

ANS
CANADA.
ph, Ont.
AND RETAIL
MANITOBA

ANGLES
s.
d for them
n all four
possesses,
ch experi-
men firmly,
ng ice and
to you, as
the "Osh-
reason is
most satis-
fyingances
f inferior
s yours
ntario.
ntreal.

BELLE CITY
FEED and
ENSILAGE
CUTTER
with blower, carrier
attachment,
11 sizes. Catalogue
and latest
book about
this
age
nt
be
re-
rite
r it.

EE
Questions:
sheep, Hogs,
paper.
SAVINGS
It is 9 1/2 x 6 1/2 ins.
The engravings of
rectum, 2 1/2 x 1 1/2.
It contains 29
winners, of the
and 6 feet tall.
Also the
winners, of the
breeds. Your
sets of Horses,
primary illustra-
for each. The
rs. You cannot
sted animals.
Stated.
by over 500,000
will always be
k healthy. "G
own the highest
national Stock
FOOD CO.
N. U. S. A.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE
SUCCEED
FOUNDED 1876

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

VOL. XXXVI. WINNIPEG. SEPTEMBER 5, 1901. MANITOBA. No. 533

DR. WARNOCK'S ULCERKURE

THE MODERN WOUND-HEALING WONDER.

Read the Following Extracts from Letters Received:

"Its healing powers are wonderful." "Ulcerkure is a great healing remedy." "It seems to put on new skin." "My friend said shoot the horse, but I used Ulcerkure and he is now as good as ever." "Cut with barbed wire almost beyond recognition, my horse was made as good as ever with a few bottles of Ulcerkure." "Mother's hands were badly burned helping to put out a prairie fire; we applied Ulcerkure liberally; it worked like magic."

Sold by all druggists and dealers in medicine. \$1 per bottle. Send 3c. in stamps for free sample.

Western Veterinary Co., Box 573, Winnipeg

BANK OF HAMILTON

HEAD OFFICE:
HAMILTON, ONTARIO.

Paid-up Capital, \$1,860,330;
Reserve, \$1,328,908;
Total Assets, \$16,150,489.

BRANCHES IN MANITOBA:

WINNIPEG
(CORNER MAIN AND McDERMOT STREETS;
C. BARTLETT, AGENT).
BRANDON, MANITOBA,
CARMAN, MORDEN,
HAMIOTA, STONEWALL,
PLUM COULEE. WINKLER.

Deposits Received and Interest Allowed

GENERAL BANKING BUSINESS
TRANSACTIONED.

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

WILD AND IMPROVED LANDS FOR SALE.
Several good farms at present for sale, or rent, in the celebrated Edmonton district. All improved. Terms reasonable. Apply for information to O. C. PEDERSON, Box 185, Strathcona, Alta.

Windsor Salt.

The test of time proves Windsor Salt as "best"—no stronger test exists. Buy Windsor Salt and you buy an absolutely pure, white, dry Salt that has no equal.

"Best by ALL Tests."

CONTENTS OF THIS NUMBER.

	PAGE.
THE CROPS AND MARKETS	527
SEASONABLE PRECAUTIONS	527
FARM SETTINGS	527
DANGER FROM FIRES	527
A CHAMPION OF THE T. N. P. A.!	527
SYSTEMATIC THRESHING	528
A CORRECTION	528
OUR ROYAL VISITORS	528
PORTRAITS OF THE DUKE AND DUCHESS OF CORNWALL AND YORK	528
PROGRAMME FOR THE ROYAL TOUR	528
AN OPEN LETTER	529
MILK TEST AT BRANDON	529
A WINTER CREAMERY FOR ASSINIBOIA	529
AN ALL-ROUND SUCCESS	529
GRAIN AND LIVE STOCK IN CANADIAN NORTHWEST	530
ATHEISTANE'S CHARMER AND HEIFER CALF, BY KING KYMAR (ILLUSTRATION)	530
INDIAN HEAD AND SINTALUTA DISTRICTS	530
BRADWARDINE DISTRICT	531
LORD BANFF, ASCOTT MAYFLOWER, LADY WATERLOO B. 2ND, EMPRESS 12TH, AND CUCKY AS A CALF (ILLUSTRATION)	531
HAMIOTA FAIR	531
THE GRAIN STANDARDS	531
REGINA FAIR	532
LARGE FARMS AND THEIR MANAGEMENT	532
AT WHAT AGE SHOULD SOWS BE BRED?	532
A CHEESEMAKER ON THE STAND	532
INDIAN HEAD EXPERIMENTAL FARM	533
BULLER (ILLUSTRATION)	533
WOLSELEY FAIR	533
BORDER LEICESTER (ILLUSTRATION)	533
FRUIT AND CROPS IN MORDEN DISTRICT	533
DR. LEYDS (ILLUSTRATION)	534
THE HAMIOTA COUNTRY	534
ADVERTISING AND SELLING STOCK	534
AN IMPUTATION RESENTED	534
BRANDON HORTICULTURAL SHOW	534
THE CANADIAN MINISTER OF AGRICULTURE ABROAD	535
SUCCESSFUL HOG FEEDING	535
ASSINIBOIA HORTICULTURAL SOCIETY	535
POINTS ABOUT PORK PRODUCTION	535
A MODEL ONTARIO SILO (ILLUSTRATED)	535
FAT CATTLE AND SHEEP IN ALGOMA	535
PRACTICAL LESSONS FROM THE TUBERCULOSIS DISCUSSION	536
DAIRY TEST AT THE PAN-AMERICAN	536
BUTTER TESTS AND MILKING TRIALS AT TRING SHOW	536
OUR SCOTTISH LETTER	537
LESSONS FROM THE MODEL DAIRY	537
THE LAWRENCE-KENNEDY MILKING MACHINE	538
THE ROOT GROWTH OF PLANTS (ILLUSTRATED)	538
SECURE THE BEST	538
ATTRIBUTES OF ALFALFA	538
PRIZES FOR PHOTOGRAPHS	538
CANNOT DO WITHOUT IT	538
POULTRY NOTES	539
IMPORTED SHORTHORN BULL, WANDERER'S LAST (ILLUSTRATION)	539
HOW HIGH-SCORING CHEESE AT PAN-AMERICAN WERE MADE	539
AUCTION PRICES FOR HORSES	540
QUESTIONS AND ANSWERS—VETERINARY: SPAVIN?; TOO ANXIOUS TO BREED; ENLARGED TENDONS—BLOODY MILK; LAME MARE AND RUPTURED COLT; INJURIES TO COLT'S LEG; PROBABLY INFLUENZA IN COLT	540
MISCELLANEOUS: TREATMENT OF CORN SMUT; GESE BREEDING FOR PROFIT; REGISTRY OF STANDARD-BREDS AND HOLSTEIN-FRIESIANS	541
FARM GOSSIP: DELTA, B. C.; CHILLIWACK, B. C.; NORTHWEST HORSES FOR THE ARMY; THE CENSUS RETURNS	541
LIVE STOCK EXHIBITS AND MEETINGS AT BUFFALO, N. Y.	541
FALL FAIR DATES	541
MONTREAL MARKETS	541
BUFFALO MARKETS	541
CHICAGO MARKETS	541
HOME MAGAZINE—THE FAMILY CIRCLE	542
THE CHILDREN'S CORNER	543
"GRANDMOTHER'S PETS" (ILLUSTRATION)	543
THE QUIET HOUR	543
"A MENAGERIE" (ILLUSTRATION)	543
GOSSIP	547, 549, 550, 552
NOTICES	547, 549, 552
ADVERTISEMENTS	525 and 526, 546 to 556

PUBLISHED TWICE A MONTH, AT WINNIPEG, MANITOBA.

People Who are Particular

About their watch repairs—people who want really first-class work done—people who want to feel that their time-piece is running as closely as it can be made to run—are the people who are building up our watch-repairing business. We do thorough, expert watch-repairing, and absolutely guarantee all our work. Send us a postcard for a mailing-box. On receipt of watch we will examine it and write you cost of repairs.

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

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

THE MANITOBA Fire Assurance COMPANY.

ESTABLISHED 1866. HEAD OFFICE, WINNIPEG.

Licensed by a full deposit with Manitoba and Territorial Governments. Farmers should patronize a home institution. Scrip for sale at lowest price. If you owe the Government, write us.

The Hon. H. J. MACDONALD, President. H. H. BECK, Vice-Pres. and Man. Director.

Reliable, Energetic Agents Wanted.

SOMERVILLE & GO.

Steam Marble and Granite Works,

BRANDON.

Dealers in Marble and Manitoba Granite.

MONUMENTS, HEADSTONES, MANTELPieces, CEMETERY FENCING TABLETS, ETC.

ROSSER AVE., BRANDON, MANITOBA.

Represented by W. Somerville, W. C. Stewart, A. W. Thomson, E. Patterson.

WHEN WRITING MENTION THIS PAPER.

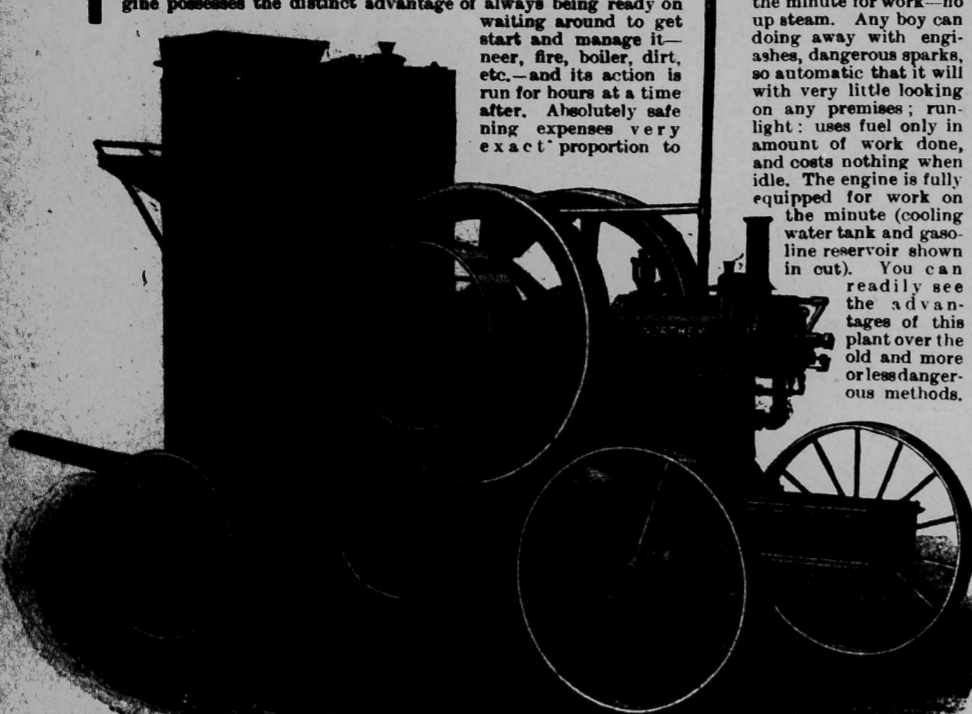
R. A. BONNAR, Barrister, Notary Public, Conveyancer, Etc.

Office 494 1/2 Main St., Winnipeg, Man. Special attention to collections. Solicitor for "Farmer's Advocate," Winnipeg. 24-a-m

PLEASE MENTION FARMER'S ADVOCATE.

THE "NORTHEY" PORTABLE Gasoline Threshing Engine

This arrangement makes the neatest, strongest, most effective and economical THRESHING ENGINE yet placed before the farming community. The truck is strongly built, of the highest class materials—will stand any amount of strain on rough roads, and always being ready on waiting around to get start and manage it—neer, fire, boiler, dirt, etc.—and its action is run for hours at a time after. Absolutely safe and expenses very exact proportion to



What Mr. Robt. Darling, Stuartburn, Man., writes us: "I have thoroughly tested the PORTABLE GASOLINE ENGINE No. 379 which I purchased from you some time ago. Have run a 23-inch circular saw, and it has given good satisfaction and runs splendidly. I cannot say too much about the 'LITTLE GIANT,' as I call it: it seems so neat and so strong. Many come to see it start, and every one has praised it and thinks it cannot be beaten. The engine runs my thresher to perfection—lots of power and regular speed, so necessary for a thresher. Yours truly, ROBT. DARLING."

SEND FOR ILLUSTRATED BOOKLET, WITH TESTIMONIALS—FREE. THE NORTHEY CO., LTD., 963 KING ST. SUBWAY, TORONTO, CAN.

WHY SHOULD BLACKLEG VACCINE IMPROVED BE USED?

BECAUSE
It will prevent Blackleg in cattle.
It is ready for immediate use.
Every lot is tested by us upon animals.
No expensive outfit is required.
Only the Syringe and Vaccine are necessary.
Now is the time to vaccinate.
Supplies are readily obtainable through druggists.
Write for literature and further information.

PARKE, DAVIS & COMPANY,
MONTREAL, QUE. WALKERVILLE, ONT.
We are also in a position to supply ANTHRAX (CHARBON) VACCINE.

TRADE MARK "BLACKLEGINE" MARK.

(PASTEUR BLACKLEG VACCINE in the form of an Impregnated Cord, ready for use as sold.)

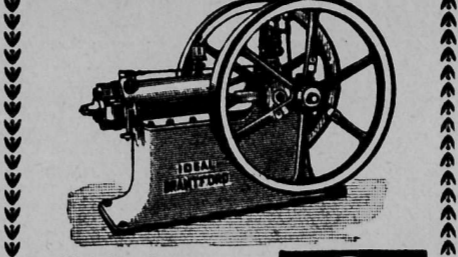
No outfit. No mixing. No filtering. No injecting. Saves time and trouble; only one application.

- Prices:
- No. 1, (10 doses), \$1.50.
 - No. 2, (20 doses), 2.50.
 - No. 3, (50 doses), 6.00.

PASTEUR VACCINE COMPANY, 56 Fifth Ave., CHICAGO.
W. J. MITCHELL & CO., WINNIPEG, CANADA.

IN WRITING
Please Mention the Farmer's Advocate.

BRANTFORD ENGINES. STRICTLY HIGH GRADE. 2 to 25 H.P.



The Perfected Product of Many Years' Experience.
Also Makers of Steel Windmills and Waterworks Outfits, Etc.
WRITE US.

COCKSHUTT FLOW CO. (Limited), Agents for Manitoba and N.-W. T., Winnipeg.

WOODSTOCK STEEL WINDMILLS



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

Any Lump Cured

If you have a real or suspected case of Lump Jaw among your cattle cure it at once with Fleming's Lump Jaw Cure. Don't take chances on a disease that always proves fatal if neglected. Don't waste money on experiments; use the remedy that invariably cures.
One bottle cures one severe or two or three ordinary cases. Cures any lump or enlargement on cattle or horses.
Argyle, Ont., April 3rd, 1900.
Sirs,—Enclosed please find \$2; send me a bottle of your Lump Jaw Cure. I got a bottle from you last fall and it gave good satisfaction.
ARCHIE McFARLANE.
Price \$2, or three bottles for \$5. At druggists or sent by mail prepaid. Money promptly refunded if it ever fails.
FREE—Our Illustrated Pamphlet to readers of this paper.

FLEMING BROS., Chemists
Room J, 58 Bay Street, TORONTO, Ont.

NO SPAVINS

The worst possible Spavin can be cured in 45 minutes. Curbs, Splints and Ringbones just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.
Write to-day. Ask for Pamphlet No. 1.
FLEMING BROS., 58 Bay St., Toronto, Ont.

TORONTO ENGRAVING CO.

92 BAY ST
CUTS BY ALL PROCESSES
LIVE STOCK A SPECIALTY.

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.

WINDMILLS



IF YOU ARE THINKING OF PURCHASING A Windmill SEE A Canadian Steel Airmotor (Galv.)
We do not build it with flimsy nicknacks to sell only, but to

Stand } Work, Wear and Time.
As supplied to H. M. Government and C. P. Railway, etc.
Ont. Wind Engine & Pump Co., LIMITED, TORONTO.
Manitoba Agents: BALFOUR IMPLEMENT COMPANY, Winnipeg, Man.

Western Agricultural College

RIDGETOWN, ONT.
Farmers' sons who are desirous of securing a good practical training in BUSINESS METHODS and in AGRICULTURAL SCIENCE should take a course in this college. Circular and information on application to
J. H. SMITH, M. A., PRIN.

THE ONTARIO BUSINESS COLLEGE, Belleville, Ont.,

is the most widely-attended business college in America. Send for the 152-page catalogue to
ROBINSON & JOHNSON, F.C.A.

BEAVER LINE.

ROYAL MAIL STEAMERS.
Regular Weekly Service between Montreal and Liverpool.
From Liverpool, Tuesday. From Montreal, Friday.
Aug. 20.....Lake Simcoe.....Sept. 6
Aug. 27.....Lake Ontario.....Sept. 13
Sept. 3.....Lake Champlain.....Sept. 20
Sept. 10.....Lake Megantic.....Sept. 27
Sept. 17.....Lake Superior.....Oct. 4
*The "Lake Superior" carries second-cabin and steerage passengers only.
First Cabin—Single, \$52.50 and upwards; Round Trip, \$100.00 and upwards. Second cabin—Single, \$35.00; Round Trip, \$65.00 and \$68.00, according to steamer, location, and number of persons in room. Steerage Rates—To Liverpool, London, Londonderry, Glasgow, Belfast, and Queenstown, \$24.50 and \$25.50. Apply to any agent of the line, or to

ELDER, DEMPSTER & CO.,
6 St. Sacrament St., Montreal.
Agents in London, Ontario: E. De la Hooke, F. B. Clarke, and W. Fulton.

Low, Wide-Tire Iron Wheels FOR WAGONS



MADE TO FIT YOUR AXLES.
EVERY farmer should have a set for drawing hay, grain, corn, etc. Are lighter, stronger, and cheaper than wooden wheels. Write for price list.
Dominion Wrought Iron Wheel Co., 9 & 11 Brook Avenue, Toronto, Ont.

NO HUMBUG.

Three tools in one. Ganges itself. Farmer Brighton's Homing Swine V. Stock Marker and Calf Dehornor. Makes 48 different marks. Stops hogs rooting. Testimonials free. Price, \$1.50. Send \$1.00, get it on trial. If it works, send 50c. more in stamps. Worth \$100.00 to any farmer. Pat. Apr. 23, 1901. S. J. Brighton, Fairfield, Iowa, U.S.A.

Good seller for agents.
IN WRITING
PLEASE MENTION FARMER'S ADVOCATE.



AGRICULTURE

VOL. XXXVI

The Cr
As is usually the
get interviews pub
which wild guess
This year we have
of 35 and even 40
the Province and T
to the only reliable
the weigh scales, t
The Local Gover
yield 24.28 bushel
Commissioner of A
estimates on a 21
With a 20 bushel a
is doing well, and
only for the North
centers of the east
bushels at 50 ce
money distributed
ducers.

The Manitoba G
follows:

Wheat.....
Oats.....
Barley.....

Total grain crop

The wheat mark
open fairly well p
cents. It nearly a
Nine times out of
opening market mak
is the price genera
season, but the mar
cash early saves
weight, saves insur
need to dread a g
meet all outstanding
hance his credit wit
and with the world
ing at cash prices,
anxieties of the gra
the wheat checks oil
every industry is th
farming community.

Seasona

With favorable
large importation o
be rapidly harveste
chinery, with plenty
careful planning, m
tively few men to
good weather, st
amount of labor,
force lying idle wait
ways safe and prud
done as possible, as
safe against almost
be quite unnecessary
careless stacking. T
instead of building,
throws together pile
this lesson taught t
to be careful in the
times much is lost b
use racks with close
The threshers also r
the grain is properl
the straw stack, and
are not run into the
man who grows wee
titled to pay for the
no sense in hauling
paying freight on the

FOUNDED 1886

MILLS

IF YOU ARE THINKING OF PURCHASING A

Windmill
Canadian Steel
Airmotor (Galv.)

We do not build it with cheap nicknacks to sell cheaply, but to

Stand **Work, Wear and Time.**

Supplied to H. M. Government and C. P. Railway, etc.

Ont. Wind Engine & Pump Co., LIMITED,

TORONTO. OUR IMPLEMENTS inipeg, Man.

Agricultural College N. ONT.

Methods of securing a good BUSINESS METHODS and SCIENCE should take a regular and information on

W. M. A., PRIN.

BUSINESS Leville, Ont.,

ely-attended in America. age catalogue

INSON, F.C.A.

LINE.

STEAMERS.

ce between Montreal

From Montreal. Friday.

ce..... Sept. 6
rio..... Sept. 13
mplain..... Sept. 20
antic..... Sept. 27
rior..... Oct. 4

carries second-cabin only.
\$52.50 and upwards;
wards. Second cabin
rip. \$66.98 and \$88.88
ation, and number of
ge Rates—To Liter-
ry, Glasgow, Belfast,
and \$25.50. Apply to

STER & CO.,

ment St., Montreal.

rio: E. De la Hooke,
on.

Wheels FOR WAGONS
DE TO FIT YOUR AXLES.

Every farmer should have a set for drawing hay, grain, corn, etc. Are lighter, stronger, and cheaper than wooden wheels. Write for price list.

Linon Wrought Iron Co., Toronto, Ont.
& 11 Avenue

BUG.
ee tools in one. Gauges
H. Farmer Brighton's
mane Swine V, Stock
cker and Calf Dehorner,
es 48 different marks.
ps hogs rooting. Testi-
nals free. Price, \$1.50.
d \$1.00, get it on trial.
t works, send 50c more
stamp. Worth \$100.00
any farmer. Pat. Apr.
1901. S. J. Brighton,
field, Iowa, U.S.A.

ING
MER'S ADVOCATE.

THE FARMER'S ADVOCATE

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

VOL. XXXVI.

WINNIPEG, MANITOBA, SEPTEMBER 5, 1901.

No. 533

The Crops and Markets.

As is usually the case when there are prospects of a good big crop, there are lots of people who get interviews published in the daily papers, in which wild guesses at the yields are made. This year we have been favored with prophecies of 35 and even 40 bushel averages of wheat for the Province and Territories. As we come closer to the only reliable standard of the crop yield, the weigh scales, these fabulous yields diminish. The Local Government crop report makes the yield 24.28 bushels per acre, and the Deputy Commissioner of Agriculture for the Territories estimates on a 21 bushel crop for the Territories. With a 20 bushel average all round, the country is doing well, and it will mean prosperity not only for the Northwest, but to the manufacturing centers of the east. A wheat crop of 50,000,000 bushels at 50 cents a bushel means a lot of money distributed among comparatively few producers.

The Manitoba Government crop estimate is as follows:

	Acres.	Bushels per acre.	Total yield.
Wheat.....	2,011,835	24.28	48,857,255
Oats.....	689,560	43.78	30,206,775
Barley.....	191,069	33.68	6,433,919
Total grain crop.....			85,497,949

The wheat market promises at this writing to open fairly well, probably between 50 and 55 cents. It nearly always pays to sell wheat early. Nine times out of ten, the man who sells on the opening market makes the most money. Not only is the price generally highest during the early season, but the man who converts his wheat into cash early saves all loss from shrinkage in weight, saves insurance and risk of loss, has no need to dread a grain blockade, can promptly meet all outstanding obligations, and thus enhance his credit with those who have trusted him and with the world. He can save money by buying at cash prices, and is freed from the feverish anxieties of the grain speculator. The cashing of the wheat checks oils the wheels of commerce, and every industry is thereby benefited as well as the farming community.

Seasonable Precautions.

With favorable weather, and assisted by the large importation of harvest hands, the crop will be rapidly harvested. Modern harvesting machinery, with plenty of horse power and a little careful planning, makes it possible for comparatively few men to handle a large crop. With good weather, stook threshing saves an immense amount of labor, but it is unwise to have a force lying idle waiting for a machine. It is always safe and prudent to get as much stacking done as possible, as if well stacked, the crop is safe against almost any contingency. It should be quite unnecessary to caution people against careless stacking. The man takes big risks when, instead of building solid, full-hearted stacks, he throws together piles of sheaves. Many have had this lesson taught them at heavy cost. It pays to be careful in the drawing in of grain, as sometimes much is lost by shelling. A good plan is to use racks with close-boarded sides and bottoms. The threshers also require attention, to see that the grain is properly threshed, none blown into the straw stack, and that the weed seeds and dirt are not run into the bushel measure, although the man who grows weeds is to a certain extent entitled to pay for the threshing of them. There is no sense in hauling weed seeds to market, or in paying freight on them. It's all very well to say

that the grain buyers dock as much on clean grain as on dirty, but the man is slack who lets them do so. Have the machine settings cleaned up. Remember the scarcity of feed last year, and the old motto, "Waste not, want not."

From past experience, more value will be placed on straw, and what is intended to be kept over should be stacked as carefully as time will permit. There is danger of prairie fires this fall. Don't neglect every precaution in the way of fire-guards.

Fall plowing should be started as early as possible, as the earlier in the season it is done the better are the chances for next year's crop. If plowed early, the soil goes over firmer and more compactly, and is in better shape to retain moisture. If the weeds on the fallows have made much growth during harvest, the land should be gone over again with a cultivator, or if that will not suffice, use the gang plow as shallow as possible, so as to cut all weeds. Stinkweed, shepherd's-purse, peppergrass, prairie wallflower, tumbling mustard and the cut-leaved goosefoot have become winter annuals, and the fall growth will live over and give trouble if they are not killed with cultivator or plow before seeding, and the late fall is the best time to kill them.

Farm Siftings.

Everybody feels good because the farmer has a bumper crop in sight. Right here, though, even should the wheat be in the granary or elevator, there is no excuse for neglecting the dams of your stockers, creatures which helped many of you through a pinching period last year. The drought south and the rush to market there of everything salable is likely to keep up the price of beef stock.

If possible, clean your grain at home, or take it to an elevator where you can get your screenings back. There will be lots of coarse grain this fall, you say. True. It looks like it; but is that any excuse for waste? If you should have coarse grain enough to carry over for a second winter's feed, it will do no harm. Money will be made easily by feeding some chop, and thus having the calves in good order for the buyers.

Human nature shows queer freaks sometimes. The other day a neighbor was seen who for several years used the stud bull of a nearby pure-bred herd on his grade females, with very beneficial results. Last year, however, he gagged at the service fee, which was reasonable, and bought a bull of no breeding or beef character for about \$40, and is using him on his herd, and now, instead of progression, it's retrogression in his herd.

What about the threshing machine this fall? Have you arranged your work so that you can keep an eye on the separator when running, and avoid your profits going out with the straw? There is no doubt that, in the anxiety to make big runs, many a machine is crowded too hard, and as a consequence a big loss results to the farmer.

Why not encourage the thresher to take his own boarding outfit with him, and thus save the women folk a lot of hard, unprofitable labor?

See to the fire-guards, that they are sufficient in number and properly made.

Wet days may come in harvest, and if not already done, those days will come useful to white-wash the stables and hennery.

It will soon be time for the goodwife to cull her poultry flock. Pen the culls for a few weeks, feed well, and get the difference in price between a first-class article and a third-class one.

Don't overfeed your horses because you have lots of it. Green oats, if not carefully fed, will demoralize your working force very easily. Keep a half gallon of raw linseed oil on hand in case of emergencies, and if necessary, give a pint and a half or quart, and then call your veterinarian at once. Delays are dangerous.

If you can afford it this fall, invest in a good set of scales. If large enough to weigh a mature animal, all the better. They will come useful in two ways: to check up the elevator man and to keep tab on your live stock, whether they are making gains or not? If not, why not?

Danger from Fires.

It seems to us a pity that there is a probability of the farmer suffering from fires this fall, due to lack of plowing proper fire-guards by the railroad companies. The great growth of weeds along the track, which are now about ripened, and consequently in a condition easily set on fire, as well as the great amount of stubble, renders chances of a big conflagration, which will mean ruin to many, very great. Along the main line of the C. P. R. west, up to the middle of August, no efforts seem to have been made to ward off such disasters; the usual fire-guards have not been plowed, nor the space burned off between. While fire-guards are not made by the companies in Manitoba, the complaint still applies, as the weeds are not even cleaned out from near the ties. Farmers along the railroad will do well to lose a day's stacking and employ it making a thorough job of fire-guards, not only along the track, but all around the farm. See to it also that a few barrels of water, and pails, are handy during the threshing period, so that any incipient blaze can be quickly smothered.

A Champion of the T. N. P. A.!

