way trackage in the world. Sold by
every jeweler in the land; guaranteed
by the world's greatest watch works.

ELGIN NATIONAL WATCH CO.
ELGIN, ILLINOIS.

Prize List Spring Stallion Show.

Class I., section 1A—Clydesdale stallions foaled previous to Jan. 1, 1899—1 Graham Bros. (Claremont) Stately City; 2 Smith & Richardson's (Columbus) King's Cross; 3 Smith & Richardson's Duke of Cornhill; 4 Robert Beith's (Bowmanville) Prince Priam; 5 J. B. Hogate's (Sarnia) Sir Reginald; 6 Smith & Richardson's Laird of Craigie; 7 W. J. Squire's (Mitchell) Sir Oswald; 8 O. Sorby's (Guelph) Pride of Morning; 9 Wm. Colquhoun's (Mitchell) Climax.
Class I., section 1B.—Clydesdale stallions foaled in 1899—1 Smith & Richardson's Pioneer; 2 R. Beith's Peveril; 3 R. Beith's Star of Roses; 4 Graham Bros. Border Sentinel; 5 Wm. Colquhoun's Coynachie; 6 H. G. Boag's (Churchill) Primrose Pride; 7 Graham Bros. Gallant Lorne; 8 J. B. Hogate's Carron Jamie.

Three-year-olds—1 Graham Bros. (Cairnhill, imp.); 2 Robert Ness (Cecil, imp.); 3 Smith & Richardson (Lavender, imp.); 4 Graham Bros. (Craig Stamp, imp.); 5 O. Sorby (Florist, imp.); 6 Hugh Semple, Harewood, (Silver Prince); 7 T. Swan Smith, Montreal, (Kitchener, imp.).

Two-year-olds—1 J. B. Hogate (Royal Park, imp.); 2 J. A. Tainer, Calgary, (Glenevis); 3 J. W. Cowie, Markham, (Alexander Macqueen); 4 J. I. Millard, Altona, (Lyon Macqueen).

Canadian-bred Clydesdale and Shire stallions, four years old and over—1 J. G. Clark, Ottawa, (Woodroffe Plowboy); 2 Francis Russell, Cedarville, (Lord Aberdeen); 3 Graham Bros. (Merriment 2nd); 4 W. F. Broad, V. S., Lindsay, (Granite Lad); 5 Geo. Isaac, Markham, (Prince Royal); 6 Ed. Hoy, Orchard, (Gordon Anderson); 7 W. J. Wells, Temperanceville (Laird Macqueen). Three-year-old class—1 Graham Bros. (Pride of Eastfield); 2 Fald & Everett, Simcoe, (Lord Donald); 3 Smith & Richardson (General Gordon); 4 Smith & Richardsan (General Macqueen); 5 Dolly Bennett, Russellton, (Perfection); 6 Jas. Gostlin, Lindsay, (Union Boy). Two-year-olds—1 J. W. Cowie (Macqueen 2nd); 2 O. Sorby (Charming Prince); 3 Robt. Davies (Royal Sensation); 4 Geo. Davidson & Sons, Cherrywood, (MacCarra); 5 D. Carstairs, Bomanton, (Prince Pearl); 6 J. G. Clark (Arbitrator Again); 7 W. R. Stewart, Toronto, (Lieutenant Junior). Yearlings—1 J. W. Cowie (Macqueen's Best); 2 H. G. Boag, Churchill, (Proud Gordon); 3 Jas. Gostlin, (Simon Macgregor).

Shires, four years old and over—1 J. J. Anderson, DonInionville, (Flagship); 2 J. B. Hogate (Nateby Monarch 2nd); 3 Morris & Wellington (Geo. Lennox). Three-year-olds—1 Morris & Wellington (Bank Statesman); 2 Morris & Wellington (Vulcan 2nd). Two-year-olds—1 and 2 Morris & Wellington (Coronation and General Favorite).

Sweepstakes Clydesdale, Graham Bros (Stately City); Sweepstakes Shire, Morris & Wellington (Coronation).

EWING'S
Selected Farm and Garden
SEEDS

are thoroughly reliable and better cannot be found. We mail free our Illustrated Seed Catalogue for 1903 to all sending us their addresses. Our assortment is complete, and includes full lines of Plants, Flowering Bulbs, Shrubs, Tools, etc., besides all varieties of seeds for farm or garden, and Seed Grain.

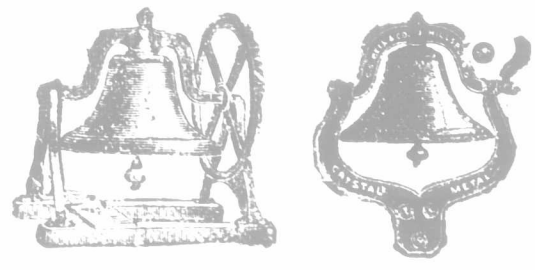
WILLIAM EWING & CO'Y,
SEED MERCHANTS,
142 MCGILL ST. MONTREAL

Catalogue Printing Our Specialty.

Many of the best Catalogues in Canada are produced by us. Latest type faces, designs, ornaments, and modern machinery.—Best in America. Up-to-date covers designed by special artists without extra charge.
London Printing & Litho. Company, Ltd.,
LONDON, ONTARIO.

Best Values
in
SEEDS!

JOHN A. BRUCE & CO.,
HAMILTON, CAN.



Send for Illustrated
Price List.

HEADLIGHT LANCE-TOOTH CROSSCUT SAW is four gauges thinner in the front than the back; is one of the fastest crosscut saws made. Every saw fully guaranteed. Only 50c. per foot.
COMBINATION COBBLER'S, TINSMITH'S and harnessmaker's outfit should be in the possession of everyone. Will save its cost over and over again. Only \$1.85 each.

HOLLOW GROUND RAZOR, fully guaranteed. The best in the market. Only \$1.00, postpaid.

FOUR-PRONG MANURE FORK, the best. Usually sold for 65c. Our price, only 40c. each, while they last.

FARM BELLS, \$1.75, \$2.25, \$3.00 and \$4.00 each.

CHURCH BELLS from \$12.00 to \$60.00 each.

WILKINS & CO.
166-168 KING ST., E.,
TORONTO, ONT.

GOSSIP.

At the Macmillan sale, Brandon, Ralph R. Brierley, Cook's Creek, Man., purchased the four-year-old Cleveland Bay stallion, Lord Redcar 1529. This horse was first in his class at the Yorkshire Show and second at the Royal Show, Carlisle. During the approaching breeding season he, in company with the Clydesdale, Damascus Blade, will be held for service in the vicinity of Springfield, Man.

Thornhill Stock Farm lies one and a half miles from Millbrook station, G. T. R., and is the property of Messrs. Redmond Bros., the well-known breeders of thick-fleshed, high-class Shorthorns. Their herd at present numbers 24 head, nearly all of them belonging to the grand old thick, evenly-fleshed Marigold family, with the blood of Challenge and Barmpton Hero strongly infused, and, practically all of them sired by Imp. Prime Minister, Imp. Royal Member and Sailor Champion, a rare good son of Imp. Royal Sailor. Sailor Champion is the sire of that model young bull, Lord Chesterfield, that won first as a yearling and junior sweepstakes at Toronto last fall, and this is the herd that produced him, and be it known that Lord Chesterfield is a representative of the kind of animals bred by Redmond Bros. At present, there is a five-months-old red bull calf, sired by Imp. Royal Member, and out of one of the choice cows, that is the making of a cracker. There are also an exceptionally thick, even pair of yearling roan heifers, and a few younger heifers, any of which are for sale. During the last year, this firm's sales have been both extensive and satisfactory, animals going as far as Texas and to different parts of Canada. Lately, they sold to Mr. Geo. Gier, of Grand Valley, the noted old stock-getter, Imp. Royal Member, who did grand service for Messrs. Redmond Bros. The bulk of their cows are now in calf to him.

"The Pioneer Seed House of Canada."

ESTABLISHED 1850.
Our beautifully-illustrated, up-to-date catalogue of "Everything valuable in Vegetable, Flower and Farm Seeds" is now ready, and will be mailed free to all applicants. SEND FOR IT.

In QUALITY our stocks are "Second to None," and prices will compare favorably with those of any other reliable house in America.

Special offer: "Bruce's Empire Asters."

1 pkt. each, separate, of 6 of the best varieties, all colors. Retail value, 60c.; postpaid for 25c.

COVER YOUR BARNS WITH

EASTLAKE Steel Shingles

GALVANIZED OR PAINTED.

Because:

- They are quicker laid than others.
- Are easy to handle.
- Can be applied by any handy man.
- Give perfect protection from lightning.
- Are storm and rust proof.
- Will prevent fire and last indefinitely.

And yet they don't cost more than poorer kinds.

Made by the Metallic Roofing Co., Limited, of Toronto.

Sold by
Merrick, Anderson & Co.,
Bannatyne Ave., Winnipeg.

"VIGILANT" NEST

SLIDING-ADJUSTABLE
(Patented Can. & U.S.)

The only nest in the World which positively prevents hens from eating their eggs.

Simple-Effective-Durable
No springs—Eggs cannot break. The inclined nest gathers them safely in lower section. Prevents flies, or parasites, etc. Everlasting, never failing, comfortable. Thousands now in use. Ask your dealer for it or write to L. P. MORIN & SON, Mfrs., 8 Antoine St., St. Hyacinthe, Que. Price 45c. each. Shipped only in crates of 5.



SHOEMAKER'S BOOK ON POULTRY

and family almanac for 1903. Over 200 large pages of best book paper, with fine colored plates true to life. Tells how to raise chickens profitably, their care, diseases and remedies. Diagrams with full descriptions of Poultry houses. All about INCUBATORS, BROODERS, and THOROUGHbred FOWLS, with lowest prices. You cannot afford to be without it. Only 5c. ea.
C. C. SHOEMAKER, Box 608, Freeport, Ill., U. S. A.

Poultry Paper Free

Your name and address on a postal card mailed to **Reliable Poultry Journal**, Box V, Quincy, Illinois, will bring you a free sample copy of the biggest and best Poultry Journal published. Over one hundred pages. **\$500 CASH PRIZES**—Everybody gets paid—Write for full particulars. **A Big Thing For Subscription Agents.**



Don't Pay Double.

We'll sell you a better hatcher for the money than any other. Incubator comes with cage. New improved regulator, that can't get out of order. Big book—200 illustrations free. **SURE HATCH INCUBATOR CO.**, Clay Center, Neb., or Columbus, Ohio.

THE SAFETY Incubators

are the most perfect hatchers on the market. Fully guaranteed. Built to last a lifetime. Write for circular to
J. E. Meyer, - Gourcock, NEAR GUELPH
(Instead of Kossuth.)

EGGS FOR HATCHING—White Wyandotte, Buff Orpington, Houdan and Pekin duck, \$1.25 per setting.
C. W. BEAVEN, Pinegrove, Prescott, Ont.

Mammoth Bronze Turkeys, S. G. Dorking. Best lot of birds we have ever offered.
ALFRED E. SHORE, White Oak, Ont.

Settlers' Low Rates West.

Via Chicago and North-Western Ry. every day from Feb. 15th to April 30th. Colonist one-way second-class tickets at extremely low rates from stations in Ontario and Quebec to points in Colorado, Utah, Montana, Nevada, Idaho, Oregon, Washington and California, also to Victoria, Vancouver, New Westminster, Nelson, Rossland, etc., etc. Full particulars, rates and folders can be obtained from E. H. Bennett, General Agent, 2 East King street, Toronto, Ont.

ROCK ISLAND



Gangs, Sulkeys,
Disc Plows,
Walking Plows,
Brush and Prairie
Breakers,
Disc Harrows,
Lever Harrows.

Send for Catalogue and Prices to

JOHN STEVENS, Gen. Agt., P.O. Box 727,
WINNIPEG,

or see Local Agent

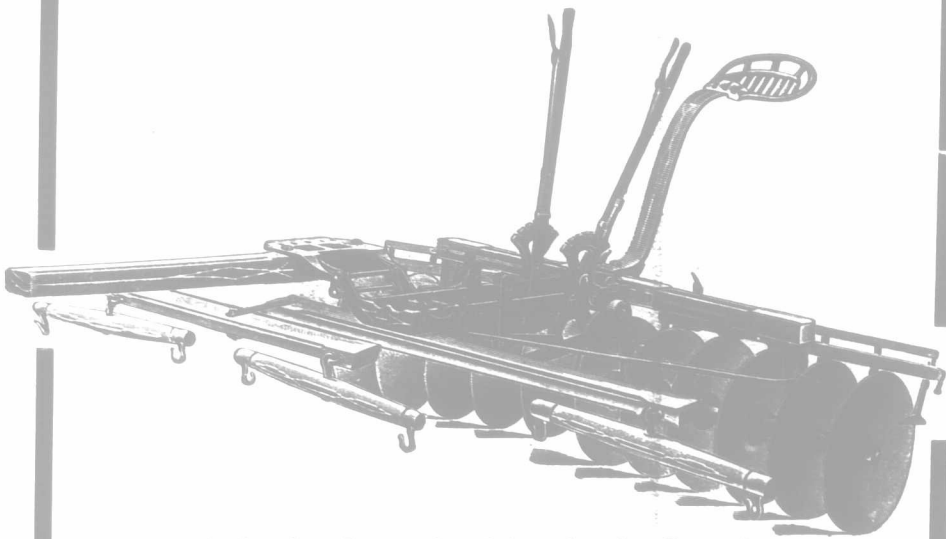
Rock Island Plow Company,
ROCK ISLAND, ILL., U. S. A.

When Spring Opens, You Will Need a

FROST & WOOD

WINDSOR DISC HARROW

This illustration shows the Windsor arranged for three horses, and done without tools of any kind.



It is the finest land leveler in Canada.
Examine the Agent's sample and

LEAVE YOUR ORDER NOW.

The Frost & Wood Company Head Office and Works:
Smith's Falls, Ont.

BRANCH OFFICES:

Toronto, Ont.
London, Ont.

Montreal, Que.
Quebec, Que.
Winnipeg, Man.

St. John, N. B.
Truro, N. S.

GOSSIP.

J. B. Thomson, Hamiota, Man., was present at Macmillan's sale, and secured a couple of the gems in a daughter of the Cedric horse, Prince Charming, and out of a Macgregor mare; also a daughter of the great Darnley and Sir Everard horse, St. Christopher, and out of a daughter of Cedric and the great Cherry Ripe. J. B. says these are too good a kind to let go astray, but expects they may be again heard from. This addition to his present stock places him in an enviable position among horsemen indeed, and greater honors than ever may be added to his name when show time comes again.

J. A. S. MACMILLAN'S SALE.

The auction sale of pure-bred horses, held at Brandon by J. A. S. Macmillan on February 4th marks a new era in the horse-breeding industry of this country. Heretofore, a public sale of registered horses in any number was unheard of in Western Canada, and it is quite within the facts to say that never before has there been offered to the farmers of the West such a splendid opportunity of securing good blood at first cost.

The sale, generally speaking, may be regarded as a success, and the prices realized were regarded as satisfactory, although no extraordinary sums were bid. T. Crawford Norris, M. P. P., Griswold, performed the important office of auctioneer, and drew from the very representative gathering of horsemen present a regularity of bidding that made the sale go on with the usual interest. The offerings consisted principally of Clydesdale mares of various ages, a few of which were in foal. A number of those catalogued were not brought out, but were supplemented by an equal number, some of which had recently been received from the stables of N. P. Clarke, St. Cloud, Minn. Twenty-two mares brought an average of \$354.50, with the individual prices as follows:

Princess Kit, 2 years old	\$200
Charming Marjorie, 2 years	225
Rose Topay, 8 years	225
Bessie Bell (imp.), 4 years	240
Mistress Judy, 3 years	250
Princess Maille, 6 years	250
Eyebright (imp.), 3 years	250
Princess Patrick, 8 years	260
Princess Mysie, 8 years	275
Princess Dalgrook, 6 years	275
Bonnie Bessie, 3 years	280
Lothian Lady (imp.), 4 years	285
Jannie Field, 3 years	290
Marjory Macgregor (imp.), 4 yrs.	300
Princess Manswraes, 6 years	310
Lady Macwhiffles, 5 years	330
Embra, 5 years	335
Lady Macgregor, 4 years	365
Princess Glencoe, 6 years	400
Tillie Lanark, 3 years	400
Lady Nansen, 3 years	450
Lady Glen Whiffles, 5 years	525

Of the Clydesdale stallions sold, Rosehaugh of Pitlivie, 2 years, brought \$510, and Charming Mister, 1 year, \$225. Only one Hackney was disposed of, and he, Middleton Gentleman, brought \$750, while an aged Percheron sold for \$560.

TRADE NOTE.

THE MILNER PETROLEA WAGON CO., whose advertisement appears in this issue, while not very long established, have already attained prominence on the market, owing to the high-grade wagons they are turning out. Their factory, erected at Petrolea, Ont., in 1902, is certainly one of the most complete of its kind in Canada. Mr. Milner, long and favorably known in connection with the manufacture of wagons, is superintendent. Dealers and agents throughout the Provinces and Territories are handling these wagons, and they are found to be giving excellent satisfaction.

FOR SALE:

Dairy Business in Neepawa,

Disposing of 200 quarts of milk per day.
Sale includes
40 Head of First-Class Dairy Cows,
and all equipments for running a dairy.
Apply to J. H. I&WIN,
Box 16. Neepawa, Man.

T. E. M. BANTING, Banting, Manitoba,
Breeder of prize Tamworths. Both sexes, young and old, for sale. On Glenbar branch of C. P. R.



150,000 Healthy, well-rooted, Manitoba-grown young trees, plants, seedlings, roots, vines and cuttings, Russian poplars, and willows, maples, elms, flowering shrubs, Virginian creepers, rhubarb roots, small fruits of all kinds, and a few apples and crabs. Prices away down. Send for price list.

CALDWELL & CO., Virden Nurseries,
VIRDEN, MAN.

GEESE!

We have some fine Toulouse geese on hand. Can supply pairs from two matings. They are of good size and quality. Write early if you wish to buy. Address:

KING BROS., Wawanesa, Manitoba.



"What a Wise Old Chap!"
He has left his hide in good hands. Send for our circular in reference to custom tanning. We send samples of work with circular.

CARRUTHERS & CO.,
TANNERS,
and dealers in hides, wool, sheepskins, furs, tallow, etc.
9th Street, Brandon, Man.

O'Neil Bros., Southgate, Ont.

Importers, breeders and dealers in registered
HEREFORD CATTLE.

Special prices on cows and heifers by car lots. We will contract to supply registered Hereford bulls by car lots, or mixed carloads of Hereford, Angus and Shorthorn bulls, to ranchmen for fall or spring delivery. Correspondence solicited. Address as above.

D. FRASER & SONS, EMERSON, MAN.

Breeders and importers of Durham Cattle, Shropshire and Southdown Sheep; Berkshire, Tamworth and Poland-China Pigs.

GALLOWAYS:

Bulls and heifers for sale.

APPLY TO
T. M. CAMPBELL,
"HOPE FARM,"
St. Jean Baptiste, Manitoba.

ABERDEEN - ANGUS AND BERKSHIRES.

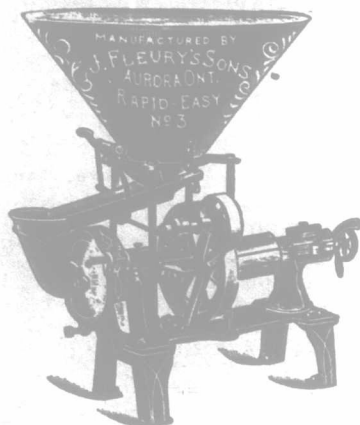
One deep, blocky April bull calf for sale. Orders booked for spring pigs, sired by Nora's Duke - 7990 - bred by J. A. McGil and King Edward - 10832 - F. J. COLLYER, Houghton Farm, Welwyn, Assa.

FAIRVIEW STOCK FARM.

Ayrshires, Yorkshires and B. Minors.
For sale: Stock bull, Craigielea of Auchenbrain (imp.) (3302) = 1661 - 1st at Toronto, and 3 choice young bulls of his get. Fall pigs on hand and spring orders booked. WELLINGTON HARDY, Roland, C. N. B. Carman, C. P. R.

PLEASE MENTION FARMER'S ADVOCATE

"RAPID-EASY" GRINDERS



DIFFERENT SIZES, adapted to all styles of POWER and to EVERY PURPOSE. CUSTOMERS say they do MORE WORK with SAME POWER than any other Grinder, and plates last longest, therefore CHEAPEST.

"I sold the Grinder to three brothers. It is working well and they are HIGHLY PLEASED with it." A. J. BRADLEY, Belwood, Ont.

"Please send us by express 2 sets 12-inch plates for No. 3 'Rapid-Easy' Grinder. Customer is MORE THAN PLEASED with the Grinder." T. J. TRAPP & CO., Ltd., New Westminster, B.C.

"The No. 2 'Rapid-Easy' Grinder which I purchased from your agent, A. Gillham, has given me ENTIRE SATISFACTION. It runs VERY EASY. I can grind FAST and do GOOD WORK in ALL KINDS OF GRAIN. It is NO TROUBLE to grind hard barley and make a SPLENDID JOB of it. I have ground oats at the rate of ONE BUSHEL PER MINUTE, running with a HORSE-POWER and 2 SPAN OF HORSES. I do better work with my Grinder than others in this locality do with stones. I would recommend the 'Rapid-Easy' to any intending purchaser. I may add that the plates that you supply are VERY good indeed. I have not used up the FIRST SET yet, and I have done a LOT of work." NOAH HOILES, Maple, Ont.

SOLD IN ALL PROVINCES.

Lithograph hanger and information on application to: The Fairchild Co., Winnipeg, Man.; The T. J. Trapp Co., New Westminster, B. C.; W. R. Megaw, Vernon, B. C.; A. A. Johnston, 212 St. Paul St., Montreal, Que.; P. T. Legare, Quebec, Que.; J. Clark & Son, Fredericton, N. B.; The Lounsbury Co., Newcastle, N. B.; W. F. Dibblee & Son, Woodstock, N. B.; Bligh & Prince, Truro, N. S.; Iilsley & Harvey, Pt. Williams, N. S.; A. Horne & Co., Charlottetown, P. E. I.; J. M. Clark, Summerside, P. E. I., or

J. FLEURY'S SONS, Aurora, Ont., Can.
Write to-day. Medals—World's Fairs, Chicago and Paris. Write to-day.

"I would not turn my hand to choose between the five leading American Incubators. They are all hot-air machines, identical in construction. There is nothing new in Incubators."—THE VIEWS OF AN EXPERT POULTRYMAN.

The **Chatham Incubator**

makes its bow.

Its makers, THE M. CAMPBELL FANNING MILL CO. OF CHATHAM, LIMITED, believe that a high-grade Canadian Incubator is in urgent demand. We believe that Incubators are beyond the experimental stage, and their construction an exact science.

We have, therefore,
(Adopted the best principles,
Used the best material,
Employed the best workmanship,
Added the best finish,
Equipped with the best instruments.)

We make three sizes—all hot-air machines, viz.:

Size A—5-dozen-egg capacity. Size B—10-dozen-egg capacity.
Size C—20-dozen-egg capacity.

All are of similar construction and equipment; built of bone-dry maple and basswood; insulated with mineral wool; regulator and heater guaranteed. We build the

Famous Chatham Fanning Mill

and have a reputation at stake. Our guarantee is simple, sure, absolute. Our prices are right. We pay the freight. We save you the 25% duty. Write for catalogues, prices and order blanks. Agents wanted.

The M. CAMPBELL FANNING MILL CO. OF CHATHAM, Ltd.
DETROIT, MICH. CHATHAM, ONT.

DISPERSION SALE
Shorthorn Cattle.

J. W. HARTMAN & SONS, ELMHEDGE, ONT., having rented their farm, will sell by auction, at their farm, 8 miles from Meaford (G. T. R., Collingwood Division), north of Toronto, on FEBRUARY 24th, 1903, their entire herd of registered Scotch and Scotch-topped Shorthorn cattle, headed by the Scottish-bred bull, Abbotsford = 19446 =, proven to be one of the best stock bulls in Canada, both in the show-ring and fat-stock shows. Females of the Minas, Mysies, Urys, Nonpareils, Isabellas, Miss Ramsdens, Matchless, Strawberries, and other favorite families. Three bulls, 13 months old, got by May Duke = 21048 =, good enough to head any herd. Also a lot of registered Berkshire sows.

SALE TO COMMENCE AT 10 O'CLOCK.

Catalogue will be mailed on application.

Lunch provided.

W. J. SHEPHERDSON,
Walter's Falls, Auctioneer.

J. W. HARTMAN & SONS,
Elmhedge.



Works on either standing timber or stumps. Will pull an ordinary Grub in 15 minutes. Makes a clean sweep of Two Acres at a Siting. A man, a boy and a horse can operate it. No heavy chains or rods to handle. The crop on a few acres the first year will pay for the Machine. Send postal card for Illustrated Catalogue, giving price, terms and testimonials. MILNE MFG. CO., 886 8th St., Monmouth, Ill. (Address Milne Bros. for Shetland Pony Catalog.)

Please Mention Farmer's Advocate.

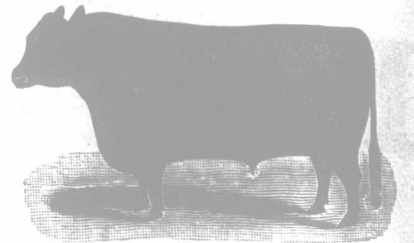
GOSSIP.

TRUMAN'S IMPORTED STALLIONS.

In another column will be noticed the advertisement of the Truman Pioneer Stud Farm, Bushnell, Ill. For the last twenty-four years these people have been importing to America stallions of the highest type and breeding. The founder of the present concern, and father of J. G., who is now president of the American Shire Association, was J. H. Truman. Previous to engaging in horse importing he was identified with the cattle exporting trade, and was one of the first to sell American cattle direct to the British butcher. In 1878, believing that the best agricultural interests of this country demanded the introduction of some good heavy-horse blood, he made an importation, and although subject to the reverses which importers are continually meeting, he has been enabled to build up a trade in high-class stock that should bring its own reward. The lines upon which their business is now being run affords opportunities for securing the best across the sea and placing it in this country at first cost. The senior member of the firm, although for several years a resident of the United States, is a thorough Englishman, and never ceased to regard Whittlesea, Eng., as his home. One son, a skilled veterinary, makes the Whittlesea stables his headquarters to which he collects the stock for exportation to America. A few months ago, these enterprising people decided to open a branch stable in Brandon, Man., to which, recently, a representative of the "Farmer's Advocate" paid a visit, and was interested to find a group of Shires, Percherons and Suffolks of such uniformly good character and quality as would command admiration anywhere. Among the Shires, the breed for which this firm has long been noted, was a beautiful brown three-year-old, Brown Prince, a wonderfully well-coupled horse, with a grand body properly set on feet and legs that are of the right stamp. Another of the same age, breed and color was Whitestake Burgeon (20163), a prizewinner in England and destined to leave his mark in this country. He is particularly thick through the withers, has a well-developed chest, and a fine head, showing the Shire type to perfection. Still another choice representative of this famous old breed, now located at Rapid City, is Prince Shapely (16328), by Orchard Prince (10111), the champion gold cup and medal winner of England in 1894, and was again in 1896 at the head of the list. Prince Shapely is 7 years old, and was first at Princetown, Ill., show last year and third at the Indiana State Fair, 1901, being beaten only by his stable mates. He is very tall, standing fully 18 hands, and weighs 2200 pounds. To bring such horses into this country means some money, but the impression left on our stock ought to mean something more. Only one Suffolk was on exhibition at the Brandon stable, but he, His Grace, is a horse of many commendable qualities, being the noted prizewinner at the Royal Show, and purchased from Sir Cutlbert Quiltie by the present owner for a large sum. He is a beautiful chestnut, six years old, with a very highly-developed neck, full breast and strong bone. His stable mate at Bushnell was Ironsides, said to be the highest-priced Suffolk imported this year. Among the Percherons was a five-year-old, which Mr. Truman said was about the best he ever bought, having been purchased from Monsieur Brebron, a noted breeder in France. This horse of wonderful substance was used by the French Government in their stud for a time.

This is merely a sample of what the Truman firm are bringing continually to this continent, and when the senior member called at this office a few days ago on his way to his English home, he reported the shipment of another lot from the native home of the Shire to America's shores. In the advancement of horse shows and exhibitions, Mr. J. H. has always taken an active part, and was very largely responsible for the gold medals being offered by the English Shire Association for the best of the breed at the leading shows of the U. S. and Canada. He is, therefore, deserving of more than ordinary credit as a horse-man.

Aberdeen-Angus Cattle
Pure-bred Clydesdale Horses.



It will pay Canadian farmers

TO WRITE
JOHN R. CAMPBELL, Prop. HIGHLAND STOCK FARM, CLYDE, MINN., U. S. A.,
For prices on
CLYDESDALE STALLIONS
from strains that are famous the world over. Has been a breeder of Aberdeen-Angus Cattle for 20 years.
Address
JOHN R. CAMPBELL,
Highland Stock Farm. CLYDE, MINN., U. S. A.

FOR SALE:
Pure-bred Clydesdale Stallion

rising two years; bright bay; good bone and action; good colt; pedigree right.

Pure-bred Shorthorn Bull

about a year old; red, a little white; mother good milker.
A few hundred

Pure "Red Fyfe"
very clean. Hundred or more

"Minnesota No. 163"
wheat, grown here two years.

Seed Oats "Ligowo"
and "Tartar King."

H. NICHOL,
BOX 382,
Brandon, Manitoba.

The **Bowness** herd
of **Shorthorns**

Containing 200 head of pure-bred Scotch Shorthorns. As I am reducing the size of my herd, now is the time for bargains in heifers and cows to start your farm with. Please write to

W. BERESFORD, Calgary, Alta.
LATE SAMSON & MACNAGHTEN.

SHORTHORNS
FOR SALE: One red and 2 roan bull calves, from 10 to 12 mos. old; very growthy; sired by Royal Duke = 24640 =, a son of Royal Gloster, out of Golden Drop. S. FLETCHER, Holmfild, Man.

SHORTHORN BULL
FOR SALE: Prince of Fortune, by New Year's Gift; dam Matilda 9th, traces to Matilda (imp.); a sire, red 4-year-old, bred by Tnos. Russell & Sons, Exeter. W. D. HUNT, Fairmede, Assa.

PLAIN VIEW STOCK FARM.



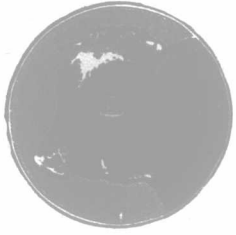
COTSWOLD, SHORTHORN, BERKSHIRE.
FOR SALE: Bulls, heifers and cows of good quality; also a nice lot of hogs and sows, all ages. A few Cotswolds at reasonable prices. Write or come and see them. F. W. BROWN, Proprietor, Portage la Prairie, Man.

SHORTHORNS FOR SALE. One bull, "Argyle's Best," rising 2 years, and several females of good families. W. MATHON, Roseberry P. O., Manitoba. Balden station, C. N. R., Holmfild, C. P. R.

Registered Shorthorns

FOR SALE.
Two 10-months-old Ontario-bred bulls, only a few heifers and cows of all ages left. Prices according to quality. Pleased to meet visitors at Rosser Station.
WALTER JAMES,
ROSSER P. O., MAN.

Clyde Stallions
Fillies and Mares



SHORTHORN
Heifers and Bulls

All for sale; no reserve.
Prices and terms to suit.

J. E. SMITH,
SMITHFIELD AVE.,

Brandon, Manitoba.

SHORTHORN BULL

For sale: Nicholas, 3 yr. old, possessed of great scale and substance, is a sure getter. He is a grandson of the famed Manitoba Chief, twice winner of first at Winnipeg. Jenny Lind -28617- is his grandam.

M. E. SUTTON, Roland.

GLENNROSS FARM.

SHORTHORNS for sale: Stock bull, Golden Flame, 2nd at Toronto in class under a year. Also 5 choice young bulls, from 6 to 16 months old, sired by him.



A. & J. MORRISON, Carman P. O. and C. P. R. sta., Holmfeld sta. (C.N.R.) on farm.

Choice young Shorthorn Bulls for sale:

Stock bull, 3 years old, Woodworth Duke, and four thick, growthy bull calves, from 10 to 12 months old. Prices reasonable. H. R. TOLTON, Oak Lake, Man.

SHORTHORNS FOR SALE:

Ten choice young bulls, 6 to 12 months old, from good families—strong, growthy individuals.

JOHN JARDINE, Manitou, Man.

SHORTHORNS FOR SALE

Four bulls, one 4 years old—Melgund Hero, got by Don Q sixote, bred by Duthie, of Melgund; two 2-year-olds, and one calf all red color.

JAS. CHEYNE, Manor, Assa.

MARCHMONT HERD

Scotch-bred Shorthorns

The 2 imported bulls, Prince Alpine and Barrister, head a herd of 90 imported and Canadian-bred, Scotch-topped cattle. A catalogue showing their breeding is now printed, and will be forwarded on application. 25 young bulls for sale, of modern breeding and good conformation, and at moderate prices.

W. S. LISTER, Middlechurch P. O. (7 miles n. of Winnipeg.) Tel. 10046.

THORDALE STOCK FARM

138 Shorthorns in Herd.

FOR SALE: Royal Judge -29200-, one of the stock bulls, winner of 1st at Winnipeg and Brandon, and 19 young bulls; also, females of all ages.

JOHN S. ROBSON, MANITOU, MAN.

SHORTHORNS AND CLYDES FOR SALE

Three choice young bulls sired by Nevaer (imp.) Also a few cows and heifers. One yearling stallion got by (imp.) McKinnon, and a few mares.

A. & J. CRADBURN, Ralphton, Man.

LAKESIDE SHORTHORNS FOR SALE

Stock Bull, Sir Colin Campbell(imp), winner of 2nd place at the Winnipeg Industrial, 1902; also Royal Campbell, rising 2, another Winnipeg winner, and two bull calves under 1 year—the low set, growthy kind—sired by Sir Colin.

R. McLennan, Holmfeld.

FORESTHOME FARM

Shorthorns, Yorkshires, and Barred P. Rocks

FOR SALE: A number of choice young bulls. A fine lot of boars fit for service. Sows of different ages, bred and ready for breeding. Young pigs, both sexes.

An exceptionally fine lot of cockerels—large, healthy, well-bred fellows. All at reasonable prices.

Carman, C. P. R.; Roland, C. N. R. ANDREW GRAHAM, Pomeroy P. O.

GOSSIP.

Walter James, Rosser, Man., reports the following sales of Shorthorns. To Walter Beachell, Rosser, Man., Sunbeam -35888-, red and white cow, got by Rosser Lad -23980-, out of Sunshine of Roses -27025-; Vera Vane -45601-, roan heifer, got by Rosser Lad -23980-, out of Violette -27026-. To S. Johannsson, Gimli, Man., Melbourne -40829-, a roan yearling bull, got by Lord Stanley 25th -29247-, out of Muriel -17990-; Josephine -25885-, red and white cow, got by Rosser Lad -23980-, out of Lena Arkwright -23822-; Freija, a roan heifer calf, out of Josephine -35885-, by Lord Stanley 25th -29247-; Lucille (Vol. XIX.), a red yearling heifer, out of Ladysmith -40211-, got by Lord Stanley 25th -29247-. To B. B. Olson, Gimli, Man., Davidson -40711-, a red and white yearling bull, by Lord Stanley 25th -29247-, out of Olenka -35881-.