I noticed a short article in your last issue re the Threshers' National Protective Association, and as I do not think your criticism at all fair, trust you will insert this letter in your next issue. First of all, as a thresher and one who knows the organization, I think that anyone writing as you and others have done, should try and get facts before making statements you make. It seems that other business men can form associations to better their interests, and there is not a word said or written about it. No association can exist without funds, and those who know what this money is used for are very well satisfied. Some think it should be higher, and those farmers who will this year be in the localities where the associations exist, will realize that they all pay the one price, a fair price to both threshers and farmers, and that the threshers will be put on a higher standard than they have heretofore been. I trust that before any further complaints are made you will investigate this matter, and you will see that this Association does not impose on any farmer that means to live and let live, but it will catch a few who think their money is a little better than others, and that their work should be done a little cheaper, or that a machine may thresh a little more on their farm than on others. Would like to see this published in your paper in justice to the threshers in this district, as I know that the prices are lower here than they were last year, and I know, now that the Association in Brandon has fixed their prices, that the prices are lower than advocated by the threshers of other districts where these Associations do not yet exist.

CHARLES KOESTER,
Brandon Lodge No. 1, T. N. P. A.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

TWO DISTINCT PUBLICATIONS—EASTERN AND WESTERN.

PUBLISHED SEMI-MONTHLY BY

THE WILLIAM WELD COMPANY (LIMITED).

WESTERN OFFICE:

MCINTYRE BLOCK, MAIN STREET, WINNIPEG, MAN.

EASTERN OFFICE:

CARLING STREET, LONDON, ONT.

LONDON, ENGLAND, OFFICE:

W. W. CHAPMAN, Agent, Fitzalan House,
Strand, 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; \$1.25 if in arrears; sample copy free. European subscriptions, 6s., or \$1.50. New subscriptions can commence with any month.
3. ADVERTISING RATES—Single insertion, 15 cents per line. Contract rates furnished on application.
4. DISCONTINUANCES—Remember that the publisher must be notified by letter or post-card when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.
5. THE ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
6. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid and their paper ordered to be discontinued.
7. REMITTANCES should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.
8. ALWAYS GIVE THE NAME of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done.
9. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
10. SUBSCRIBERS failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.
11. NO ANONYMOUS communications or enquiries will receive attention.
12. LETTERS intended for publication should be written on one side of the paper only.
13. 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.
14. 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.

Systematic Threshing.

While the getting up of the threshing combination has been more or less alarming to the farmers, there are some features of the organization which are to be commended. As we understand it, certain machines will be restricted to certain districts, an arrangement which should save a lot of time and energy by avoiding the travelling several times over the same ground, now so often done by machines to secure a hold on a job. The adoption of such a system would tend to prevent weeds being carried from districts, and would also render it easier for a farmer to know when to expect the mill. Such an organization should mean better and more thorough work, and might well see to the adoption of boarding the men by the thresher. Another effect of the threshers' move is that it has induced the farmers to combine and purchase outfits to thresh themselves out. The threshers claim that no increase of prices will follow, but that price-cutting will be stopped. The latter done, a great deal of benefit will result, as the ridiculous cutting of rates to get business engenders poor work, and the farmer suffers thereby.

A Correction.

In the report of the dairy cattle at the Brandon Fair, which was published in our issue of August 5th, a mistake was inadvertently made by referring to the Holstein cow shown by James Glennie of Langburn. She was given credit for being the winner of the milk test at Winnipeg in 1900. The winner of this test was James Herriott of Souris, as shown by the full report of the milk test, on page 459, August 20th issue of 1900.

Our Royal Visitors.

We take pleasure in presenting herewith portraits, from a recent photograph, of Their Royal Highnesses the Duke and Duchess of Cornwall and York, whose arrival in Canada this month ranks in some respects as the most notable event of the year. Their visit is part of a tour of British dominions, and we are certain that nowhere else in the Empire will they have received a more cordial welcome. It is now some forty-one years since the King, Edward VII., then the Prince of Wales, paid his personal respects to Canada (autumn of 1860), and if he received a hearty reception in those early,

er. Prince Arthur visited Canada in 1869, and the Princess Louise was here during the term her husband, the Marquis of Lorne, was Governor-General.

Programme for the Royal Tour.

Major F. S. Maude, Secretary to the Governor-General, under date of August 6th, 1901, The Citadel, Quebec, has issued the following instructions as to the presentation of addresses to Their Royal Highnesses the Duke and Duchess of Cornwall and York while in Canada:

1. Addresses should be presented at the following "centers": Quebec; Montreal (*Montreal addresses only*); Ottawa; Winnipeg; Regina; Vancouver;



LATEST PORTRAITS OF THE DUKE AND DUCHESS OF CORNWALL AND YORK.

modest days, we may predict a truly royal greeting to his son in days of expanding imperialism and deepening love for the motherland. George Frederick Ernest Albert, Duke of York and Cornwall (second son of the King, Albert Victor, Duke of Clarence, having died Jan. 14th, 1892), was born June 3rd, 1865, and was married on July 6th, 1893, to Princess Victoria Mary (May) of Teck, who have issue a son Edward (in direct succession to the throne), born June 23rd, 1894; Albert, born Dec. 14th, 1895; Victoria Alexandria Alice Mary, born April 25th, 1897, and Henry, born March 31st, 1900. The Duke is an enthusiastic farmer and stock-breeder.

Victoria; Toronto; London (*London addresses only*); Hamilton (*Hamilton addresses only*); Kingston; St. John; Halifax.

2. Addresses from cities or towns not mentioned in paragraph 1 should be presented at the "center" nearest to such city or town.

3. Drafts of addresses for presentation to His Royal Highness should reach the Governor-General's Secretary, The Citadel, Quebec, by the 1st September next. It should be stated at which "center" it is proposed to present them.

4. The deputation intending to present an address should be limited to five individuals. The names of the proposed deputation should in every case accompany the draft of the address mentioned in paragraph 3.

An O

To the Hon. Sydney
Dominion Min

Sir,—No man has
of live-stock husband
ment success of C
view without gray
of what has been
Crusade. The mag
the injury already
which overshadows
operations in conse
this so-called test
authority, justify n
through the period
interests jeopardize

Permit me at th
to the vigor which
tion of the Portfoli
beneficent results ac
the removal of a
tine preventing the
who desired them
and giving our stoc
an advantageous ra
operations, and als
to the marketing
abroad. Dealing w
gressive people, it
statesmanlike to r
tate advancement.

culin test has, un
opposite effect. Wh
removed burdens, y
mitted progress to
importation and sp
imperatively require
ever to make the ir
which it obviously

It would seem ne
testimony showing
of tuberculin testing
Royal Agricultural
17-64 per cent. of
not sufficiently tru
purposes desired, an
ground. The Dublin
rate of error, cond
off the guilty. I ha
the testing of a not
of public weal thr
gained. Some that
tered and were fou
systems, while a n
found to be perfec
the test in Englan
reaching the Argent
fact that under test
by your officers in
officially tested agai
tuberculosis? Is it
year an importatio
official test in Brita
dian officials, the d
to do his country so
be re-tested. About
demned. In a few m
all these animals p
bunch of beautiful h
health, purchased in
tested and condemne
tested by another of
animals were tested
veterinarian, and n
those rejected at fir
passed the first test
breeder had a lot t
action, but in six mo
ones passed, and on
the second test
ence gained this year
are more liable to
after an injection of
of apparently less co
is presumably reason
to react is in a ma
activity (promoted b
ply), and also by th
sequently, this season
robust animals select
port to Canada were

Furthermore, ther
the animal is liable
condition, causing
which may easily b
demning rise or fev
this subtle poison
Careful trials in sev
animals on regular f
health, but without
gave a rise in temp
natural cause or ch
under the test.

Surely, sir, you n
which I cannot conce
you, and you must s

An Open Letter.

To the Hon. Sydney Fisher,
Dominion Minister of Agriculture:

Sir,—No man having at heart the well-being of live-stock husbandry, upon which the permanent success of Canadian agriculture depends, can view without grave apprehension the continuance of what has been styled the Tuberculin-test Crusade. The magnitude of the interest involved, the injury already inflicted, and the menace which overshadows the future of cattle-breeding operations in consequence of the application of this so-called test under and by virtue of your authority, justify me in addressing you publicly through the periodical specially concerned for the interests jeopardized.

Permit me at the outset to pay a just tribute to the vigor which has marked your administration of the Portfolio of Agriculture, and to the beneficent results accruing from such measures as the removal of a vexatious ninety-day quarantine preventing the disposal to American feeders who desired them of our surplus feeding cattle and giving our stock-feeders freedom of access to an advantageous raw material required in their operations, and also to the strict attention given to the marketing of our agricultural products abroad. Dealing with an enlightened and progressive people, it has been found wise and statesmanlike to remove hindrances and facilitate advancement. In its application the tuberculin test has, unfortunately, had exactly the opposite effect. While with one hand you have removed burdens, you have on the other permitted progress to be arrested by hindering the importation and spread of the breeding animals imperatively required if our live-stock trade is ever to make the improvement and progress of which it obviously stands in need.

It would seem needless to adduce or reiterate testimony showing the unreliability and futility of tuberculin testing. The experiments of the Royal Agricultural Society of England, showing 17-64 per cent. of error, discredited the test as not sufficiently trustworthy to accomplish the purposes desired, and there it has certainly lost ground. The Dublin experiment showed a similar rate of error, condemning the innocent and letting off the guilty. I have before me particulars of the testing of a notable dairy herd on the ground of public weal through the knowledge to be gained. Some that failed to react were slaughtered and were found to have tubercles in their systems, while a number that did react were found to be perfectly sound. Animals passing the test in England have been condemned on reaching the Argentine or Canada. Is it not a fact that under test cattle have been condemned by your officers in quarantine, and on being officially tested again were pronounced free from tuberculosis? Is it not also true that late last year an importation for Canada all passed the official test in Britain, but, importuned by Canadian officials, the distinguished owner, thinking to do his country some service, allowed them to be re-tested. About one third of them were condemned. In a few months, under re-test, did not all these animals pass without a reaction? A bunch of beautiful heifers, evidently in the pink of health, purchased in England for Canada, were tested and condemned; in two months they were tested by another officer, and all passed. Twelve animals were tested for an importer by a British veterinarian, and nine reacted. In five weeks those rejected at first all passed, and those that passed the first test were condemned. Another breeder had a lot tested and several gave a reaction, but in six months' time all the condemned ones passed, and one that first passed, reacted at the second test. It would appear from experience gained this year that strong, fleshy animals are more liable to show a rise in temperature after an injection of tuberculin than leaner ones, of apparently less constitution, and for this there is presumably reasonable ground, as the tendency to react is in a measure dependent on cellular activity (promoted by nutrition and blood supply), and also by the amount of the dose. Consequently, this season some of the best and most robust animals selected in British herds for export to Canada were left behind.

Furthermore, there can be little doubt that the animal is liable to many changes in physical condition, causing variations in temperature which may easily be confounded with the condemning rise or feverish reaction occasioned by this subtle poison—tuberculin—in the system. Careful trials in several herds have shown that animals on regular feed and evidently in perfect health, but without any tuberculin injections, gave a rise in temperature, arising from some natural cause or change, sufficient to condemn under the test.

Surely, sir, you must be aware of these facts, which I cannot conceive have been concealed from you, and you must see that the test is utterly

unworthy of confidence, and that its value as a preventive against the importation or weeding out of any diseased animals, or the propagation of sound stock, is actually nil.

Canada and the States enjoy a discreditable pre-eminence in this business. Britain, which has produced more and better pure-bred stock than any other countries put together, has, fortunately, not been led astray with this inoculation fad. The solid good sense of the Britisher has saved him from being overridden by a veterinary caucus. To the credit of the English veterinarian, he has shown no marked disposition to approve the test or make its use compulsory, nor have any of them attempted to hold the Government in leading-strings. And I am glad to say that not a few of the more thoughtful men of the profession in North America have not been carried away in the delusive and costly pursuit of an ignis fatuus which has landed breeders, people and governments in a quagmire, and accomplished no good whatever.

It has been frequently charged that the tuberculin test is responsible for many cases of abortion in pregnant animals, in consequence of the influence which the lymph has upon the tissues. I observe by an official report of the Canadian Quarantine Department, that breeders were warned, in studying the test, to use that only "reliable tuberculin" be used; and Prof. Nocard, of France, has issued a warning against the use of tuberculin as a diagnostic of tuberculosis in man, owing to the danger that it may start the mischief afresh in a portion of the lung that was healing. In view of these possible dangers, would it not have been a proper and prudent course to have set afoot scientific inquiry into these serious questions before embarking on an unknown course, which, as we now know, has resulted in confusion, uncertainty, and loss?

Again, this policy is anti-Canadian. Leading American breeders desire access to the herds of Canadians, and prefer to trust their own experience and knowledge of good healthy animals, rather than trust the vagaries of inoculation with an unknown fluid. But they are prevented from doing so, and trade is destroyed. Within their own borders the test is not allowed to embarrass them. Hence the Canadian Veterinary Department is simply made a tool. Since Canada was the first to impose the test, leading to its adoption by the United States, you, sir, should be the first to remove it.

The result of the investigations by Dr. Robert Koch, admittedly the highest living authority on the subject in the world to-day—the man who invented tuberculin, though he was not responsible for the test system—is that human and bovine tuberculosis are distinct diseases, and not intercommunicable, and that the precautions against infected cattle may at once and for all be abandoned. No one could reasonably believe that the people dying annually from consumption in Canada contracted it from our cattle, which are healthy. An animal wasting and dying of tuberculosis is the rarest of occurrences, and the same is true of British herds. But for the unfounded fear of disease to man, the tuberculin crusade had no real strength, and was not needed for the cattle themselves. But your Chief Veterinary Officer appears to be laboring under the hallucination that the breeders of this country, who have demonstrated their superior capacity and skill in every arena on the continent, are either dishonest or lacking in sufficient knowledge to conduct their own business. They cross the Atlantic, select, at a cost of thousands of dollars, the best bred, most robust constitutioned and good conditioned animals to be found for the improvement of our stock, but our Official Tuberculin Censor puts about one third of them on the black list, raises doubts as to their soundness, and casts a stain on the reputation of the herds. Need we wonder if the British stockman receives coldly your application to raise the embargo against the admission of Canadian feeding cattle?

In conclusion, wherein has it been shown that either humanity or the animals themselves have benefited by the system instituted by and to which your Chief Veterinary Officer has clung with such deathlike but misguided tenacity? Had it been some lawyer or physician whom the exigencies of politics had made Minister of Agriculture, I would have been less surprised at the course of events, but from an enlightened farmer, and a stockman to boot, as I am assured you are, better things were expected. I have never heard or read of a breeder who does not welcome any reasonable proposition whereby the health and condition of stock may be improved, but I am amazed at their long forbearance with the test system and the injury it is doing them, and also under the broken promise of assured relief in February last. Other considerations aside, the political instincts of a statesman would naturally suggest the propriety of not arraying the breeders and the leading farmers of the country in a strong spirit of antagonism, but rather to take these men into your confidence, as they are the persons who are directly concerned and whose operations I venture to hope may still be accorded that measure of security to which they are entitled at your hands. STOCKMAN.

Milk Test at Brandon.

The Canadian Holstein Association offered a special prize of \$25 for a milking competition under similar conditions as in years previous. To this another \$25 was added by the Agricultural Society. The competition was in charge of W. A. Wilson, Dairy Superintendent of Assiniboia, and he has furnished us the following detailed report:

Name of Owner	Address	Name of Cow	Breed	Date of Calving	Time of Day	Lbs. milk.	% of fat.	Lbs. fat.	% solids.	Lbs. solids.	Total lbs. milk.	Total lbs. fat.	Total lbs. solids.	20 points for each lb. of fat.	4 points for each lb. of S. N. F. or solids.	1 point for each 10 days in milk after 1st 30 days; limit, 10 points.	Total points.
1. J. Herrick	Souris	Tempest Ath.	Holstein	April 27th	July 24—morning noon night	294 3.5	1.04	8.77	2.36	117	4111	10.55	82.58	42.20	6.	130.48	
2. W. V. Edwards	Souris	Yankee Rosebud	Jersey	June 5th	July 24—morning noon night	251 4.4	1.034	9.10	2.28	85	4146	8.08	82.92	35.92	2.30	121.31	
3. Jas. Glennie & Son	Langburn	Daisy Teak's Queen	Holstein	May 27th	July 24—morning noon night	271 4.0	1.00	10.00	2.25	113	3224	9.55	61.48	38.40	3.	106.88	
4. Jas. Glennie & Son	Langburn	Modest Maiden	Holstein	June 29th	July 24—morning noon night	271 4.0	1.00	10.00	2.25	118	3185	10.22	63.70	40.88		103.58	

A Winter Creamery for Assiniboia.

It has been decided to operate the Qu'Appelle creamery during the coming winter. Cream will be received from patrons of other creameries along the line, who will deliver it at the railway stations in cans to be supplied by the Department. The Department will also pay the express charges, so that the patrons of outside creameries will be on the same footing as those of Qu'Appelle.

The Department can afford to do this, because the saving in cost of manufacture through the increased output will compensate for the expense of bringing in the cream.

The patrons of the various creameries within reach of Qu'Appelle will be enabled to show how far they are prepared to support winter work at their own creameries by the extent of their patronage during the coming winter.

An All-round Success.

Financially, the Winnipeg Industrial was a success, the receipts from all sources totaling over \$50,000. The amount of money paid out in prizes will aggregate about \$16,000. There were over 7,000 more people passed through the turnstiles this year than last, a pretty good evidence of the growing importance of the Industrial, in view of the general scarcity of ready money and the existing strike on the C. P. R., which undoubtedly prevented many from coming.

Grain and Live Stock in Canadian Northwest.

To the Editor "Farmer's Advocate":

Viewed from the standpoint of the agriculturist, the heading of this paper gives in a nutshell the present and the future of the Canadian Northwest, exclusive of British Columbia. The extent of the vast region possessed of high adaptation in both lines of production does not appear to be even known as yet to its utmost limits. Every year the production of both is pushing toward the pole. Long years will probably elapse, even in this progressive age, before it will be fully known how far north the plowman may turn his furrows with the confident expectation of harvest, and how far toward the pole the stockman can safely winter his flocks and herds.

This means that an immense empire of virgin soil lies open to the enterprise of the settler in this land that stretches away up toward the midnight sun. The soil, or at least very much of it, is of surpassing richness. While in some places there is, in some seasons, too little rainfall for the production of maximum crops, the country is, with the exception of limited areas, sufficiently watered. In no part, probably, do those down-pours occur which are so potent a factor in rainy countries in washing fertility out of the soil. When we are inclined to murmur about scant rainfall, we do well to bear in mind that there is usually associated with it the blessing of unwasted fertility. In this fact rests our reason for the amazing fertility of much of the land that is found in semi-arid regions. When this great fertility is linked with the modest rainfall of this region, the conclusion is legitimate, that for years and years it will be capable of high production, even under a system of farming that may be termed relentless and absolutely unfair to the land. With the marked fertility in the soil, with the little waste, relatively, that is caused by excessive rains, and with the moderate temperatures that characterize the entire region at the time of the ripening of the grain, this great realm of productive power will grow good crops of grain for many years.

But will it grow these forever under a system of tillage that is forever taking away and putting nothing back? I met an old Scotchman at Qu'Appelle. His view on this question was, that the men who advocated mixed farming for the country around Indian Head were giving advice that was not good. They could grow just as good crops of wheat around Indian Head as ever they could. The chief danger they had to guard against was that of getting too much straw. I did not say to the honest and successful old farmer what I will say now, viz., that so surely will the lands around Indian Head, with all their fatness, cease to produce good crops of wheat, if managed in the future as they have been in the past. I did not say this at the time, as I felt it would be no use, for when an old Scotchman gets an idea into his head, like the Quaker's bulky horse at the foot of the hill, it is there. It is useless to hurl reasoning and energy against such rock-like ideas. It is a thousand pities, all the same, to destroy or even to seriously impair the productive power of such land.

Can the productive power of the grain-growing lands of the Canadian Northwest be maintained? Unquestionably they can. If asked how, I answer, by growing fewer crops of grain and more crops of grass, and by keeping more live stock. The power that lies in the grass, "*Bromus inermis*," to provide grazing is being well brought out by Mr. S. A. Bedford, the eminently successful manager of the Experimental Farm at Brandon. Should it be objected that the Northwest is not a corn country—and this objection will be expressed by every would-be American settler—I answer that Ontario became famous for its stock before it gave much attention to growing corn. If asked, "Will the farmers generally take care of the fertility of their magnificent soils?" I answer, No, not generally, until they begin to feel somewhat seriously the pinch of failing crops through a waning fertility. It is not human nature to do so. The average farmer who can reap good crops from his land through a period of successive years does not think any more about the fertility of the future than the average grasshopper thinks about where his breakfast will come from tomorrow. Should he think seriously about maintaining fertility under such conditions? That depends upon how long he expects to live, whether his son is likely to till his land or not after him, and whether or not he has any love for his country.

The system of growing two crops in succession, which many farmers in the Northwest have adopted, and then summer-fallowing the land, is

a great improvement over that system which crops every year. The bare fallow cleans the land, and in proportion as it does it is beneficial. It also liberates fertility and increases the power of the soil for the time being to hold moisture, but it does not bring any fertility to the land, nor does it do anything toward increasing its supply of humus. The better and the more frequently, therefore, that land is summer-fallowed, the more quickly will it wear out, unless some renovating crop accompanies the summer-fallow. Can such a renovating crop be grown? I answer, Yes, various renovating crops can be grown. Those best suited for the purpose may not be the same for all sections.

In the judgment of the writer, therefore, the question of questions with the farmers of the Northwest is how shall they maintain an equilibrium in the soil. The term equilibrium as used here is intended to apply to fertility, to humus, to moisture, and to mechanical conditions generally. The phase of this question that should first receive attention relates to humus, and the growing of Bromus grass in the rotation should go far toward the solution of this question. When this crop has been cut two years and pastured one, its roots furnish humus in their decay. They prevent lands from drifting, and greatly increase their power to hold moisture. This has been admirably brought out in the experiments of Mr. A. MacKay, the Superintendent of the Government Farm at Indian Head. The crop that shall bring fertility is not so easily found; but if needed, the common pea could in the meantime be used.

Indian Head and Sintaluta Districts.

From the car windows of the train on the main line of the Canadian Pacific Railway, one gets but a very limited idea of the wheat fields that furnish the golden stream that for the next few months will be pouring through the elevators, which for many months in the year stand as silent indicators of the fact that in many sections of the West "wheat is king." Indian Head district is far famed as one of the most successful wheat centers, and a drive through the districts this year just as the grain was whitening to the harvest, amply demonstrates that the productiveness of the soil is as yet unimpaired. Wherever the soil has been even half-decently worked, the crops are simply wonderful. Wheat with long, well-filled heads, many with six rows, and full to the very tip. Oats strong and well headed. Little barley is grown throughout this district. Most of the crops, except some badly-worked stubbles, are very clean and free from weeds. On some fallows the crop is too heavy, some of it having lodged, and consequently it will not yield in quantity or quality, while at the same time requiring more labor to harvest. But while many fields will yield well up to 40-bushel crops, there are too many that won't go the half of that, and what is the reason? Simply because men are attempting to handle more land than they can properly work. Of course, last year's crop well-nigh crippled many, and there is excuse for some slipshod work, but this year will put every man on his feet, and it is to be hoped



ATHELSTONE'S CHARMER AND HEIFER CALF BY KING KYMAR.

First-prize Polled Angus three-year-old cow and first-prize heifer, Winnipeg Industrial. BRED AND OWNED BY JOHN TRAUQUAIR, WELWYN, ASSA.

The interest shown by the railroads, and also by the legislative bodies in the Canadian Northwest, in the development of the live-stock industry is indeed gratifying. A rich harvest will assuredly result from such seed-sowing: The encouragement thus given to the introduction of good sires, in a measure at least, accounts for the relatively high grade of the cattle. The farmers are also wise in growing the bacon types of pigs, since they grow the grains that will produce bacon in fine form. His Honor the Lieutenant-Governor of the Territories is giving a fine object-lesson to the people in the success which is attending his efforts in tree culture on the grounds adjacent to the Government House at Regina. The Hon. Thos. Greenway has done a work for Manitoba in live-stock lines, the influence of which will be felt for long years to come, and the work that is being done by the experiment stations is beyond praise. But before the Government will have done its whole duty to the live-stock interests of the country, it will have established one or more agricultural colleges in the Canadian Northwest. I am glad to notice that the Government of Manitoba is already moving in this question. In establishing their college, may they see to it that it will not be so completely overcrowded by university interests that its usefulness will be crippled. This has happened in too many instances on our side of the line. (PROF.) THOS. SHAW.

St. Anthony Park, Minn.

that none will be so overcome by the prosperity sent by a kind Providence as to be satisfied with the methods that have prevailed. There are many hundreds of acres of stubble-sown wheat even in this marvelously fertile district that won't yield over 15 bushels this year. What would have been the result had the season been less favorable? More thorough methods must be adopted, and some system besides the bare fallow introduced to keep the land clean and in proper mechanical condition without the risk of a too heavy and too late ripening a crop. The salvation of wheat farming in this, as in many other sections, will be found in grass, and the Experimental Farms might well devote more attention to finding ways of seeding down suitable to farm conditions. Taking a whole year to get the grass in, and another to get it out, is too expensive a job for the average farmer to tackle.

On a high, open plain, many hundreds of feet above the level of the Qu'Appelle River, into which the country is drained by intersecting steep-banked coulees, this famous wheat section lies. The soil generally is a strong, heavy, black clay loam, but varies to a lightish loam in some places. The flourishing town of Indian Head, with its eight elevators and grist mill, lies about at the south-west corner of the district, with Sintaluta at the south-east corner, five elevators being located at the latter place. Many individual instances of successful wheat-growers could be mentioned; where a single crop had paid the purchase price of a valuable farm; where from

"hired-man," men to positions of wealth truly a well-favored see this year's improvements, better of trees and shrubs stantial barns and a concentration of rather than a spr

Bradwa

The summing up from the seat of a generally results in the part of the view however, at present owing to the absence to be remedied, he the grading outfits, for a line from F hoped will furnish facilities at some p This done, the dist great drawback, w sufficient, however. Situated south of f far-famed territory it merges into the northern end. Rol sloughs give infini which at this time, hightened by the w vest and the dark. Unfortunately, som

LORD BAN

covered with a mantle, an evidence of luxury of a drive to be despised, and be a source of much bluffs, from which from behind which a and large barns, ar solid comfort. Wh plentiful, mention of route followed will n Bradwardine school. Ferguson, with solid neat appearing hom with a fine barn, bu contain the Bromo g we notice the fine guson and the big w Later, passing on th the large barn and s ouse of Jas. McInt volve the looking a quarters, in which helpmate. Farther c is seen, on which is and only needing fine its garnering sure. South, we strike the shiremen, who are k

Manitoba Districts.

the train on the
the wheat fields
that for the next
through the eleva-
in the year stand
act that in many
is king." Indian
one of the most
drive through the
gram was whiten-
onstrates that the
yet unimpaired.
even half-decently
wonderful. Wheat
ny with six rows,
strong and well
throughout this
cept some badly-
n and free from
op is too heavy,
d consequently it
ality, while at the
to harvest. But
l up to 40-bushel
won't go the half
son? Simply be-
handle more land
Of course, last
any, and there is
but this year will
it is to be hoped

"hired man," men have shot up in a few years to positions of wealth and independence. It is truly a well-favored country, and we expect to see this year's wealth devoted to permanent improvements, better homes, with sheltering belts of trees and shrubs surrounding them, more substantial barns and some attention to live stock; a concentration of effort on the present holdings, rather than a spreading out over more acres.

Bradwardine District.