When in the vicinity of Markham, Ont., recently, an "Advocate" representative made a call on Mr. Ed. Robinson, importer and breeder of choice Shorthorn cattle, and found his magnificent herd of 50 head in prime condition. Thirty-five head of this lot are imported, and the herd represents such noted Scotch families as Broadhooks, Jilts, Undines, Isabellas, Marr Roan Ladys, Campbell Marys, Orange Blossoms, Kiblean Beautys, Reid's Marys, Marchionesses, Gwynnes and Lovelys, at the head of which is the rare good bull, Imp. Rustic Chief, bred by Alex. Watson, Auchronie, sired by the Queen's Guard. He is a roan, very even, thick, smooth, and with abundance of quality. Among the females are eight imported two-year-old heifers, as follows: Roan Rose by Abbotsford 2nd, Myra 2nd by Lord Harold, Annie by Lovat's Chief, Daisy by Jubilee Star, Dorothy Princess by Proud Star, Jilt 21st by Scottish Prince, Rothnick Rose 4th by Scottish Prince, Betsy by Lovat's Chief. All of these are either in calf or have calves at foot, by such notables as the Marr Missie bull, Conqueror's Crown, and King Victor. Besides these, there are twelve yearling heifers, all imported, as follows: Lettuce by Knight of Strathbogie; Prisca and Pappae, by same sire; Apple Pie, Sally and Sweet Briar, by Ivanhoe; Cherry 2nd and Tulip, by Orton; Beauty 32nd, by Count St. Clair; Primrose 2nd, by Hogarth; and Millstream, by Sweet William. In three-year-olds, imported, there is Love Bird, by Scotland's Fame. She has a nine-months-old bull calf, by Knight of Strathbogie—an extra nice, thick youngster; Duchess Gwynne 6th, by Baron Lee, has a red yearling heifer by Scottish Prince, and one at foot by King Victor. There is ten-months-old red bull, imported in dam, by Golden Fame, dam Dorothy Princess by Proud Star—an extra good one; also, one white yearling bull, by Imp. Baronet, dam August Lassie 2nd by Indian Sailor. He is also a very good, even type of animal. On the day of our visit, there arrived from quarantine the beautiful model show cow, Mary 15th (imp.), 3 years old, in calf to Nonpareil Duke. Lately, Mr. Robinson has sold two imported cows to Dixon Bros., Luana, Iowa; two imported heifers and one bull to Good-fellow Bros., Macville; one bull, imported in dam, to T. Mercer, Markdale; one bull, imported, to R. McLennan, Holmfeld, Man.; one cow and yearling heifer to Walter James, Rosser, Man.; two cows to E. R. Sullivan, Iowa; and five head to R. Miller, Stouffville. Anything in the herd is for sale. Mr. Robinson's farm lies within the corporate limits of Markham village, and is only twenty miles from Toronto.

"Let the GOLD DUST twins do your work."



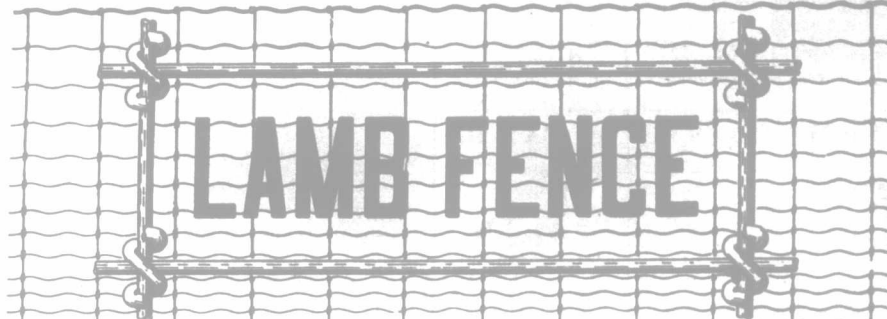
No Soap, Borax, Soda or Ammonia is needed with

GOLD DUST

With little water and less effort you can clean anything about the house better, easier and cheaper than with Soap or any other cleanser. Once try it, you'll always buy it.

Made only by THE N. K. FAIRBANK COMPANY, Montreal, Chicago, New York, Boston, St. Louis—Makers of COPCO SOAP (oval cake).

SAVE 20 CENTS PER SHEEP on every sheep you shear with STEWART'S PATENT SHEEP SHEARING MACHINE. The day of the old fashioned hand shears is past. No owner of 10 sheep or more can afford to shear by hand, even though the work be done for nothing. Don't butcher your sheep. Shear with this machine and get ONE POUND OF WOOL EXTRA PER HEAD. It will more than cover the cost of shearing. Send today for valuable book, "Hints on Shearing." It is free and will save you money. CHICAGO FLEXIBLE SHAFT CO., 110 Ontario St., CHICAGO.



CHEAPEST BECAUSE IT'S BEST.

The H. R. LAMB FENCE CO., Ltd., LONDON, ONT. Fence shipped from our Winnipeg Warehouse.

THE BLOOD OF TOPSMAN Breeds on.

JNO. G. BARRON is offering for sale

10 SHORTHORN BULLS

Aged 12 months to 14 months, sired by Nobleman (Imp.) -28371-. Also for sale, three following noted Shorthorns:—

1. Topsmans Duke -29045-—First prize and sweepstakes bull at Winnipeg Industrial, 1901, and 1st prize in aged bull class, 1902.

2. Sir Arthur Grant -30503-—Two years old, and out of Jenny Lind IV.; got by Nobleman (Imp.) -28371-.

3. Nobleman (Imp.) -28871-.

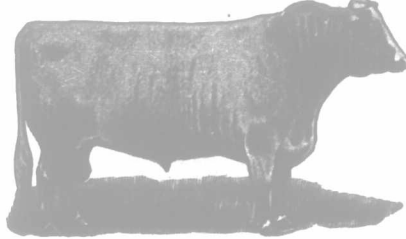
Stock is all open for inspection. No "culls" in them. You will always be made welcome at

FAIRVIEW STOCK FARM, JNO. G. BARRON, PROPRIETOR, CARBERRY, MANITOBA.

Three miles from town of Carberry. Also call at Western Stables, Carberry.

PRAIRIE HOME STOCK FARM

CLYDESDALES, SHORTHORNS, Ayrshires, SHROPSHIRE, BERKSHIRE and YORKSHIRE. Shorthorn herd headed by Judge, imp. Sittyton Hero 7th and Moneytuffel Banner. Ayrshires of the best quality; herd headed by Surprise of Burnside. Shropshire ram lambs, also ewes of various ages. Summer Hill Monarch and a large number of high-class sows represent the approved bacon type of Yorkshires. The Berkshire boar, Victor (Teasdale), sweepstakes at Brandon and Winnipeg, 1900, and 30 sows of faultless conformation and superior breeding, make up the Berkshire herd. Farm 1 mile from the station. Visitors welcome. Prices and quality right. THOMAS GREENWAY, PROPRIETOR, Address all communications Crystal City, Man.—on farm business to Waldo Greenway, Crystal City, Man.



STRONZA STOCK FARM
SHORTHORNS AND BERKS. FOR SALE:
 Young bulls of blocky, thick-fleshed type, sired by Riverside Stamp 2nd, one of Thos. Russell's (Exeter, Ont.) best. Berks. of various ages and both sexes on hand. **DAVID ALLISON, Roland.**

ROSELEA FARM
SHORTHORN BULLS FOR SALE,
 mostly sired by Sir Victor or Strathcona. Six of them are 2-year-olds and 6 yearlings; also females of all ages. Several young York. boars fit for service. **KENNETH McIVER, Virlden.**

GREENDALE STOCK FARM.

Have several young Shorthorn bulls for sale—thick, sappy fellows, of good families. Also a few upstanding, well-bred teams, weighing from 28 to 32 cwt. Prices right. **F. W. GREENE, Moose Jaw, Assa.**

Lakeview Stock Farm.

SHORTHORNS FOR SALE.
 Have several heifers, 1 and 2 years old, by Baron's Pride (imp.), in calf to Clan Mackay (imp.); also some good cows in calf to Clan Mackay. One good yearling bull, by Lord Strathbrogie (imp.), out of Empress of India (imp.). Several bull calves, sired by Clan Mackay Cheap, if sold soon.

THOMAS SPEERS, OAK LAKE, MANITOBA.

Mansuch Stock Farm—Shortorns for Sale.

Four choice young bulls, sired by Calthness Yet; yearling heifers by Sir Colin Campbell. Cows in calf; also good driving team, 4 and 6 years old. All at right prices and terms. Write quick. **W. E. PAULL, KILLARNEY, MAN.**

Oak Grove Farm.

SHORTHORNS AND YORKSHIRES
 One choice young bull by Mastepiece, he by Grand Sweep (imp.); a few heifers by the same bull; also some by Village Hero and Knuckle Duster (imp.). Some young sows of spring litters, and an extra choice lot of W. P. Rock cockerels. One purebred Billy goat (Angora) I am offering bargains in heifers. Correspondence solicited.

JAS. BRAY, LONGBURN, MAN.

Shorthorns, Tamworths & Yorkshires

FOR SALE: Young bulls, cows and heifers (in calf), sired by Pomerooy Favorite and Knight Templar. Young swine of both breeds and both sexes ready for shipment now. Correspondence answered promptly. **W. G. STYLES, Rosser, Man.** 7 miles north of Rosser, main line C. P. R.

ELKHORN STOCK FARM.

O. I. C. swine, Hereford cattle, B. P. Rocks and L. Brahmas. No cattle for sale. **A. E. THOMPSON, Wakopa, Man.** Ninga, C. P. R., shipping station.

SHORTHORNS

FOR SALE: Four bull calves and several heifer calves, by Earl of Plainville; large and thrifty. **Moropano, Man. WM. MAXWELL.**

Home Bank Farm OF LARGE ENGLISH BERKSHIRES

Are still to the front. Some grand sows, bred for the spring trade. Have two fine litters ready to ship about March 15th. Now booking orders. Call or write for prices.

Jos. Laidler, Neepawa, Man.

Chester White Boars for Sale.

I have three **PEDIGREED CHESTER WHITE BOARS** for sale. Guaranteed to be in good condition every way. Apply or write to

AUSTIN OLSON, LACOMBE.

Improved Yorkshire Swine

A few young boars and sows for sale; can be registered. Apply to

YORK SHAW, Midnapore, Alberta.

GOSSIP.

In the prize list recently published by the Royal Agricultural Society of England provision is made for the offer of prizes at the Royal Show for 1903 in: 11 breeds of horses and ponies, 17 breeds of cattle, 21 breeds of sheep, and 6 breeds of pigs. Horses receive prizes to the value of £1,980, cattle £2,904, sheep £1,591, and pigs £495. For horses the prizes are: £15, £10 and £5; for cattle, £15, £10 and £5; for sheep, £10, £6 and £4, and for pigs, £10, £6 and £4. The breed societies have supplemented the prizes by offering gold or silver medals or special prizes for the best animal of the several breeds. They have also supplemented the sections by adding prizes for those which the Society had not seen fit to recognize. The most notable of these is that for two-year-old rams, which the council had decided to omit. Six of the breed societies have furnished money for a section for two-shear rams. The show will be held June 23rd to 27th, in London, where it is to be permanently located for the future.

FREE ADVICE TO STOCKMEN.

An Eminent Veterinarian Offers His Services Free of All Charge During February to Readers of this Paper.

ANY reader of this paper may now have—free—consultation, advice and prescription for any animal from the eminent veterinary surgeon, Dr. Hess. He is a graduate of famous American medical and veterinary colleges, and these institutions of learning and their profession generally recognize his written works as authoritative and his preparations for cattle, horses, sheep and hogs as standard remedies.

No matter how much money you may be willing to pay a veterinary, you could not get better service than Dr. Hess will give absolutely free during February. But this offer is good only for this month.

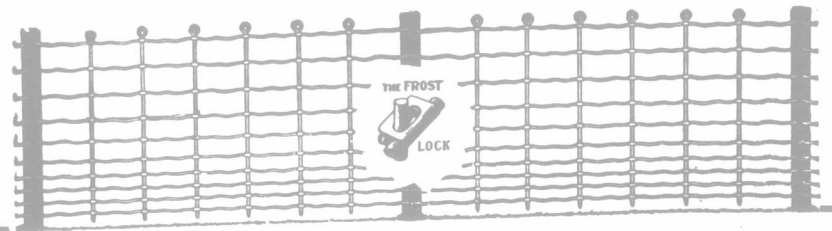
If you have an animal that is ailing from disease or injury, write at once. The only conditions are that you send a two-cent stamp for reply, and state what stock you own, what stock food you have fed, and mention this paper. Address Dr. Hess & Clark, Ashland, Ohio, U. S. A.

This offer is intended to cover specific cases—to demonstrate Dr. Hess' ability. It is not an offer of general advice on the training and care of stock.

While you are waiting Dr. Hess' reply it would be well to get a package of Dr. Hess' Stock Food (100 lbs., \$5.00; smaller packages a little higher proportionately) and begin conditioning all your stock. It is a scientific preparation that nourishes the vital organs of an animal, and gives to all foods the elements of strength and vitality they may lack—producing perfect condition, vigorous health, greater weight. A wonderful tonic, a marvellous invigorant, a positive weight producer.

The use of this wonderful tonic and remedy is so simple that anyone may employ it without further direction than is shown on the wrapper. But if any of our readers would like to make a study of the diseases of stock and poultry, he can get a copy of the comprehensive Dr. Hess' Stock Book free of all cost by mentioning this paper, stating what stock he has, what stock food he has fed, and addressing Dr. Hess & Clark, Ashland, Ohio, U. S. A. This is a standard work written for the use of the people at large.

With the aid of the Dr. Hess Stock Book you can become a master of all diseases of cattle, horses, sheep, hogs and poultry. You will not only be familiar with all the disorders of stock, but will know the remedy to be applied. It may save you great sums of money; it may make you a local reputation that will be very useful.



The Frost 10 Wire and 6 Stay Fence
 is the strongest and heaviest wire fence made—good openings for good agents; write us at once for terms. Ask for catalog.
THE FROST WIRE FENCE CO., WELLAND, ONT. WINNIPEG, MAN.

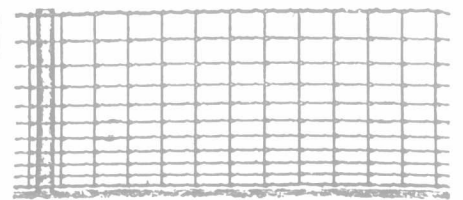
WOVEN WIRE FENCING

MANUFACTURED IN CANADA

The best selling because the most satisfactory.

"American" Field Fences

For horses, cattle, sheep, and hogs. All styles and heights—20 inches to 58 inches high, with stays 12 inches or 6 inches apart.

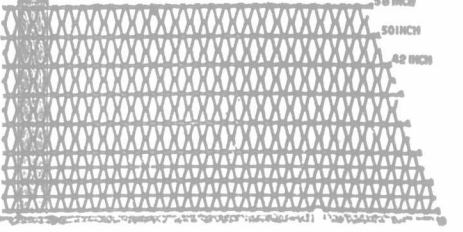


"AMERICAN" FENCE.

"Ellwood" Field, Farm and Lawn Fences.

Six styles. Heights, 18 inches to 58 inches.

If you can't get the celebrated **AMERICAN** and **ELLWOOD** fences from your dealer write to us and we will help you.



"ELLWOOD" FENCE.

The CANADIAN STEEL & WIRE CO. (LIMITED), HAMILTON, CANADA.

Bargains in IMPORTED STALLIONS at Brandon, Man.

I have brought from my **AURORA (ILLINOIS)** stables a very choice selection of **SHIRE** and **PERCHERON** stallions of the most popular breeding; all young and vigorous; every one passed by a competent vet., and will be fully guaranteed. I never handle old, second-hand or worn-out show horses. I am offering these very desirable young horses at living prices, on easy terms of credit to responsible buyers; or will allow a liberal discount for cash. Individual buyers or syndicates will save money by corresponding with me before paying the fancy prices at which inferior stallions are being sold by peddlers.

A few reliable agents wanted at various points in Manitoba and the N.-W. Territories. Address:

GEO. E. BROWN, BRANDON, MAN.



CRAIGIE MAINS CLYDESDALES

A. & C. Mutch, Lumsden, Assa.

BREEDERS AND IMPORTERS.

A few young **Stallions, Mares and Teams for Sale.**

Mr. Alex. Mutch, now visiting in Ontario, is prepared to fill orders for stallions or mares. Selecting from the best studs. Correspondence solicited. Address, till March 1st, **ALEX. MUTCH, 170 King St. E., Toronto. A. & C. MUTCH, Lumsden, Assa.**

2,000 HORSES

FOR SALE:

All weights, with prices to suit customers. Special rates on car-load lots. You will find it worth your while to write at once for prices to

J. H. SPENCER, Medicine Hat, Northwest Territory.

OR **DAVID Y. McNAIR, MOOSE JAW, N.-W. T.**

SALESMEN WANTED in every town in Manitoba and Northwest Territories. Say that you saw it in the "Advocate."

FOR SALE: DRAFT HORSES OF ALL AGES.

OWING to lack of range, we have decided to cut our herd of draft horses down to one-half and sell 2,000 head at greatly reduced prices. This great selection of mares, geldings and growthy youngsters of all ages represents the results of seventeen years of judicious mating to strictly high-class Percheron, English Shire, Clydesdale and Hackney sires. We can furnish high-grade brood mares and fillies with foal to imported and home-bred registered stallions, and have always on hand a large and first-class selection of registered and high-grade Percheron and English Shire stallions, also registered mares and fillies of same breeds. Correspondence solicited. Inspection invited.

LITTLE MISSOURI HORSE COMPANY,

W. G. CLARK, SUPT.

GLADSTONE, NORTH DAKOTA.

Blood will tell



When an animal is all run down, has a rough coat and a tight hide, anyone knows that his blood is out of order. To keep an animal economically he must be in good health.

DICK'S BLOOD PURIFIER

is a necessity where the best results from feeding would be obtained. It tones up the system, rids the stomach of bots, worms and other parasites that suck the life blood away. Nothing like Dick's powder for a run down horse. 50 cents a package.

Leeming, Miles & Co., Agents, MONTREAL.



Curb, Splint,

contracted cord, thrush, grease heel and all forms of lameness yield readily to

Tuttle's Elixir.