The summing up of the resources of a district from the seat of a parlor car by an Easterner generally results in inaccuracy of statement on the part of the viewer. The district mentioned is, however, at present debarred the parlor car, owing to the absence of a railroad, a want soon to be remedied, however. At the present time the grading outfits are at work on the roadbed for a line from Forest to Elkhorn, which it is hoped will furnish the district with marketing facilities at some point close to Bradwardine. This done, the district will have removed its great drawback, which handicap has not been sufficient, however, to prevent it going ahead. Situated south of Hamiota some 10 miles, this far-famed territory extends south for miles, until it merges into the Oak Lake district at the northern end. Rolling land, large bluffs and sloughs give infinite variety to the landscape, which at this time (middle of August) is further heightened by the whitening of the crops to harvest and the dark color of the summer-fallows. Unfortunately, some of the latter are well

as Shorthorn breeders. Large fields of wheat do not seem to be incompatible here with the raising of good stock, if we are to believe the evidence of our eyes, and we hear from the lips of one of the firm the number of acres engaged in carrying the heavy crop of wheat. The visit is further enlivened by A. Chadbourne, who proves himself a capital raconteur of his experiences and opinions of a visit last year to the Old Land. The recital was rendered doubly interesting to the little coterie of listeners (Geo. Rankin, Thos. Jasper, and the writer) as the stock and farms were described of such noted breeders as Duthie, Marr, Philo Mills, Dudding, Capt. Law, etc., and the hospitality of the Old Countryman outlined. Travel undoubtedly broadens one, and the young stockman who can make such a trip must gain valuable information and enthusiasm for his calling, especially so from the association with men whose names are household words in the stock-breeding world. But we refrain from a further talk on stock topics, more of which can be found in the "Gossip" columns. Close to the Chadbournes are several good farmers, Thos. Dobson, of Brierwood, having things comfortable around him; the Kents, A. and S., and A. Orr, Ralphon, all going to make up a neighborhood which is evidently progressive, possessing as it does beef rings in working order and a Farmers' Institute unbeaten for its work in the Province. Evening draws on. The lowing of the kine and tinkle of the cow bell, together with gradual stilling of the farmyard cries, warns us that Nature goes to rest; and our drive for the day is over.

Sheep and Swine Breeders' ribbon went to Allan Eby for the best ram any age. Pigs were a very fair show, Jno. G. Bray and A. E. Brown making the show in Yorkshires; O. J. White, Jos. Anderson and D. A. Robertson capturing the prizes in Berkshires. D. A. Henderson won the sow and litter prize, and O. J. White the diploma ribbon of the S. & S. B. A. on his boar. In grains and vegetables competition was keen, some very good specimens being shown. Dairy products brought out several exhibits of butter, the winners being E. W. McConnell, Mrs. W. Leary, Jos. Kirk, Miss L. Templeton, and S. Smith. Cheese, homemade, was exhibited by Mrs. A. M. Wilson. The bread and pastry specials were won by Miss H. French and Miss Leith.

The Grain Standards.

The General Inspection Act defines the grades of grain as follows:

SPRING WHEAT.

"Extra Manitoba hard wheat shall weigh not less than sixty-two pounds per bushel, shall be plump, sound, and well cleaned, and shall contain not less than eighty-five per cent. of hard Red Fife wheat.

"No. 1 Manitoba hard wheat shall be plump, sound and well cleaned, weighing not less than sixty pounds to the bushel, and shall be composed of at least seventy-five per cent. of hard Red Fife wheat.

"No. 1 hard White Fife wheat shall be sound and well cleaned, weighing not less than sixty pounds to the bushel, and shall be composed of not less than sixty per cent. of hard White Fife wheat, and shall not contain more than twenty-five per cent. of soft wheat.

"No. 1 Manitoba Northern wheat shall be sound and well cleaned, weighing not less than sixty pounds to the bushel, and shall be composed of at least sixty per cent. of hard Red Fife wheat.

"No. 2 Manitoba Northern wheat shall be sound and reasonably clean, of good milling qualities and fit for warehousing, weighing not less than fifty-eight pounds to the bushel, and shall be composed of at least forty-five per cent. of hard Red Fife wheat.

"Any wheat not good enough to be graded as No. 2 Manitoba Northern, shall be graded No. 3 Manitoba Northern in the discretion of the inspector.

"Scoured wheat shall not be graded higher than No. 3 Manitoba Northern.

"All wheat in the preceding six grades shall consist wholly of wheat grown in Manitoba, the Northwest Territories, or in Ontario west of Fort William, on Lake Superior.

OATS.

"No. 1 oats shall be sound, plump, clean and free from other grain.

"No. 2 oats shall be sound, reasonably clean, and reasonably free from other grain.

"No. 3 oats shall be sound, but not clean enough to be graded as No. 2.

"Rejected oats shall include such as are damp, unsound, dirty, or from any other cause unfit to be graded as No. 3.

BARLEY.

"No. 1 barley shall be plump, bright, sound, clean and free from other grain.

"No. 2 barley shall be reasonably clean and sound, but not bright and plump enough to be graded as No. 1, and shall be reasonably free from other grain, and weigh not less than forty-eight pounds to the bushel.

"No. 3 extra barley shall be in all respects the same as No. 2 barley, except in color, weighing not less than forty-seven pounds to the bushel.

"No. 3 barley shall include shrunken or otherwise slightly damaged barley, weighing not less than forty-five pounds to the bushel.

"No. 4 barley shall include barley equal to No. 3, weighing less than forty-five pounds to the bushel.

"All barley which is damp, musty or from any cause badly damaged or largely mixed with other grain, shall be graded as rejected."

FLAX SEED.

"No. 1 Manitoba flax seed shall be mature, sound, dry and sweet, free from mustiness, and containing not more than ten per cent. of damaged seeds, and weighing not less than 53 pounds to the bushel of commercially pure seed.

"No. 2 Manitoba flax seed shall be mature, sound, dry and sweet, free from mustiness, and containing not more than twenty per cent. of damaged seed, and weighing not less than 50 pounds to the bushel.

"All flax seed which is immature or musty, or which contains more than twenty per cent. of damaged seed, and which is not too damp or unfit for temporary storage, shall be graded as rejected.

"All flax seed which is warm, mouldy, very musty, too damp or unfit for temporary storage, shall be classed as 'no grade,' with the inspector's notation as to quality and condition."



LORD BANFF, ASCOTT MAYFLOWER, LADY WATERLOO B. 2nd, EMPRESS 12th,
AND CICELY AS A CALF.

IMPORTED SHORTHORNS IN THE HERD OF W. D. FLATT, HAMILTON, ONT.

Hamiota Fair.

The agricultural society of the district held a successful fair on Aug. 7th. This year the association had the advantage accruing from fenced ground, part of which is boarded up high. Further improvements will be made, such as the levelling of the grounds, construction of sheds and other buildings, etc., and thus tend to make the annual show a bigger success than ever. In heavy draft horses, Geo. R. Rankin & Sons were the main exhibitors, others being Alex. Smith, Al. Kemp. In general-purpose horses, Robertson Bros., Jos. Ross (Brierwood), W. H. English, Jas. Riddle, Jas. Anderson, Geo. Titmus, were exhibitors and winners. Specials in horses were won by T. R. Todd, Rankin & Sons, D. Whyte, Jno. Allen. In cattle, pure-breeds, T. Jasper took the bulk of the prizes with his Shorthorns, winning the P. B. C. A. diploma ribbon with his bull, bred by G. R. Rankin & Sons. Other winners in this class were Jas. Anderson, Alex. Smith, and T. R. Todd. In grades, W. H. English, Alex. Smith, Robt. Ross, Chas. Dickie, and Jos. Shier won. In sheep, Thos. Jasper won out with his Leicesters, although J. Leland captured a good few; the prizes, in shortwools going to T. R. Todd, some also to Thos. Borland. The

covered with a thick green or parti-colored mantle, an evidence of defective cultivation. The luxury of a drive through such a country is not to be despised, and to the materialist it would be a source of much satisfaction, as the large bluffs, from which each gets his own fuel and from behind which appear fine houses, windmills and large barns, are all evidences of thrift and solid comfort. While good fields of grain are plentiful, mention of a few farmsteads along the route followed will not be out of place. Near the Bradwardine school, one passes the farm of Jas. Ferguson, with solid fields of waving grain; the neat appearing homestead of Geo. Glendenning, with a fine barn, built in square form, which will contain the Bromo grass grown there. Further on we notice the fine barn and farm of Sam Ferguson and the big wheat fields of Henry English. Later, passing on the west side of a pretty bluff, the large barn and solid-looking, attractive brick house of Jas. McIntosh appears, whose labors involve the looking after of a section and three-quarters, in which he is ably seconded by his helpmate. Farther on, the farm of Jno. English is seen, on which is 400 acres of wheat, all good, and only needing fine weather and work to render its garnering sure. Away still further to the south, we strike the Chadbourne Brothers, Yorkshiresmen, who are known outside of their district

CATE
\$1.00
PER YEAR



trial.

by the prosperity
be satisfied with
ailed. There are
bble-sown wheat
le district that
this year. What
d the season been
methods must be
des the bare fall-
nd clean and in
hout the risk of
ing a crop. The
this, as in many
n grass, and the
devote more at-
ng down suitable
whole year to get
et it out, is too
farmer to tackle.
undreds of feet
elle River, into
y intersecting
us wheat section
ong, heavy, black
ish loam in some
of Indian Head,
st mill, lies about
e district, with
er, five elevators
ace. Many indi-
eat-growers could
rop, had paid the
rm; where from

Regina Fair.

The annual exhibition at Regina was held on August 13th and 14th, and was the most successful yet held, the large attendance reminding one of the Territorial Fair of 1895. A horse and cattle barn has been erected this year, at a cost of over \$700. The number of entries exceeded by several hundreds those of former years. The fair was opened by His Honor Lieut.-Governor Forget. The Mounted Police furnished a first-rate programme of sports, and there were some very interesting races. In the main building, a fine exhibit of roots and vegetables was the principal feature. The competition throughout was keen, and really excellent specimens were shown. The flower exhibit was also most attractive. The prizes in the vegetable class were pretty well distributed among the following: Wm. Cook, P. Copey, Regina; D. A. Purdy, Lumsden; G. Spring Rice, Pense; the Indian Industrial School, and a few others. In small fruits, of which the exhibit was most creditable, Mrs. D. A. W. McInnis, G. Spring Rice, Neil Martin and P. Copey were prominent winners.

Owing to the prize cards being attached to the exhibits without the names of exhibitors written on them, it was most difficult to gain any information regarding the entries, and it also detracts greatly from public interest, as people like to know who the winners are. This can easily be remedied, and in future we hope will be. There were only a few entries of threshed grain, but a fair number of exhibits of grain in the sheaf. The Government noxious weed tent, with Superintendent Willing in charge, was very largely patronized, and samples of nearly every weed troublesome in the Territory were exhibited, and information given regarding them. A disappointingly small exhibit of dairy produce was made, Mrs. J. C. Pope and Mrs. H. Anticknap being the largest and most successful competitors. The poultry exhibit was fair. W. Anderson, Brandon, showed Cochins, Minorcas, etc.; Mrs. A. Neville, Barred and Buff Plymouth Rocks; J. Peacy, Barred Rocks; W. Clancy, Leghorns; Mrs. J. C. Pope, Bronze turkeys; and His Honor A. E. Forget was also an exhibitor of turkeys and Belgian hares. The horses were judged by S. R. Edwards, Indian Head, who pronounced the class a most creditable one, especially in heavy horses. In draft registered stallions, Robt. Kinnon's Clydesdale, Glenfarg, unbeaten at this show for the past 3 or 4 years, had to take second place to the drafter Shire, Rising Sun, shown by McLaulhin, of High River, Alta. Mutch Bros., Lumsden, won in the 3-year-old stallion class, with Prince Stanley; Neil Martin, Wascana, getting the second, with Prime Minister. In the female and junior draft and general purpose sections, Mutch Bros., N. Martin, John Godson, Robert Kinnon, Norman McKell, J. E. Armstrong and others were the principal winners, and the stuff shown was of good quality, and most of it in creditable shape. In the light horse class, the quality was not on the whole particularly worthy. Jas. Churchill and John Forrester had forward Standard-bred stallions, Thos. Brown won on pair roadsters; John Godson on carriage pair; F. G. Arnold on single driver, and Mrs. H. C. Lawson on saddler.

The cattle were judged by Prof. Thos. Shaw, of the Minnesota Agricultural College, in his usual thorough and satisfactory manner. There were very few pure-bred cattle out, owing, doubtless, to the proximity of the harvest. J. B. Hawkes won first in the aged Shorthorn bull class, with a straight-lined, good-quality roan; C. Martin, second. In two-year-olds, Meadows & Spera, of Hedgesford, won, with Oxford Boy, straight-lined, with good back and level quarters, and shown in good fit. Hugh Armour was first in yearlings; C. Martin, second.

J. A. Purdy, Lumsden, showed Herefords, his cow, Empress of Beresford, being much admired. M. W. Coulton, Regina, had out the only bull in this class. In dairy cattle, the Ayrshire and Holstein classes were fairly well filled. In the latter, A. B. Potter, Montgomery, had come through from the Manitoba fair circuit with his herd, and took the prizes without competition. He also took most of the prizes in Yorkshire and Berkshire swine; the Indian Industrial School and J. V. Boyd being the only other exhibitors. In Ayrshires, J. C. Pope, Regina, made a very creditable exhibit, his females being of choice quality. In aged cows, his entries were placed as follows: 1st, Dolly Button; 2nd, Gurta's Queen; and Pauline Johnston. D. A. Purdy won first on aged bull, with Pope's Hatton second. In 2-year-olds, Pope won 1st on Prince Teak, and 2nd on Prairie Chief, and 1st on bull calf, with Sir Charles. Some very good grades and milk cows were shown.

Prizes were offered for a milking test, which was conducted by Dairy Superintendent Wilson and buttermaker Ferguson. J. C. Pope won 1st and 2nd on a Jersey grade and Ayrshire, respectively, and R. Beach 3rd on a Holstein grade. Regarding this test, Mr. Wilson writes us as follows:

"In connection with the milk test at Regina,

the prize list was rather defective in conveying definite information as to how the test was to be conducted and awards given.

"I understand that one or two who had entered in the competition were eventually barred, owing to ignorance on their part of the hour set to milk out all cows entering in the test. Had the hour been mentioned in the prize list, instead of being set the first morning of the Exhibition, no misunderstanding would have occurred.

"If the test is to be continued another year, it would be well to have the prize list contain full particulars of what is required of the competitors, such as setting the hour to have all cows milked out, the hour milking is to be done at afterwards, and how many times a day they are to be milked. No confusion should then result.

"I am of the opinion that it would be more instructive and encouraging to both competitors and outsiders, in allotting the awards, to take into consideration the solids not fat (S. N. F.), as well as the fat; scoring by points, allowing, say, 20 points for each lb. of fat, 5 points for each lb. S. N. F., and 1 point for every 5 lbs. of milk given. The value of a cow is not wholly based on the fat content of her milk, although it is the most important ingredient; but the S. N. F., more particularly in cheesemaking, is of considerable value. This will be easily understood when the fact is known that, roughly speaking, one-third of the composition of cheese is casein.

"Work like this should be done in such a way to show, as far as practicable with a few milkings, the value of the animal, and also to be educating to those interested."

Large Farms and Their Management.

THE FRASER FARM, EDEN, MAN.

Located in Rosedale Municipality, some 10 miles north of the thriving town of Neepawa, is the farm of Donald Fraser, whose land holdings here and further north are quite extensive. The farmstead is located on the edge of a small creek, which furnishes water for the stock, and is well sheltered by groves of trees, most of which were planted by the owner. The house nestles in the trees, embowered in which are crab-apple trees (Transcendant), native and cultivated plum trees, all of which were bearing at the time of our visit. Given proper shelter, the fruit problem in Manitoba will at least be partially solved. The soil of the farm is a heavy loam, noted in the locality for producing heavy crops of fine grain. There is in all 640 acres, 325 being in wheat, 120 in oats, 8 acres in barley. Summer-fallowing this year is being done on 160 acres, the land being plowed once and cultivated with the spring-tooth and drag harrow as often as the weeds demand. A rotation of crops is in force as follows: 2 crops of wheat, 1 of oats, 1-year fallow; the manure being applied to the oat ground after frozen up; the rankness of the crop succeeding, liable to result if the manure is applied to the summer-fallow, is thus avoided. A small area has been sown, with Bromo grass this season. Eighteen horses are used, and 24 cattle kept; 160 acres of land being reserved for pasturage. Plowing is done with four-horse gangs, and as much as possible done every fall, fall plowing being preferred. Several harrows are given the land ahead of the seeder, 4 horses being hitched to each implement, 6 sections of harrows being drawn. The owner favors rolling ahead of the seeder, and the use of the weeder after the drill. In harvest time, four horses are used on the binders, which are kept going by using relays of horses, and thus economizing in the number of binders used. Stook threshing is usually done, for which is paid 5½ cents a bushel for wheat, 5 for oats; if stack threshing, 4 and 3 cents is the price. Six teams (in heavy crop, 7 teams) are supplied by the thrasher for the wagons in stook threshing. To accommodate the live stock, a commodious basement barn has been erected, with balloon frame; size, 54 by 72 feet; part of the stable being laid off for horses, two rows, with single stalls 5 feet wide, the remainder being used for cattle, in double stalls, of which there are 2 rows, 6 feet wide, and box stalls, harness and feed rooms. The passages behind the stalls are wide enough to render it possible to draw out the manure with a horse. The system of ventilation in the stable is reported as very satisfactory by the owner. The inlets for fresh air are in the ends of the barn, about half-way to the peak, the boxes to conduct it to the stable being the space between two studding, 16 inches apart, as far as the ceiling, the box being built below the ceiling about two feet. In the bottom of each box is a slide to regulate the ingress of air. The outlets are by means of boxes starting about one foot from the stable floor, going to the ceiling, which is then used as a conductor by boxing in the space between two joists; the opening for egress of air being at the top of the stone wall, which is 9 feet high. As the stable faces east, the outlets being on that side, traps are used to cover the openings should the wind be strong. The inlet holes are on the north and south ends, respectively.

At What Age Should Sows be Bred?

As the prospect for plenty of rough feed is so good, and the price for pork also quite remunerative, the farmer will look about him for feeding stock. The outlook is not very good for bargains in young pigs, so that it will be more profitable, provided the farmer understands the management of brood sows, to breed his own feeding stock. Old and tried brood sows will be high in price, so that the young sows will need to be used for the purpose. The query following will naturally arise in the farmer's mind, the answer to which accompanies it:

At what age should young sows be bred from? This is a problem that has very often been discussed by pig breeders, and it is one about which no hard-and-fast rule can be laid down. Some breeders do not approve of having their sows served until they are quite twelve months of age, on the ground that if bred from at an earlier age, the young pigs produced are not as robust as those from a more mature sow, nor is the sow herself so "lasting" or so fruitful afterwards. In our experience, however, we have never known these arguments to hold good. We have seen hundreds of sows bred from eight to nine months of age, and never with any injurious consequences, so far as either the sows or their young were concerned. Only within the past few weeks we had an opportunity of inspecting several sows which were nursing splendid litters of young pigs, though the dams were still under twelve months of age. One great objection urged against young sows is that they are not so good in their tempers, and that they are more liable to kill their young when bred from at too early an age than if allowed to become more mature before being put to the boar. As against this, however, there is the substantial loss of time which occurs if pigs are allowed to reach the age of twelve months before being bred from. One point deserving of special attention in this connection is that when young sows are being bred from, say at eight or nine months of age, it is always advisable to put them to a mature boar in preference to one of their own age. Use the best boar you can get, and one of the up-to-date bacon breeds.

A Cheesemaker on the Stand.

With four or five vats of overripe milk, it is not easy to make first-class prizewinning cheese. Our biggest drawback is having to draw our milk so far. We have a good country, but a number send their cream to the butter factory, wanting to have milk at home for calves. The utmost care must be exercised, in the weighing-in of the milk, not to accept any tainted or overripe milk. In some cases we make up the second-class milk by itself, and let the senders take what it is sold for. We find we get the best satisfaction by setting our milk as soon as possible and heating to 94 degrees, until acid begins to develop, then cook to 98 degrees. By so doing, your curd is sure to be evenly cooked all through—not just tough cooked on outside and soft in center. You can also give more acid before dipping and not injure your cheese. We always use the rennet test to ascertain at what stage our milk is in. If it is too ripe, of course we cook to 98 degrees at once. We have used no starter so far, as we find the milk works plenty fast enough without it. We wash all curds after milking, with clean water at a temperature of 98 degrees; give plenty of stirring; do not pile too much except in cold weather; salt when it has a nice, mellow, silky feel. There is no fear of getting it to press too warm, unless you use too warm water for washing. Give lots of power. We have the old upright press; therefore, cannot make as nice a shaped cheese as the gang. The cheese should be turned in press every morning and pressed 17 hours, also turned in curing room twice a day in hot weather. Our curing room is not up-to-date; therefore, we cannot control the temperature as it should be. The grease was frying out of our cheese when we shipped them. We think the cheese at Buffalo scored extra well, considering the weather they were made in. We would advise every maker to have the inspector visit his factory, as it would pay supposing he had to foot the bill out of his own pocket.

Huron Co., Ont. ALBERT MILLSON.

The judging rings at the leading exhibitions furnish a good opportunity for young farmers to study the different breeds of stock, and to see the most approved type in each breed as placed by the judges, who, as a rule, are nominated by the Breeders' Associations, and are supposed to be competent experts and up to date in their ideas. There is, also, much to be learned from conversation with stock-breeders around the ring, many of whom are as capable judges as those officiating, and whose criticism of the work, though not always disinterested, may be helpful in arriving at proper conclusions. To one willing to learn and looking for light on the question of stock-judging, we know of no better school.

Indian Head

It is but a few Government locate Indian Head, on a farm, consisting of acres, with miles of avenues of Superintendent's are most charming and an arboretum trees, shrubs and roundings cannot be slow in manifestation, and the circle ever-widening one, inaugurated by the the Brandon Farm Territorial Farm.



First-prize yearling and bred and owned by

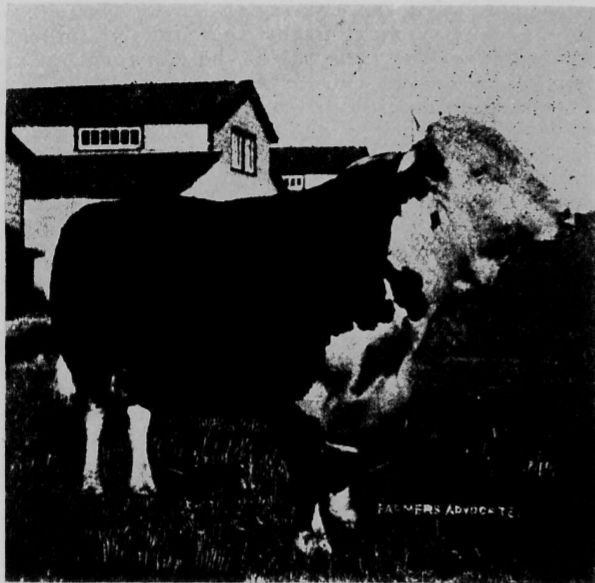
the people for partial effects produced shelter-belts. An worth a million in the shelter-belts a pioneer. One beauty which is thought of MacKay. The (sian), ash and elm, shrubs, are used west hedges, none of native thorn, and the Asiatic maple, surrounded by this and inside of these fruits flourish amazingly in fruit-growing very heavy crop of this year loading point. Actually, so up to aid them in. The fruit? Well, it and vary in size in button, and the plative seedlings. But in these, as there is enough for use, plums. One Aiken, loaded with fine fruit.

Among the grafficient. Soil always to best advantage used, the results are sure, but with the season as the past looked for. The so variety tests are wheat, 60 of oats, peas. What benefit repeating year after every year prove that our conditions is here and the labor might more practically be early sorts of v Plumper, etc.—were days earlier than however, short-head paratively useless. nificent crops. With ence could be noticed turns from the weight possible to speak a Preston and Stahl the latter a bald h give great promise, being full to the top on each side of head particularly noticeable the final returns of special note as com

FOUNDED 1866

Indian Head Experimental Farm.

It is but a few years ago since the Dominion Government located the Experimental Farm at Indian Head, on a bare, open plain. To-day the farm, consisting of one section of land, is bordered with miles of shelter-belts and intersected with avenues of trees, while the farm buildings, Superintendent's house and adjoining test plots are most charmingly surrounded by hedgerows and an arboretum containing a great variety of trees, shrubs and flowers. The beauty of the surroundings cannot but influence the most unimpressible, and while the apparent effect may be slow in manifesting itself, it is none the less sure, and the circle of its influence will be an ever-widening one. The farmers' excursions inaugurated by the Canadian Pacific this year to the Brandon Farm should be extended to the Territorial Farm, and every opportunity afforded



BULLER.

First-prize yearling and sweepstakes Hereford bull, Winnipeg and Brandon Fairs.

BRED AND OWNED BY JOHN WALLACE, CARTWRIGHT, MAN.

the people for personally inspecting the wonderful effects produced by the growing of trees and shelter-belts. An object-lesson of this kind is worth a million circulars on forestry. Most of the shelter-belts are of native maple—the best pioneer. One beautiful avenue is of cottonwood, which is thought very highly of by Superintendent MacKay. The poplars (both native and Russian), ash and elm, and a great variety of smaller shrubs, are used with good effect. Of the small test hedges, none, probably, are so useful as that of native thorn, and none more beautiful than the Asiatic maple. Many of the test plots are surrounded by thick hedges, 10 to 15 feet high, and inside of these, flowers, vegetables and small fruits flourish amazingly. The greatest triumph in fruit-growing yet achieved on this farm is the very heavy crop of apples and plums that are this year loading the trees down to the breaking point. Actually, some trees have to be propped up to aid them in carrying their burden of fruit. The fruit? Well, the apples are Siberian crabs, and vary in size from a collar stud to a vest button, and the plums are mostly unknown native seedlings. But there is great encouragement in these, as there are several crabs quite large enough for use, and several most promising plums. One Aiken and several Weavers are well loaded with fine fruit.

Among the grain plots, the crops are magnificent. Soil always highly cultivated and handled to best advantage, and the best of seed only used, the results are every year practically assured, but with such a wonderfully favorable season as the past, extraordinary returns may be looked for. The same apparently unending list of variety tests are being conducted, about 80 of wheat, 60 of oats, 50 of barley and the same of peas. What benefit can possibly be derived from repeating year after year tests of varieties that every year prove themselves utterly worthless for our conditions is hard to see. Surely the ground and the labor might be utilized for something more practically beneficial. Some of the extra early sorts of wheat—Rya, Dawn, Harold, Plumpler, etc.—were cut August 14th, several days earlier than usual. These varieties are, however, short-headed, weak-strawed, and comparatively useless. In the plots were some magnificent crops. With the better sorts little difference could be noticed, and not until the final returns from the weigh-scales are known will it be possible to speak as to yields. In the field tests, Preston and Stanley (the former a bearded and the latter a bald hybrid, of Red Fyfe parentage) give great promise, the majority of the heads being full to the top, and showing the three rows on each side of head pretty well filled. This was particularly noticeable on Bromegrass sod, and the final returns of these plots will be worthy of special note as compared with summer-fallow. A

newly-introduced English oat, Tartar King, is of wonderful promise. Both oats and barley will yield heavily. Peas seemed too long in straw; they had kept growing and blossoming too long. Spelt showed weak straw and was lodging, but looks like a good fodder plant. The corn crop is the best ever grown at this station. There are nine acres in this crop, and one well-sheltered plot will yield a big cut of fodder. The Leaming is showing up well this year. The cultivated grasses had been harvested and had yielded heavily, one plot native rye grass (*Agropyrum tenerrum*) topping the list, with 4½ tons per acre. There were ten acres of this grass and forty of Bromus, while 12½ acres of each have been seeded down this year.

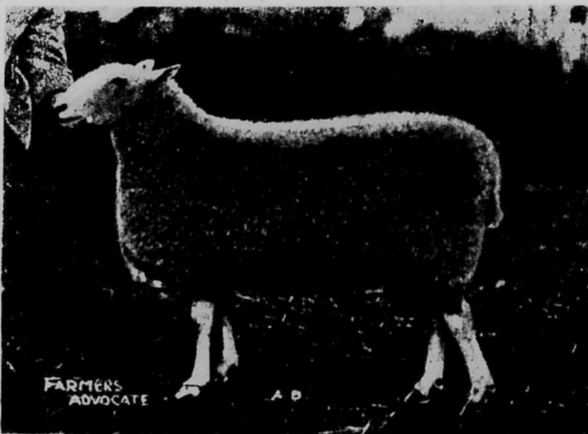
The stock, containing a few representatives of Shorthorns, and an Ayrshire and a Guernsey bull, are all looking well. The swine consists of Berkshires, Yorkshires and Tamworths, with the latter in favor as the most prolific breeders and the best doers.

FORESTRY DEPARTMENT.

The Forestry-Branch of the Department of Interior has been allotted some seven or eight acres on the Experimental Farm for the growing of young trees for free distribution. This work in the Territories is under N. M. Ross, with George Lang, who used to be gardener at the Farm, in charge of the tree plantations. A very successful start has this year been made in the growing of native maples, elms, etc., and a good supply of seedlings will be ready for distribution next season. Cuttings of cottonwood, Russian poplar, willow, etc., will be prepared this winter to have ready for spring distribution.

Wolseley Fair.

The union fair between Grenfell and Wolseley was held on August 15th and 16th, at Wolseley, and, considering the late date at which it was held, was fairly successful. The attendance was fair, but the live stock and agricultural exhibits



BORDER LEICESTER.

Shearing ram. First prize and champion of the breed at the H. & A. S. Show, Inverness, and Royal Northern Show, Aberdeen, 1901.

BRED AND OWNED BY DAVID HUME, BARRELWELL, BRECHIN.

were not numerous. In the main hall, a very creditable vegetable exhibit was made, quality being more pronounced than quantity. Geo. Lang judged this class, and the principal exhibitors were, as near as could be ascertained (the entry tickets and prize cards being absolutely devoid of the names of exhibitors): Chas. Thompson, Ellisboro; A. B. Bompus, Wolseley; T. W. Wright, Grenfell, and others. A few good exhibits of sheaf grain and grasses were noticed, and one very creditable exhibit of native grass, that, however, would have been much more worthy of recognition had the varieties been named. In dairy produce, Messrs. Perley and Bompus were the first-prize winners. The poultry exhibit was fair. In swine, but one entry was made; Berkshires shown by A. B. Bompus. A few sheep were shown by Mr. Brooks and Mr. Copeland. Cattle were judged by Prof. Shaw, and to the satisfaction of all exhibitors he gave his reasons for placing each award. Shorthorns and grades were the only classes out. The good, useful-looking grade cows were shown by R. McLean, F. Gates, and J. Hunt. In Shorthorn class, four aged bulls lined up, all in rather thin condition. A. B. Bompus won on a straight, even-fleshed bull of good handling quality. C. Thompson, Ellesboro, was 2nd on a straight, good-topped young bull; R. McLean 3rd, and J. Linnell 4th. Bompus won on yearling, and McLean 1st and 2nd on bull calves. In the cow class there were six entries, Wm. Dixon, of Grenfell, having an outstanding winner in a big, massive, thick-fleshed, good-backed red cow; second going to the same exhibitor on a daughter of the aged cow, 3rd going to R. McLean on a good, useful sort. In yearlings and heifer calves, McLean got the firsts, with Bompus following. In horses, Arthur Perley was the principal exhibitor in the roadster class. Considerable interest centered round the single-driver class, in which there were eight or nine entries. In the draft and general purpose classes there were but few en-

tries, D. Ferguson, Sr., Moffat, winning on draft team and several other sections. The Fotheringhams, Grenfell, were also successful exhibitors in these classes.

Fruit and Crops in Morden District.

The Morden district has long been noted as one of the most successful wheat centers in the Province. For over twenty years this district has been producing wheat of the choicest milling quality, and has been peculiarly free from frosts and other mishaps. The soil is mostly a warm sandy loam, varying, of course, in some localities from a heavy clay to a very light loam. To one driving through the district, it becomes evident that the continued cultivation of the soil, with the bare fallow as the only rest from grain production, is beginning to tell, and that a more intelligent system must be adopted. The soil must be re-supplied with humus, which has evidently become worked out. Undoubtedly, the readiest way in which to do this is by seeding down to grass. The wheat crop throughout this district is not as good as one would expect from such a favored location, the heads being rather small and not well filled. In addition, a good deal of the crop is badly rusted and lodged. Along the route were noticed large quantities of wild plums and chokecherries, an evidence of Nature's intention that Manitoba will yet grow her own fruit. It would be interesting to know just what the average results have been from the comparatively small area of grass sod that has been in crop this year. Space does not permit mention of the many large and prosperous farmers who have built up good and comfortable homes in this district. In a brief visit but few calls can be made. Robert McLean has a large farm, with substantial farm buildings and handsome stone house, located immediately east of the town. The buildings are indication of the number of stock kept, and a large field of North Dakota Flint and Red Cob Ensilage corn shows that the stock is well provided with fodder. Mr. McLean has this year, in company with several neighbors, purchased a Deering corn binder to assist in harvesting the crop. North and east of Morden a few miles, on the banks of the creek, and surrounded by natural timber, is the home of one of the most extensive farmers of the district, Mr. George Cram. His home, a handsome frame house on stone foundation, is beautifully situated in the midst of a plantation of trees that were set out many years ago. The farm buildings are substantial and comfortable looking, and the spot is certainly an ideal one. The vegetable garden and root crop, together with a considerable area of corn, are located on a very choice piece of land lying between the creek and the main road, and the luxuriant growth and freedom from weeds of this



DR. LEYDS.

First-prize yearling and sweepstakes Tamworth boar, Winnipeg Industrial.

OWNED BY W. E. BALDWIN, MANITOU.

field would do credit to any farm. Mr. Cram was superintending the harvest on one of his many adjoining farms, and we were thus unable to obtain accurate information regarding his system of farming.

North and west of Morden, about seven miles, is located the home of A. P. Stevenson, now so well known as the leading horticulturist of Manitoba. Mr. Stevenson's nursery has already been referred to somewhat extensively in the "Advocate," and it will suffice at this time to say that, although Mr. Stevenson has been away from home a great deal in connection with the work of the Forestry Dept. of the Interior, the orchard and nursery have been ably looked after by his son James, the eldest son, Robert, attending to the farm work. Things are in good shape, and it is a pleasure to report the most successful fruit

Why be Bred?

A rough feed is so quite remunerative to him for feeding good for bargains more profitable, the management in feeding stock, be high in price, and to be used for pig will naturally answer to which pigs be bred from? often been discussed about which laid down. Some of their sows in months of age, at an earlier age, not as robust as nor is the sow fruitful afterwards. We have seen to nine months of consequences, young were conveyed weeks we had several sows which of young pigs, twelve months against young in their temper to kill their fully an age than are before being, however, there which occurs if age of twelve One point of connection is bred from, say it is always added in preference the best boar to-date bacon

Stand.

ripe milk, it is winning cheese, to draw our factory, want- The utmost ighing-in of the r overripe milk. second-class milk what it is sold sfection by set- and heating to velop, then cook urd is sure to not just tough nter. You can ng and not in- the rennet test. ilk is in. If it 98 degrees at far, as we find gh without it. ith clean water give plenty of except in cold, mellow, silky it to press too water for wash- ve the old up- ake as nice a eese should be nd pressed 17 twice a day in ot up-to-date; temperature as ng out of our We think the ell, considering e would advise visit his fac- he had to foot

T MILLSON.

ing exhibitions ng farmers to and to see the as placed by inated by the apposed to be in their ideas. l from conver- the ring, many ose officiating, hough not al- in arriving at to learn and of stock-judg-

crop ever harvested at the Pine Grove nursery, over thirty varieties of apples having fruited this year, some of them bearing large crops. Most of the successful varieties grown by Mr. Stevenson are Russian sorts, mention being made merely of a few of the heaviest yielders. Of course, there are a good many that bear fruit of inferior quality as to flavor, but it is possible that these may somewhat improve as the trees grow older. Of the summer apples, the Blushed Calville is, perhaps, the largest yielder, Mr. Stevenson having picked of this variety about four barrels; the Sugar Sweet, Little Hat and White Rubbets, also summer varieties, are of very good eating quality. Of the late fall and winter varieties, perhaps there is no better than the Anisette, which has borne heavily, and very much resembles the Duchess of Oldenburg; the fruit is large, well shaped, and a very good keeper. The Wealthy and Patton's Greening are two American seedlings that have produced large crops of fall apples of very good quality. A Russian apple of good quality and a heavy yielder is the Hibernial. In crabs, this is somewhat of an off year, one large tree, from which \$30 worth of Transcendent crabs were sold last year, bearing only a few specimens this year. There are a number of other crabs bearing; the Virginia, Sweet Russell, etc. It is a big year in the plum orchard, the Cheney, of which there are many trees in Mr. Stevenson's orchard, being considered one of the best, bearing large quantities of good-sized fruit, of fine quality, and being early in ripening. The Yosemite, the Woods, Wyant, Bixby and Weaver are all fruiting well. Another interesting tree in the collection is the Compass Cherry, which is a hybrid originating from a Miner plum and the Sand cherry. The fruit, although not ripe enough to test at the time of our visit, was of good size and apparently of good quality. In the nursery the season has been a successful one, and there are many interesting things to which we will return at a season when our readers will have more leisure. The lawns and flower gardens are really beautiful, and all the trees, heavy and ornamental, have made wonderful growth. As showing that apple-growing is not confined to any single person, mention may be made of a three-year-old Duchess of Oldenburg in the garden of A. A. Hobkirk, Morden, the tree carrying thirty good-sized apples at the time of our visit. The crab apple trees in the same garden were well loaded.

The Hamiota Country.

Up the old Northwest Central, now a branch of the C. P. R., lies the flourishing town of Hamiota, whose stores, mill, and elevators, the latter numbering seven, are strong evidences of the productiveness of the district. The country surrounding the town is of a rolling nature. Hill and valley, sloughs and bluff make up a view kaleidoscopic in its effects, while the sloughs and ponds furnish food for the sportsman's powder in the toothsome but rapid-flying duck. Around some of them is gathered the farm's supply of hay. As one gets to the edges of the bluffs and wheat fields, the whir of a disturbed covey of prairie chickens informs you that the feeding experiment now going on in the wheat field will in time yield up of its fulness in that choice edible—broiled prairie chicken. With such natural advantages of soil and game, the latter not marred by the game-preserve system of the Old Country for a favored few, farming should be very attractive in this locality. Good crops of wheat and other grains are the rule and not the exception, and in addition to the well-kept fields, are up-to-date barns and houses, surrounded with groves of trees, in many cases planted by the owners. Roots do well on this soil, thus rendering it possible to round out the winter's ration of dry feed and ensure mellowier skins and increased thriftiness to the live stock. Few sheep are kept in the district, which is partially explained by the presence in the country of that pariah—the skulking wolf, who can often be seen making for cover across the prairie. North and west of the town the district used to be considered unfit for wheat-growing, due to frost; today, owing to the increased cultivation and bringing into the arable state of large areas of land, great fields of the king of grains are seen, which yield large returns of good-quality grain. Vegetables and small fruit do well if given proper attention. Occasionally instances are seen in which no progress is being made; at one farm the summer-fallow is a nursery for weeds, instead of being their graveyard; at another farm a scrub bull heads the herd of grades, and thus renders impotent, in a way, the efforts of years of the agricultural press, the experimental farms, the agricultural college and other exponents of agricultural progress and education. As the houses and barns are an indication of the thrift and progress of a community, they were noticed particularly. Several large farms were passed—those of H. Inman, M. Thompson, S. Armstrong, Wm. Bedlow, Bedford Arrowton, Wm. Lipsett Arrowton—all having extensive areas in wheat, just about to be harvested.

Advertising and Selling Stock.

Next in importance to having good pure-bred stock, kept in good condition, especially those one wishes to dispose of, is by judicious advertising to let it be known that one has such for sale. There are two principal methods of advertising pure-bred stock. One is to show representative specimens of one's herd or flock at the fairs, taking chances of winning a share of the prizes, thus securing attention and more or less publicity, according to the character of the exhibition at which one competes. If it is a show of provincial importance, the stock may be seen by visitors from a comparatively large territory, and if prizes are won, the list being published by the more enterprising papers, a more or less wide circulation may be given to the standing of the stock competing. The successful exhibitor may win sufficient in prize money to pay the expense of preparing his stock and placing it on exhibition, and if very successful may win more than that. The unsuccessful gain some knowledge from experience and observation, and, profiting by this, may make a better record later on. In the interest of the breed, and that means the interest of the breeders, it is desirable that a strong representation be brought out to the fairs, for there is no doubt that the visiting public judge of the comparative popularity and usefulness of the several breeds largely by the number and character of the exhibits in each, and for this reason loyalty to the breed of his choice and his interest in the dissemination of that breed should be an incitement to every breeder to fit and exhibit something good enough to be creditable to himself and the breed. While, therefore, we hold that breeders should, in their own and the country's interest, sustain the fairs by exhibiting, we just as strongly contend that the show-yard is not the best place to sell breeding stock in the best breeding condition. Stock in that condition taken to the fairs compares badly with highly-fitted animals, and is not likely to be estimated at its true value by intending purchasers. For this reason we find a very much smaller number of animals taken to the fairs for sale than formerly, though, as a rule, more carefully selected and fitted, breeders more and more availing themselves of the advertising columns of the agricultural and stock journals to inform farmers and breeders of what they have for sale. And this is the medium which at all seasons of the year, over a vast territory extending as widely as the circulation of the paper, brings a man's stock to the notice of just the class of men most likely to want what he has to sell. Many of the importers and breeders who have been among the most successful in making sales of their stock, and a reputation for themselves, do not exhibit, some of them, indeed, never having done so, and yet have found no lack of buyers. Their business has grown into large dimensions, mainly through correspondence resulting from judicious advertising, but also to a considerable extent through personal visits at their homes by men who have noticed their advertisements.

One of the advantages of advertising is that it is cumulative; that is, it is not for the present only, but a man's name and address as a breeder of a certain class of stock having been for a time before the public as such, it becomes fixed in the mind of the reader, and when that class is wanted the name recurs unconsciously to the memory, and besides, the more one is talked of in that connection the wider his reputation grows, like the ripple in a lake caused by the casting in of a pebble. People are apt to get the impression that advertising rates in first-class papers are high, and to doubt whether the returns will justify the cost, but they forget that advertising by exhibition is much more expensive and the field much more circumscribed. Does it never occur to these people that the papers having the highest standard of rates have the largest circulation, and are read by the largest number of farmers and patronized by the most enterprising breeders and business men, who have studied the various methods of advertising, and learned from experience the most advantageous. These men have realized that not infrequently by attracting one good customer, and often in one sale, they have been more than repaid the whole cost of their advertisement for a year, and this has also in many cases been the experience of smaller breeders, who often have quite as good stock for sale as some who make more pretentious claims. It is due to the increasing advocacy of the advanced agricultural press that the farming community generally has come to appreciate the outstanding value of improved live stock.

A continuous yearly advertisement, in the opinion of the writer, as the result of experience and observation, is the most profitable and satisfactory, since it stands to reason that parties desiring to purchase stock will look up the list of advertisers of the breed they are interested in, and the occasional advertiser not being found in the list receives no enquiry in that case, while his

neighbor, who is advertising steadily, may secure valued customers by this means.

Much of the benefit of advertising may be lost through indifference in the wording of the announcement, or by failure to order changes necessary to make it attractive and seasonable and keep it up to date. Carelessness and lack of promptness, too, in answering correspondence is often accountable for failure to reap the best returns from advertising. When an enquiry is received it should be carefully read, and the points on which information is asked noted in order that they may be all covered as explicitly in the answer as can reasonably be expected, the description and breeding being fairly and clearly stated. As the enquirer in many instances has little idea of the location of the advertiser, it is well to make this clear in the advertisement as nearly as possible, and also upon one's letter-heads or envelopes. Every breeder who expects to do business with the public should also have an atlas or map of the country in his house, if it be only a railway map, as by this and the mileage statement on the time tables, he can form an approximate idea of the distance his correspondent is from him, and can, by enquiring of the railway agent, give him an idea of what the freight or express charges will be, which may be the means of securing a sale, and if a price can be quoted, including the expense of transportation, so that the buyer may know just what the animal will cost him at his own station, business may be much facilitated. To a Canadian breeder a copy of the Canadian Almanac, which contains, besides much other useful information, a list of all the post offices in the Dominion, and the nearest railway station, will be found to be very convenient and helpful. Care and attention to shipping stock comfortably and in good condition, in order that the animals make a good impression on arrival at their destination, is also important, as first impressions count for a good deal. In the case of cattle, the furnishing of good halters, and plenty of feed and bedding for the trip, and in the case of sheep or pigs shipped in crates, washing and trimming previous to shipping, and neatness, with lightness and strength in the crates, and the use of an address card or tag having the printed address of the breeder on it, are all details which indicate business methods and go to make a favorable impression, which will be found to pay many times their cost. The first essential, however, in establishing and maintaining a successful business by whatever method or medium it is advertised, is to produce high-class stock, to feed liberally in order to develop it creditably, and to ship only stock of such character as will themselves be a good advertisement for the breeder and be likely to prove satisfactory to the buyer.

An Imputation Resented.

To the Editor "Farmer's Advocate":

As a veterinary surgeon, although not a "Government vet.," I feel that the insinuations cast upon my chosen profession by Mr. Walter Lynch, in your issue of August 5th, should not be allowed to pass in silence.

According to this worthy breeder, the veterinary profession is trying to make a revenue out of the farmers by testing their cattle whether they will or no, and finds it more profitable to condemn the animals tested than to find them healthy. As to the officials making the tests, he says: "Reverse the conditions and pay these officials in proportion to the number of healthy cattle they find, and you will change the results, and make them the most active agents in proving our cattle are healthy."

This insinuation that the officials will give one opinion or another, according as they are paid, is a monstrous injustice to the Government veterinarians, and an insult to the profession to which they belong. The officials are not paid in proportion to the number of animals condemned, but for the number tested, so there is absolutely no inducement to give any but the correct results. Even if Mr. Lynch's supposition was correct, and veterinarians could increase their pay by condemning the cattle tested, it is doubtful if any could be found dishonest enough to do so. Mr. Lynch has no ground for making such assertions, and I trust that when his attention is called to the matter he will apologise for the unjust attack he has made upon a class of men who deserve the respect of the community.

Winnipeg.

F. TORRANCE, D. V. S.

Brandon Horticultural Show.

The annual meeting of the Brandon Horticultural Society was held on August 23rd and 24th, and was very successful. Promenade concerts each evening proved a very attractive feature. In connection with the flower and vegetable show, there were competitions for the best laid-out and best-kept gardens, and a similar class for farms. In the garden class, Senator Kirchoffer won first, with G. R. Coldwell second. The best vegetable-garden prize was won by H. Tooke, G. R. Coldwell second. In the farm competition, the awards were distributed as follows: 1st, Henry Nichol; 2nd, Jas. Henderson; 3rd, Jas. Ramshaw.

The Canadian M

Hon. Sydney Fisher recently returned to visit in Great Britain. His view: 1st, to buy Dominion Experiment; 2nd, to discuss the restrictions placed on the importation of cattle; 3rd, to discuss Canada for army purposes; 4th, to discuss some matters and trade-marks with authorities in England; 5th, to discuss the Exhibition and inspection there which were proposed; 6th, to meet with a committee connected with the Cattle Act; 7th, to induce firms to improve the vessels for the carriage of cattle; 8th, to discuss the means of securing a sale, and if a price can be quoted, including the expense of transportation, so that the buyer may know just what the animal will cost him at his own station, business may be much facilitated. To a Canadian breeder a copy of the Canadian Almanac, which contains, besides much other useful information, a list of all the post offices in the Dominion, and the nearest railway station, will be found to be very convenient and helpful. Care and attention to shipping stock comfortably and in good condition, in order that the animals make a good impression on arrival at their destination, is also important, as first impressions count for a good deal. In the case of cattle, the furnishing of good halters, and plenty of feed and bedding for the trip, and in the case of sheep or pigs shipped in crates, washing and trimming previous to shipping, and neatness, with lightness and strength in the crates, and the use of an address card or tag having the printed address of the breeder on it, are all details which indicate business methods and go to make a favorable impression, which will be found to pay many times their cost. The first essential, however, in establishing and maintaining a successful business by whatever method or medium it is advertised, is to produce high-class stock, to feed liberally in order to develop it creditably, and to ship only stock of such character as will themselves be a good advertisement for the breeder and be likely to prove satisfactory to the buyer.

Mr. Fisher laid before a scheme for the purchase of Canada, with which he was pressed, and a committee has been satisfied and Capt. Maudslay, of who are now throughout in Canada where suitable chiefly through the private horse dealers. Thousands have been going forward and our farmers have prices—much better than animals during recent years.

At the Glasgow Exhibition, the interest taken in the Canadian flatterer things have been the visitors, economic representation of soil and industries. This done an excellent business with the returns taken. The Glasgow Exhibition as the Paris or Chicago exhibits and the exhibition are excellent. It is a success.

This season in England, the hay crop is pastures when he left milk production shrinking enquiry about Canadian used it in England acknowledge they can get. The hay season being such a good demand for the quality expected by the English of weeds, amongst which and have about 20 per cent clover. To overcome this necessary that the hay pressed than the old-fashioned. In consequence of the Office for South Africa proved presses have country, which will be a hay trade with England.

As was foreshadowed when he left on Fisher, like some of his predecessors in securing the right against Canadian cattle, be slaughtered within that stockers or feeders cattle finished for the standpoint of the Canadian side it to be by far the finish the cattle here. The tory, and Mr. Fisher's argument could not be got to ostensible reason is to keep does not exist and never cattle of Canada, but the majority of British stockers especially, are opposed Canadian "store" cattle were so popular there.

The Canadian Minister of Agriculture Abroad.

Hon. Sydney Fisher, Minister of Agriculture, recently returned to Ottawa from a two-months visit in Great Britain. He had several objects in view: 1st, to buy thoroughbred cattle for the Dominion Experimental Farms; 2nd, to discuss the restrictions placed by the Old Country on the importation of cattle from Canada for their markets; 3rd, to discuss the purchase of horses in Canada for army purposes (War Office); 4th, to discuss some matters connected with patents and trade-marks with the Board of Trade authorities in England; 5th, to visit the Glasgow Exhibition and inspect the Canadian exhibits there which were prepared under his direction; 6th, to meet with and address various bodies connected with the Canadian trade in food products; 7th, to induce the heads of great shipping firms to improve the accommodations on their vessels for the carriage of Canadian food products; and, 8th, generally to investigate in what way Canadian trade with England in agricultural products can be improved and increased.

He visited many herds of cattle and sheep to find the animals wanted for the Farms, and found stock in England high in price and most of the breeders indisposed to sell their best. It took some time, therefore, to secure the animals desired, and which are coming out in charge of Mr. Grisdale, the Agriculturist of the Central Experimental Farm: some 20 head of cattle and a number of sheep and pigs.

We understand that Mr. Fisher was able to induce the ship-owners to start the improvements desired in the matter of accommodation for shippers, though disinclined to do so when first approached. He also obtained much useful information regarding the improvement of Canadian exports.

Mr. Fisher laid before the Imperial War Office a scheme for the purchase of army horses in Canada, with which they were favorably impressed, and a committee is now investigating the matter. In the meantime, however, the problem has been satisfactorily solved by Col. Dent and Capt. Maudslay, of the Remount Department, who are now thoroughly aware of those districts in Canada where suitable horses can be secured, chiefly through the private enterprise of our local horse dealers. Thousands of Canadian horses have been going forward to Africa this season, and our farmers have been getting remunerative prices—much better than were realized for such animals during recent years.

At the Glasgow Exhibition he found great interest taken in the Canadian exhibits, and most flattering things have been said of them by the press and the visitors. It is a thoroughly good economic representation of the products of our soil and industries. The exhibitors there have done an excellent business, and are well satisfied with the returns for the trouble they have taken. The Glasgow Exhibition is not as large as the Paris or Chicago ones, but the quality of the exhibits and the organization of the Exhibition are excellent. It has been a great financial success.

This season in England has been extremely dry. The hay crop is a very short one. The pastures when he left were burned up and the milk production shrinking. He found everywhere enquiry about Canadian hay. Those who have used it in England acknowledge it to be the best they can get. The hay crop in Canada this season being such a good one, there should be a good demand for the quality of hay which is expected by the English market. It must be free of weeds, amongst which is counted couch grass, and have about 20 per cent. to 25 per cent. of clover. To overcome the cost of carriage, it is necessary that the hay should be more tightly pressed than the old-fashioned press could do. In consequence of the sale of hay to the War Office for South Africa, a number of improved presses have been established in the country, which will be extremely useful in future hay trade with England.

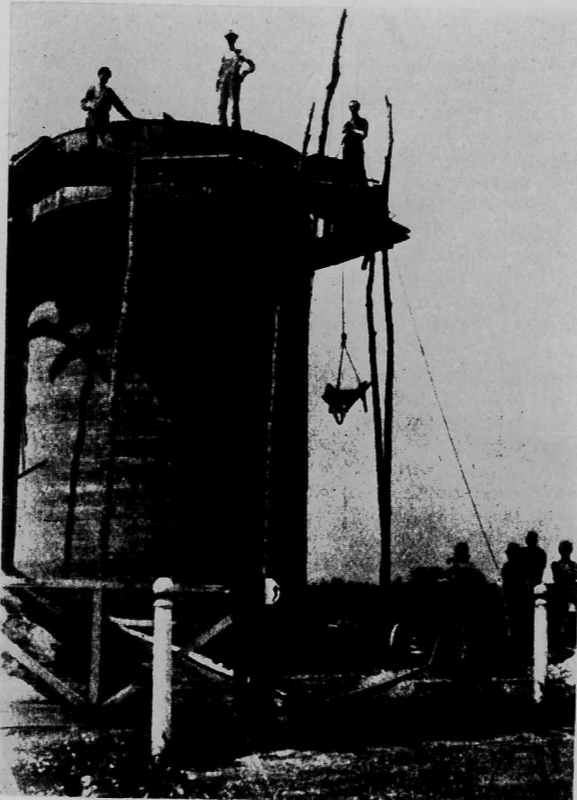
As was foreshadowed in the Farmer's Advocate when he left on his mission, Hon. Mr. Fisher, like some of his predecessors, did not succeed in securing the removal of the embargo against Canadian cattle, which requires them to be slaughtered within ten days of landing, so that stockers or feeders are barred out and only cattle finished for the block are sent. From the standpoint of the Canadian farmer, many consider it to be by far the better policy for him to finish the cattle here. This restriction is statutory, and Mr. Fisher was told that an amendment could not be got through Parliament. The ostensible reason is to keep out a disease which does not exist and never has among the healthy cattle of Canada, but the real reason is that the majority of British stockmen, and the Irish farmers especially, are opposed to the competition of Canadian "store" cattle, which in times past were so popular there as feeders. A Scottish

correspondent of the "Farmer's Advocate" lately threw out a hint that it would be desirable, from the British point of view, to admit dressed meat only (which sells at a lower price), and thus exclude our fattened cattle, which now go forward to the great lairages of Liverpool, London, and Glasgow. If John Bull is wise he will take a hint from the "Farmer's Advocate" and never attempt any game of that sort, and Mr. Fisher will do well to see that the present privilege is retained and the facilities improved. Nowhere in the world is the dressed-beef business carried on so perfectly and on so vast a scale as in Chicago and other Western States cities. Still, they ship thousands of their very best cattle alive to England every year. If there were as much or more money in shipping them as dressed meat, would they send them on the hoof? Uncle Sam is not in the habit of doing that sort of thing. As yet we have practically no export trade in dressed beef. Let us not drop a real substance for an uncertain shadow.

Successful Hog Feeding.

On the 18th day of Feb., 1901, we had a litter of eleven pigs born, out of which eight lived and grew to an average weight of 206 lbs. at 5 months and 6 days old.

The breed was Yorkshire and Cheshire cross, which are large, lengthy hogs, with strong constitutions and great capacity. At the age of about four weeks we had a place fixed so the pigs could eat out of a small trough which the



CIRCULAR CEMENT-CONCRETE SILO, BUILT FOR MR. GEORGE LETHWAITE, HURON CO., ONT.

dam could not get at, and by six weeks old they went right on and scarcely missed their mother.

We fed skimmed milk and shorts until about the first of May, or till the pigs were about two months and a half old, and from that on wheat chop (ground fine) and whey. They were fed six feeds every day. Quantity—what they would eat up clean. We watched that they ate up everything clean. If some was left we slacked the feed, and then increased it as the hogs grew. We put their shorts or chop in their troughs dry, and put their drink on it every feed. During the cold weather, when they could not go out, we gave them dirt from the root-house and ashes and such like to keep them healthy.

The secret of success in feeding and raising hogs is to watch, be with them often, keep the rooms clean, give them dry beds, and see that they are always comfortable.

Now, as for letting them out, they were out every day (when the weather got warm enough), in the forenoon, in a small yard (just so as to get to the ground), and shut in the rest of the day until about four months and a half old. After that they were shut in close all the time. We enclose certificate of the buyer of these hogs, as to their weight, etc.

Scotland, Ont., July 25, 1901.

I have much pleasure in certifying to the extra quality of eight hogs bought to-day from L. Kelly & Son, of Kelvin. At five months and six days old the average weight was 206 lbs. The breed was Yorkshire and Cheshire.

O. J. Benedict.

Mr. Benedict is a buyer for Mr. Harris, of

Bow Park. He buys only first-class hogs, and pays first-class prices. We received \$7.25 per 100 lbs. LEMUEL KELLY & SON.

Points About Pork Production.