Used and endorsed by Adams Express Co. Reading Trotting Park, Mass., Aug. 31, 1899.

Dr. S. A. Tuttle, V. S. Dear Sir—I want to add my testimonial to your list recommending Tuttle's Elixir for curbs, broken tendons, thrush, and nails in the feet. I have used it on all of these cases many times, and never failed to make a cure. J. H. NAY.

Given internally it is sure cure for Colic, Distemper, Founder, Pneumonia, etc. TUTTLE'S FAMILY ELIXIR cures rheumatism, sprains, bruises, etc. Kills pain instantly. Our 100-page book, "Veterinary Experience," FREE.

Dr. S. A. TUTTLE, 66 Beverly St., Boston, Mass.

Beware of so-called Elixirs—some graze but Tuttle's Avoid all blisters; they offer only temporary relief if any. LYMAN, KNOX & SON, Agents, Montreal and Toronto, Canada.

FOR SALE:

SEVERAL YOUNG

Clydesdale Stallions

Also two aged Clydesdale stallions. Also one very fine young Hackney stallion, winner of first and sweepstakes prizes. At very low prices. Write for particulars and prices to

ROBERT DAVIES,

TODMORDEN, ONTARIO.

OR CITY ADDRESS, om

34 Toronto Street, Toronto, Ontario.

CLYDESDALES

AYRSHIRES and POULTRY.



R. Ness & Sons, Howick, Que.

importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, 1 Percheron, and 1 Hackney, winners. Ayrshires of both sexes, and poultry. om

The High Price of Coal

is the cause of much present anxiety but there is a practical way of overcoming it to some extent. SEE! With an Appleton Wood Saw you can rapidly and with ease and safety



SAW your own wood and SAVE COAL, time, labor, money; or saw your neighbor's wood and make \$5 to \$15 A DAY. Strong, rigid frame adjustable dust-proof oil boxes, etc. We make 5 styles. Also the famous "Here" Friction Feed Drag. Saw, Feed Grinders, Ensilage and Fodder Cutters, Huskers, Shellers, Sweep Horse Powers, Tread Powers, Wind Mills, etc. Write to-day for Free Catalogue. APPLETON MFG. CO., 53 Fargo St., Batavia, Ill.

GOSSIP.

Hon. Wm. Beresford, Bowness Ranch, Calgary, Alta., in writing to the "Advocate," says: "Among my recent sales of pure-bred Shorthorn cattle is that of a foundation herd to Mr. R. K. Bennet, of Calgary. I have sold him six head of females, among them such cows as Kirklevington of Dallas, sire 5th Barrington Duke of Walnut Hill; dam 15th Duchess of Walnut Hill. She is seven years old, red, and a very fine cow indeed, being well ribbed, straight in the back, low-set, and ought to have an especially fine calf. The others are Oneida 3rd, a very low-set cow, with splendid coat; Little Dorritt 3rd, sired by Saxon Knight; Iowa Duchess, a cow bred in the States, and out of Kirklevington Duchess; and two young heifers of the Ruby and Magnolia families—one of them will make a particularly nice show heifer. All these cows, except the youngest, are to calve soon, so Mr. Bennet has a fine start for a herd."

Being in Ottawa, recently, an "Advocate" representative boarded a street car and was soon landed at Hintonburg, opposite the splendid dairy farm of Messrs. R. Reid & Co., breeders of typical Ayrshire cattle, Clydesdale horses, Berkshire and Tamworth hogs. In the long rows of well-arranged stalls were to be seen 60 head of big, well-formed, heavy-milking Ayrshires, a number of which are imported. At the head of the herd is the grand stock bull, Imp. Duke of York, a bull of great length, substance and quality. Among the many cows are a number showing a butter-fat test of four per cent. and with milk records of from 35 to 50 lbs. a day. In younger animals, are a number of two-year-old heifers that are extra nice, showing an evenness and truthness to type that makes winners and record-breakers. There are also about seven one-year-olds that have only to be seen to be appreciated, and a few heifer calves. In young bulls, there are three yearlings and eight calves, all sired by the stock bull, and a rare good lot they are. Any of the young animals and a few of the older ones are for sale.

The Tamworths are certainly a superior lot. The main stock boar is Imp. Whittaker Bruce, winner of a host of prizes at the leading shows. Next in service is a son of his, Maple Cliff Bruce, a young boar that for type, quality, perfect form and finish has very few equals. In females there are several brood sows, among them being Imp. Knowlflower. They are ideal animals and winners all through. In younger ones, there are several very choice young sows for sale. The Berkshires are of the improved type. The stock boar is King Highclere 2nd, a very long, even, smooth hog. In this breed there are also several young sows for sale. Messrs. Reid & Co. report sales as exceptionally brisk, being considerably taxed to keep pace with their orders.

In Clydesdales they are offering for sale the grand yearling stallion, winner of first place at Ottawa last fall, sired by The Chief, dam Erskine Libby (imp.), a mare that weighs 1,995 lbs. This is a very big, thick, brown colt, with grand, flat, dainty bone, very even in his make-up, and shows a wonderful development of muscle, possesses lots of quality, and can go some, too. He will make a 2,200-pound horse. Note Messrs. Reid & Co.'s ad., and write them, to Hintonburg P. O., Ont.

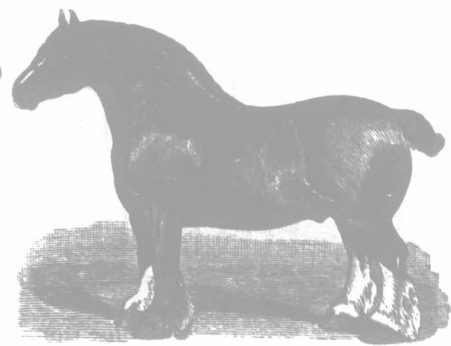
HIGH PRICES FOR BERKSHIRES.

At the annual sale of Berkshire pigs, held last month at Biltmore Farms, Biltmore, N. C., the 61 head sold brought an average of \$221.90. The sensation of the sale was the boar, Imp. Manor Faithful, sold for \$615 to Filston Farms, Glencoe, Maryland. The same establishment bought the sow, Manor Croydon Duchess, at \$505, the highest price for a sow, and Her Majesty at \$405.

TRADE NOTE.

"THE LITTLE ORGANIST OF ST. JEROME" begins and gives its title to a collection of short stories by Mrs. Annie L. Jack, of Chateaugay Basin, P. Q., well known as a contributor to the magazines. Published by Wm. Briggs, Toronto. Price, 60c., postpaid.

Stallions



DALGETY BROS.,

LONDON, ONT.,

Largest Importers of Horses in Canada.

FIFTH CONSIGNMENT this season will arrive at Toronto first week in March, and will include some extra good horses.

Our motto: Small profits and quick returns.

om

DALGETY BROS., LONDON, ONT.



ROBERT BEITH,

BOWMANVILLE, ONT.,

IMPORTER AND BREEDER OF

Clydesdale AND Hackney Horses

Is offering for sale a number of choicely-bred Clydesdales and Hackney stallions; also a number of Hackney mares. The Clydesdales are sired by the noted horses, Prince of Albion, King of the Roses, Lord Stewart and The Prior. om

CAIRNBROGIE'S GREAT STUD.

Graham Bros., Claremont, Ont.,

BREEDERS AND IMPORTERS OF

Clydesdale and Hackney Horses



HANDLING only the best of their representative breeds. We have now on hand more good young stallions and mares than ever before—home-bred and imported—of choicest breeding and ample size, combined with the very best quality and action. Prices in keeping with the quality of our offerings.

New importations just arrived. Claremont is 25 miles east of Toronto, on the C. P. R. Farm one mile from station. Correspondence and an examination of our stock solicited. om

10 CLYDESDALE STALLIONS

FOR SALE:

OF ALL AGES, IMPORTED AND HOME-BRED.

Sired by such noted sires as Baron's Pride, Mains of Airies, Sir Christopher, Prince Thomas, and others. Among them is Prince Fragrant, the first-prize three-year-old at Toronto Industrial, 1902. Stables half mile from town. Parties desiring to purchase, please write or call upon

R. R. Station: Mitchell, G. T. R.

Wm. Colquhoun, Mitchell, Ont.



Clydesdales and Shorthorns



FOR SALE: Seven choice young stallions, and several young mares and fillies. Five young bulls and bull calves, and thirty-five excellent young cows and heifers. Mostly registered in the American Herdbook. om

JOHN BRIGHT, MYRTLE, ONTARIO

Please Mention the Farmer's Advocate.

Truman's Pioneer Stud Farm

BUSHNELL, ILL.,

Has for 24 YEARS been headquarters for the CHOICEST

SHIRE, PERCHERON, SUFFOLK AND HACKNEY STALLIONS.

Sixth importation for this season received November 10th.

20 to 30 Good Practical Salesmen Wanted

Best lot of draft stallions in the United States or Canada. Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. If there is no first-class stallion in your neighborhood please write us. For our 24th annual catalogue, etc., address

J. G. TRUMAN, MANAGER,

BUSHNELL, ILL., or om

J. H. TRUMAN, Branch Stables, BRANDON, MAN.

Imp. Clydesdales and Shorthorns

Messrs. Smith & Richardson,
COLUMBUS, ONT.,

Importers and breeders of Clydesdale horses and Shorthorn cattle, are now offering 14 stallions, 9 of them imported, including brothers of the world-renowned Baron's Pride, Hiawatha, and Royal Cairnson; also 13 mares bred from imported stock. Shorthorns, imported and home-bred, all ages. Stations:

Oshawa & Brooklin, G.T.R., Myrtle, C.P.R.

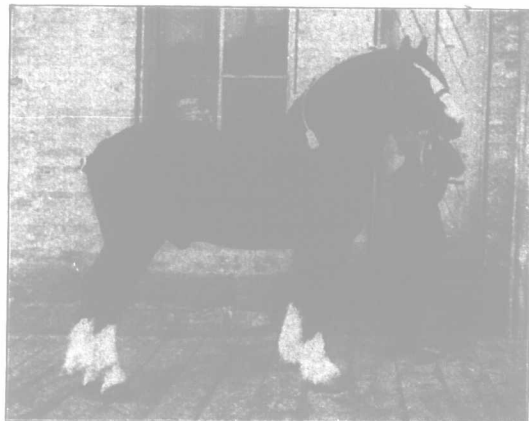
Long-distance Telephone, Columbus. Telegraph, Brooklin. om

NEW IMPORTATION

Arrived January 21st, 1903.

Thirty-five first-class Stallions just added to our stock gives buyers an unequalled selection.

Clydesdales
Suffolks
Percherons
Shires
Hackneys



Call early and be convinced of the superior quality of our horses and our very reasonable prices.

OVER TWENTY YEARS AT THE FRONT.

ALEX. GALBRAITH & SON,

JANESVILLE, WIS., AND BRANDON, MAN.

JAS. SMITH, MANAGER MANITOBA BRANCH, BEAUBIER HOUSE, BRANDON

International Importing Barn, Sarnia, Ontario.

J. B. HOGATE, PROPRIETOR.

IMPORTER OF

Clydesdale and
Shire Stallions, and
Spanish Jacks.

My third importation within
the last fourteen months
arrived Sept. 4th.

I select every one myself, and it is conceded both in Europe and America that I do get the best ones that cross the Atlantic to America. My stallions are sired by the leading sires of Scotland; ages from two to four years. The Jacks are direct from Spain, and registered, two to four years old, 14 to 15 1/2 hands high. I pay cash for my stock. I buy where I can get the best. Write for particulars. Will save you money. Mention this paper when you write.

H. H. CALISTER, Manager and Salesman.

GOSSIP.

Mr. John Isaac, Markham, advertises for sale 27 head of imported Scotch-bred Shorthorns and one Clydesdale stallion, recently landed from quarantine.

Mr. Alex. Burns, Rockwood, Ont., places an advertisement in our columns of his herd of Shorthorns, and writes: "I have been in the Shorthorn business for thirty years, and have always found the best cattle to be the most profitable. I have on hand some freshly-imported ones, which will greatly improve the herd, as they are from some of the best breeders in Scotland and are high-class animals. Anyone interested would do well to look up my ad., and also come and see the animals, as there are some thirty head to choose from."

The twenty-eighth annual meeting of the American Berkshire Association was held in the office of the Association, Springfield, Ill., January 28th, 1903. The auditor's and Treasurer's reports showed that the receipts for the year were \$6,996.80, and the disbursements \$6,650.88. As there was a balance on hand at the beginning of the year of \$1,399.45, the balance in the treasury is \$1,745.37.

The stock of the Association that has been held in blocks by individuals was purchased by the Association, and a resolution was adopted hereafter restricting the holding of more than one share of stock at \$100.00 or four shares at \$25.00 by any one individual or firm. A committee was appointed to make the necessary arrangements to reduce the shares of stock to \$25.00.

The following officers were elected: President, Geo. S. Prine, Oskaloosa, Iowa; Vice-President, Geo. F. Weston, Billmore, N. C.; Secretary, Frank S. Springer, Springfield, Ill.; Treasurer, D. W. Smith, Springfield, Ill.

The magnificent Shorthorn cow, Nonpareil 57th, whose picture appears elsewhere in this issue, was bred and is owned by Messrs. J. & W. Russell, Richmond Hill, Ont. She is of the noted Nonpareil tribe, so successfully bred at Sittyton and Kinellar in Aberdeenshire, and was sired by Lord Stanley =17849=, the junior champion bull at the World's Fair at Chicago, and who headed the young herd that won the grand sweepstakes herd prize of \$600 over all beef breeds for the Messrs. Russell at that show, and which were all bred by themselves. Her dam, Nonpareil 44th, was by Prince Royal =2288=, by Imp. British Statesman, and of the Kinellar Fair Queen family. Her granddam was by Imp. High Sheriff =131=. With such breeding and ancestry at her back, and the liberal supplies of turnips which the cattle on Springbrook farm receive, it is not surprising that Nonpareil 57th has developed into one of the grandest if not, indeed, the best cow in the Dominion, combining, as she does, in the highest degree the cardinal virtues of constitution, symmetry, quality and beauty. She is from the same dam as Nonpareil 52nd, winner in 1900 of the gold medal and championship for Messrs. Russell at the Toronto Exhibition. This best named cow is still in splendid shape, having bred two calves since winning that trophy, and is forward in calf again. The whole herd is in fine condition, and comprises a grand lot of young things of the best type and quality. The imported bull, Fitz-Stephen Forester =36030=, now at the head of the herd, a roan son of the Deane Willis bred Stephen Fitzlaverder, of the Cruickshank Lancaster tribe, sired by Bapton Javelin, out of Golden Geraldine by Count Lavender, is doing sterling service as a breeder, as the strong backs and long level quarters of his progeny amply attest, and as one would expect from him, considering the clear-cut character of his forbears, both on the side of his sire and of his dam, who is a son of the famous Warlaby Flower family. The yearling and two-year-old heifers and bulls, by Golden Measure and British Hope, are splendid specimens, built on the blocky type, full of substance and quality, and fit to show in any company in any country.

Horse Owners Should Use
GOMBAULT'S
Caustic Balsam
The Great French Veterinary Remedy.
A SAFE, SPEEDY AND POSITIVE CURE.

Prepared exclusively by J. E. Gombault, ex-Veterinary Surgeon to the French Government Stud.

SUPERSEDES ALL CAUTERY OR FIRING
Impossible to produce any scar or blemish. The safest best Blister ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses or Cattle.

As a **HUMAN REMEDY** for Rheumatism, Sprains, Sore Throat, Etc., it is invaluable.

WE GUARANTEE that one tablespoonful of our Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made.

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address
THE LAWRENCE-WILLIAMS CO., Toronto, Can.

OAKLAWN FARM.

Greatest Importing and Breeding Establishment in the World.
Famous Prize-Winning Stud of
PERCHERONS and FRENCH COACHERS.

On hand upward of
500 HEAD.
Four Large Importations in 1902, forming, with our home-breds,
The Choicest Collection Ever Assembled, including Four of the Six First-Prize winners at the great annual French Show of the Societe Hippique Percheronne in 1902. At the recent
INTERNATIONAL LIVE-STOCK EXPOSITION at Chicago, the Oaklawn Percherons achieved distinguished honors. The Champion Stallion and every First-Prize winner (except one) in the regular stallion classes were imported by Dunham, Fletcher & Coleman.

Notwithstanding the superior quality of our horses our prices are lower than can be obtained elsewhere in America.
Catalogue sent on application.

DUNHAM, FLETCHER & COLEMAN,
WAYNE, DU PAGE CO., ILLINOIS.

J. M. GARDHOUSE, WESTON P. O., ONT.
SHIRE AND CLYDE HORSES, SPORTHORN CATTLE, LEICESTER SHEEP.

One imp. 4-year-old Clyde stallion, half-brother to the champion Hiawatha, for sale. Also Clyde and Shire stud colts. Newham's Duke, the gold and silver medal Shire stallion, in service. Chief Ruler, bred by W. S. Marr, Uppermill, heads the herd. Imported and home-bred cattle for sale.
Farm, 15 miles from Toronto. Weston station, G. T. R. and C. P. R., telephone and telegraph offices.

BARON DE CHAMPOUIS
Proprietor.

BOOM
Importer.

DANVILLE, QUE.

USY REEDERS ELIEVING LOOD
BUSINESS Y UYING ELGIANS

FOR SALE: 6 CLYDESDALE STALLIONS
from 1 to 8 years old, good individuals, of most fashionable breeding and good breeders, and a few young mares. Come and see them and their produce. Also 2 young Shorthorn bulls. I. DE VITT & SON, Building Junction Sta., on Freeman P. O. G. T. R. 1 mile from farm.

FOR SALE: An Imported Hackney Stallion
Registered in England and Canada. He is solid black, weighs 1,370 lbs.; stands 16 hands high; girths 6 ft. 6 inches. Sound, and a sure foal-getter. He has high action, and he never was beaten in the show-ring, either as a Hackney or as a carriage stallion. The reason for selling, owner going West. For price and particulars apply to G. A. RYAN, Riceville, Ont. om

Registered Clydesdale Fillies FOR SALE.

The well-matched fillies, Maud Lawrence 3531, by Imp. Lawrence Again, 3 years old, dam Hattie McInnis; and Lady McInnis, by Imp. McInnis, dam Imp. Maid of Harraing. She is 2 years old. They are one of the best pairs in Canada. R. D. DUNDAS, FRASERVILLE STATION. SPRINGVILLE P. O.

GEO. STEWART, Howick, Quebec, IMPORTER OF



Clydesdale Horses

has now on hand for sale 3 two-year-olds and 1 yearling stallion, carrying the blood of Hiawatha, Darnley, Lord Erskine, Prince of Wales and Time o' Day, combining size, style, quality and action. Also 1 five-year-old mare, with filly foal. The best lot I ever imported. Write quick. GEO. STEWART, Howick, Quebec.

RED RIBBON STUD Largest Importers and Breeders of

Shire Horses in the Dominion,

including first-prize winner at Royal Agricultural Show in England, and winning more prizes at Industrial and other large shows than all others combined.

Stallions and mares all ages, home-bred and imported, always for sale. Over 50 to choose from. MORRIS & WELLINGTON, Fonthill P. O., Welland County, Ont.

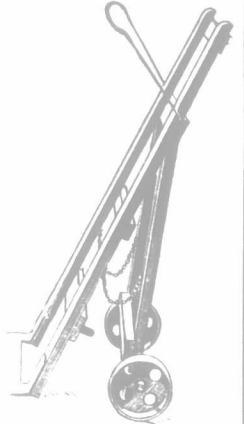
DISCARD Hamstraps and get "Sure-Go" Hamfastener A 20th Century Idea. No Buckle. Outlasts Harness. Simple; quick; works like a charm; can work it with mittens on. 100,000 pre-engaged. Introduced through Mail Orders awhile @ 50 cents a pair, prepaid. Order today. Send only current funds. Address, JOHN HAUSAM, 175 B. RACINE, WISCONSIN, U. S. A.

TREES FRUIT. ORNAMENTAL.

Actually first hand. Why pay intermediate profits when you can buy direct from the growers? Send at once for Catalogue and Price List to

WINONA NURSERY CO., WINONA, ONT.

YOUR ATTENTION



is drawn to this little article,

Combined Truck and Bag Holder

BECAUSE: It will pay for itself. Saves your bags. Does away with one man.

You will find it the HANDIEST ARTICLE around the FARM. Price, \$3.00.

We make— WINDMILLS, PUMPS, GRINDERS, FANNING MILLS, ETC. Write us. ONT. WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT. Manitoba Agents: Manitoba Pump Company, Brandon, Manitoba.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

Members of the American Chester White Record Association held the annual meeting at Columbus, Ohio, and elected the following officers: President, F. P. Hardin, Lima, Ohio; Vice-president, W. H. Pool, Delaware, Ohio; Secretary and Treasurer, Carl Freigau, Dayton, Ohio. Send pedigrees of Chester White swine, no matter in which state they are improved, to Carl Freigau, Dayton, Ohio

The classification for sheep at the Royal Show of England provides for 21 distinct breeds, as follows: Oxford Downs, Shropshires, Southdowns, Hampshire Downs, Suffolks, Lincolns, Leicesters, Cotswolds, Border Leicesters, Kent or Romney Marsh, Wensleydale, Dorset Horn, Devon Longwool, Dartmoor, Exmoor, Cheviot, Blackfaced Mountain, Lonk, Herdwick, Welsh Mountain, and Ryeland. This is a pretty generous list, but does not comprise all the known breeds in Great Britain.

IMPORTANT PURCHASE OF SHORT-HORNS.

Messrs. A. & G. Mutch, near Regina, N.-W. T., having determined to found a herd of Shorthorns, recently visited "Maple Shade," the home of Hon. John Dryden, at Brooklin, Ont., where they found a large number of choice heifers of extra quality, from which four were selected, representing as many different families—two roans and two reds, the latter being sired by the imported bull, Collynie Archer, and the former by Prince Gloster, the present stock bulls at Maple Shade, both superior animals of the choicest breeding, and prepotent sires, as evidenced by the younger animals of the herd. Collynie Archer was bred by Mr. Duthie, of Scotland, and selected for use on Mr. Dryden's herd. His pedigree is exactly the same as that of the great show bull, Marengo, the winner of the championship in Great Britain for three successive years. Collynie Archer has made a splendid record at Maple Shade. Ten of his heifers, all under two years and of Scotch breeding, made an average of \$710 each in June last at auction in Chicago. Prince Gloster, the younger bull, seems likely to prove equally good as a breeder. One of his heifers of last year's crop, and the first that has been shown, easily took first place in a large class at the Whitby Model Fair last fall.

One of the heifers purchased belongs to Mr. Cruickshank's favorite Lavender family, tracing through bulls used by Mr. Dryden to imported Lavender Pride by Cumberland, acknowledged by all to be one of the greatest sires of the Sittyton herd. He was the sire of the greatest Shorthorn bull of recent years, Scottish Archer. Another heifer belongs to the Cruickshank Brawith Bud family, the pedigree showing eight cows of Mr. Cruickshank's own breeding. Both these heifers are exceptionally thick and low-set, with splendid coats of hair. Another one is of Mr. Cruickshank's Venus or Easthorpe family, and is a beautiful red, on short legs, and a typical Shorthorn. The fourth is of great size for her age, and in every way desirable. She belongs to the Lady Eden tribe, the oldest of all the families in Mr. Dryden's herd. Her dam, at six years, was sold at Chicago for \$530, and her own sister for \$440. The individuals of this family are uniformly good, and this heifer is one of the best. We congratulate Mr. Mutch on his excellent commencement. He has, no doubt, secured animals of great individual merit and of the choicest breeding to be found anywhere.

These heifers are to be bred to Mr. Dryden's prize Cruickshank bull, Clipper Hero, and next year Mr. Mutch will add a first-class young bull for his use in the future. We shall watch the result with great interest. It is not often young breeders start with such choice pedigrees and animals which show it by their appearance, and we feel sure that the whole country will gain by the further development of this herd.

No. 3 "Prize" Best Feed Grinder Money Can Buy for Operation with Gasoline or Steam Engine, Tread Power, Power Wind Mill, etc. WHY? Because it grinds rapidly making splendid feed, table meal or graham flour. Has ample capacity for 4 or 5 horse power, and an automatic feed regulator, which prevents its choking down the lightest power; is built throughout of iron and steel and will last a life time. Thousands in use for 10 and 15 years still as good as new. We make 65 sizes and styles of Feed Grinders, including the only really successful Corn and Cob, and Cereals, Cob and Shuck Feed Grinders. Also a full line of Enslage and Fodder Cutters, Huskers, Shellors, Wood Saws, Sweep Horse Powers, Tread Horse Powers, Wind Mills etc. Write to-day for free catalogue. APPLETON MFG. CO., 83 Fargo St. Batavia Ill.

EVERGREENS Hardy sorts, Nursery grown, for wind-breaks, ornament and hedges. Priced, \$4 to \$10 per 100-50 Great Bargains to select from. Write at once for free Catalogue and Bargain Sheet. Local Agents wanted. D. Hill, Specialist, Dundee, Ill.

AYRSHIRES and YORKSHIRES Young bulls fit for service and young calves of either sex, all from heavy-milking dams and imported sires. Shows safe in pig, and early January pigs, either sex, of the right type and breeding. Write us for anything you may need in either breeds, and you will find our prices very reasonable. ALEX. HUME & CO., Menie P. O.

High Park Stock Farm Galloway Cattle. A few choice young heifers and bulls for sale. Inspection invited. SEAW & MAESTON (Late A. M. & R. Shaw). P. O. Box 294, BRANTFORD, ONT.

J. Richards, Bideford, P. E. Island, Importer and breeder of Aberdeen-Angus Cattle, Clydesdale Horses, Shropshire Sheep, and Shetland Ponies. Stock always for sale. om

ABERDEEN - ANGUS. For Sale: Laird of Tweed-hill 29486. A prizewinner, 4 years old; 1-year-old bull and two bull calves, sired by him and out of winners. W. HALL, Washington P. O. Drumbo Station, om

SALE! INGLESIDE HEREFORDS. Young bulls, cows and heifers of most up-to-date type and breeding. If you want good Herefords at good-value prices, send for illustrated catalogue, and state requirements. Also import and bred Hereford cows and heifers. H. D. SMITH, Compton, Que.

HEREFORDS, HEREFORDS An offering for sale Herefords of up-to-date breeding, either sex, and all ages; also a good 24-months-old bull; a grand stock getter. Write or call on WALTER BENNETT, CHATHAM, ONTARIO.

CHOICE HEREFORDS A. S. HUNTER, DURHAM, ONT., has for sale the following high-bred Herefords: 25 Young Registered Bulls. 30 Young Registered Heifers. 10 Young Registered Cows. The above stock are in good condition, and are bred from imported and American-bred sires. Ranchers will do well to inspect this offering.

FOR SALE: 27 Head of Imported SHORTHORNS just landed from quarantine. Also one Clydesdale stallion. JOHN ISAAC, Markham, Ont.

SCOTCH SHORTHORNS FOR SALE. 2 imported bulls; 2 from imp. sire and dam; 2 home bred. Females of all ages, imp. and home bred. ALEX. BURNS, Rockwood P. O. and Sta., G. T. R.

Shorthorns, Clydesdales and Leicesters FOR SALE: Young animals of both sexes always on hand for sale; bred in the purple, and as good as the best. 20 Leicesters, both sexes, all ages. WM. McINTOSH, Burgoyne P. O. Forc. Egin Sta

JOHN DRYDEN & SON, BROOKLIN, ONTARIO, BREEDERS OF CRUICKSHANK SHORTHORNS AND CHOICE SHROPSHIRE SHEEP. Five choice young CRUICKSHANK bulls. Straight, smooth, low-down and of show-yard type. Visitors welcome. om

For Sale: One Shorthorn Bull Calf Twelve months old, roan, of the well-known Wimple family. He is a good one. Also some females of the Crimson Flower, Golden Drop and Cruickshank Lovely strains. HUGH THOMSON, BOX 556, ST. MARY'S, ONT.

SHORTHORNS. Dark red bull calf, Blue Ribbon 2nd, 13 months old, sired by Blue Ribbon (imp.) 17095 (63703), dam by Royal George (imp.) (64728). Bull calf, 7 months old, dark red; also yearling and two-year old heifers. om JOHN McFARLANE, - DUTTON, ONT.

W. G. PETTIT & SONS FREEMAN, ONT., CAN., Importers and breeders of

Scotch Shorthorns and SHROPSHIRE SHEEP,

make special offering for January and February. 2 imported bulls coming 2 years old. 4 bull calves, from 5 to 12 months old, from imported sire and dam. 6 bulls, 10 mos. to 2 yrs., by Imp. sire. Imp. and home-bred cows and heifers of all ages. Our entire flock of Shropshire sheep, 75 head. om

Mercer's Scotch Shorthorns I am now offering four nice red bulls, from 13 to 10 months old; a number of young cows and heifers, in calf and calves at foot. For breeding, refer to Christinas number. Prices right. Visitors met on shortest notice. Drop a card or wire before coming. Farm one and a half miles from C. P. R. station, Markdale, Ont. om THOS. MERCER, Proprietor.

R. & S. NICHOLSON Sylvan P. O. Parkhill Station, Ont. Importers and breeders of

SHORTHORNS Have for sale: 13 IMPORTED HEIFERS, 2 IMPORTED BULLS, 7 YEARLING BULLS, 20 HEIFERS (choicest). Home-bred herd composed of Nonparvells, Minns, Clementinas, Cruickshank Lovelys, Shethin Rosemarys, A. M. Gordon's Estelles, Miss Symes, etc. om

Bulls! Shorthorns Bulls! IMPORTED and CANADIAN-BRED

ORDERS TAKEN FOR BULLS AND HEIFERS, COTSWOLD AND LEICESTER SHEEP, YORKSHIRE AND BERKSHIRE PIGS, AND DELIVERED TO ANY PART OF MANITOBA OR THE NORTHWEST. Write for prices. Satisfaction guaranteed.

Goodfellow Bros., Macville, Ont. om

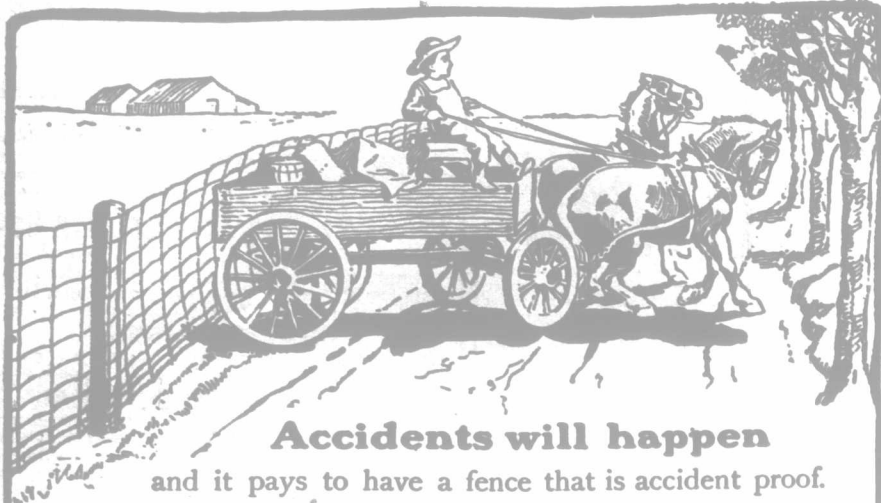
ARTHUR JOHNSTON, GREENWOOD, ONTARIO, CANADA, Offers at private sale young

SHORTHORN BULLS AND HEIFERS of the choicest Scotch breeding. Quality unsurpassed. om

J. & W. B. WATT BREEDERS AND IMPORTERS OF

Shorthorns, Clydesdales and Berkshires

We breed our show cattle and show our breeding cattle. The imported bulls, Vicaroy and Scottish Peer, head the herd. Imported and home-bred cows and heifers for sale. A few choice young bulls on hand. Our herd at Toronto won three firsts, a second and third out of five herd classes. om Salem P. O. and Telegraph Office. Elora Sta., C.P.R., G. T. R.



Accidents will happen

and it pays to have a fence that is accident proof.

The No. 7 Top Wire in **Page Fences** is break-proof at 3000 pounds' strain—common wire same size at 1700 pounds.

Page Fence Wire is tempered to stand that strain. Its coil takes up summer slack and gives spring for winter tension, and acts as a cushion to meet accidental strains.

"Page Fences wear best"

PAGE WIRE FENCE CO., Limited
Walkerville, Ont. Montreal, P.Q. St. John, N.B.

107

PINE GROVE SHORTHORNS AND SHROPSHIRE.

Our herd comprises over 150 females, including our last importation of 30 head, all of the most esteemed strains. Of Shropshires, we offer a few choice rams, also high-class ewes bred to first-class rams. Address

W. C. EDWARDS & CO.,

Rockland, - - - - - Ontario.

VALLEY HOME STOCK FARM
SCOTCH SHORTHORNS Choice young bulls and heifers for sale from imported and home-bred cows.
AND
BERKSHIRE SWINE. Also some young Berkshires. om
S. J. PHARSON & SON,
C. P. R. Station and Telegraph Office. MEADOWVALE P. O.

Spring Grove Stock Farm
Shorthorn Cattle and Lincoln Sheep.

HERD prize and sweepstakes at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by the Marr Missie bull, Imp. Wanderer's Last, last of the get of the great sire, Wanderer, of the Cruickshank Bra with Bud tribe. High-class Shorthorns of all ages for sale. Also prize-winning Lincolns. Apply om

T. E. ROBSON, ILDERTON, ONT.

SHORTHORNS. A number of choice young bulls, heifers and cows, for sale. om
A. M. Shaver, HAMILTON Sta.
Ancaster P. O., Ont.

SCOTCH SHORTHORNS AND SHROPSHIRE. Present offering:—Five young bulls and 4 yearling heifers, and a few cows. Shropshires of both sexes and all ages. om
BELL BROS., Bradford P. O. and Station.

SHORTHORNS. Lady Fannys and Beautys for sale 5 bulls, from 6 to 14 months old; 7 heifers, from 1 to 3 years' old, some of them in calf to Prince Eclipse 33049. om
James Caskey, Tiverton P. O., Kincardine Sta.

QUEENSTON HEIGHTS SHORTHORNS
SCOTCH AND SCOTCH TOPPED

In service: Derby (Imp.) = 32057 = ; Lord Montalis, by Collynie Archer (Imp.) = 28860 = . Some choice heifers and young cows with calf at foot or in calf to imported bull at moderate prices.

HUDSON USHER,
QUEENSTON, ONT. om
FARM 3 MILES NORTH NIAGARA FALLS

FOR SALE
6 SHORTHORN BULLS

14 months old; also heifer and cow. Would sell a cartload. Imp. Prince William at head of herd. om Jas. Gibb, Brookside, Ont.

SHORTHORNS and GLYDESDALES.

We have for sale five bull calves, from 8 to 24 months, from imp. sire and dams; also six extra good stallions, from two to six years old.

JOHN MILLER & SONS,
BROUGHAM, ONT.
CLAREMONT STATION, C. P. R. om

SHORTHORNS (IMP.)

Cows and heifers, imp. and home-bred. Bulls, imp. and home-bred—all ages. Representing the fashionable blood of Scotland. om
EDWARD ROBINSON,
MARKHAM P. O. & STN.

RIVER FARM SHORTHORNS

I am now offering 6 choice young bulls, from 8 to 16 months old, sired by Lord Lavender 28855. They are rare good ones. Price right. om
H. PARKER, DURHAM P. O. and STATION.

SHORTHORNS. Imported and Canadian-bred. I have for sale eight young bulls from 8 to 12 months old; also a few choice heifers, all got by Captain Mayfly (Imp.), first-prize aged bull at Toronto and London in 1902. om
JAS. A. OCKERAE, Shakespeare, Ont.