Growing pigs need plenty of exercise.
Feed to make muscle instead of fat.
Preventing diseases is better than curing them.
A breeding boar should not be kept fat.
With growing pigs more grass or clover means better health and growth.

Individual merit is as essential as pedigree in a breeding boar.

It is the pig that is kept growing without being glutted or cloyed that pays best.

The pigs to be castrated should be attended to as soon as they are old enough to handle.

Sows that are expected to farrow an autumn litter of pigs should not be allowed to get poor.

Economy of pork production is to maintain good health with early maturity.

An important item in making cheap pork is to get the pigs to market as soon as possible.

Feed the sows after farrowing upon foods calculated to produce a large flow of milk.

Growing pigs relish sweet and wholesome food much better than that which is sour.

There is no objection to making corn the staple food for hogs. The bad results come from making it the only food.

The success of a young sow with her first litter has much to do with her future value.

The first litter is always the hardest draft on the young sow; hence she should be given a rest.

The time of weaning must depend a good deal on the conditions of the sow and the quantity of the milk she gives.

After the pigs are weaned so far as possible, the sow should be put in a good gaining condition before being bred again.

Supply the pig with clean, fresh water in hot weather, and plenty of green feed if the grass is dry in summer, and with roots in winter.

Keep a good supply of ashes—three parts, and salt one part—where the pigs can have access to it. Burn up wood into charcoal, and allow the pigs to eat it, as they will do with a relish. The pigs seem to demand by nature earth substance for some purposes, and are much healthier when supplied with it.

A Model Ontario Silo.

We present on this page an engraving made from a photograph of the circular cement concrete silo built this summer on the farm of Mr. George Lethwaite, of Huron County, Ontario. The silo is 30 feet high and 14 feet in diameter. It required 30 barrels of Beaver Portland cement. The work was done by Mr. A. E. Hodgert, of Exeter, and occupied the time of four men 8½ days in building it. The cement was mixed in a Hodgert mixer, one part cement to 12 parts sand and gravel. Steel rings were used, 14 feet in diameter by 2½ feet high. The cement was placed in the first ring, and then a second one was placed on top and filled while the first was setting. As soon as the second ring was filled, the first one was unbolted and hoisted by four men with ropes. Doors were put in every 2½ feet; size of doors, 2½ feet wide by 3 feet high. The holes for the doors were made by inserting a wooden frame, until the cement set, and on the inner side of the silo the frame was made about two inches the largest so that when the doors are put in they will be flush with the surface. The roof is to be of galvanized iron. The cement cost at Goderich \$3 per barrel.

Fat Cattle and Sheep in Algoma.

A valued subscriber of the FARMER'S ADVOCATE, near Iron Bridge, Algoma, Ont., writes us to know if something cannot be done for the farmers of that locality, who have lots of fat cattle and sheep to sell, but no buyers to take them? The latter, he says, come as far as Thessalon, where they get the impression that there is nothing worth going further for. He states that several carloads of good fat cattle could be got there now. Algoma is a particularly fine district for stock-raising. Some of the Toronto or other dealers who have local buyers there, or who send buyers to that part of the country, should get into communication with the Iron Bridge feeders. We trust they will find buyers at remunerative prices for their stock at an early date.

Assiniboia Horticultural Society.

A horticultural society has been formed at Regina, with the following officers: Honorary president, Lieutenant-Governor Forget; president, Mr. A. F. Angus; vice-presidents, G. Spring Rice (Pense), Angus MacKay (Indian Head), C. W. Milestone (Moost Jaw), G. Michaelis, and R. S. Barrow; treasurer, R. M. Napier; secretary, W. B. Pocklington. Committee—J. T. Stems-horn, Jonathan Rigby, W. Cayley Hamilton, K. C.; Geo. Watt, and R. Martin.

Practical Lessons from the Tuberculosis Discussion.

(From the English Live Stock Journal.)

The echoes of Dr. Koch's remarkable address at the Congress on Tuberculosis are still heard in many lands, and will doubtless continue to be so for a long time. At the closing sitting of the Congress, it was resolved, on the motion of Sir Herbert Maxwell, seconded by Earl Spencer, "That in view of the doubts thrown on the identity of human and bovine tuberculosis, it is expedient that the Government be approached and requested to institute an immediate inquiry into this question, which is of vital importance to the public health, and of great consequence to the agricultural industry."

These statements, no doubt, fairly represent the position, but it may be well to ask whether, during the period of experiment and investigation now before us, something cannot be done to modify the suspicion that has been growing up for some years regarding cattle as a cause of tuberculosis in man. The result of this suspicion has been most detrimental to stock owners in many ways. To specify one instance of this, it is well known to have had an adverse influence on the export trade, as the Governments of Colonial and foreign countries have insisted upon the tuberculin test being applied to all pedigree cattle purchased with the object of improving the stock of these distant countries. No one disputes for a moment the perfect right of the Governments to insist upon any reasonable precaution being taken to prevent the importation of disease. Many thousands of pounds have been spent in this country in order to clear our herds of all infectious maladies which could possibly be conveyed. It is the aim of breeders here to have only healthy stock, and the restrictions to which they have patiently submitted with this object amply prove their earnest wish to comply with the highest practical requirements as to the freedom of their stock from disease. But when the scare about the transmission of tuberculosis from animals to man extended all over the world a few years ago, something was demanded with which it was certainly difficult to comply, and many breeders, convinced of the health of their herds, declined to have their animals subjected to the tuberculin test, and preferred to let the export trade alone, while the diverse and uncertain results of the test have resulted in loss and inconvenience to those who have submitted to it. The cattle breeders, both in the United States and Canada, have revolted against this test in the case of carefully-selected pedigree stock, and if it rested with them its application would be withdrawn at once. It will be interesting to see if the Governments of these countries still consider it necessary to guard against a danger which Dr. Koch considers to be non-existent, because that is really the chief excuse for insisting upon the application of the test. Exporters are quite capable of selecting animals that are healthy, and that will certainly not be the cause of disease among cattle. The test is not needed for that purpose.

It has been stated that Dr. Koch, in his declaration as to the non-transmissibility of tuberculosis from man to animals and from animals to man, has really attacked his own science, but this is not strictly correct. His discovery of the tubercle bacillus, upon which all the modern methods of dealing with tuberculosis in human beings have been built up, was followed, some years afterwards, by his invention of tuberculin as a cure for consumption in man. As is well known, this cure was prematurely disclosed, and disappointment followed the high hopes with which its discovery was hailed. It was not Dr. Koch who first applied it as a diagnostic among animals, but Professor Gutman, of Dorpat, Russia. Dr. Koch apparently considers it a useful agent for diagnosing the disease in animals for laboratory purposes, as he used it in his recent experiments to prove that the disease is not inter-communicable. The great edifice of suspicion against cattle that has been built up, to some extent by the results of the tuberculin test as a diagnostic for animals, is not, however, part of Dr. Koch's science. The object of his address was to recall attention to the real practical use of his discovery of the tubercle bacillus, which can, in his opinion, best be combated by preventing infection from human beings who are afflicted with the disease. The tendency has been to concentrate attention upon the possibility of the transmission of the malady from animals to man, and the fe-

actions of the tuberculin test have tended to magnify the prevalence of the disease in cattle. Dr. Koch puts heredity and transmission from cattle in the same category, and does not consider it necessary to take any measures against either as a cause of the disease in man, and, of course, he did not make that declaration without a certain amount of proof, his experiments which preceded it, and of which he suggested a repetition elsewhere, being indeed such that Lord Lister admitted that he had established part of his case, viz., the incommunicability of human tuberculosis to animals. The other branch of the case is in dispute, and will probably remain so for many years, but Dr. Koch's pronouncement against it must have some considerable influence, as there is an absence of direct evidence to justify the suspicions that have grown up.

Few would object to adequate measures being adopted to safeguard the soundness and purity of the meat and milk supply, quite apart from the question of the transmissibility of this particular disease. A good deal has yet to be done to secure efficient inspection, and to avoid the unnecessary destruction of wholesome food, as also to apportion the losses from seizures and to introduce the principle of compensation for meat destroyed in the public interest; but the agitation for better inspection will make progress, and capricious condemnations will become more rare. No doubt the influence of Dr. Koch's statement will be increasingly felt in a more reasonable administration of the laws for regulating the purity of food. Some vexatious provisions demanded by local authorities will now have less chance of being conceded than ever, and a few of those already granted may with advantage be revised. On the whole, however, the public are not likely to consent to the withdrawal of safeguards in this direction.

As regards the disease in cattle, there was a good deal of alarmist talk at the Congress, and no doubt there would have been more if it had not been for Dr. Koch's intervention. Certainly it would be a great relief to cattle owners to know that their stock cannot transmit this scourge to the human race, and it seems strange that during all the years of controversy the veterinary profession do not seem to have systematically experimented on the lines carried out by Dr. Koch, as they might have done, though Professor Bang, of Copenhagen, mentioned that he had proved that there was very little danger in inoculating cattle from man. We are sure that the veterinary profession would welcome as much as the owners of live stock the establishment of the theory of the non-transmissibility of this disease from animals to man. This would relieve them from the task of dealing with subjects which do not directly touch upon the branch of study in which they are universally acknowledged to be distinguished experts.

If tuberculosis in cattle were to be treated as a disease of animals, much more rapid progress would be made with its extermination than has been the case during the period of alarm which has followed the introduction of the tuberculin test. The slaughter of cows that took place when pleuro-pneumonia was being stamped out revealed the fact that tuberculosis prevailed to a considerable extent among animals in town cowsheds, while, according to these post-mortem examinations, it was not largely prevalent in the ordinary cattle stock of the country. It would not cost a great amount of public money to destroy any visibly affected animals in these sheds, compensating the owners for their loss. Professor McFadyen states that two per cent. of the milch cows have tuberculous udders. Could not these be dealt with on some practical scheme of slaughter with an element of compensation to encourage intimations of the disease, and to prevent loss to the owners?

The herds of the country, especially those composed of valuable pedigree animals that are carefully bred and reared, are, we believe, very healthy. They are out in the open air half the year; their sheds are frequently disinfected and cleared of all the cobwebs which shelter disease germs, while unthrifty animals are not retained for breeding purposes. It is a great hardship that such cattle should be placed under a cloud of suspicion. The tuberculin test does not always disclose the really bad cases of tuberculosis, so that they could be weeded out if they exist, but it often gives reactions where the disease exists in the shape of a minute speck, that on slaughter can only be discovered by the microscope. The working out of this matter has led to anomalous results, and has hindered practical measures for eliminating the disease. If the tuberculin test were to be used in the laboratory as an aid to scientific experiment, and the Government veterinary staff were authorized to remove the comparatively small percentage of animals that are visibly tuberculous, compensating the owners for any loss they may sustain, we should soon be able to claim a clean bill of health under this head, as we have been in the case of other cattle diseases which have succumbed to practical treatment in this country, but that have baffled the executives of the Continent, where the tuberculin test has been exploited with so much vigor.

Dairy Test at the Pan-American.

REPORT OF THE MODEL DAIRY AT THE PAN-AMERICAN EXPOSITION, GIVING TOTALS OF EACH HERD COMPLETE FROM THE COMMENCEMENT OF THE TEST, MAY 1ST, UP TO AND INCLUDING WEEK ENDING AUG. 13, 1901.

BREED.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Guernseys	17755.7	916.99	\$229.23	\$81.91	\$147.32
Jerseys	17082.9	883.54	220.87	79.74	141.13
Ayrshires	21065.0	889.33	222.32	81.93	140.39
Holsteins	24069.1	887.45	221.85	91.61	130.24
Red Polls	18664.7	844.05	211.01	82.61	128.40
Brown Swiss	20041.1	826.87	206.70	89.60	117.10
Shorthorns	20342.9	811.43	202.55	93.89	108.66
French-Canadian	16961.4	714.11	178.52	69.71	108.82
Polled Jerseys	13927.5	691.72	172.92	64.18	108.74
Dutch Belted	15252.9	587.35	147.58	76.72	70.86

REPORT OF THE MODEL DAIRY AT THE PAN-AMERICAN EXPOSITION FOR THE WEEK ENDING AUGUST 13, 1901.

BREED.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Jerseys.					
Gipsy	292.9	10.74	\$ 2.68	\$1.00	\$1.68
Primrose	174.7	12.53	3.13	.91	2.22
Queen May	263.7	11.62	2.90	.85	2.10
Rexina	269.0	10.81	2.70	.81	1.89
Mossy	211.5	10.94	2.73	.87	1.86
Total	1001.8	56.64	14.14	4.44	9.70

Guernseys.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Vega	173.5	9.38	2.34	.90	1.44
Cassiopea	224.0	11.06	2.76	1.06	1.70
Mary Marshall	262.2	13.55	3.39	1.05	2.34
Madora Fern	172.7	9.14	2.28	.92	1.36
Procris	224.7	11.76	2.94	1.06	1.88
Total	997.1	54.89	13.71	4.99	9.72

Ayrshires.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Kirsty Wallace	239.9	10.73	2.68	.88	1.80
Lady Flora	229.0	9.42	2.35	.84	1.51
Alice 2nd	217.4	10.99	2.75	.88	1.87
Betsy 1st	243.8	10.32	2.58	.88	1.70
Pearl of Woodside	230.2	10.29	2.57	.88	1.69
Total	1160.3	51.74	12.93	4.36	8.57

Holsteins.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Meg	188.7	8.98	2.25	1.16	1.15
Tidy	230.7	11.45	2.86	1.25	1.61
Inka Mercedes	307.8	11.22	2.80	1.24	1.56
Hulda	300.7	11.67	2.92	1.25	1.67
Beauty	297.9	11.91	2.98	1.22	1.76
Total	1355.8	55.23	13.81	6.12	7.75

French-Canadians.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Liena Flory	209.4	10.34	2.58	.78	1.80
Rouen	187.9	10.16	2.54	.78	1.76
Denise	207.7	9.65	2.41	.78	1.63
Luna	176.9	7.90	1.97	.75	1.22
La Bouchette	142.0	6.18	1.54	.46	1.08
Total	923.9	44.23	11.04	3.55	7.49

Shorthorns.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Princess of Thule	207.6	9.89	2.47	1.24	1.23
Daisy D	204.4	9.01	2.25	1.23	1.02
Miss Molly 24536	272.6	11.86	2.96	1.24	1.72
Queen Bess 21780	238.5	10.24	2.56	1.24	1.32
Rose 3rd 113205	247.6	9.75	2.44	1.24	1.20
Total	1170.7	50.75	12.68	6.19	6.49

Butter Tests and Milking Trials at Tring Show.

The annual one-day show at Tring, on the estate of Lord Rothschild, is regarded as one of the most interesting events of the sort in England. The show was held this year on August 8th, the entries numbering 854. Judged by inspection, Jolly Brown, the first-prize Jersey cow at the Royal Show at Cadriff, had to take fourth place at Tring.

The following are the results of the butter test and milking trials, only Jerseys and Shorthorns competing:

BUTTER TEST.					
Cows of any breed or cross, not exceeding 900 lbs. live weight.					
	Days in Milk.	Yield.		Butter.	
		lb.	oz.	lb.	oz.
1st prize, Tuddie's Queen (Jersey)...	67	47	1	2	11 1/2
2nd prize, Gloaming 4th (Jersey)....	130	34	11	2	2
3rd prize, Primrose Day (Jersey)....	67	49	14	2	7 1/2
Cows of any breed or cross, exceeding 900 lbs. live weight or over.					
1st prize, Lady (cross bred)	59	58	10	3	6
2nd prize, Lady of the Sunny Isles (Jersey)	125	45	6	2	5 1/2
3rd prize, Trefoil (Shorthorn).....	79	72	10	2	9 1/2
MILKING TRIALS.					
Cows of any breed or cross, exceeding 900 lbs. live weight.					
	Days in Milk.	Yield of milk.		Points.	
		lb.	oz.	lb.	oz.
1st prize, Trefoil (Shorthorn).....	79	72	10	76.52	
2nd prize, Lady (cross bred).....	59	58	10	60.52	
3rd prize, Model Mary (Shorthorn).....	11	59	6	59.37	

After an abortive busy harvesting, heavy thunderstorms the country. This greatly facilitated grass. I saw some very high land in my air to-day, and I heart into the buy future of this trade last year, but it is than it was a month South, and English appreciable extent are, however, doing absence, and price parties. They are year's rates, and expect a bright yellow head, but self-binders are at and storms kept away year for the self-binders and not too heavy.

The autumn so of all kinds of lea notable of these ev event, was the Con in London. Your the members, and tuberculin and th The great event Dr. Koch's startl tuberculin and th same disease; that from animals to r exaggerate the cor unexpected deliver the teeth of every subject, and no on For one thing, if thesis, the alarms subside, and saner munities. Dr. K current ideas, and that much restric revised, and not a interest will be m hereabout are prep an accurate repres of accurate and i where recognized, slow to take action and in the end we parties for anythin conclusive characte ence has been to m able inspectors. maintain that they doubt the German gether, he had a co of 1901 adjourned special or making generally followed also met in Edinb kinds of subjects h as in London. The far has come from of the Royal Colle analysis of Koch's us in no doubt as to which local author endeavoring to comb go on, as it has ma the sanitary condit ings. Cleanliness a successful dairying this disease. The effort to put milk c and rest assured th protection against

When the Hon. time ago, he intima full information to of cattle in Canada fact that there is n cattle. The partic the date of this i working up an ag Act which made it from over the sea of the movement when a meeting of feeding districts, Trusts of Glasgow Canadian ship-ow Chambers, Glasgo meeting. Lord H the meeting had been organized by Authority of the C spoke are well kno economic measures but they rather ov Canadian stores.

Readers of this what prospect th modified to meet would be folly for no hope whatever of 1896 will be n admitted that Ca and that the rest morrow so far as C difficulty is that would work to di

Our Scottish Letter.

After an abnormally dry season, farmers are now busy harvesting. The weather has broken, and heavy thunderstorms have been general throughout the country. This has retarded harvest work, but greatly facilitated the growth of the root crops and grass. I saw some magnificent fields of turnips on very high land in the historical territory of Sheriffmuir to-day, and the rain has come in time to put heart into the buyers at the store-lamb sales. The future of this trade may not be as bright as it was last year, but it is certainly ever so much brighter than it was a month ago. Foggage is scarce in the South, and English buyers are not operating to any appreciable extent at the sales. Scottish buyers are, however, doing their best to make up for their absence, and prices are going the right way for all parties. They are, however, much lower than last year's rates, and in no case can the flockmaster expect a bright year. The grain crops have a heavy head, but straw is bulking poorly, and the self-binders are at work everywhere. Had the rains and storms kept away, this would have been an ideal year for the self-binder, the straw standing well up and not too heavy.

The autumn so far has been fruitful in meetings of all kinds of learned institutions. By far the most notable of these events, from an agricultural standpoint, was the Congress on Tuberculosis, which met in London. Your Professor MacEachran was one of the members, and aired his well-known views on tuberculin and the test conducted by its means. The great event of the Congress, however, was Dr. Koch's startling announcement that bovine tuberculosis and human tuberculosis are not the same disease; that the disease is not communicable from animals to man. It would be impossible to exaggerate the consternation to which this wholly unexpected deliverance has given rise. It is right in the teeth of every kind of accepted theory on the subject, and no one can tell where it may lead to. For one thing, if it were established as a correct thesis, the alarms of the past few years would soon subside, and saner counsels bear sway in all communities. Dr. Koch's view is flatly opposed to current ideas, and should it prevail, it will follow that much restrictive legislation will need to be revised, and not a little harassing of the agricultural interest will be mitigated. At the same time, few hereabout are prepared to accept the new theory as an accurate representation of the case. The need of accurate and independent experiment is everywhere recognized, but our Government is terribly slow to take action in connection with such matters, and in the end we will likely be indebted to Southern parties for anything we may know of a definite and conclusive character. One good effect of the deliverance has been to moderate the demands of unreasonable inspectors. Some of them are prepared to maintain that they know better than Koch, and no doubt the German scientific man is scared, but, altogether, he had a cordial reception, and the Congress of 1901 adjourned without doing anything very special or making recommendations which may be generally followed. A Veterinary Congress has also met in Edinburgh, and very much the same kinds of subjects have been dealt with in the North as in London. The most notable answer to Koch so far has come from Professor MacFadyean, the head of the Royal College of Veterinary Surgeons. His analysis of Koch's reasoning is admirable and leaves us in no doubt as to the precise effect of the work in which local authorities here are engaged when endeavoring to combat tuberculosis. That work must go on, as it has mainly been directed to improving the sanitary condition of byres and their surroundings. Cleanliness and fresh air are indispensable to successful dairying, and they are also inimical to this disease. The moral, therefore, is, relax no effort to put milk on the market of absolute purity, and rest assured that healthy bodies are the best protection against this disorder.

When the Hon. Sydney Fisher arrived here some time ago, he intimated that he was prepared to give full information to all parties regarding the health of cattle in Canada, and he specially emphasized the fact that there is no pleuro-pneumonia in Canadian cattle. The parties chiefly interested have, since the date of this information, been very active in working up an agitation in favor of repealing the Act which made it impossible to import store cattle from over the sea. The most formidable aspect of the movement has been presented this week, when a meeting of representative farmers from the feeding districts, with members of the Harbor Trusts of Glasgow, Dundee and Aberdeen, and Canadian ship-owners, was held in the City Chambers, Glasgow. It was a well-conducted meeting. Lord Provost Chisholm presided, and the meeting had a kind of official status, having been organized by the sub-committee of the Local Authority of the City of Glasgow. The farmers who spoke are well known for their advocacy of advanced economic measures in land-holding and cultivation, but they rather overstated the case in favor of the Canadian stores.

Readers of this letter will be interested to know what prospect there is of the status quo being modified to meet the case of Canadian cattle. It would be folly for me to deny that in my opinion no hope whatever need be entertained that the Act of 1896 will be meddled with. It is generally admitted that Canada has a clean bill of health, and that the restrictions might be removed tomorrow so far as Canada herself is concerned. The difficulty is that no one seems able to see how it would work to differentiate Canada from the rest

of the world. Except on grounds of high political expediency no reason exists for differentiating, and breeders in Canada would do well to abandon all idea of reviving the trade in stores. Although they are as a rule wealthy farmers in good districts who favor the introduction of Canadian stores, they are in a hopeless minority, and the overwhelming proportion are breeders who desire the security which the Act gives of immunity from disease, and this enables breeders to extend their labors in that particular direction. There is a big market here for all kinds of fat cattle, and Canada seems to be making a good job of sending such to this country. Let her adhere to this trade, which hits our farmers sorely enough, but they must bear that. It will take very strong evidence indeed to convince the British Parliament that it should repeal an act passed in 1896 at the expiry of five years.

"SCOTLAND YET."

Lessons from the Model Dairy.

The subject receiving most attention at present in the model dairy barn, Pan-American Exposition, is that of TWO VS. THREE MILKINGS A DAY. Since the falling off in milk flow incident to the excessive heat and flies, as well as to the natural shrinkage from advanced period of lactation, it is the belief of every herdsman in the barn that two milkings only would be conducive to better results, in that the animals would have more opportunity to rest in the evening when the noisy throng of people is gone and the flies least aggressive. More time to rest and make milk would seem better so long as the total quantity given for the 24 hours is not enough to be burdensome or painful when carried for one-half that time. Besides, it would seem more reasonable to conduct the test on lines practicable by the dairy farmer rather than on lines of an occasional test for high records.

Canadian authorities in charge of the test claim that the owners of all cows from that side wish their cows milked three times a day throughout the test, and orders have been issued to the herdsman accordingly.

It would seem to the writer, however, that some of these owners have not been made acquainted with all the circumstances and conditions at the model dairy, or they might feel differently about it.

Some of the American herdsman would have gone over to two milkings some weeks ago, except for the fact that this plan would increase the duties of the men who weigh and sample the milk, so long as some continued the three milkings, and the good-will and courtesy existing among all the herdsman tended to delay any change which might disturb any neighboring herd in the barn at an unusual or unnatural hour.

Up to a short time ago there was some assurance of a change to two milkings by all, but with this gone, some of the American herdsman have finally made the change. About a week ago the Polled Jersey herdsman began milking one cow only twice, with such satisfactory results that yesterday (Aug. 21st) the Dutch Belted, Brown Swiss and Polled Jersey herdsman adopted the plan with their full herds, and one Guernsey cow was put in the twice-a-day plan.

The yield of milk from these herds for the day has been quite satisfactory, and it is not at all unlikely that all the Americans will have adopted the plan by another week.

For nearly three weeks the weather has been very favorable to man and beast, until Tuesday, the 20th, when the hot wave struck us. The cows are suffering a good deal from the heat and there is quite a noticeable loss in milk in consequence. As was observed in previous hot spells, the lactometer tests show a less per cent. of solids not fat in milk, the drop being quite striking in some cases.

THE COMPOSITE TEST.

The men in charge of the testing department have for some weeks been carrying on a series of tests of each milking of the five cows of some herd for a full week corresponding with the week for which the composite test is accumulated. The latter method being the official one in this test, it is interesting to note how nearly this agrees with the fat for the week as shown by the sum total of products of milk and test for the 21 milkings of the week.

This work has been completed for a week with each of the following breeds: Shorthorn, Holstein, Ayrshire, Jersey, and Guernsey.

Besides the data thus furnished to further establish the correctness of the composite method of sampling (when properly done), the tables will be interesting in showing the variations and fluctuations in per cent. of fat from day to day and milking to milking.

The publication of these tables by a paper which reaches such a number of dairy farmers and patrons of creameries should be of great practical value, as the composite method of sampling and testing milk is the usual one in creameries and cheese factories.

For the herd of five Ayrshire cows the total difference in yield of fat for the week when calculated by the two methods was .26 lb. The method of testing each milking would mean 105 tests, while the composite required but five. Composite samples here are all tested in duplicate, and when a variation of more than one per cent. occurs another test is made from the jar. Up to date, from May 1st, in all the testing of the ten herds weekly, but seven cases have occurred where a second trial was required.

TESTS OF EACH MILKING FOR THE JERSEY COWS FOR ONE WEEK COMPARED WITH COMPOSITE FOR SAME PERIOD.

	Gipsy of Spruce Grove.		Primrose.		Queen May.		Rexina.		Mossy of H.		
	Lbs. milk.	Test.	Lbs. milk.	Test.	Lbs. milk.	Test.	Lbs. milk.	Test.	Lbs. milk.	Test.	
Aug. 7—noon	9.1	5.2	4.732	8.1	6.9	5.589	9.4	6.	5.610	10.1	5.2
—night	9.6	5.1	4.896	7.3	6.	4.380	8.7	4.7	4.089	9.4	4.2
" 8—morning	10.4	4.1	4.264	9.9	5.8	3.742	10.9	4.5	4.995	11.4	3.7
—noon	10.4	5.1	5.304	8.8	6.5	5.720	9.5	5.6	5.320	10.	5.6
—night	9.1	4.8	4.368	7.3	5.4	3.942	8.4	4.7	3.948	10.3	5.2
" 9—morning	10.8	3.8	4.104	10.1	5.3	3.533	11.1	4.2	4.662	8.	2.5
—noon	10.	4.8	4.800	8.4	6.5	5.460	8.8	4.7	4.136	9.5	4.7
—night	9.	4.	3.600	6.7	5.	3.350	9.2	4.8	4.184	8.4	3.8
" 10—morning	11.2	4.	4.480	10.	5.4	3.540	10.5	4.3	4.515	11.4	2.9
—noon	10.	4.8	4.800	8.4	6.5	5.460	9.	4.6	4.140	8.9	3.5
—night	9.4	4.6	4.324	8.3	7.	5.810	9.	4.6	4.140	8.9	3.5
" 11—morning	8.6	4.3	3.698	8.1	6.3	5.103	9.4	4.8	4.512	9.1	3.5
—noon	9.6	3.7	3.552	8.8	5.6	4.928	11.1	4.5	4.995	10.9	2.9
—night	9.9	5.6	5.544	8.	6.2	4.960	9.	5.4	4.890	10.6	5.9
" 12—morning	10.3	3.6	3.708	10.8	6.5	7.020	11.3	4.6	5.196	8.7	5.2
—noon	10.3	5.9	6.077	7.4	6.9	5.196	9.6	5.4	5.184	11.4	3.7
—night	8.4	5.2	4.368	7.6	6.4	4.564	8.6	4.8	4.128	9.7	4.6
" 13—morning	10.8	4.1	4.428	9.	6.2	5.580	10.8	4.5	4.860	16.6	3.8
—noon	9.	4.8	4.320	4.8	4.1	1.968	9.3	5.3	4.929	10.7	7.5
—night	8.1	3.9	3.159	7.	4.	2.800	9.	4.8	4.320	9.3	4.8
" 14—morning	10.7	3.9	4.173	12.3	7.4	5.102	10.9	4.4	4.796	10.9	3.
Totals	202.9		9.2245	174.7		10.4937	203.7		9.8333	200.	
Test computed from daily wt. and tests		4.511		6.061		4.822		4.32		4.38	
Composite test and fat from same		4.5	9.1305		6.1	10.656		4.85	9.8794		4.4

TEST OF EACH MILKING OF AYRSHIRE COWS COMPARED WITH COMPOSITE METHOD FOR SAME PERIOD.

	Kirsty Wallace.		Lady Flora.		Betsy Ist.		Alice 2nd.		Pearl of Woodside.		
	Lbs. milk.	Test.	Lbs. milk.	Test.	Lbs. milk.	Test.	Lbs. milk.	Test.	Lbs. milk.	Test.	
July 31—noon	9.2	3.9	3.588	8.6	3.7	3.182	10.2	4.4	4.488	8.3	5.1
—night	9.9	3.5	3.465	8.4	3.6	3.024	11.	3.6	3.960	8.5	4.6
Aug. 1—morning	12.9	3.6	4.644	9.6	3.4	3.264	13.7	3.4	4.658	10.4	3.6
—noon	10.6	4.	4.240	7.3	4.3	3.139	11.1	3.7	4.197	9.8	4.8
—night	10.	3.9	3.900	8.1	3.6	2.916	11.3	3.2	3.616	8.7	4.
" 2—morning	12.1	3.7	4.488	10.9	3.3	3.597	14.8	3.4	5.032	11.4	3.6
—noon	11.1	4.	4.440	8.9	3.4	3.024	11.	3.8	4.180	10.3	5.1
—night	10.7	3.8	4.066	9.6	3.4	3.264	11.7	3.6	4.212	9.3	4.2
" 3—morning	14.	3.6	5.040	12.5	3.5	4.375	14.9	3.5	5.215	12.2	3.8
—noon	11.1	4.4	4.884	9.7	3.7	3.589	10.7	4.	4.280	9.4	4.5
—night	10.7	3.7	3.959	10.2	3.1	3.162	11.1	4.	4.440	9.5	4.4
" 4—morning	14.	3.4	4.760	13.	3.2	4.160	13.7	3.	4.110	11.8	3.5
—noon	11.1	4.	4.440	10.	3.5	3.500	10.6	3.7	3.922	9.8	4.5
—night	10.7	3.8	4.066	10.6	3.2	3.392	11.8	4.	4.720	9.5	4.3
" 5—morning	13.4	3.3	4.422	12.8	3.4	4.352	13.9	4.1	4.726	11.7	3.7
—noon	12.4	4.1	5.084	10.7	3.3	3.531	10.7	3.6	3.852	9.9	3.8
—night	11.1	4.	4.440	11.1	3.3	3.663	11.7	3.8	4.446	9.9	3.5
" 6—morning	13.3	3.8	5.054	13.4	3.5	4.690	14.2	3.6	5.112	13.1	3.9
—noon	11.	3.9	4.290	10.7	3.2	3.424	11.5	4.	4.690	10.8	4.6
—night	10.3	3.2	3.296	10.6	2.9	3.074	11.	3.2	3.520	9.7	3.9
" 7—morning	13.6	3.2	4.352	15.	3.4	5.100	15.3	3.8	5.880	13.	3.5
Totals	243.5		9.1018	221.7		7.5424	256.		9.3086	216.8	
Test computed from daily wt. and tests		3.73		3.4		3.63		4.1		3.83	
Composite test and fat from same		3.7	9.0065		3.4	7.537		3.65	9.34		4.05

FOUNDED 1866

merican.

PAN-AMERICAN EXPOSITION COMPLETE THE TEST. FINDING

Value at 25c. per lb.	Cost of Feed.	Profit.
229.23	\$81.91	\$147.36
220.87	79.74	141.13
222.32	81.93	140.39
221.85	91.61	130.24
211.01	82.61	128.40
206.70	89.60	117.10
202.55	93.89	108.66
178.52	69.71	108.82
172.92	64.18	108.74
147.58	76.72	70.86

PAN-AMERICAN EXPOSITION AUGUST 13, 1901.

Value at 25c. per lb.	Cost of Feed.	Profit.
\$ 2.68	\$1.00	\$1.68
3.13	.91	2.22
2.90	.85	2.10
2.70	.81	1.89
2.73	.87	1.86
14.14	4.44	9.75

2.34	.90	1.44
2.76	1.06	1.70
3.39	1.05	2.34
2.28	.92	1.36
2.94	1.06	1.88
13.71	4.99	9.72

2.08	.88	1.80
2.35	.84	1.51
2.75	.88	1.87
2.68	.88	1.70
2.57	.88	1.69
12.93	4.36	8.57

2.25	1.16	1.15
2.86	1.25	1.61
2.80	1.24	1.56
2.92	1.25	1.67
2.98	1.22	1.76
13.81	6.12	7.75

2.58	.78	1.80
2.54	.78	1.76
2.41	.78	1.63
1.97	.75	1.22
1.54	.46	1.08
11.04	3.55	7.49

2.47	1.24	1.23
2.25	1.23	1.02
2.93	1.24	1.72
2.36	1.24	1.32
2.44	1.24	1.20
12.68	6.19	6.49

g Trials at

Tring, on the
arded as one of
he sort in Eng-
year on August
dged by inspec-
Jersey cow at
to take fourth
of the butter test
and Shorthorns

eeding 900 lbs. live

Yield	Milk	Butter.
lb. oz.	lb. oz.	lb. oz.
47	1	2 1/2
34	11	2 1/2
49	14	2 7/8

900 lbs. live weight

58	10	3	6
45	6	2	5 1/2
72	10	2	9 1

The Lawrence-Kennedy Milking Machine.

In dairy machinery there has perhaps been a greater advance made during the past twenty-five years than in any other branch of the farmer's business. A modern dairy fitted with all the latest appliances must be something of a revelation to the uninitiated. Science has done much to advance modern dairy practice, and whether the aid has been in the mechanical or in the chemical departments of research, it has been welcomed and appreciated to an extent which guarantees to those who can render effective help a substantial recompense for their labors. There is one operation in dairying, however, which, so far as general practice is concerned, still remains open for the inventor, and where the dairy farmers would cordially welcome help. We refer to the need of an efficient substitute for the present scarce and costly labor of hand milking. That the difficulties hitherto preventing the general adoption of mechanical milking will be, if they have not already been, successfully surmounted, we have little doubt—difficulties which are not purely mechanical, but extend to the widely differing conditions of what may be best described as temperament in the individual animals.

It was, therefore, writes a correspondent of the *Agricultural Gazette*, of London, Eng., with considerable interest that we accepted an invitation to view the Lawrence-Kennedy cow milker in practical work at Riding Court, Datchet, where the occupier, Mr. J. Kinross, farms some 1,100 acres, has 150 milch cows, and is the holder of that much-coveted trophy, the Prince Consort's cup, presented by Her late Majesty the Queen. The machine, we were advised, has been in use on the farm for a year, with the view of having it thoroughly tested under ordinary working conditions, so that any defects noted, or improvements required, could be remedied. The apparatus was erected in a shed containing 48 cows, but at first half the number were milked by hand so as to be able to compare the yield and other conditions of the two methods. The result is reported as being altogether satisfactory and decidedly in favor of the machine in economy of labor, cleanliness, keeping qualities of the milk, and without any ill effects on the animals. The machine is operated by suction, which may be obtained by a suction pump operated by an engine, electric motor or water wheel, or, as in this instance, where the vacuum is obtained by an ejector attached to a small boiler, the steam jet producing the vacuum and dispensing with the necessity of an engine. A vacuum-container tank is connected, so as to give more steady working, and a range of iron pipes runs along the shed immediately over the cows, with a short branch, fitted with a vacuum cock, descending between every alternate animal. A rubber tube, slipped onto the iron pipe, connects with the milking apparatus, which may be described as a cone-shaped pail, the lid carrying a double-action pulsator of simple construction, from which branches two rubber tubes, one to each cow, to which are attached four rubber teat-cups. The speed and strength of each pulsation can be finely regulated by means of a screw, to suit the peculiarities of each cow, and as the pulsations only occur in the teat-cups and in the short rubber tube leading therefrom to the pulsator, the milk is not brought into direct contact with the air. The lid and the pipes are kept in place by the vacuum, no screw or other fitting being required, while the milk, on its way from the teats, can be seen passing through a glass trap, and when the cow is milked clean, the cups remain on the teats until removed by the attendant. The cups are unique in that a thin piece of rubber with a hole in the center is inserted immediately inside the cup, giving a more tenacious hold than in previous patterns, while at the bottom of the cup a smaller detachable rubber cup is inserted, so that the cow is milked wet, as the fluid has to flow over this inner vessel before leaving the large cup, and in practice this has been found of considerable advantage to the success of the operation. In work, the appliance is exceedingly simple. The pail is placed between the cows, the rubber tube slipped onto the iron pipe, the vacuum cock turned on, and the cups held to the teats, to which they at once adhere, and the milking begins.

The pulsations regulating the collapse and expansion of the cups are close imitations of the calf sucking, and the vacuum pressure is very small. The milking was done quickly and cleanly, and the animals did not exhibit any signs of inconvenience, as in most cases they stood quietly feeding during the operation. The value of the regulation of the pulsations as regards speed and strength to suit the temperament of the various animals was particularly noticeable, and altogether the work was completed in a very satisfactory manner. The vendors—the Dairy Outfit Company, Limited, King's Cross, London—claim that by the use of the machine 48 cows can be milked in an hour, with the help of a man and a boy, and that no more hands would be required for 60 cows. Cleanliness is ensured by the milk being drawn direct into the air-tight pail, while it has been found that the milk will keep longer than where the milking is done by hand. The teats of the cows appeared to be in capital condition, and we were advised that after the first few days the animals take kindly to the machine, while heifers milked for the first time take to it much more readily than to hand milking. The apparatus is easily cleaned by sucking water through the cups, and the rubber is kept sweet, soft and pliable, when not in use, by being immersed in lime water. The cost of the plant is not heavy, and if under varying conditions the work is done as well as when we viewed it—and we

see no reason why it should not—then it will soon repay its cost in wages. The Lawrence-Kennedy machine, at any rate, marks a decided advance in meeting the need indicated at the beginning of this article; time alone will tell whether or not it has solved the problem of mechanical milking, but we commend its claims as worthy of the attention of readers.

The Root Growth of Plants.

The North Dakota Experiment Station has made a special study of the root system of growth of various grains and roots as indicating the nature of the cultivation that should be applied:

CORN ROOTS.

"Several samples of corn roots have been taken

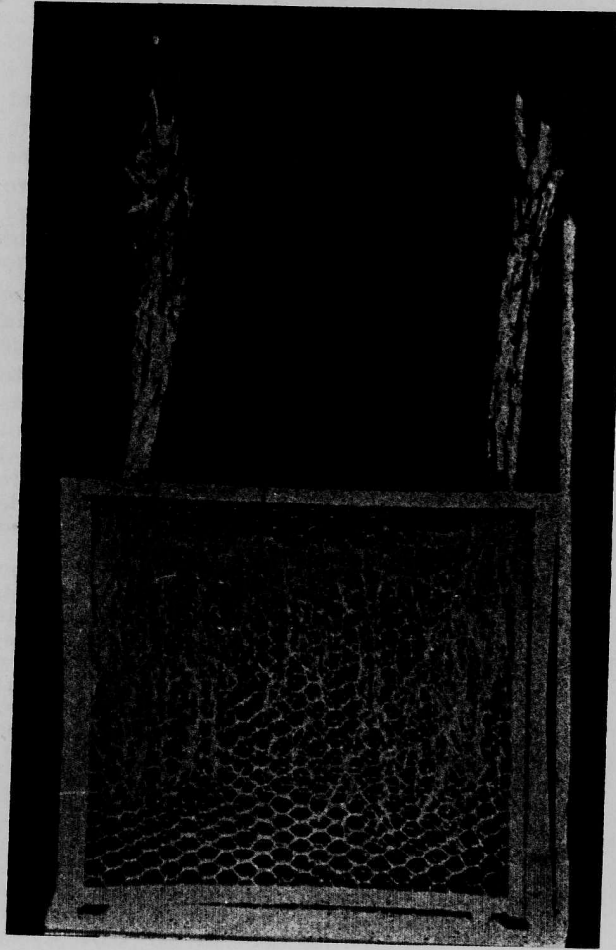


FIG. 1.—Showing distribution of roots between two rows at end of growing season. The corn was frosted 90 days after planting.

at different stages of growth. Thirty days after planting, at the second cultivation, the roots from adjacent hills (hills three feet apart) already meet and interlace. The main development in the early part of the season is laterally or to the side. A few roots have reached to a depth of twelve inches, but the bulk of the growth is within eight inches of the surface of the ground. Six inches from the hill the main roots lie within two and one-half to three inches of the surface. Midway between the hills they have reached a depth of four and one-half inches. Deep cultivation even at this stage of growth would have injured the roots.

"The sample of corn roots taken fifty-five days

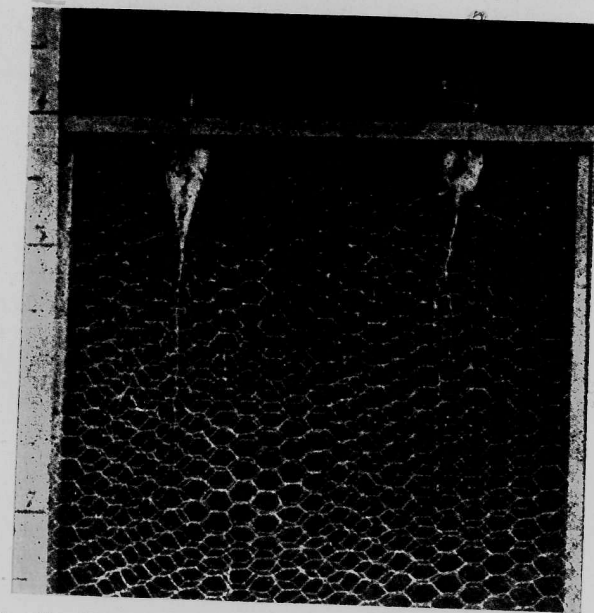


FIG. 2.—Sugar-beet roots at maturity on ground plowed six inches deep, but not subsoiled.

after planting, at the last cultivation, shows that at this stage the main roots have penetrated to a depth of two and one-half feet. The number of horizontal roots has increased and their length is much greater, many extending now from hill to hill (three feet eight inches apart), inclining most of their length, but finally, at about three to three and one-half feet from the hill, they dip often almost vertically downward. The horizontal roots, as well as the vertical, send out numerous branches and small feeders in all directions. Many vertical

branches from the horizontal roots have penetrated the hard layer of soil beneath the furrow slice and have already reached depths almost equal to those of the primary vertical roots. The branches in turn give off other branches, and these produce fibers and root hairs so that the whole soil at this stage of growth to the depth of two feet was practically filled with roots. In this sample the main roots were three inches from the surface of the ground at six inches from the hill and about four inches below the surface midway between the rows. Numerous feeders or small, fibrous roots were noticed in washing, within two inches of the surface, and some were caught on the wires. After corn is ten inches high, it should not be cultivated deep. A sample of corn roots taken after the corn was killed by frost, ninety days after planting, showed that the whole field to the depth of three and a half feet was fully occupied by the roots. (See Fig. 1.)

SUGAR-BEET ROOTS.

"The root system of the sugar beet differs from that of any of the other plants studied. The vegetable itself is really the enlarged upper part of the taproot which extends almost perpendicularly downward into the ground, becoming rapidly smaller in diameter in the upper part of its course, the lower part being quite small and threadlike, and reaching, in several samples, a depth of over three and one-half feet. From this central root, branches spread outward and downward into the soil on all sides. The upper main branches are the largest and extend outward almost horizontally for more than two feet. Those deeper down incline more and more until the last branches run nearly parallel to the taproot. The diagram (Fig. II.) merely represents the skeleton of the root system."

Secure the Best.

Parties desiring to secure improved stock of any of the standard breeds should carefully read the advertisements now appearing in the columns of the *FARMER'S ADVOCATE*, where they will find a large offering in many varieties, and we feel sure that by correspondence with the breeders, or visiting them at their homes, it will be found that good stock can be bought at reasonable prices. There may be exceptional instances of what may seem to be exorbitant prices asked, but, as a rule, these will be found to be cases where large expense has been incurred in importation or purchase of the parent stock, and there is always this about it, that one does not have to buy if the price asked is higher than he considers he will be justified in paying. By seeking further, he may find what will suit him as well for less money. The field is large and the good things are not all owned by any one breeder. It is, however, good policy to buy the best one can afford, especially in the case of a sire, as his influence for good, if he is well come, will extend through the herd or flock for years and may be visible for decades of years. And the influence of an inferior sire is just as likely to be for ill and for as lengthened a period. The lowest priced is not always the cheapest, but often decidedly dear.

Attributes of Alfalfa.

It is stated that millions of dollars are annually added to the wealth of arid portions of the Western States through the growing of alfalfa for feeding animals, and that it has added immensely to the production of honey in those sections—that each blossom has its honey, and that the bee in gathering it, spreads the pollen which fertilizes and gives to the plant a superior quality and more vigorous growth, particularly the power to produce seeds.

It has been demonstrated that alfalfa does not seriously exhaust the strength of the soil, though it produces a series of crops each year without the introduction of fertilizers, which shows that its growth in large part is from drafts upon the atmosphere.

It is a truth demonstrated by the whole human experience that the fertility of the soil is much sooner exhausted in wet than in dry countries, which is philosophical. An abundance of water carries the fertilizing elements downward or causes them to evaporate, when in periods of what may be called droughts, or in dry countries, the tendency of moisture is towards the surface, bringing with it the elements that contribute to vegetable growth.

Prizes for Photographs.

In our Home Department of this issue, several handsome prizes are offered for the best amateur photographs of country scenes. We direct the attention of all interested in photography to this interesting competition, the conditions of which should be carefully read. We trust that many will compete.

Cannot Do Without It.

DEAR SIRS,—We are all well pleased with the *FARMER'S ADVOCATE*, and would not think of doing without it. There is no paper that suits the farmer as well as the *ADVOCATE*. Wishing you every success, I remain, Yours truly,

ROBT. G. DUNCAN.

In a recent issue of the *FARMER'S ADVOCATE* a correspondent complained of the increasing number of old bachelors throughout the country, and in the Home Department of this issue a contributor—"Uncle Daniel"—gives some wholesome advice to young men in search of a wife. We commend a perusal of his letter.

The wise poultry
ahead, and now is
for next season.
fortunately very
the owner is con-
clearing out all th
half years old in
for the second tim
without its excepti
third season, but t
latter will take a
ably rest the whol
has come, the wea
plentiful. In fact,
her keep. Still, it
great drain on the
many birds and
which otherwise co
figure. The stock
March, April or M
months; March or
April or May for l
overdo it and take
them on to maturi
in late summer a l
take a long rest.
hatched pullets. T
the fall, and then

the feathers from t
short time they ha
moulting hen. This v
early-hatched moulti
to occur again. I di
them for three mo
nearly bare when col
should have had goo
lost the eggs when p
perience is a grand t
pensive one. Octobe
pullets to lay, for th
moulting.
I mentioned before
having to fill the pla
of selling pullets, bu
by ignoring it and se
parently, that it is l
it is to be had. But
policy. There must
year's stock, to take
unless the stock is t
by keeping the be
quality of the stock c
Every farmer knows t
and sheep breeding, t
bred from, and that
same is true of pou
well grown, healthy
healthy stock, bred fo
both. Such birds ca
cheap-purchased stock
we know nothing of
if they are constituti

Poultry Notes.

The wise poultry-keeper will be ever looking ahead, and now is full time to consider the stock for next season. The useful life of a hen is unfortunately very brief, and every moulting time the owner is confronted with the necessity of clearing out all those hens that are two and a half years old; in other words, those moulting for the second time. Of course, there is no rule without its exception. Some hens pay to keep a third season, but the average hen does not. The latter will take a long time moulting, and probably rest the whole winter, not laying till spring has come, the weather mild, and eggs cheap and plentiful. In fact, she will, probably, not pay for her keep. Still, it must be confessed that it is a great drain on the poultry-keeper to clear out so many birds and fill their places with pullets which otherwise could be sold at a profitable figure. The stock birds should be hatched in March, April or May, the three great hatching months; March or April for the heavy birds, April or May for Leghorns, the latter taking a shorter time to reach maturity. We need not overdo it and take early-hatched birds and force them on to maturity, for perhaps they will lay in late summer a batch of eggs, then moult and take a long rest. I had a pen of twelve early-hatched pullets. They laid a few eggs early in the fall, and then I noticed they were losing

When your fowls do not lay, and you seek about for the reason, you may be told, perhaps, that the houses are not warm enough. Even if this be so, and you remedy the defect, the time has been lost, eggs have not been forthcoming when they ought to have been, and what is quite as bad, nothing you can then do will be followed by an immediate supply of eggs. Has this been your experience, reader, in the years gone by? If so, try this year to have your henhouse made warm and comfortable before winter sets in. "Why," you say, "it is not fall yet." Yes, I know, but do not put it off until November; there will be so much to do then you will not find time to patch up the old henhouse. I think most of us feel the first cold of autumn and winter more than severe weather later on. So it is with the poultry, and, unfortunately, many of the fowls are not in full feather yet, and therefore feel it the more.

Should the house stand in a very cold place, a covering of felt will help to keep it warm, and this should be tarred just as soon as it is put on. Your early hens and pullets may look like laying any day, and nothing on your part should be left undone which may check them doing so.

By keeping on your place unprofitable fowls you must be keeping poultry at a loss. Yet on scores of farms are hens found in food and house room through the winter which lay never a penny's worth of eggs; and besides eating their heads off, they are occupying the room and consuming the food other fowls would turn into money. These old hens make excellent soup.

How the High-scoring Cheese at the Pan-American Were Made.

1. What precautions did you observe when taking in the milk?
2. Did you use a "starter"? If so, what kind, how prepared and used?
3. Did you wash the curds? If so, how, at what temperature of water, and at what stage or stages of the curd?
4. At what temperature did you put to press, how long was the cheese pressed, and how often was it turned in the press?
5. (a) At what temperature was the cheese cured?
- (b) Describe your system of ventilating and cooling?
- (c) How long was cheese held in curing room?
- (d) How often was cheese turned on the shelves?
- (e) What per cent. of moisture was maintained in the curing room?

Let it be remembered that these makers, while they follow the standard rules for Cheddar cheese-making, also have picked up many little methods and practices for improvement by reading dairy literature and observation and experiment, so that the lessons they teach in their respective letters are the results of keen effort anxiously and wisely pursued, and their cheese tells the tale of the wisdom of their practices.

THOS. GRIEVE, WELLINGTON CO., ONT.

I had no intention to send cheese to the Pan-American, for I had all my June cheese dated. The instructions were that no cheese should be dated or any mark whatever on the cheese that was sent to the Pan-American. The directors of this factory boxed the cheese, and they said that I must send two cheese to Buffalo. They were boxing a carload on June 15th. I had good curds that day, so I did not date a vat. So you see that there was no testing done. I had better cheese, but, as I said, they were dated. It is great gratification that the Canadian cheese has done so well at the Pan-American contest. Twenty or twenty-five years ago if we had such hot weather and the milk in such bad condition, I am sure there would have been some very poor cheese made. It was nearly impossible to make cheese out of the milk that was delivered. Our curds in the vat were not properly cooked; dipping when they were very soft. We could not let them lie any longer, for the acidity came on very rapidly. Cheesemakers should be thankful to the leading men in the cheesemaking industry for the trouble they have taken to school us up to the high standard we now hold. I am sure, Mr. Editor, you have done your share in this educational work. I thank you for the extra copy of the FARMER'S ADVOCATE you sent. I am going to send it to England.

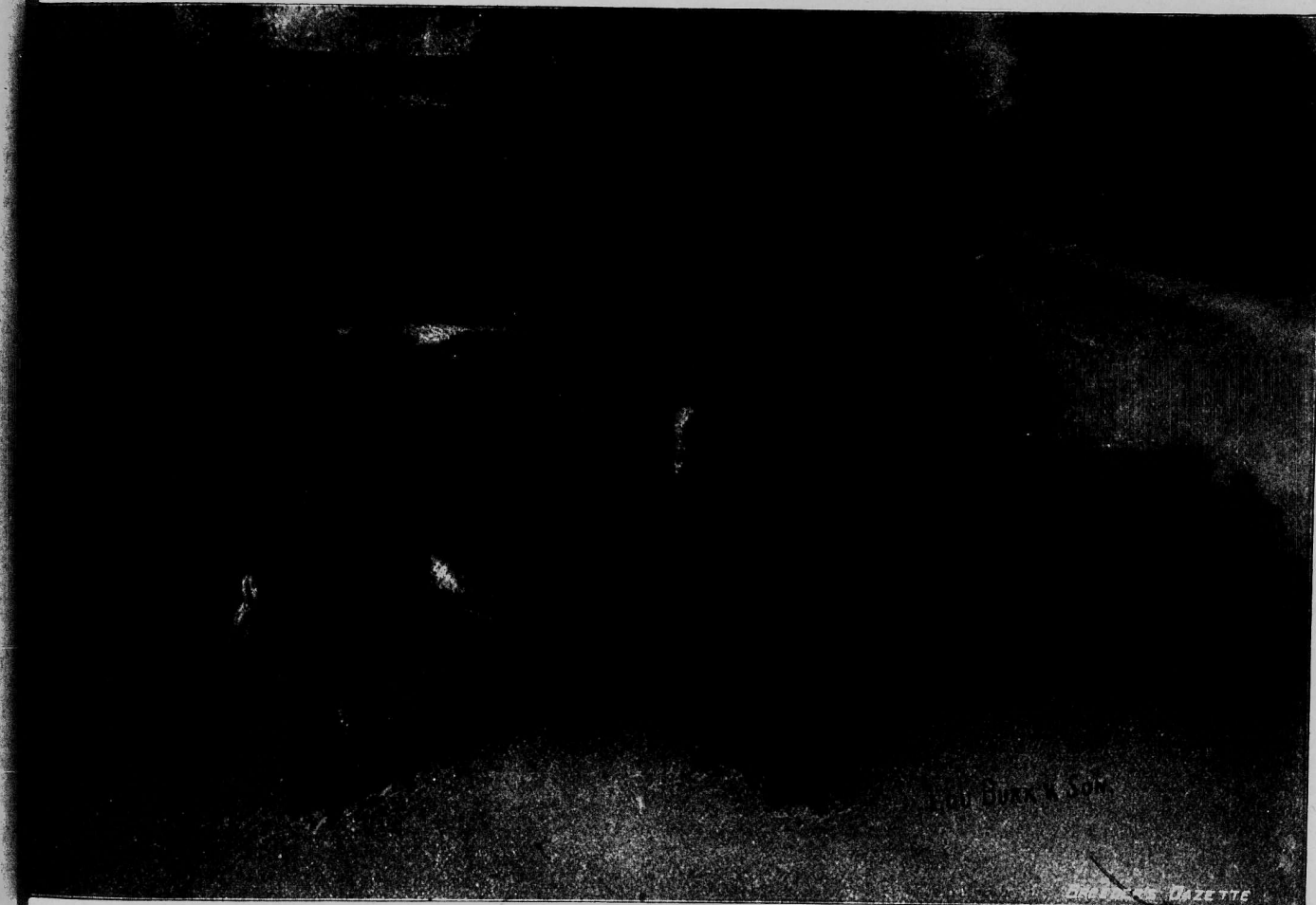
1. I had not much time to observe anything when taking in the milk. Glad to get it in and add the rennet as soon as possible.
2. Did not use a starter; milk did not require it. I don't believe in a starter if I can get along without it.
3. I wash all my curds. Temperature of water, 96 degrees. I wash them as soon as they are milled.
4. The temperature of the curds is generally 82 or 84 degrees when put to press. Cheese is pressed from 16 to 18 hours, and turned in the hoops next morning.
5. (a) The temperature of curing was running from 72 to nearly 80 degrees in that hot weather.
- (b) Ventilation is poor. Cool with ice.
- (c) From June 15th to July 2nd.
- (d) Turned once daily on the shelves.
- (e) I have no instrument to tell the moisture in curing room.

In regard to exhibition cheese, the weather was so fearfully hot and milk in such poor condition that, really, one had no time to observe very much. I have been making cheese 33 or 34 years, and from the last week of June to the last of July I never had such a hard time with milk. How I got through so well I many times wonder.