SHORTHORN BULLS FOR SALE: A choice lot of Shorthorn bulls from 10 to 16 months old, sired by Imp. British Statesman (63729) = 20633 = ; and cows of the Mars family. They must be sold at once. Prices away down to suit customers. **FITZGERALD BROS.,** om Elmvale Station, G.T.R. Mount St. Louis P. O.

GREEN GROVE SHORTHORNS: I am now offering a few heifers, Claretta, Floras, and one Missie; also a choice year-old bull, by Aberdeen of Markham. om
W. G. MILSON, GORING P. O. and MAREDALE STATION.

Shorthorn Cattle, Lincoln Sheep

Imp. Prime Minister at head of herd. Imp. Clippers, Miss Ramsdens, and other Scotch families. Lincolns won more than half the money and first for flock at the Pan-American; International, Chicago, 1901 and 1902.

J. T. GIBSON, om DENFIELD, ONT.

SCOTCH COWS and HEIFERS

of good quality, in calf to one of the great Scotch sires of the period, and a few young bulls, for sale at prices you can stand. Shropshire rams and ewes of greatest individual merit and breeding, for sale as usual. Ask for catalogue. Representative in America of Alfred Mansell & Co., College Hill, Shrewsbury, Eng. om
ROBERT MILLER, - STOUFFVILLE, ONT.

GOSSIP.

O'Neil Bros., Southgate, Ont., write: "We have decided to offer for sale our great stock bull, Sunny Slope Tom 1st 1170 and 86085, bred by C. S. Cross, of Emporia, Kansas, U. S. A. He was sired by Wild Tom, he by Beau Real, he by anxiety 4th, by Anxiety. As a calf, Sunny Slope Tom won first in class and third sweepstakes Hereford bull of any age. He is a sure stock-getter, and his get have been successful in the show-ring whenever shown. The other bulls we are offering are plainer and are within the reach in range of value of the farmer and ranchman. The females are a very choice lot, and will be appreciated by prospective customers on examination. We have had a very successful season so far, having disposed of 15 bulls and 20 females of all ages since fall. We desire to express our appreciation of the "Advocate."

TREDINNOCK AYRSHIRE.

Quebec is the home of the Ayrshire. In this Province are a number of herds of continental fame for superior excellence, and none more so than the Tredinnock herd, the property of Mr. Robt. Reford, of Montreal. The farm lies close to the station at Ste. Anne de Bellevue, on the main line of the G. T. R., 20 miles west of Montreal. Connection is also made at Ste. Anne with the C. P. R. This model farm is under the management of Mr. James Boden, who was born and reared in Ayrshire, and, consequently, from childhood has been associated with this favorite dairy breed of cattle, and, having a natural innate love for his native cattle, has thoroughly mastered their peculiarities, and as a judge of what constitutes typical dairy form in this breed, has few equals and no superiors. The herd is made up of 70 head, all either imported direct by Mr. Boden or bred from imported stock, and it is a sight worth going miles to see—the long rows of beautiful, deep-bodied, sleek animals, with their large, even udders, with the breeding of each animal placed under glass over their heads, and the floors kept scrupulously clean. The stock bulls are: Lord Dudley of Drumsue (Imp.), by Brownchief of Drumsue. Lord Dudley is a massive, typically-formed bull, weighing 2,000 lbs., and winner of first and sweepstakes at Toronto and Ottawa in 1901. Last fall, owing to his getting a little sour on strangers, he was not shown. The other stock bull is that grand old noted sire, Glencairn 3rd (Imp.), a bull second to nothing ever imported as a sire of winners. In young bulls, we were shown seven August and September calves, all by Lord Dudley, and out of such grand cows as Betsy 1st of Fairfield Mains (Imp.), winner of first at Buffalo in milk test and second at Toronto last fall; Bluebell of Hillhouse (Imp.), a Scottish champion, milk record 60 lbs. a day; Jessie of Ste. Annes by Imp. Glencairn 3rd, whose test shows a percentage of 5% butter-fat, Molina of Ste. Annes by Imp. Glencairn 3rd, winner of second at Toronto, '02; Kirsty Wallace of Auchincrain (Imp.), milk record 66 lbs. a day, testing 4.0 per cent., and winner of second place in the milk test at Buffalo; Lady Grace of Ste. Annes by Glencairn 3rd, winner of first at Toronto, '02, in the three-year-old class, with a butter-fat test of 3.30 per cent.; Polly of Mechlin (Imp.), with a test of 4.30 per cent.; Stately 1st of Balmangan (Imp.); Lily 1st of Barcheskie (Imp.), winner of 17 first prizes in Scotland. Indeed, the whole herd shows an equally high test of butter-fat and milk records. At present, there are for sale eight yearling heifers, out of imported cows and sired by imported bulls, as choice a lot as the bred produces, and eight heifer calves, besides a number of older ones. In fact, there are very few animals in this herd reserved, so that if it is a show animal, a producer, or a combination of both that is wanted, either in single animals or in car lots, Tredinnock herd can produce them. Write Mr. James Boden for prices, etc. to Ste. Anne de Bellevue Que.

Baby's Own Soap
PURE, FRAGRANT, CLEANSING.
ALBERT TOILET SOAP CO., MFRS. MONTREAL.

IMPERIAL CREAM TARTAR BAKING POWDER
PUREST, STRONGEST, BEST.
Contains no Alum, Ammonia, Lime, Phosphates, or any Injurious.
E. W. GILLET COMPANY LIMITED Toronto, Ont.

Orchard Hill Shorthorns. I am now offering 13 heifers from six months to two years, 4 bulls from 10 to 13 months old, and 7 very heavy milking cows. Here is a rare chance to get stocked with pure-bred cattle at reasonable terms. **A. Johnston, Vandelear P. O., Markdale Sta.**

SHORTHORNS. THORNHILL HERD, ESTABLISHED 27 YEARS. Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls. om
REDMOND BROS., Millbrook Sta. and P. O.

BONNIE BURN STOCK FARM, 40 rods north of Stouffville station, offers Scotch Shorthorns; choice Shropshires and Berkshires from imported and Canadian-bred cows. All at farmers' prices. Inspection invited. om
D. H. RUSNELL, STOUFFVILLE, ONT.

SCOTCH SHORTHORNS. Urya, Stamfords and Matchless. Young, vigorous females, all ages, for sale. Shropshire sheep and Yorkshire pigs. **ROBT. BATTY,** om Glenbourne Farm. Meaford P. O. & Sta.


SHORTHORNS: We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruickshank, with Lavender and Miss Ramsden dams. **THOS. ALLIN & BROS.,** om Oshawa, Ont.

Shorthorns, Berkshires and Leicesters. FOR SALE: Choice two-year-old heifers, well gone in calf; also yearling heifers, bull calves. Boars and sows fit for breeding, and young pigs. om
ISRAEL GROFF, ALMA, ONTARIO.

HAWTHORN HERD of deep-milking Shorthorns for sale. Six young bulls of first-class quality and breeding and from 14 dairy cows. om
WM. GRAINGER & SON, Londesboro, Ont.

Lakeview Shorthorns. Herd represented by such noted families as Stanfords, Minas, Marr Floras, Crimson Flowers, Village Girls, Bucan Lassies, and Lavinias. Stock of both sexes and all ages for sale. om
James Bowes, Strathclair P. O., Meaford Sta.

WHAT THE NATIONAL WILL DO.



It will increase the yield of butter about 1 lb. per week, and about 30 to 60 lbs. per year, and will pay 8% on its cost price annually with one cow, and pay for itself in one year with 12 to 15 cows.

It will be placed on trial beside any other Cream Separator and prove to be superior in construction for convenience, easy operating, cleaning, close skimming, quality of cream and butter, style, fine finish and lasting service.

The only Cream Separator having its bowl and all parts made and finished in one shop in Canada under the supervision of the best Cream Separator experts obtainable.

The bowl is not filled with innumerable complicated parts to adjust and wash every time it is used. It has no stable-tainted, enamelled casing into which the milk and cream is discharged, that requires hot water at the barn to wash it every time it is used.

The National is designed for convenience and to overcome every objectionable feature found in other Cream Separators. A sample machine sent for a free trial to prove all that is claimed for the National.

NATIONAL No. 1A.
Capacity, 450 to 500 lbs. per hour.

NATIONAL No. 1.
Capacity, 330 to 350 lbs. per hour.

NATIONAL B.
Capacity, 250 lbs. per hour.

Give the National a trial. Send for particulars to any of the following general agencies:

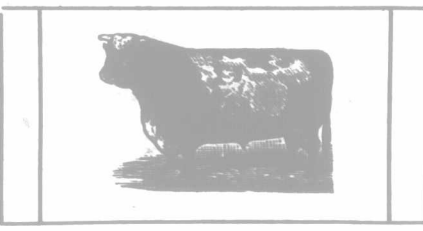
The CREAMERY SUPPLY CO., Guelph, for South-western Ontario.
The T. C. ROGERS CO., Guelph, for Ontario North and East.
JOS. A. MERRICK, Winnipeg, Man., for Manitoba and N.-W. T.
JOHN A. ROBERTSON, 108 Union Avenue, Montreal, Quebec.

The Raymond Mfg. Co. of Guelph, GUELPH, ONT. LIMITED.

GEO. ISAAC, BOMANTON, ONT.
IMPORTER AND BREEDER OF
Scotch Shorthorn Cattle

Have imported, this year, 68 head of Shorthorns—6 bulls and 62 females. Twenty-seven head left quarantine 11th Sept., 1902. Intending purchasers should see this stock or correspond.

BOMANTON P. O., COBourg STATION, G. T. R.



CHOICE SCOTCH SHORTHORNS.

An excellent lot of young bulls of the Cruickshank Village Blossom, Lovely and Mysie families; also Marr Missies and Kinellar Clarets. A few choice young females for sale as well.

H. SMITH, Exeter, Ont.
Farm adjoins Exeter Station, on the G. T. R., 30 miles north of London.

Scotch Shorthorns
BREEDING FEMALES ALL IMPORTED.

Imp. Golden Drop Victor our present stock bull. Eleven young bulls and some young cows for sale at reasonable prices.

H. CARGILL & SON,
Cargill Station, G. T. R. CATALOGUE FREE. Cargill, Ontario.

H. J. Davis, Woodstock, Ont.
40 HEAD IMPORTED and CANADIAN-BRED SHORTHORNS.

22 head just home from quarantine, including a choice lot of heifers and young bulls of the best breeding. Herd headed by the Willis Cruickshank-bred bull, Bapton Chancellor (imp.), and the Lovat bull, Viceroy. Woodstock: Main line G. T. R. and C. P. R.

MAPLE LODGE STOCK FARM.
ESTABLISHED 1854.

SHORTHORNS.—First-prize milking strains, best Scotch breeding. Young bulls and heifers for sale.

LEICESTERS.—A grand lot of ewes, bred to our imported rams, and a few choice rams now for sale.

A. W. SMITH,
Alisa Craig Station, G. T. R., 3 1/2 miles. MAPLE LODGE P. O., ONT.

GOSSIP.

Frank Rockefeller, of Belvidere, Kan., has presented the Kansas State Agricultural College with the best Hereford bull calf he could select from his herd. The calf is sired by Columbus 17th, the second-prize bull at the late International Exposition. This is another instance of the philanthropic attitude of the American farmers toward their agricultural colleges.

Dalgety Bros. have sold to M. C. E. Bebee, of Owen Sound, one of their newly-imported stallions, Sir Martin (10649). This young horse is one of the best kind, and will make a very heavy one, with the best kind of feet and legs, with the feather in the right place. This horse was only shown once, at Barr Head open show, where he won first prize in a large competition. He was sired by the noted sire, Lord Stewart (10084), grandsire Castlereagh (18342). His dam is the noted mare, Lady Die by Golden Avon, second dam, The Dowager by Darnley (222), third dam by Walter Scott. If this horse proves as good a stock producer as his sire is, he will be a great boon to the people that use him. His sire's service fee was fifty dollars (\$50.00). Sir Martin was bred by the Most Honorable Marquis of Londonderry, K. G., Seaham Hall, Seaham Harbor.

Ingleside Herefords is a name well known among lovers of the white-faced beefers all over America. Fourteen years ago Mr. H. D. Smith, the present owner, established what has since been known as the Ingleside herd on his farm at Compton, Quebec, and from their superior excellence individually and wonderful success in the show-ring have become noted, and are universally recognized as the banner herd of Canada. Ingleside farm lies about 2 1/2 miles from Compton station, and 114 miles east of Montreal. This splendid farm, which comprises 950 acres of rich, arable land, is, no doubt, the best equipped stock farm in Canada. The stables are commodious, the plan perfect for feeding and cleaning, a complete waterworks system permeates all the buildings, the windows are large and plenty of them, the ventilation adopted is the most modern, the whole of the buildings are lighted by electricity generated from the powerhouse on the farm, which also supplies the power for all the farm work, such as grinding and cutting feed, sawing wood, pulping roots, threshing, etc. The herd at present numbers 160 head, and represents the get of such noted bulls as Ancient Briton, Anxiety, Anxiety 3rd and 4th, Bourton, Bradwardine, Cassio, Corrector, Hartington, Kodac of Rockland, Launcelot, Lord Wilton, Rupert, Silurian, Sir Horace, The Grove 3rd, Tushingham, Viscount Wilton and Mark Hanna. A great many of the females in the herd are imported, and about every two years, in order to infuse new blood in the herd and, where possible, improve the standard and quality, fresh importations are made. The present main stock bull is the massive, 2,300-pound, prizewinning bull, Prince Ingleside 2nd, a son of the great bull, Sir Horace. Second in service is Bourton Ingleside, a yearling, sired by Mark Hanna, a son of Eureka; dam Lady Bountiful, by the great bull, Bourton, the sire of Ancient Briton, the sweepstakes winner at Chicago in 1893. For sale there are four young bulls, sired by Mark Hanna, and three of them out of imported dams. There are also about 25 heifers, one and two years old, the bulk of them sired by Mark Hanna, among which we noticed Downtown Ingleside 3rd, a half-sister to the sweepstakes winner last fall; a two-year-old and a yearling, daughters of Sylvan 7th of Ingleside, by Mark Hanna. This pair have few equals, being wonderfully perfect in their form. For the last seven years this herd has won the lion's share, and a big share, too, of all the prizes at the leading shows in Canada. They are under the care and management of Mr. Fred Norton, and what he does not know about sitting up a Hereford to show at its best is hardly worth knowing.

THE VALUE OF CHARCOAL.

Few People Know How Useful it is in Preserving Health and Beauty.

Nearly everybody knows that charcoal is the safest and most efficient disinfectant and purifier in nature, but few realize its value when taken into the human system for the same cleansing purpose.

Charcoal is a remedy that the more you take of it the better; it is not a drug at all, but simply absorbs the gases and impurities always present in the stomach and intestines, and carries them out of the system.

Charcoal sweetens the breath after smoking, drinking, or after eating onions and other odorous vegetables.

Charcoal effectually clears and improves the complexion, it whitens the teeth, and further acts as a natural and eminently safe cathartic.

It absorbs the injurious gases which collect in the stomach and bowels; it disinfects the mouth and throat from the poison of catarrh.

All druggists sell charcoal in one form or another, but probably the best charcoal, and the most for the money, is in Stuart's Absorbent Lozenges. They are composed of the finest powdered willow charcoal and other harmless antiseptics in tablet form, or rather in the form of large, pleasant tasting lozenges, the charcoal being mixed with honey.

The daily use of these lozenges will soon tell in a much improved condition of the general health, better complexion, sweeter breath, and purer blood; and the beauty of it is, that no possible harm can result from their continued use, but, on the contrary, great benefit.

A Buffalo physician, in speaking of the benefits of charcoal, says: "I advise Stuart's Absorbent Lozenges to all patients suffering from gas in stomach and bowels, and to clear the complexion and purify the breath, mouth and throat. I also believe the liver is greatly benefited by the daily use of them. They cost but twenty-five cents a box at drug stores, and although in some sense a patent preparation, yet I believe I get more and better charcoal in Stuart's Absorbent Lozenges than in any of the ordinary charcoal tablets."

SHORTHORNS (imported)
One imported and one Canadian-bred bull. A few cows and heifers.

THOS. RUSSELL, EXETER, ONT.

English Shorthorns.

Booth and Bates Shorthorns, topped with Cruickshank bulls. Young cows, bulls and heifers always on hand for sale. Right for the American market. Royal and Highland prizewinners included for the last two years. Close on \$100 won in prize last year and this.

WM. BELL,
Rathough Farm, Alnwick, Northumberland, Eng.

For Sale Some choice young YORKSHIRES (Highly well strain) of both sexes and different ages; also young Shorthorn bulls, sired by British Hope (3006). Price moderate. Write: C. & J. CARUTHERS, Cobourg Station and P. O. Ont.

I GUARANTEE A \$5.00 PACKAGE OF **BARREN KOW CURE** postpaid, to make any cow under 10 years old breed, or refund money. No trouble, no risk. Given in feed twice a day.

L. F. SEILECK, Druggist, Morrisburg, Ont.

Best Jersey Bulls
AT LOWEST PRICES.

Owing to the large sale of registered Jersey cows, all in milk (18 head), that I have just made, I offer several bull calves, of unsurpassed breeding and from tested dams, at prices that will surprise purchasers. This, because the sale of so many cows in profit leaves me short of milk for the present. Also some choice heifers in calf.

Mrs. E. M. Jones, Brockville, Ont.
Box 324.

DO YOU WANT A SNAP?
Jersey cows and heifers, also two young bulls, at low prices, from prizewinning stock. Write for prices.

W. W. EVERITT, Dun-ston Park Farm, CHEATAM, ONT.

Jersey Bulls

Out of tested show cows and sired by Brampton's Monarch (imp.). As we have the largest herd of pure-bred Jerseys in Canada, we are able to offer great choice. Come and see or write for what you want.

B. H. BULL & SON,
C.P.R. and G.T.R. stations, Brampton, Ont.

HOLSTEIN BULLS
For Sale: From 4 to 7 months old, having some in their pedigrees from such strains as Inka, Netherlands, Royal Aegrie, and Tritonia Prince, and out of imported females that have proven their worth at the fall.