R. K. CRANSTON, ELGIN CO., ONT.

1. I used no unusual precaution selecting milk, other than the usual daily watchfulness; or, to use a brickmaker's term, it was kiln run.
2. Did not use starter. I am opposed to using starters for good milk.
3. Curds were not washed. I do not wash curds that are in good condition. I can see no good in washing a curd that is all right before it is washed. I wash only gassy curds (a thing I rarely have) or a curd that the flavor is not clean. I think that is where many cheesemakers err, in running to the extreme in innovations, which are good in their place, but no use when not needed.
4. I did not note temperature when cheese were put to press. They were 24 hours in press, and turned only once.
5. (a) Cured at a temperature from 65 to 70 degrees.
- (b) Ordinary ventilation and ice boxes.
- (c) Turned on shelves once per day.
- (d) Was made 6th of June; was at the Pan-American about the 10th of July.
- (e) Did not note moisture in curing room.

Consider one of the principal points of success in my case is eternal vigilance in cleanliness, more especially in regard to whey tanks, which I clean out thoroughly every day, and I fully believe it is from that fact I have got rid of, or nearly almost all, gas. I believe more bad milk comes from dirty whey tanks than from any other source.



IMPORTED SHORTHORN BULL, WANDERER'S LAST 158478.
IN SERVICE IN THE HERD OF CAPT. T. E. ROBSON, M. P. P., ILDERTON, ONTARIO.

the feathers from their necks and heads. In a short time they had every appearance of a moulting hen. This was my first experience with early-hatched moulting pullets. It is not likely to occur again. I did not get a dozen eggs from them for three months, and then they were nearly bare when cold weather set in, when they should have had good warm coats. Then, too, I lost the eggs when prices were the highest. Experience is a grand teacher, but sometimes an expensive one. October is quite soon enough for pullets to lay, for then there is no fear of their moulting.

I mentioned before the drain on the owner in having to fill the places of the old hens, instead of selling pullets, but some escape the difficulty by ignoring it and selling recklessly, arguing, apparently, that it is best to make a profit when it is to be had. But this is a very short-sighted policy. There must be young pullets for next year's stock, to take the place of the old hens, unless the stock is to be diminished. It is only by keeping the best of the pullets that the quality of the stock can be kept up and improved. Every farmer knows the value of quality in cattle and sheep breeding, that only the best should be bred from, and that keeping the best pays. The same is true of poultry. By the best I mean well grown, healthy specimens, that come from healthy stock, bred for laying or table points, or both. Such birds can be relied on, while some cheap-purchased stock is an unknown quantity—we know nothing of the pedigree of the birds, or if they are constitutionally sound.

Then, the same weeding out process must be continued among the chickens; some go ahead, the majority are a level lot, and to a certainty there will be some which lag behind. This third class is the one whence disease springs, whereon insects are bred and scattered, and wherein your money is sunk past recovery.

These, then, are better cleared away, no matter at what price; they will never make large nor profitable birds, and never should they be used for stock.

Perhaps I have been too emphatic. Maybe by skillful treatment, expenditure of valuable time, and a large slice of luck, some sickly, weedy chicken may ultimately be pulled around into a decent fowl, but the chances are heavily against it. The time, food and care can be more profitably employed in keeping the best chickens still the best; it is a mistake to think you can bring the consumptive, the roup, the liver-diseased chicken up to their standard.

Perhaps, too, up to now many of the fowls have been roosting out of doors, but are now driven by the weather to seek the shelter of a roof; this generally means overcrowding the house, and this is attended by the greatest evils. In all ways, then, thinning out and selling or eating all the old stock should be rigorously proceeded with.

Here is a sum, readers, for mental arithmetic: Which is the more profitable, fifty fowls in full profit, or a hundred which do not lay an egg.
FARMER'S WIFE.

W. P. STACEY, HASTINGS CO., ONT.

- 1. Not to take in overripe or tainted milk.
- 2. Didn't use a starter.
- 3. Didn't wash curds.
- 4. Put to press at a temperature of from 80 to 86 degrees. Pressed about 20 hours. Turned twice in press.
- 5. (a) Cheese were cured at a temperature of from 65 to 70 degrees.
- (b) We have no way of cooling only by opening the windows at night. The building is a frame one, bricked and plastered inside, two stories high, and on a foundation about four feet high. About eight air holes are in the floor, 6x8 inches; the same above in ceiling, and ventilator in center of the building. I may say our curing room has been as high a temperature as 78 degrees since those cheese went away.
- (c) Cheese were 25 days old when they left here on the 3rd of July.
- (d) Cheese were turned every morning on the shelves.
- (e) Don't know the per cent. of moisture in curing room.

JOSEPH CRAMER, FRONTENAC CO., ONT.

- 1. I took milk for Pan-American Exhibition cheese that was nearest the factory and of good flavor.
- 2 and 3. I did not use starter nor wash curds.
- 4. The cheese was put to press at eighty degrees. Pressed 24 hours and turned once in the morning in press.
- 5. (a) The cheese was cured at 65 degrees.
- (b) Open windows and doors at night.
- (c) Twenty-three days.
- (d) Turned on shelves once a day.
- (e) I sprinkled the floor with cold water 3 times a day. The cheese the last 4 days before shipping was kept at a temperature of 62 degrees.

JOHN E. STANTON, WELLINGTON CO.

- 1. I am careful to take in nothing but good milk, particularly avoiding all gassy, or bad-flavored or sour milk.
- 2. I did not use any starter.
- 3. I washed the curds by pouring on water at temp. 94 degrees to 96 degrees, right after grinding. Then turn curds over and wash again.
- 4. I put to press from 82 degrees to 84 degrees. The cheese were pressed 20 hours, and turned over.
- 5. (a) The cheese were cured at temperature of 65 degrees as nearly as possible.
- (b) I have ice boxes, in which ice is kept for cooling, and ventilation for emitting warm air.
- (c) The cheese were cured from June 11th to July 3rd, when they were shipped.
- (d) The cheese are turned on the shelves every day (not excepting Sunday).
- (e) From 70 to 75 per cent. moisture is maintained in curing room. I am particular to keep curing room perfectly clean and cheese free from mould. My exhibition cheese were made just as I make any cheese, and were not made from any special milk, nor had any special care other than all my cheese get.

Auction Prices for Horses.

The following Chicago market quotations for horses are not only useful for the farmer to draw deduction from as to what to breed, etc., but will also aid in clearing up a misty point or two as to the weights required in the various classes. At many local shows, great confusion exists as to the classification of the horse exhibit, more especially so with respect to the draft, agricultural and so-called general purpose classes. Even at the big fairs we see animals masquerading as drafters which are by no means up to weight. Hairy legs and white markings don't make a drafter of themselves.

	Poor to fair.	Good to fancy.
Drafters, 1,600 to 2,200 lbs.	\$ 70 to \$115	\$125 to \$250
Expressers, 1,450 to 1,550 lbs.	80 to 115	130 to 180
Chucks, 1,100 to 1,400 lbs.	45 to 75	80 to 125
Drivers and roadsters	60 to 110	125 to 500
General use, 1,100 to 1,400 lbs.	35 to 45	50 to 80
Carrriage teams	150 to 250	300 to 700
Saddlers	35 to 65	40 to 80
Southern chucks, 900 to 1,100 lbs.	35 to 45	60 to 85
Western rangers	10 to 25	30 to 75
Plugs and scrubs	5 to 10	15 to 45

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. SPAVIN?

I have a mare, seven years old, that has in her hind limbs what Canadian people call, in French, "paigne." What disease is this, and please, what the best way to cure it? L. G. Sainte Rose du Lac.

Ans.—The treatment usually given is rest,

reduction of the inflammation in the joint by the liberal use of cold water, followed by a blister, made as follows: Lard, 1 ounce; biniodide of mercury, 2 drams; and wool mixed. The mixture is well rubbed in over the joint and allowed to remain on for 24 to 48 hours, after which clean sweet lard is applied twice daily. For the first twelve hours after the application of the blister, the horse should be tied so as to prevent it biting the parts blistered. Rest is absolutely necessary, and should be given for a period of at least three or four weeks. If the blistering, which may be repeated in two weeks, does not prove satisfactory, firing by a qualified veterinarian should be performed.

TOO ANXIOUS TO BREED.

I have a pure-bred Yorkshire sow, nine months old, who, when she weighed 125 lbs., and was five months old, I bred to my pure-bred Tamworth hog. She was due to farrow on the 15th of July. I had her in a hot, close pen, and she had always been fed on grain and whey, consequently at that date she was quite fat, and so could not give birth to her progeny. Engaging the services of a farmer experienced in such matters, he took the pigs from her (ten in number), the best I had ever seen. Three were dead and badly decayed; the other seven were living, but she was so sick they died. She is getting well rapidly now, and all her organs seem to have come to a normal state. Would you advise keeping her for a breeder? Will her generative organs ever be perfect again? What diet is best for a breeding sow at all times, and also for the last month with pig, and after the pigs have come?

SUBSCRIBER.

Ans.—Taking all things into consideration, you have had better success with your sow than could reasonably be expected. In the first place, you bred her too young. In some cases, a young female, especially one in good flesh, will reach the state of puberty very early, though not sufficiently matured to reproduce without great danger. Such was the case with your young sow. You should not have bred her until she was older and more developed. In the second place, the surroundings in which you placed her to farrow indicates either gross carelessness or gross ignorance. The weather about the middle of July being excessively hot, any careful man would have selected a cool and as well-ventilated building as possible. Again, the sow was too fat for breeding, and we are not surprised to learn that she had trouble; on the contrary, we are surprised that she recovered. If allowed to run for four or five months before breeding her again, I see no reason why she should not make a good breeder. Breeding sows should be kept in moderate condition, neither excessively fat nor yet lean. The food given will depend upon what the owner has to feed. All food should be of good quality, easily digested, given regularly in small quantities. The sow should have plenty of exercise. In summer time she will be able to get grass; in winter time, substitutes for green food should be given in the form of roots. If confined in small quarters in cold weather, where little exercise is taken, a sufficient quantity of some laxative should be given daily in the food to keep the bowels open. I find for this purpose, equal parts of powdered charcoal, sulphur and Epsom salts act well. After farrowing, the same principles in feeding should be observed, but, of course, she will require food in larger quantities after the litter is a few days old.

ENLARGED TENDONS—BLOODY MILK.

I have a mare, 12 years old, which has enlargement of the back tendons of nigh fore leg, between knee and fetlock joints, till the leg is almost round. She is a trifle lame, and after driving holds it out in front as if resting. Would you advise a blister, and what kind?

2. Also have a cow, four years old, that had a calf in March, and since that time has given bloody milk at times, but is getting worse. I tried Glauber salts and carbolic acid, but it did very little good. Please give cause and treatment. W. K. WILLITON.

Ans.—Enlarged tendons, such as you describe, are very hard to reduce. Blistering may help. Use the following: Two drams biniodide of mercury, two drams powdered cantharides, two ounces vaseline; mix. Clip the hair off, rub blister well in, tie head so that she can't bite the parts. In 24 hours rub well again with the blister, and in 24 hours longer wash off and apply vaseline. Let her head down now, and apply vaseline every day until the scale comes off. Then tie her up and blister again. After this blister every four weeks.

2. The bloody milk is due to rupture of some of the small vessels of the gland. Some cows are predisposed to this condition, and it is very hard to treat. Do not feed to cause great flow of milk. Bathe the udder long and often with cold water, and after bathing apply camphorated oil, made by putting one pint sweet oil and half ounce camphor in a jar. Place the jar in a pan of warm water and leave it there until the camphor is dissolved.

LAME MARE AND RUPTURED COLT.

1. I have a mare eleven years old; was sprained in the right ankle when four years old; got all right in about a month. Carried herself all right until a year ago last June, when she showed lame again, large puffs coming on each side of her leg above the ankle. I blistered them, and she got better, until this summer she became lame again. I took shoes off and let her run a month, but it did not help her any. Blacksmith says her feet are all right; shows some symptoms of founder; some tender on the coffin bone. What could be done for her? Does it hurt her to breed from?

2. Also a suckling horse colt, about three months old, has an enlargement in bag as big as a large potato, about four inches long. Is it a rupture; if so, can it be cured, or would it be better to kill him at once? E. P. L.

Ans.—It is possible the bursal enlargements or puffs above the fetlock joint are causing the lameness. These enlargements, when quite large and tense, frequently do. All that can be done in such cases is long rest and repeated blistering. If the lameness be in the feet (and it is impossible for me to tell without seeing her), long rest and repeated blistering around the coronet will help her, as it will insure her a rest. Of course, if there has been a congenital weakness of the parts, there is a danger of the progeny having a like predisposition.

2. Your colt has scrotal hernia, or rupture. Do not think of destroying him on that account. It is very probable a spontaneous cure will result before he is a year old. If nature should not effect a cure by the time he is to be castrated, the operator must perform what is known as the covered operation. If, instead of getting better as the colt grows older, the rupture should increase in size, you will have to have him operated on at once. The operation necessary in such cases consists in casting him, placing him on his back, cutting down into the intestine, returning it, and stitching up the opening and also the skin. It requires a veterinarian to operate.

INJURIES TO COLT'S LEG.

Will you please tell me what to do for a colt's leg, as follows: First he got bitten by a dog. We kept the wound dressed with carbolic acid and sweet oil. When about healed he ran away with doubletrees, and bruised it. I policed with linseed, and it is healed over now, but there seems to be a fleshy lump inside skin. Seems loose, not fast on cords, as it is just above fetlock on outside of hind leg.

When he ran away he also bruised his hocks bad. Both are capped, and one seems like a curb. We blistered both with fly blister, then oiled with castor oil. They seem quite tender, especially the curb place. When he is exercised, the swelling goes down some, but keeps swollen badly when stabled. We work him some. Is three years old. What would be best to do? Have we done right so far? B. P.

Ans.—The growth is a fibrous growth, the result of inflammation, and it is hard to remove. The lumps on the hocks are also hard to lessen. If there is any considerable quantity of fluid beneath the skin on the points of the hocks, which can be detected by manipulation, it will be necessary to lance to allow the escape of it. But it is better to not open unless necessary, and if it has to be done, a veterinarian should operate. You will be able to reduce all the enlargements and probably entirely remove them by the use of the following liniment: Iodine, 4 drs.; potassium iodide, 2 drs.; glycerine, 4 ozs.; alcohol, 4 ozs. Rub a little of the liquid into the parts once daily. If it blister, cease applying it, and apply vaseline until the parts become smooth again, when you will again apply the liquid. Keep this treatment up and have patience, as chronic enlargements disappear slowly.

PROBABLY INFLUENZA IN COLT.

A colt, which came the last of May, has been on pasture with the mother for a month, with access to spring water at will, and has been healthy from the start. I have just noticed, however, that the hind legs, including the knees, are swollen quite large, and it moves about like an old horse with puffed legs. I think the front legs are also a little swollen, but very little. Kindly let me know what is the trouble; if it is serious, and what can be done for it? J. S. MCGURN.

Ans.—It is probable your colt has influenza, a disease that is quite common in some sections. In many cases the legs swell and the joints become sore. Of course, the swelling may be from other causes, but, from symptoms given, I think not. Keep mare and colt in the stable during the day, and protect from flies by darkening the stall. Feed the mare new hay or grass and a liberal supply of chopped oats and bran. Encourage the colt to eat by arranging a feed box at the proper height. Put 20 grains chlorate of potash on a teaspoon, catch the colt's tongue in

left hand, insert right hand and up tongue. Give this not attempt to do take nourishment. It refuses to do so fessional assista them out at night rain storm or cold

TREATMENT

The reading of ter regarding grain 20th, leads me to a to the next crop o which I find is very son, if the bunche ground? Will the that way, and if made of the smu corn next season, stoned, and how; how, or is there an

Ans.—There is of grain following for the smuts which ley are distinct fr produce it. One n a crop of white cl seed. The smut o barley or corn; affect wheat or b smuts is a distin general biological holds true here a animals. Care sh the ground from corn smut, which smut balls from spores retain the are not readily d ground clean, all should be removed balls burst open a Again, the spores they are allowed for the droppin which will go on medium. As a m believed that the young corn plan spores. On this only thoroughly

2. Regarding planting, there opinion. Some at seed in bluestone but there are ma treatment was v that corn smut sp corn plants, the that smut spore planted will infec solution of bluest lons of water, m spores. This solv corn so that eve solution of forma of water, may b latter treatment

GEESE B

I have two p would be more p pure-bred Embde breeding purpos bred African gan market?

Ans.—An expe the produce from and Embden good purposes, being Embden at mat weight with the quality of Embd believe you can purposes, it wou be more money could at least se the remainder, b as much on the would. As a rul variety of pure pure and to ma to improve the s REGISTRY OF ST

1. Would you ADVOCATE, who t Horse Association

2. Also, who address?

Ans.—1. J. H. of the American Standard-bred H recognized regist

2. The Secreti ciation of Americ Vermont. The S Association of Ca Ont.

COLT.

years old; was four years old; Carried herself June, when she coming on each blistered them, summer she became and let her run a any. Blacksmith was some symp- the coffin bone. s it hurt her to

left hand, insert the spoon in the mouth with right hand and upset the spoon well back on the tongue. Give this dose three times daily. Do not attempt to drench. As long as the colt will take nourishment you need not be alarmed; if it refuses to do so, you had better employ professional assistance. If the weather be fine, turn them out at night, but do not leave out in a rain storm or cold.

Miscellaneous.

TREATMENT OF CORN SMUT.

The reading of Prof. Lochhead's valuable letter regarding grain rusts, in your issue of August 20th, leads me to ask: First—If there is not danger to the next crop of other grains from corn smut, which I find is very prevalent in my field this season, if the bunches are allowed to fall upon the ground? Will these spores infect other grain in that way, and if so, what disposal should be made of the smut balls? Second—In planting corn next season, should not the seed be bluestoned, and how strong may it be applied, and how, or is there any better remedy? W. S.

Ans.—There is no danger whatever to the crop of grain following corn infested with corn smut, for the smuts which damage wheat, oats or barley are distinct from it, and cannot possibly reproduce it. One might just as well expect to get a crop of white clover from sowing purple clover seed. The smut of wheat will not affect oats or barley or corn; neither will the smut of oats affect wheat or barley or corn. Each of these smuts is a distinct species, as we say, and the general biological law that "like produces like" holds true here as with the higher plants and animals. Care should be taken, however, to keep the ground from becoming filled with spores of corn smut, which may be done by preventing the smut balls from falling to the ground. Smut spores retain their vitality for several years, and are not readily destroyed by heat. To keep the ground clean, all stacks of corn which are infested should be removed and destroyed before the smut balls burst open and begin dropping their spores. Again, the spores may be distributed by cows if they are allowed to eat corn infested with smut, for the droppings will contain living spores, which will go on reproducing in the semi-solid medium. As a matter of fact, it is generally believed that the main source of infection of the young corn plant is manure containing smut spores. On this account it is advisable to use only thoroughly rotted manure for corn crops.

2. Regarding treatment for seed corn before planting, there is considerable difference of opinion. Some authorities claim that soaking the seed in bluestone assists in preventing infection, but there are many cases on record where such treatment was valueless. However, if it is true that corn smut spores in the ground infect young corn plants, then it is also natural to assume that smut spores attached to seed corn when planted will infect the young plants. A strong solution of bluestone, 25 pounds in 25 or 30 gallons of water, may be used to kill the attached spores. This solution may be sprinkled on the corn so that every grain is thoroughly wet. A solution of formalin, 1 pound in 30 or 40 gallons of water, may be similarly used. Probably the latter treatment is the better one.

W. LOCHHEAD.

GEESE BREEDING FOR PROFIT.

I have two pure-bred Embden geese. Which would be more profitable, to mate them with a pure-bred Embden gander and sell the stock for breeding purposes, or mate them with a pure-bred African gander and raise the stock for the market? SUBSCRIBER.

Ans.—An expert poultry judge assures us that the produce from a cross of the African gander and Embden goose is very satisfactory for market purposes, being hardy, vigorous growers. The Embden at maturity is about equal in size and weight with the African. If you have a first-class quality of Embden geese, and have reason to believe you can readily find buyers for breeding purposes, it would seem likely that there would be more money in keeping them pure, as you could at least sell part of them for breeding, and the remainder, if well handled, will bring about as much on the market as the cross-bred stock would. As a rule, when one has a good market variety of pure-breds, it is wise to keep them pure and to make judicious selections of males to improve the stock.

REGISTRY OF STANDARD-BREDS AND HOLSTEIN-FRIESIANS.

1. Would you please let me know, through the ADVOCATE, who the secretary of the Standard-bred Horse Association is, and his address?

2. Also, who registers Holstein cattle, and his address? J. M.

Ans.—I. J. H. Steiner, Chicago, Ill., is Secretary of the American Trotting Register. There is no Standard-bred Horse Breeders' Association and no recognized registry in Canada for Standard-breds.

2. The Secretary of the Holstein-Friesian Association of America is F. L. Houghton, Brattleboro, Vermont. The Secretary of the Holstein Breeders' Association of Canada is G. W. Clemons, St. George, Ont.

FARM GOSSIP.

Delta, B. C.

Mr. Thomas Cunningham, fruit inspector, on returning from a recent visit to the Delta district, reports that he took particular notice of the dairy stock, and states that he has never seen cattle in better condition. Many of the herds showed fine breeding, the scrub cow being conspicuous by her absence. The young cattle now rapidly coming forward give evidence of judicious breeding; they are mostly cross-bred from pure-bred stock on both sides. Dairy Shorthorn bulls seem to have the preference, and they certainly appear to nick well in breeding with Ayrshires and Holsteins. This, he states, is evident by the quality, shape and size of the young heifers now coming in. "The Delta farmers are good, liberal feeders, their pastures being rich in sweet, succulent grasses." Mr. Cunningham cultural outlook throughout the Delta. Speaking of the dairying industry, he states that three of the chief creameries on the Delta are turning out no less than 15,000 pounds of butter per month, the Delta Co-operative Creamery making 400 pounds per day, or 12,000 pounds monthly. L. Guichon's creamery is producing 1,700 pounds per month, all from his own cows, and the Wellington Farm, owned by R. Rithet, is turning out 1,300 pounds.

Chilliwack, B. C.

In the Victoria Colonist we find the following statements, elicited in an interview with L. W. Paisley, a well-known resident of Chilliwack: "The crops are looking fine. Wheat, oats and barley will yield fully up to the average, while hay will give a splendid return. Mr. Paisley mentioned a field of Alsike clover which stands 5 feet 6 inches high, the timothy 6 feet 10 inches, and rye grass 7 feet 8 inches. Roots and vegetables are splendid. Fruits of all kinds are also looking well. There was a phenomenal crop of berries, of excellent quality. Apples, plums and prunes give promise of a very large yield. The Eden Bank creamery, established four years ago, on the co-operative plan, is a good example of what is being and may be done in dairying. In 1900 it produced 130,000 pounds of excellent butter, which was sold at 25 cents a pound, and at the end of the season there was a surplus of \$1,400. On Monday, 1,457 pounds of butter was made; on Tuesday, 1,070 pounds, the daily average being about 1,200 pounds. More than half the farmers in the district make their own butter in the old-fashioned way, so that there is a good field for the establishment of other creameries. Last year the butter cost, to make, 1 cent per pound, while this year the cost of manufacture will be reduced to one quarter to one third cent per pound. The butter produced at Eden Bank Creamery finds a ready sale in Vancouver, New Westminster, and Victoria, the latter being the best market."

Northwest Horses for the Army.

Lieutenant-Colonel Dent, who has been in the Northwest for some weeks purchasing horses for the War Office, has completed his tour and returned to Montreal. He expresses himself as being very much pleased with the assistance given him in his work by Secretary C. W. Pearson and other members of the Territorial Horse Breeders' Association, particularly Capt. Inglis and Messrs. W. R. Stewart, J. A. Turner and G. S. Goddard. From the knowledge gained by a personal inspection of the leading horse-breeding districts of the Northwest and British Columbia, he is inclined to think that a future visit might be much more productive of results than has been. Col. Dent considers that a great deal of improvement might be made in breeding the right class of mares and using a Thoroughbred stallion. It would also greatly facilitate business if breeders would devote more attention to having their horses better broken in, so that they would be handier and more tractable. Col. Dent also recommends that a law be passed similar to that in force in England, compelling the railway companies to properly clean and disinfect all stock cars after each shipment. Following is a statement of the number of horses purchased in the Northwest and British Columbia by Col. Dent, with the prices paid for each class of horse, and the total amount expended:

Table with 4 columns: Horses bought, No., Price, Amt. Rows include Mounted Infantry Cobs, Cavalry, Royal Artillery, and Total.

Of these 778 horses, 26 were secured at Kamloops and Vernon, B. C.; the others at various points in the Northwest, as follows: Calgary, 217; High River, 98; Cochrane, 61; Lethbridge, 18; Muesleod, 231; Pincher Creek, 48; Medicine Hat, 27; Maple Creek, 44; Moose Jaw, 8.

The Census Returns.

Census Commissioner Blue has issued his first statement of returns, showing the population of Canada to be 5,338,883, an increase of 505,644, compared with 1891. Of the seven Provinces, Quebec exhibits the largest gain in population, having 132,439 more than in 1891. Manitoba comes next, with 93,958, while British Columbia is third, with 91,827. Ontario is fourth on the list, with 53,657 to her credit. New Brunswick is considerably behind Ontario, with a gain of 9,830, while Nova Scotia closely approaches the former, with 8,720. Prince Edward Island laments a loss of population, in which unenviable position she stands alone, amounting to 5,820. The Territories are able to boast of a gain of 78,201. An analysis of the returns shows that the population has uniformly decreased in the older rural sections, and increased in cities and towns and in the new regions. Judging from the comments of the press, a greater increase was expected. As immigration has been fairly heavy, the natural increase could not have been very large in the past decade. In the last issue of the Farmer's Advocate, Mr. David Lawrence, writing on the farm labor question, laid part of the blame for this upon the old bachelors, who are becoming numerous in nearly every township. The Toronto Globe thinks that economic changes, such as the introduction of machinery and the adoption of mixed farming, have resulted in a great decrease in the amount of labor needed on the farms of old Ontario, and have accordingly brought about a proportionate decrease in population. The singular uniformity with which it is popping in the eastern, central and western Ontario rural districts have lost population emphasizes this point. The farms of old Ontario are as

carefully tilled as ever. They earn considerably more money than they did ten years or more ago. There are fewer farmers to share this increased income, and so they are better off on two counts. While the rural districts everywhere, except on the Detroit frontier and in the Ottawa Valley, have receded in population, all the cities except one have made heavy gains. A portion of the population from these rural districts has drifted to the towns and cities and a part to the newer districts, such as New Ontario, British Columbia, and the Yukon.

Live Stock Exhibits and Meetings at Buffalo, N. Y.

As the time approaches for the live-stock show at the Pan-American Exposition, the indications are that one of the largest and best shows ever brought together will be seen at Buffalo, the dates for which are as follows:

Table with 2 columns: Animal type and dates. Rows include Swine, Cattle, Sheep, Horses, Poultry, and Pet Stock.

During the time of each exhibit, arrangements have been made for the holding of meetings of breeders of the various classes of live stock, and through the courtesy of the New York Commission, the meetings will be held in the audience room of the New York State Building, as follows: Swine Breeders, September 4th; Cattle Breeders and Dairymen, September 19th and 20th; Sheep Breeders, October 3rd; Horse Breeders, October 17th; Poultry and Pet Stock Fanciers, October 25th. An interesting programme is in course of preparation, and invitations have been extended to the officials of the South and Central American countries to participate in the deliberations, as well as to all those of the United States and Canada who are interested in live-stock meetings. These meetings are a result of an anxiety expressed on the part of live-stock men to get in closer touch with the live-stock interests of not only our own country, but of South and Central America as well. A general invitation is extended to all stockmen to be present at these meetings.

F. A. CONVERSE, Superintendent of Live Stock.

Fall Fair Dates.

Table with 2 columns: Location and dates. Rows include Toronto Industrial, London Western, Pincher Creek, Ottawa Central, Medicine Hat, Battle River, Broadview, Maple Creek, S. E. Kootenay, Kamloops, B. C., Churchbridge, Qu'Appelle, Dauphin, Innisfail, Emerson, Morden, Carlyle, Ft. Saskatchewan, Saltcoats, Victoria, B. C., Hartney, Moose Jaw, Olds, Russell, Selkirk, St. Andrews, Swan Lake, Rosthern, Swan River, Carnduff, Gainsboro, Kildonan and St. Paul's, Deloraine, Stonewall, Killarney, Gladstone, Boissevain, Lacombe, and Oak Lake.