THOS. B. CARLAW & SON,
Warkworth.

JERSEYS, COTSWOLDS, YORKSHIRES.
Registered Jersey cattle, Cotswold sheep and Yorkshire pigs for sale. A few nice heifers, 6 mos. to 2 years, and 1 yearling bull, by Count of Pine Ridge, grandson of Adelaide of St. Lambert, record 84 lbs. milk daily. om WM. WILLIS, NEWHAMPTON, Ont.

KNOWS NO DISTINCTION

Rich and Poor Alike Suffer from Catarrh in this Climate.

All observant physicians have noticed the enormous increase in catarrhal diseases in recent years, and the most liberal and enlightened have cheerfully given their approval to the new internal remedy, Stuart's Catarrh Tablets, as the most successful and by far the safest remedy for catarrh yet produced.

One well-known catarrh specialist, as soon as he had made a thorough test of this preparation, discarded inhalers, washes and sprays, and now depends entirely upon Stuart's Catarrh Tablets in treating catarrh, whether in the head, throat or stomach.

Dr. Risdell says: "In patients who had lost the sense of smell entirely, and even where the hearing has begun to be affected from catarrh, I have had fine results after only a few weeks' use of Stuart's Catarrh Tablets. I can only explain their action on the theory that the cleansing and antiseptic properties of the tablets destroy the catarrhal germs wherever found, because I have found the tablets equally valuable in catarrh of the throat and stomach as in nasal catarrh."

Dr. Estabrook says, "Stuart's Catarrh Tablets are especially useful in nasal catarrh and catarrh of the throat, clearing the membranes of mucus and speedily overcoming the hawking, coughing and expectorating."

Any sufferer from catarrh will find Stuart's Catarrh Tablets will give immediate relief, and being in tablet form and pleasant to the taste, are convenient and always ready for use, as they can be carried in the pocket and used at any time, as they contain no poisonous drugs, but only the cleansing, antiseptic properties of Eucalyptus bark, Blood-root and Hydrastin.

All druggists sell the tablets at fifty cents for complete treatment. om

Day's Stock Food

PREPARED FROM AROMATIC HERBS

No duty—purely Canadian. Increases the production of milk, flesh and eggs. As an aromatic for horses, it is perfection.

Sample 3-lb. package, 30 cents. 50 lbs., \$3.00; 100 lbs., \$5.00.

Ask your dealer, or write om

The Day's Stock Food Co., Toronto, Can.

Family Knitter

Cheapest, Simplest, Best.

Price \$8.00.

Write for circular. om

Dundas Knitting Machine Company, om DUNDAS, ONTARIO.

GARGET,

Lump Jaw, Big Knee, in fact, any inflamed, caked or soft bunch, also strained joints, cured with

**ABSORBINE**

Relieves Rheumatism and Gout in Mankind. \$2.00 per bottle delivered, or at regular dealers. 25 cents for sample bottle. Pamphlets free. om

W. F. YOUNG, P. D. F., Springfield, Mass. LYMAN, SONS & CO., Montreal, Agents for Canada.



The "STAY THERE" Aluminum Ear Markers are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. If 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., 124 Lake St., Chicago, Ill.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

From the corner of Notre Dame and McGill streets, in the city of Montreal, per street car, a thirty-minute ride lands the visitor within one mile of the beautiful and modernly equipped farm of Mr. W. Watson Ogilvie, opposite Lachine Rapids, where, under the skillful management of Mr. Robert Hunter, are to be seen what is perhaps the choicest lot of imported Ayrshire cattle on the continent. All told, there are seventy-four head in the barns at the present time, representing the aged and young herd winners at Toronto, Ottawa and London in 1900, and the Pan-American in 1901, while in 1902 they won all the herd prizes, medals, sweepstakes and diplomas, with one exception, at Toronto, Ottawa and London. This noted herd was established in 1898 by the importation of 25 head, selected with great care by Mr. Hunter, from the leading herds of Scotland. Again, in 1900, a second importation, of 20 head, was made, and this coming summer it is the intention, all being well, to make another importation. As milk producers, the whole herd, including heifers, average 50 lbs. a day each, the majority of them having records of 60 lbs. a day; while Mayflower 2nd of Drumside has a milk record of 75 lbs. a day, testing 4 per cent. of butter-fat. Minnie of Lessnessock, sweepstakes female at Toronto, 1902, has a milk record of 72 lbs. a day, testing 3.90 per cent. Tempest of Knockdown has a milk record of 40 lbs. a day, but her test is 6 per cent. Marjory of Gateside gives 50 lbs. of milk a day, which tests 5 per cent. The main stock bull is Imp. Douglassdale, champion at Buffalo, Toronto, London and Ottawa. His lieutenant in service is Imp. Black Prince, winner of 3rd at Toronto and Ottawa, and second at London last fall. The four heifers that won first prize last fall, the get of one bull, were sired by Comrade of Garlaff (imp.). For sale, there are a few young bulls and females of all ages.

One mile from Danville station, in the Province of Quebec, lies Netherlea Dairy Stock Farm, the property of Mr. T. D. McCallum, breeder of high-class Ayrshire cattle, Shropshire sheep, Yorkshire hogs, and collie dogs. The Ayrshires number 45 head of big, well-formed, heavy-milking animals, the whole herd of working cows ranging from 40 to 60 lbs. of milk a day, at the head of which is that wonderfully successful sire, Imp. Napoleon of Auchenbrain, whose dam has a milk record of 72 lbs. a day. The bulk of the herd is the get of those well-known bulls, Matchless, a son of Imp. Glencairn 3rd and Nellie Osborne, and Imp. Baron Renfrew. This herd was founded 25 years ago, and has always been kept up to the standard. At present, a number of them are out of imported dams, and, as a herd, their tests average the grand showing of 4.90 per cent. of butter-fat. Among the younger bulls we were shown was one yearling that captured the red ticket at all the local shows, and a rare good youngster he is. All told, there are for sale three young bulls, fit for service, and a number of females of various ages. The Shropshires are all imported, being a smooth, even set, with the best of covering. Last year's lambs are all sired by an imported ram. They show the true characteristics of the modern Shropshire, covered from the ground up. There are, for sale a few of both sexes.

The Yorkshires all belong to the O. L. foundation, and the Berkshires to Snell foundation. They are representative of the two breeds, and for sale here are a number of both breeds, both sexes, all ages. The main breeding bitch of the collies is Perfection Queen, by that great dog, Perfection, that sold for 105 guineas. There is a five-months-old bitch out of her, by Imp. Rosenth, the sweetest type of collie the writer ever saw. At present, the young stock of collies is all sold.

AYRSHIRES

WATSON OGILVIE,
PROPRIETOR.



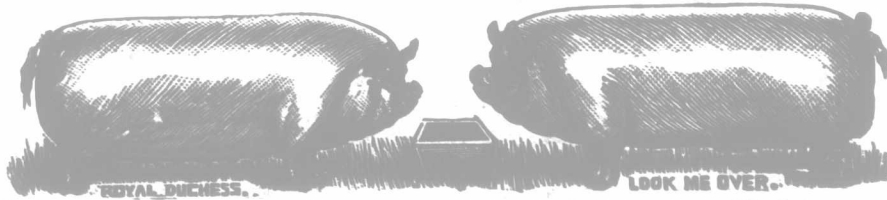
Ogilvie's Ayrshires won the herd and young herd prizes at Toronto, London and Ottawa in 1900; also at the Pan-American, in 1901, and in 1902 they won all the herd prizes and medals, sweepstakes and diplomas, with one exception. The cows are all imported, and were carefully selected for strength and constitution, style, size of teats, and milk (quantity and quality). The herd is headed by Douglassdale (imp.), champion at the Pan-American and at Ottawa, Toronto and London, in 1902, ably assisted by Black Prince (imp.). Stock, imported and home-bred, for sale at all times. om

ROBERT HUNTER, Manager.

Near Montreal. One mile from electric cars. Lachine Rapids, P. Q.

SUMMERHILL HERD OF Large English Yorkshires.

HEADQUARTERS FOR THE IDEAL BACON HOG.



Our winnings at the large shows, for 1901, are as follows: At Toronto every possible first prize and five seconds, two silver medals, and first for pen of pure-bred bacon hogs, also sweepstakes on bacon hogs over all breeds; at London every possible first but two; while at the Pan-American, where our herd was divided, half going to Toronto, we won six out of ten possible firsts, also sweepstakes on boar any age. At the Pan-American (Buffalo), Toronto and London there were thirty-six first premiums and medals given: all the medals and every first prize but six won by the Summer Hill Yorkshires. When in need of the best write D. C. FLATT & SON, MILLGROVE, ONT. om Telephone: Millgrove, Ont.

HILLCREST HERD OF Large English Berkshires

My brood sows are imported or show animals, and the sires are big, long fellows of the bacon type. For sale: An excellent lot of young pigs, and a few young sows recently bred. Can supply pairs not akin. Enquiries promptly answered. Vine station, G.T.R.—near Barrie. Jno. Lahmer, Vine, Ont.

Maple Park Farm Holsteins. Netherland Hamming De Kol (imp.), stock bull. Stock of all ages for sale from the great De Kol Pieterje Clothilde and Barrington strains. Home of the great cows, Edgeley Mol, milk record 104 lbs. in 24 hours; Emery Beauty, the great public test winner, and many others with heavy records. SIDNEY MACKLIN, om Streetsville P. O. and station, C. P. R.

Ridgedale Farm Holstein-Friesians for Sale. 3 yearling bulls; also bull and heifer calves; all of choice breeding. Prices always reasonable. Write, or come and see them. R. W. WALKER, Utica P. O. Shipping stations: Port Perry, G. T. R.; Myrtle C.P.R. om

AYRSHIRE CATTLE

SHROPSHIRE SHEEP, B. P. ROOK FOWL and 20 YOUNG LARGE ENGLISH BERKSHIRES FOR SALE.

J. YUILL & SONS, om Carleton Place, Ont.

CHOICE AYRSHIRES

A first-class light-colored, Aug., 1901, bull. Two April, 1902, bull calves. One 4th prize winner at Toronto, 1902, light colored. Others spotted, dark red and white. Two Aug., 1902, bull calves. All from imported stock. Write us before buying. om

ALEX. HUME & CO., Menie P. O., Ont. HOARD'S STA., G. T. R.

HIGH-CLASS AYRSHIRES

At "Live and Let Live" Prices. Two bulls fit for service; one February and three March, 1902, bulls, and a number of young bull calves; also heifers bred lately, and younger.

W. W. BALLANTYNE, om Stratford, Ont. Neidpath Farm adjoins city, main line G. T. R.

CHOICE AYRSHIRES.

Present offering: 4 bulls, from 1 to 2 years old, by choice sires, and out of producing dams, and 4 individuals. om

N. DYMENT, Clappison P. O., Dundas Sta.

NETHERLEA AYRSHIRES.

Present offering: 3 bulls fit for service, prize-winners; also a few young females, sired by Napoleon of Auchenbrain (imp.), whose dam's record was 72 lbs. a day, and all of them out of record cows. T. D. McCALLUM, om Danville P. O. and Station, Quebec.

Tredinnock Ayrshires.

Imported bulls at head of herd: Glencairn 3rd, Napoleon of Auchenbrain, and Lord Dudley. Forty imported females, selected from leading Scotch herds, and their produce from above-named bulls. Size combined with quality and style, well-formed udders, good-sized teats, and capacity for large milk production. Bull calves for sale; also a few young cows and heifers. For prices and particulars address JAMES BODEN, Mgr., St. Anne de Bellevue, Quebec. om Farm close to St. Anne Station, G.T.R. & C.P.R., 20 miles west of Montreal.

PENNABANK STOCK FARM.

Twenty-five ram lambs; a few ewe lambs and shearings with Imp. Williams or Knox-bred sires; 1 good two-shear ram. Four fine young Shorthorn bulls, om Hugh Pugh, Whitevale, Ont.

Dorsets & Chesters Young stock in Dorset Sheep and Chester White Hogs of good quality for sale, reasonable. R. H. HARDING, THORNDALE, ONT. om "MAPLEVIEW FARM."

FOR SALE, AT MAPLE AVENUE STOCK FARM, OHIO

Lincoln Sheep and Shorthorn Cattle Bred from best English stock. Bred from Scotch bulls of fashionable families. CAN SUPPLY EITHER IN CARLOAD LOTS. Write us before buying elsewhere. Address: F. H. NEIL, Proprietor, LUOAN, ONT. Box 35. Telegraph and Railway Station. om

FAIRFIELD LINCOLNS

Imported ewes and lambs. Can supply show flocks. om

J. H. PATRICK, ILBERTON, ONT., OAN.

PRIZEWINNING COTSWOLDS.

Imported and home-bred stock, prizewinners at all the leading fairs. ELGIN F. PARK, om Box 21, Burgessville, Ontario, Canada.

IMP. COTSWOLD SHEEP

Five rams (year-olds), both sires and dams imp.; 10 ewes (year-olds), sire imp. Also this year's lambs, both sexes; Yorkshire and Tamworth hogs. om

BROOKS & LANGMAID, COURTOISE, ONT.

American Leicester Breeders' ASSOCIATION.

A. W. Smith, Pres., Maple Lodge, Ont.

Pedigrees now being received for Vol. 4. For information, blanks, etc., address:

A. J. TEMPLE, Sec., CAMERON, ILL. om U. S. A.

W. S. CARPENTER,

"MODEL FARM," SIMCOE, ONT. Importer and breeder of Shropshire sheep. My flock was represented at Toronto, and won first on shearing ram, first and second on aged ewe, and second on the pen. First time exhibiting. If in need of a first-class yearling ram, imported or home-bred, write! Your wants can be supplied, and at prices consistent with quality. Have a choice lot to choose from, and can guarantee satisfaction. Come and see them, or a card will bring them. om Station One-half Mile from Farm, Wabash and G. T. R.

Newcastle Herd of Tamworth Swine

Have for a number of years taken a share of the best prizes offered at Toronto Exhibition, but this year has excelled all past records, having taken the sweepstakes for the best herd; also both silver medals for best Tamworth boar and best Tamworth sow, besides many other prizes in the various classes. Our present offerings are: Several young sows, bred and just ready to breed; also a lot of beautiful young pigs of both sexes, 2 to 4 months old, all descendants of our sweepstakes stock. Pairs supplied not akin. Also sow 15 months old, in pig. Enquiries promptly answered.

COLWILL BROS., NEWCASTLE, ONT.

WILLOW LODGE BERKSHIRES

Hard headed by Long-fellow 10th of H. F., assisted by the noted prize-winner, Highclere Crown 3rd. Sows, the best money will buy, and are winners. Young stock of both sexes and all ages for sale, not skin.



W. WILSON, Snelgrove, Ont.

SHROPSHIRE FOR SALE.—Shearling rams, ram lambs, ewe lambs, also shearling and older ewes, about 50 head all told. All registered or eligible. Low-set, well covered, in fine condition and form. Sires from Campbell and Dryden flocks. MALCOLM McDUGALL, Tiverton, Ont.

FOR SALE: Yorkshires and Holsteins

Best type and quality. Young stock constantly on hand. Prices right. E. HONEY, om Brickley P. O., instead of Warkworth.

Yorkshires—For one month only I will sell boars and sows weighing nearly 100 pounds for \$9 each (registered), and Ontario express paid. WM. TEASDALE, om Thorahill Sta., and electric cars. Dollar P. O.

YORKSHIRES FOR SALE.

Boars fit for service, sows in farrow and ready to breed, and young stock on hand. Prices reasonable. WM. HOWE, om BRUCE CO., NORTH BRUCE, ONT.

Large English Yorkshires

Imported and Canadian-bred Yorkshires, from stock of the best British herds. A choice lot of boars, ready for service, and a number of sows being bred to Imported Dalmeny Long Sam, for sale. Also young pigs, all ages.



H. J. DAVIS, om Box 518 WOODSTOCK, ONT.

PLEASE MENTION FARMER'S ADVOCATE

Langelier's Yorkshires

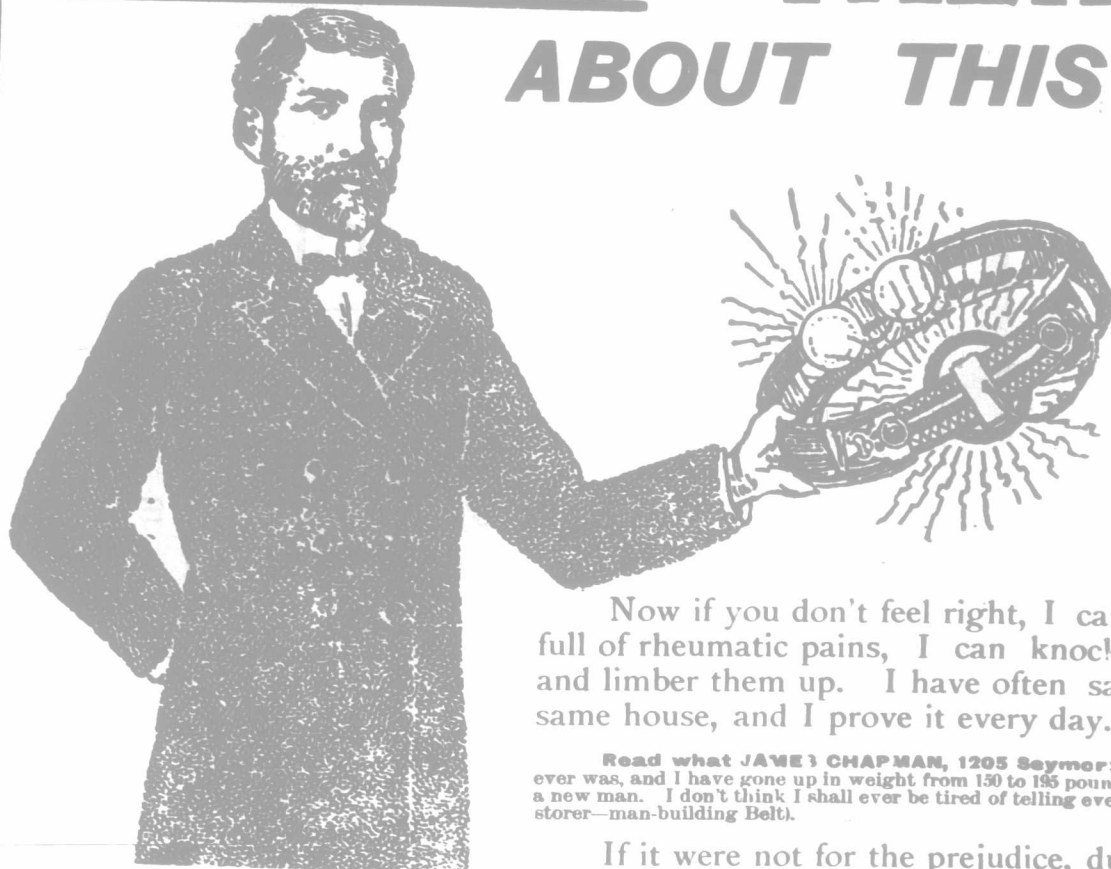
I am expecting, by the first steamer next spring, a few choice sows with litters. Will book orders now for young stock, 8 to 10 weeks old, to be delivered at beginning of May. This is a rare chance to buy imported stock at reasonable prices. Write me now, and ask also for the finest poultry circular published in Canada.

GUS. LANGELIER, Quebec City, om

SPRUCE GROVE HERD OF YORKSHIRES.

A number of choice young boars fit for service, sired by Summer Hill Member. Also pairs 10 weeks old, not skin. Prices right. Also young sows in pig-om FRED. C. SMITH, New Hamburg, Ont.

MEN! I WANT TO TALK TO YOU ABOUT THIS BELT.



I want to talk to men who have pains and aches, who feel run down physically, who realize that the old "fire" and energy which were so evident in youth are absent now; men who can't stand the amount of exertion they could years ago. I want you—if that means you—to see what I have done for others who were just as badly off. That's my introduction. If a friend in whom you had confidence presented some one to you and said: "Jack, here's Brown; he has made good with me and I trust him," wouldn't you trust him, too?

Now if you don't feel right, I can cure you with my Electric Belt. If you are full of rheumatic pains, I can knock them out. I can pour oil into your joints and limber them up. I have often said that pain and electricity can't live in the same house, and I prove it every day.

Read what JAMES CHAPMAN, 1205 Seymour St. Vancouver, B.C. writes to me:—I am stronger now than I ever was, and I have gone up in weight from 150 to 195 pounds. My health is something wonderful. I can truthfully say that I am a new man. I don't think I shall ever be tired of telling everybody what the Belt has done for me. (I might say your health restorer—man-building Belt).

If it were not for the prejudice, due to the great number of fakes in the land, I would not be able to handle the business that would come to me. The "Free Belt" fraud and the "Free Drug" scheme, which are not free at all, or the "Just as Good" Belt offered for a dollar or two, which gives no current at all, have made everyone sceptical, but I know that I have a good thing, and I'll hammer away until you know it.

One thing every man ought to know is this: Your body is a machine. It is run by the steam in your blood and nerves. When you begin to break down in any way you are out of steam. That's just what I want to give you back.

MR. GEO. S. BROOKS, Shanty Bay, Ont., wears one of my Belts, and he says:—Your Belt is all that you claim it to be. I can recommend it to any one who is suffering from rheumatism. It has cured me of indigestion, also my kidneys, as I used to suffer a good deal from kidney trouble, and I do not feel it at all now.

I have a cure in every town. Tell me where you live and I will give you the name of a man I've cured.

Tell me your trouble, and I will tell you honestly whether I can cure you or not. If I can't cure you, I don't want your money. I have been in this business 22 years, and am the biggest man in it to-day by long odds, and I am growing yet, because I give every man all he pays for.

Now, wouldn't you rather wear my life-giving appliance while you sleep every night, and feel its glowing warmth pouring into you, and feel yourself taking on a new lease of life with each application, than to clog your intestines up with a lot of nauseous drugs? Surely! Try me.

I can show you thousands of just such letters as Philip Rodmore, 205 Victoria Avenue, Ottawa, Ont. Read what he thinks of my Belt:—I am sixty-five years of age, and I think your Belt is an age renewer when worn according to directions.

I don't ask any one to buy my Belt on speculation. I don't ask you to take any chances of a failure. I take all the chances of curing you. If you are suffering from Rheumatism, Lame Back, Lumbago, Sciatica, Varicocele, Nervous Debility, Constipation, Lost Energy, resulting from exposure and excesses in young and middle-aged men, write to me. Offer me reasonable security and I will make a Man of you, and you can

PAY WHEN CURED.

READ WITH CARE

Every patient wearing Dr. McLaughlin's Electric Belt receives free, until cured, the advice of a physician who understands his case. Agents or drug stores are not allowed to sell these goods.

FREE BOOK—If you cannot call, write for my beautiful illustrated book, giving you cuts of my Belts and prices. This little book is of great value to any one; it contains a lot of useful information to men who are not what they should be; tells how strength is lost and won. I send this book closely sealed free to anyone. I have a book for women as well as men.

DR. M. D. McLAUGHLIN, 130 Yonge St., TORONTO, ONT.
OFFICE HOURS—9 A.M. TO 8.30 P.M.

VALUABLE PREMIUMS

THE NAME OF SENDER DOES NOT COUNT ON LISTS OF NEW SUBSCRIBERS.

EXACT SIZE OF KNIFE.



AN A 1 FARMER'S KNIFE

Finest Steel Blades. Strong and Durable.
Beautiful Nickel Handle.

Manufactured by Joseph Rodgers & Sons,
SHEFFIELD, ENGLAND.

CANNOT BE DUPLICATED.

Every Farmer and Farmer's Son Should Have One of These Knives.

START OUT FOR THE NAMES TO-DAY.

HOW TO SECURE IT.

SEND

New Subscribers **2** New Subscribers

TO THE

FARMER'S ADVOCATE

And we will send you the knife, postpaid.

THE BIG FOUR

"CANADA'S IDEAL"

class modern Shorthorns ever issued in any

THE GREAT PREMIUM PICTURE OFFER, FOR OBTAINING NEW SUBSCRIBERS TO THE "FARMER'S ADVOCATE" AT \$1 A YEAR.

Admitted by judges, breeders and artists to be the most magnificent engraving of high-country. 24 x 36 inches. Twelve animals.

"CANADA'S PRIDE"

Nine celebrated draft horses.

Your choice of any two of these for 1 new subscriber, or all four beautiful pictures for only 2 new subscribers.

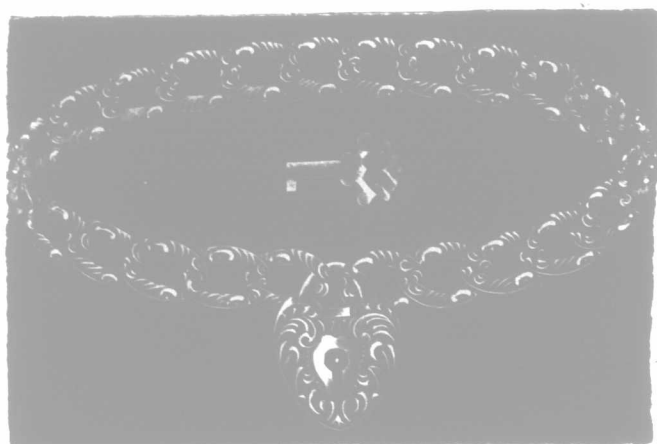
"CANADA'S GLORY"

Eleven celebrated light horses.

"CANADA'S COLUMBIAN VICTORS"

Thirteen celebrated Ayrshire cattle.

Handsome Curb-link Bracelet; Silver Filled



For 2 new subscribers. Sterling silver for 3 new subscribers. For each additional new subscriber, two Sterling Silver Friendship Hearts.

Our Self-Binder

HANDY, DURABLE and ATTRACTIVE. Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of TWO NEW SUBSCRIBERS and \$2.00.

BEGIN TO CANVASS AT ONCE

FOR NEW SUBSCRIBERS. The balance of 1902 will be sent FREE, including Christmas number, to all who now subscribe for 1903. Subscription Price. \$1.00 per Annum.

THE

MICROSCOPE



Is a means of great entertainment and instruction in the home and out of doors. To meet the wishes of many subscribers, we have arranged with a first-class firm for a supply of those instruments; which we now offer:

Tripod Microscope, with strong magnifying lens, useful for examining weed and other seeds, insects and other small objects, for obtaining one (1) new subscriber to the FARMER'S ADVOCATE.

Bagster's NEW COMPREHENSIVE Teacher's Bible,

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an Indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

HOW TO OBTAIN IT—

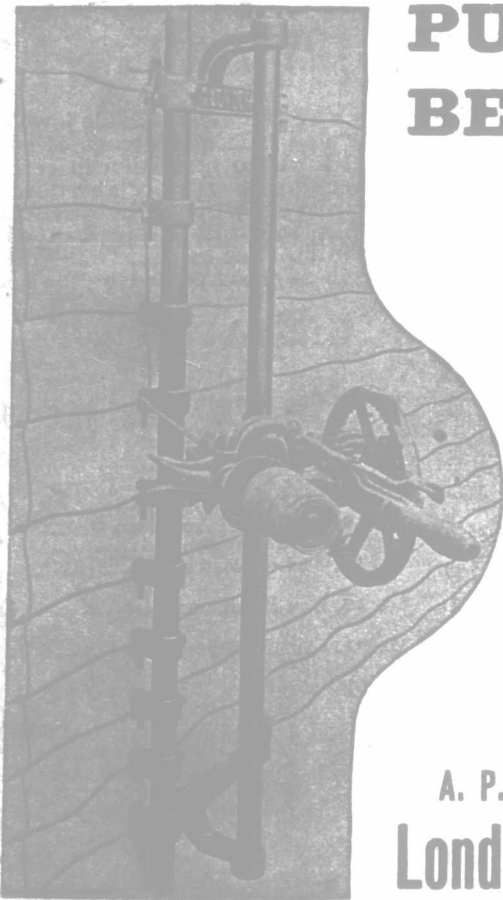
Would retail at from \$3 to \$4. We will send (carefully packed, post paid) this Bible to anyone sending us the names of THREE NEW SUBSCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums. Cash must accompany new names.

The W.M. WELD CO., Ltd.

WINNIPEG, MAN.

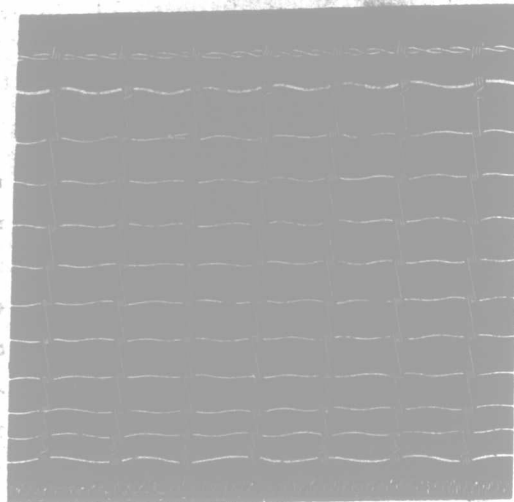
PUTTING THE CART BEFORE THE HORSE.



STRETCHING wire fence after it is woven is like "Putting the cart before the horse." The best fences are stretched first, each strand separately, and woven after. They fit the ground like a glove and have no slack strands — every wire does its duty.

Our modern LONDON FENCE MACHINE in the hands of the average farmer will complete 40 to 60 rods per day easily. Anyone can operate it.

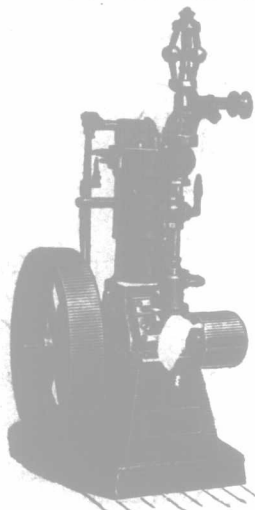
It's as simple as "running a wheelbarrow." Ask your hardware dealer for them and for London Coiled Spring Wire, or write us for catalogue.



A. P. McDONALD, Sole General Agent for the West, Winnipeg, Man.
London Fence Machine Co., Ltd. Works at London, Can. Cleveland, Ohio.

McLachlan Gasoline Engine

IS MOUNTED IN 5, 10, 15, 20 OR 25 HORSE POWER.



WRITE
THE MCLACHLAN GASOLINE ENGINE CO., LIMITED,
 201 Queen St. E., TORONTO,

for catalogue and prices.

SHIP YOUR **FURS** TO
McMillan Fur & Wool Co.
 MINNEAPOLIS, MINN.
 WRITE FOR CIRCULARS

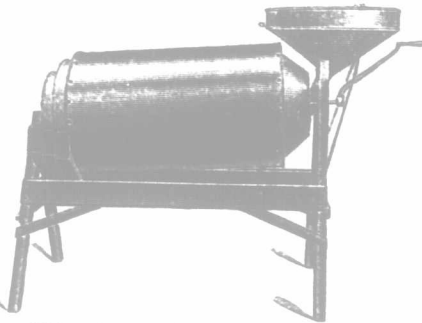
GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

The best book on strawberry-growing ever written. It tells how to grow the biggest crops of big berries ever produced. The book is a treatise on Plant Physiology, and explains how to make plants bear Big Berries and Lots of them. The only thoroughbred scientifically-grown Strawberry Plants to be had for spring planting. One of them is worth a dozen common scrub plants. They grow **BIG RED BERRIES**. The book is sent free to all readers of the "Farmer's Advocate." Send your address to **H. M. KELLOGG**, Three Rivers, Mich.

TORONTO ENGRAVING CO.
 92 BAY ST
 CUTS BY ALL PROCESSES
 LIVE STOCK A SPECIALTY.

BEEMAN'S New Process Grain Cleaners

They separate flax from wheat, wild or tame oats from wheat or barley, cockle and all foul seed; clean flax, timothy, clover, etc., perfectly.



DO YOU

If so, our **JUMBO** Will do it for you.

Want to raise your wheat from one to three grades by separating all frosted sprouted or shrunken kernels?

Want to clean and bluestone your wheat at one operation?

Want to sack your clean grain, tailing and screenings all at the same time?

Write for catalogue and prices. Dealers make money selling our machines.

Factories: **Winnipeg, Man.** **Minneapolis, Minn.**
BEEMAN & CO'Y,
 131 Higgins Ave., Winnipeg, Man. 2902 Pleasant Ave., Minneapolis, Minn.

To Farmers:

OUR Company is still in the fight for forcing the railroads to trot out more cars and to promptly furnish them to any one who wants a car. We say, one man one car, when a blockade is on. The man who produces the grain has a better right to a car than the elevator man, who invariably puts on the screws when cars are scarce. The right to load direct from wagons into cars is the true remedy for keeping the street price within decent range of track price, and for putting a damper on the 10c. cinch of the combiner. The Winnipeg Grain Exchange is not friendly to our Company, but we have found out in the last four months that we can sell wheat as well as the best of them. We ask the farmers to support us by consigning grain to us. We can handle wheat at full Winnipeg market value, charging only 1c. per bushel commission, or will wire offers for cars on track, country points. Support us, and we will always do our utmost to look after your interests when opportunity offers.

INDEPENDENT GRAIN CO.,
 Rooms 26 and 27, Merchants Bank Block, WINNIPEG.
 N. B.—Liberal advances on consignments. Write for shipping instructions.

Joseph Rodgers & Sons
 Limited,
 SHEFFIELD, ENGLAND.

Please see that this EXACT MARK is on each blade.

JAMES HUTTON & CO., MONTREAL, SOLE AGENTS IN CANADA.



COWAN'S PERFECTION COCOA

Maple Leaf Label, is absolutely pure. Makes rich blood and builds up the system. Is easily digested, and is the best food, as well as drink, for invalids and children.

The **COWAN CO., Ltd.,**
 TORONTO.

Plumas, Nov. 26, 1902.
 I hereby certify that I threshed Mr. Robbins Salzer's Two-foot Oats, and that they are the greatest yielding oats I ever threshed.

N. JACKSON, Thresher.
 N. B.—They are free from noxious weeds.
 PRICES—Up to 10 bus. \$1 per bus.
 Over 10 to 20 bus., 90c. per bus.
 Over 20 bus., 80c. per bus.
 Bags included. F. O. B. Cash with order.
 Quantity limited.

RALPH ROBBINS, Plumas, Manitoba.

Western Rye Grass Seed FOR SALE, guaranteed free from noxious weeds. Price, 4 cents per lb. (sacks extra) f. o. b. Virden.

CHAS. E. IVENS.

STUDY AT HOME

Do you want to know more about your business or profession? Do you wish to write on the **Civil Service** or the **Junior or Senior Matriculation** examinations? Would you like to be a better **housekeeper, farmer, mining prospector, or mechanic?**

Write for **FREE** booklet
The Canadian Correspondence College, Limited
 Canada Life Building, TORONTO, ONT.

HOLWELL MANOR FARM FOR SALE:

Two Scotch Collie bitches, one 8 mos., the other 15 mos. old.
D. G. GANTON,
 ELMVALE, ONT.



Wide Metal Wheels
 Tire FOR WAGONS
 Made to fit any axle, of any desired height or width of tire. Are stronger, lighter and cheaper than wooden wheels. Just the thing for the farm. Our **QUEEN CITY HANDY WAGON.**

With metal wheels, is low and convenient for farm and general work. Made by skilled workmen, and of the best material. Guaranteed to carry four to five thousand pounds. Write for catalogue with full description of both Wheels and Wagons.
Dominion Wrought Iron Wheel Co., Ltd.,
 9 AND 11 BROOK AVE., TORONTO, ONT.

WALKERVILLE WAGONS
 ARE THE BEST
Walkerville Wagon Co. Limited
 WALKERVILLE, ONT.
 WRITE FOR CATALOGS.