Montreal Markets.

Montreal, Aug. 29.—There were about 1,000 head of butchers' cattle, 150 calves and 1,500 sheep and lambs offered at East End Abattoir to-day.

Cattle.—There was a larger proportion of pretty good cattle to-day than has been the case lately, and all kinds, except the best, were rather lower in price, 4c to 4 1/2c per lb.; pretty good stock sold at from 3 1/2c to nearly 4c per lb.; common dry and thin young stock, 2 1/2c to 3c; canners paid from 1 1/2c to 2c per lb. for small bulls, and from 1 1/2c to 2c per lb. for old cows.

Calves from three to four weeks old sell at from \$1 to \$5 each, or about 4 1/2c per lb. Calves two to three months old bring \$8 to \$12 each, or about 4c per lb.

Sheep.—Shippers paid 3 1/2c per lb. for good large sheep, and the butchers paid from 3c to 3 1/2c per lb. for the others.

Lambs.—The supply of lambs is not equal to the demand, and prices are firm. Fair to good lots of lambs sell at from \$3 to \$3.75 per head, with a few choice ones at from \$4 to \$4.50 each, or about 4 1/2c per lb.

Hogs.—Fat hogs sold at from 6c to 7c per lb., the latter for selects.

Buffalo Markets.

East Buffalo, Aug. 29.—Cattle.—Receipts, three cars: good demand and steady; good to fine finished steers, \$5.45 to \$6; medium to choice shipping steers, \$5.30 to \$5.80; coarse rough, \$4.15 to \$4.65; fat smooth, \$5 to \$5.25; green steers, \$3.85 to \$4.30.

Hogs.—Receipts, 12 cars; excited and higher; heavy grades opened at \$6.35 to \$6.40; closed at \$6.70; mixed, \$6.30 to \$6.35; closed at \$6.45; Yorkers, \$6 to \$6.25, as to weight and quality; pigs, \$5.80 to \$5.90; roughs, \$5.40 to \$5.70; stags, \$4.50 to \$4.75.

Sheep and lambs.—Receipts, 15 cars; market steady to firm for lambs; top, \$5.85 to \$6.00; culls to fairly good, \$3.25 to \$3.70; sheep, top mixed, \$3.30 to \$3.50; wethers, \$3.60 to \$3.90; yearlings, \$3.75 to \$4.

Chicago Markets.

Chicago, Aug. 29.—Cattle.—Receipts, 10,000; butchers' stock firm; Texans strong; westerns slow; good to prime steers, \$5.60 to \$6.35; poor to medium, \$3.75 to \$5.50; stockers and feeders steady, \$2.25 to \$4.25; heifers, \$2.75 to \$4.00; canners slow, \$1.25 to \$2.35; steers, \$4 to \$5.25; Texas grass steers firm, \$3.40; western steers, \$4.75 to \$5.10.

Hogs.—Receipts to-day, 23,000; top, \$6.60; mixed and butchers', \$5.75 to \$6.50; good to choice, heavy, \$5.90 to \$6.80; rough heavy, \$5.70 to \$5.90; light, \$5.70 to \$6.25; bulk of sales, \$6.10 to \$6.40.

Sheep.—Good to choice wethers, \$3.25 to \$4.10; fair to choice, \$3 to \$4.00; native lambs, \$3 to \$5.20; western lambs, \$4.00 to \$5.10.



Widow Gray on Homemade Worries.

It was a quiet summer evening, cool and pleasant, the thunderstorm having cleared the air and brought the temperature down most acceptably. The cottage was of medium size, bearing signs of wear-and-tear, but none of poverty or neglect. It was on a corner lot in one of our larger cities, and sometimes the question of the heavier taxes this desirable situation entailed became a burning one with its owner; but so far she had managed, by the strictest economy, to meet all claims, and she hoped that for the remaining span of her existence, which could not, in the natural course of things, be a long one—she might be able to remain in the dear little place to which her John had brought her as a young bride some forty years ago, and in which her children had been born and brought up. Some of them had gone to other elsewhere, from which they came to visit her from time to time; and two others had gone to the best Home of all, where, "please God," she would say, "I hope to join them presently"; but meanwhile life held many blessings for her which her grateful heart was not slow to recognize. Widow Gray was seated in her rocking-chair, on a snug corner of her little veranda, with its peephole through the thickly-leaved creeper which almost covered it—"kind o' thinking," she would have told you, adding, "but perhaps not so much thinking as letting little thoughts and little ideas and little fancies run helter-skelter, one after another, through my head." To-day a very joy-bell of anticipation was ringing in her ears, for to-morrow, John, her eldest, and Jim, her youngest, were coming with the crowd of "Old Boys" whom the city was preparing to welcome, but who (in her case, and perhaps in the case of many others also) really came "to see mother." At church the minister's sermon had been all about joy—about rejoicing, not "sometimes," but "always," and Widow Gray had recalled an oft-repeated saying of her dear old husband: "We are meant to be joyful, Bessie. I cannot understand a child of God being anything but cheery and happy. There must be something wrong if a Christian man or woman carries a long face."

"Well," thought Widow Gray, "I know that's how it should be, but there's many a cloud of our own making which comes between us and the light. And so it is that some of us, who should be so bright, look so gloomy. It seems to me that we get the good and the bad, the sunshine and the shadow, all mixed up somehow. Some are so afraid of cares which may come to-morrow, that they have no eyes for the blessings which are already theirs to-day. My John was fond of quoting what Robbie Burns had to say about this:

Human bodies are sic fools,
For a' their colleges and schools,
That when nae real ills perplex them,
They make enow themselves to vex them."

"Now, for instance, how many young couples spoil the happiness of their whole married lives by the terrible mistakes they make by beginning, so to speak, at the wrong end. They lay up untold worries for themselves by their want of common sense, if not common honesty, though they would think that a hard name to give it. There's that dear young couple over the way. Any one who knows what he earns, and how unfit, from want of proper training, she is to spend his wages wisely, can see with half an eye that it will not be long before their troubles begin; and that they will be troubles of their own making won't make them easier to bear. They have furnished their little cottage on a scale far beyond their means. They got one of those circulars headed, 'Why pay cash when you can buy everything on the instalment principle?' and nothing I could say, and I did try to say it kindly and lovingly to them, could persuade them that it was not the very easiest thing in the world to pay by degrees. 'Why,' Auntie Gray, 'we shan't feel it. It's called the "hire system," and is ever so much better than having to pay for it all in a lump. Besides, we can get married NOW, instead of having to wait for goodness knows how long!' My talking wasn't of any use, and but too soon will come for these deluded young people, not only worry, but sorrow, for sorrow always follows sharp upon the heels of worry.

"This 'pay by degrees' plan is a downright snare to our young men, too—a regular pitfall, I call it. They want bicycles, they want musical instruments, they want all manner of things good enough in their way, but which should be earned before bought; and but too often, even after really pinching themselves to meet the pay-

ments, their so-called possessions are forfeited or find their way into the pawn shop. All these are what I call homemade troubles. Our dear Lord never sent them to us, and I can't help thinking that they are amongst 'the crooked paths' out of which He leaves us to find our own way—they are not those which He has promised to make straight. I cannot be too thankful for the manly uprightness of my dear old John. Bessie, my woman, he would always say when I showed a hankering after something we could not rightly afford, 'we'll only have what we can pay for on the nail, and then there'll be no sorrow with it.' Our children knew his way and respected his motives even when sometimes they seemed difficult to understand. Now that they are fathers and mothers themselves, they realize what a good foundation he was laying by precept and example for our future happiness. To his self-denial and careful provision I owe the comfort of my declining days and the prospect of my boys' home-coming to-morrow without a thought of bitterness to mar our pleasure." Here Mrs. Gray suddenly remembered that it was time to put on the teakettle, and having done so, and partly to prevent her thoughts upon this fruitful subject "running away with her," as she termed it, she took from the top shelf of her bureau, which held many such treasures, the following extracts, which, she said to herself, "express so much better than I can what are the best of all remedies for every trouble, whether of our own making or which may come to us in the Providence of God." And as the dear old white-haired lady bends over the pages we will bid her good-bye for the present. This is what she reads:—

"Two remedies for worry.—The first by Daniel Quorn: 'Start the day thinking like this: There will be nothing to-day but He will help me through it. There will be nowhere to-day but He will be with me; no temptation but He can deliver me; no burden but I can cast it upon Him. He looks over the day for us. There's a worry waiting, He sees it, and here's the patience. There's a temptation; yes, He knows, and here is wisdom and strength. There's a bit of a trial, and here He is waiting to give thee a bit of courage and faith. But don't let that be all. Ah! He will make thee glad with His favor and send thee forth cheerful to thy work.'

"The second remedy by Mary D. Brine:
Cheer up; cheer up, ye moody ones,
Look for the bit of blue!
And when you find it you will feel
The warm sun shining through.
And if the shadows come, why, then
Just wait awhile; you'll find
That clouds can't last forever,
When the sun lies just behind."

H. A. B.

Do You Know?

Do you know that every cruelty inflicted on an animal in killing or just before death poisons to a greater or less extent its meat?

Do you know that every cruelty inflicted upon a cow poisons to a greater or less extent its milk?

Do you know that fish killed as soon as taken from the water, by a blow on the back of the head, will keep longer and be better than those permitted to die slowly?

Do you know that birds destroy millions of bugs, mosquitoes and harmful insects; that without the birds we could not live on the earth, and that every little insect-eating bird you may kill and every egg you may take from its nest means one less bird to destroy insects?

Do you know that a check-rein which will not permit a horse to put his head where he wants to when going up a hill is a cruel torture to the horse?

Do you know that the mutilation of a horse by cutting off his tail compels him to suffer torture from flies and insects every summer as long as he lives?

Do you know that every kind act you do and every kind word you speak to a dumb animal will make not only the animal but yourself happier, and not only make you happier, but also better?

GEO. T. ANGELL.

His Amazed Daughter.

The wife of a Gordon Highlander received, some time ago, an invitation to visit him at the barracks in Scotland. She did so, taking with her their little six-year-old girl. When they arrived, as it happened, the husband was engaged on sentry duty, and so they could not approach him.

The child eyed her "daddy" with a rather sorrowful but amazed expression, as he paced up and down the square, shouldering his rifle and wearing a kilt. She had never before beheld him thus arrayed, and for a few minutes the spectacle seemed to be quite beyond her; but for no longer could she keep silent.

"Mamma," she said, in a voice that betrayed a trace of childish covetousness, "if daddy finds the man what stole his trousers, will he gimme dat little frock?"

The Secret of How to Secure a Good Wife.

(Written especially for the bachelor readers of the "Farmer's Advocate.")

Whoso findeth a wife findeth a good thing and obtaineth favor of the Lord, and a prudent wife is from the Lord.—(Solomon, the Wise Man.)

While giving advice to a canny Scotchman regarding the better way of getting married, rather than living alone, I was confronted with the question, "Are ye mairitt, yersell?" When I answered in the affirmative, my questioner replied, "Oh, weel, ye'll ken a' about it."

When God at the beginning created man, He said: "It is not good that the man should be alone. I will make him an help meet for him." God does not change, but what He says in His wisdom is always true, and certainly the farmer, of all others, should not think of living alone. While these facts will at once be admitted by all reasonable men, some will at once tell me that they have friends who are unhappily married, and that it is very difficult to get a good wife. Others will say that it is a question of falling in love, etc. Now, let us reason this matter out. What do you fall in love with? One married man, whose wife was very homely, was heard to say that he did not marry his wife for her beauty, but because she had such a beautiful gesture. It is told of a man who was in the habit of calling where there were three sisters: One day, while at dinner with them, he noticed that one cut off all the rind from the piece of cheese she was eating. He decided that she might be a little wasteful. The second ate her piece of cheese, rind and all. He then feared that she might not be as cleanly as he would like. The third scraped the rind very carefully and neatly. He at once decided that she was both economical and cleanly, and concentrated his affections upon her and won her.

Young men's tastes are often very different, but it might be possible to lay down some general principles that might be applicable to all.

Common Sense and Good Taste are perhaps the best talents and gifts that any woman—or man either, for that matter—can possess. It is certainly nice to have a fine healthy wife, strong and of good physique, and a man ought certainly to see to it that the one who is to be the mother of his children would not be likely to impart to them any disease or weakness of body or mind that she might have inherited from her parents. Then the mind is very important. As the body requires training and development, so does the mind. The model farmer's wife should have both: be well trained and developed in all ordinary accomplishments, and should, above all things, be a good cook. Very few people, however strong, can continue to eat badly-cooked food and retain good health.

But the soul, or spiritual part, is not that the most important of all? A bachelor used to sigh for "a little farm well tilled and a little wife well willed."

A man who had a fine-looking team of horses got stuck fast in a soft place on the road. A neighbor, whose team would not bring as much money as either one of the other horses, came along and pulled the load out of the hole. The fine-looking team would only pull one at a time; when the one was ready and willing, the other was sure to hang back; but the shabby-looking team/pulled together as one horse and easily took the load out.

Now, this is the secret of getting along well in the married life—pull both together.

But the question still confronts the bachelor, How am I to know the mind?

The story related in Genesis, of Abraham sending his servant to get a wife for Isaac, is a very beautiful one, in that it shows the Patriarch's implicit trust that God would direct. It is written that it is God only that knows the heart, and Abraham believed this and acted accordingly.

While a young man and woman were walking in opposite directions, on the deck of an Atlantic steamer, the Lord sent a heavy wave which gave the vessel such a sudden jerk that the young man and woman, who up to that moment were entire strangers, were literally thrown into one another's arms. A long time afterwards the mother of that young man, after telling me how well she was pleased with her daughter-in-law, remarked, "Was it not a queer way that they became acquainted?" Truly, God moves in a mysterious way.

To sum up, God is willing to give a prudent wife to every lonely bachelor who consecrates himself to the Lord and asks him for an help-mate. "No good thing will He withhold from them that walk uprightly." "Ask and ye shall receive." Of course, you must use means: you must become acquainted with her, pay attention to her, gain her affections, and by your real worth and manliness make yourself worthy of her love and affection. Of course, it is better never to be late, but better late than never. If you are a little old, never mind, go on in the right way and God will bless you.

Yours faithfully, UNCLE DANIEL.

THE CHIL

"Grand

Do you know what mother to visit? They are perfectly happy "Dear Granny" for a lot of chickens and are generally kind gathered, and the clwits by their devoted up to grandma and k

"Here are some Nan. "Now please was a little girl."

Gladys knows her When any of you l storm and cry for it, er, I am sure, will n pressure of those so a great deal of pow people far more than the right way about when you Gladys and Nan copy Gladys and Nan

Did you ever hear ment between the S them was the stron blow the cloak off a but the harder he h wrapped his cloak ab ly down, and the mar he found it too hot. influence than rude c

"If only you'll think When people are v And be pleasant When one's school You will conquer t

"If only you'll think When a certain tr With peas in his And a look of th Comes calling upo

"If only you'll think And laugh, like th He will scamper You'll be happy And I'd like to be

Cou

The Son of H

"I shall have to m of that boy of mine, other way out of it," knownlawyer with a into my office the o way home from sel threepenny bit down fore me.

"What is this for, "Retainer," he an "Very well," said the joke. "What h tained upon?"

My boy dug down and produced a note er, and placed it bef comment. It was t he had been "cuttin vised a whipping.

"Now, what would asked he in a busines I had read the note a that the young ras into.

"I think that our fi be to apply for a cha said I.

"Very well," he "you're handling the

"Then we will tur to your mother," said

I saw the young i braced up and said:—

"See here, dad, yo on this 'cause you've know!"

"I'll argue your ca ed, "but you will h would not dare to at

Well, I pleaded the thrown out of court, served—a good whipp

It was the first tim

A

Shall I be like grandd Shall I wear such a No feathers, no poste With a little white Shall I sit in the easi With a great ball of Shall I think it quite And dirt and disord

Just wait till I tell yo I hope you won't thi It happened one day v For being ill-temper She came and sat by I And told me, "Thee It's by stumbling, my And we always grov

"Was anyone ever so w I asked her between Then grandma laugh And her little white "Was any one ever so n I'm sure that I know "Who was it?" I aske She whispered, "Yo

THE CHILDREN'S CORNER.

"Grandmother's Pets."

Do you know what it is to have a dear grandmother to visit? These little girls, Gladys and Nan, are perfectly happy when they are allowed to visit "Dear Granny" for a few days. Grandmother has a lot of chickens and little yellow ducks, and there are generally kittens too. When the eggs are gathered, and the chickens frightened out of their wits by their devoted admirers, the children nestle up to grandma and beg for a story.

"Here are some flowers, grandma," cries little Nan. "Now please tell us about mother when she was a little girl."

Gladys knows how to coax, too, doesn't she? When any of you little ones want anything, don't storm and cry for it, but try her plan. Grandmother, I am sure, will never be able to resist the tender pressure of those soft little fingers. Children have a great deal of power, and can influence grown-up people far more than they think, but they must go the right way about it. Never scream and scold when you want anything. Take my advice and copy Gladys and Nan.

Did you ever hear the old story about the argument between the Sun and Wind as to which of them was the strongest? The Wind said he could blow the cloak off a man who was walking along; but the harder he blew the more closely the man wrapped his cloak about him. The Sun shone brightly down, and the man soon took off his cloak, because he found it too hot. Sunshine ways have far more influence than rude or angry words.

"If only you'll think of it, dearie,
When people are vexing and rude,
And be pleasant for two,
When one's scolding at you,
You will conquer the opposite mood.
"If only you'll think of it, dearie,
When a certain troublesome elf,
With peas in his shoes,
And a look of the blues,
Comes calling upon you himself—
"If only you'll think of it, dearie,
And laugh, like the sun, in his face,
He will scamper away;
You'll be happy all day;
And I'd like to be in your place."

COUSIN DOROTHY.

The Son of His Father.

"I shall have to make a lawyer out of that boy of mine. I don't see any other way out of it," declared a well-known lawyer with a laugh. He came into my office the other day on his way home from school and laid a threepenny bit down on the desk before me.

"What is this for, son?" I asked. "Retainer," he answered, soberly. "Very well," said I, entering into the joke. "What have I been retained upon?"

My boy dug down into his pockets and produced a note from his teacher, and placed it before me without comment. It was to the effect that he had been "cutting up," and advised a whipping.

"Now, what would you advise?" asked he in a businesslike voice after I had read the note and saw the trap that the young rascal had led me into.

"I think that our first move should be to apply for a change of venue," said I.

"Very well," he answered, "you're handling the case."

"Then we will turn the note over to your mother," said I.

I saw the young imp's face fall at this, but he braced up and said:—

"See here, dad, you're bound to see me through on this 'cause you've accepted my retainer, you know!"

"I'll argue your case before the court," I answered, "but you will have to accept the decision. I would not dare to attempt to influence the court."

Well, I pleaded the boy's case, promptly had it thrown out of court, and the boy got what he deserved—a good whipping.

It was the first time I ever played false to a client.

A Secret.

Shall I be like grandma when I am old?
Shall I wear such a queer little bonnet—
No feathers, no posies, not just a plain fold,
With a little white edging upon it?
Shall I sit in the easy-chair all day long,
With a great ball of wool and a stocking?
Shall I think it quite dreadful for folks to do wrong,
And dirt and disorder quite shocking?
Just wait till I tell you what grandma once said—
I hope you won't think me quite crazy—
It happened one day when they sent me to bed
For being ill-tempered and lazy.
She came and sat by me, and patted my hand,
And told me, "There's no use crying;
It's by stumbling, my pet, that we know how to stand,
And we always grow better by trying."
"Was anyone ever so wicked as me?"
I asked her between my sobbing.
Then grandma laughed just as hard as could be,
And her little white curls went bobbing.
"Was any one ever so naughty as you?"
I'm sure that I know of one other.
"Who was it?" I asked. "O please tell me, do."
She whispered, "Your own grandmother."

Now isn't it strange? But of course it's true.
I can tell you just one thing about it—
She'd not tell a story, whatever she'd do,
And we'd only be silly to doubt it.
But, of course, I feel certain you never will tell,
For how perfectly dreadful 'twould be
To have people know, who all love her so well,
That grandma was ever like me.

Dress for Elderly Women.

How often do we find the notion fixed in people's heads that because women are middle-aged, beyond that period, say elderly, they should not dress well. We do not put it quite so crudely as that, but we expect them to quietly retire into a permanent uniform of dead black. Now, of course, elderly women should not dress the same as young people, but they should certainly as well, always having in view, of course, the existing circumstances. It is a mistake for a woman to say: "I am not as young as I used to be: it doesn't matter much what I look like now."

One should give enough thought to determine what one may and what one may not wear to advantage, and after that, one can effect a great saving in time by not needing to bother further with what one should not wear.

The woman who no longer has the girlish contours of her younger years should frankly recognize this in her dress, and select for gowns and wraps such designs as are not constantly at war with her figure, as is the case when the woman of sixty years and two hundred pounds dresses in clothes designed for twenty years and one hundred and twenty-five pounds. To be beauti-



"GRANDMOTHER'S PETS."

ful in the true sense, a dress should hide all departure from beautiful outlines, and not call attention to them. When a woman who at twenty had a waist measure of twenty-six inches finds herself at fifty with a waist measuring thirty-six inches, she is not so gracefully proportioned as she was at twenty; therefore, she must take the more pains to add grace to her attire.

Elderly women may wear almost any color if it is deftly combined. Nothing is so attractive for the old lady with white hair as some shades of pink, when worn as roses placed among velvet or lace in a bonnet. Dull browns and lifeless grays are too cold for women with colorless faces and hair. The dark, rich purple-reds and red-purples especially suit elderly women with clear skins, and all the softened colorings that seem to be one color overspread with a haze, in the manner of so many colors now in vogue, are becoming to age. Wraps should invariably have irregular and not stiff and set outlines. Brims of bonnets should be draped about the face, and not laid in plain folds. When faces and necks show time's irresistible impress, bonnet strings and neckwear alike should be of pliable and fluffy fabrics, as of lace, chiffon, mousseline, nets and so on; plain ribbon strings on a bonnet and a plain linen collar are too severe for the face that should be dealt with gently.

It takes no more time and costs no more money to look well than to look ill, once one knows what to select and what to let alone.—(Ladies' Journal.)

THE QUIET HOUR.

Go Forward.

Hearing so much in these days of the comfortable doctrine, that "we can do nothing, God will do all," we are apt to sit down complacently with folded hands—leaving everything for Him to do. It is true enough that without His help we are powerless, it is just as true that we are allowed and commanded to be workers together with God. Faith can remove mountains of difficulty, but it must be an active faith, faith which worketh by love. The disciples who were commanded to feed the multitudes knew that the task was far beyond their strength. Did they, therefore, sit idly down, leaving Christ to do all the work? No, they brought their small supply of food for His blessing, and went quietly on with their preparations for the meal, trusting to Him to provide necessary help. He did not multiply the loaves and fishes until they had begun their apparently hopeless task, Lazarus was not raised from the dead until willing hands had prepared the way by opening the tomb—doing what they could. The ten lepers were not healed until they had started to show themselves to the priests. The widow's meal and oil were not renewed until she had taken of her scanty store to feed the prophet. The miraculous supply of oil was not provided for another poor widow until she had borrowed vessels to contain it. It is the same with our duties, God will not supply the needed strength for any task unless we do what we can ourselves. That would only encourage idleness. I read a little poem on this subject the other day, and as it expresses more forcibly than any words of mine can do the possibility of trusting too much of our work to God, I will insert it here.

"For a web begun God sends the thread,
Over and over these words I read;
And I said to myself with an easy air,
'What need to burden myself with care
If this be true,
Or attempt to do
More than my duty? For here is proof
'That we are to hold ourselves aloof
Until from the Master we receive
The thread for the web we are to weave!'"

"So day after day I sat beside
The loom, as if both my hands were tied,
With idle shuttle and slackened warp,
Useless as strings of an untuned harp;
For I took no part
With hand or heart
In the work of the world, To the cry of need,
The voice of the children, I gave no heed.
'When the task is ready for me,' I said,
'God will be sure to supply the thread.'"

"Others might go in cellars and slums,
And weave a web out of scraps and thrums,
Finding excuse for the daily toil,
The reckless waste of life's precious oil,
But as for me,
I could not see
How I was to follow them, or believe
That the needed strength I should receive,
Unless I waited, however time sped,
For God to send me the promised thread."

"I had no strength of my own, I knew,
No wisdom to guide, no skill to do,
And must wait at ease for the word of command,
For the message I surely should understand,
Else all in vain
Were the stress and strain
For the thread would break, and the web be
spoiled.
A poor result for the hours I'd toiled;
And my heart and my conscience would be
at strife
O'er the broken threads of a wasted life."

"But all at once, like a gem exhumed,
The word 'begun'—by a light illumed—
From the rest of the text stood boldly out,
By the finger of God revealed, no doubt;
And shocked and dazed,
Ashamed, amazed,
I saw as I had not seen before
The truer meaning the sentence bore,
And read as Belshazzar might have read:
'For a web begun God sends the thread.'"

"The man himself, with his mind and heart,
Toward the Holy City must make a start,
Ere he finds in his hands the mystic clew
That shall lead him life's mazes safely through.
And if loom and reel
And spinning-wheel
Idle and empty stand to-day,
We must reason give for the long delay,
Since the voice of the Master has plainly said,
'For a web begun God sends the thread.'"

Like the Israelites who stood on the shore of the Red Sea, our orders are to "Go forward!" The path may look difficult or even impossible, but if we take the first step, trusting our Leader, the next will become possible. Difficulties melt away if we advance boldly: the troubles we dreaded are found to be bearable. I do not write this from hearsay only. A few days ago two bright boys—my nephews—who were as dear to me as any young brothers could be, were laid side by side in one grave. They were here to dinner, and then went merrily off with a party of young people for a swim. When I next saw those dear lads they were lying side by side with peaceful faces and hands quietly folded. We might have expected that such a sudden and overwhelming sorrow would have almost broken the hearts of those who loved them so dearly, but when it came God's comfort came with it. "They were lovely and pleasant in their lives, and in their death they were not divided," were the words of peace that seemed to come instinctively to our lips. God's heaviest blows never crush those who trust in Him. HOPE.

Be a Good Wife.

For readers of the...

a good thing and a prudent wife is...

my Scotchman re...

created man, he...

When any of you...

admitted by all...

When you want...

Did you ever hear...

When people are...

When a certain...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

When you'll think...

Ingle Nook Chats.

My dear Guests,—
One of the pleasantest afternoons I have had for some time was spent in reading and judging the thirty-eight sets of Memory Gems sent in response to Contest XII. To read them was a delight, to judge their respective merits oftentimes a trifle puzzling, but I at length got through them all. I then counted up the marks obtained by each, and selected about a dozen of the highest; these I carefully went over again, after which I arrived at a decision. An unprecedented occurrence was the sending of two prize sets by one contributor, but this should remind others that there is nothing like trying to do one's best. The prizewinners are (1st) Miss Kate E. Crane, Burnstown P. O., Ont.; (2nd) Miss Margaret L. A. Matheson, Massie P. O., Ont., and (3rd) Miss Kate E. Crane, A. L. McDiarmid and "Mossback's Daughter" and Jean Lane were very close contestants for 3rd prize, while Jennie MacVannel, Nettie MacCallum, Annie E. Newlove, "Morag," Mrs. Philip, Bernice Devitt and Robt. B. Forsyth were but little behind. Contributions of merit were also received from "Imperialist," Pearl Shepherd, "Nancie," Charlotte Borrowman, Alan R. G. Smith, Fannie Newman, Ethel M. Lewis, Maud Jose, Douglas E. MacVannel, Janet Waterman, "McGinty" and David A. Ashworth.

I am pleased to note the popularity of this sort of contest, but would like to see keener competition in the essays. Miss Mary Gillies acknowledges receipt of prize, and comments kindly upon the Ingle Nook. Thank you, Miss Mary. Our Camera Contest should excite a friendly rivalry among many of our guests, as the prizes offered are very liberal. The winning Memory Gems (also others which have not won a prize) will appear from time to time, as space permits. In order to allow room for as many as possible this issue, I shall bid my guests good-bye for the present.

THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

FIRST-PRIZE MEMORY GEMS.

(By Miss Kate E. Crane, Burnstown, Ont.)
How'er it be, it seems to me,
'Tis only noble to be good;
Kind hearts are more than coronets,
And simple faith than Norman blood.
—Tennyson.

Talk not of wasted affection; affection never was wasted. If it enrich not the heart of another, its waters, returning back to their springs, like rain, shall find them full of refreshment. That which the fountain sends forth returns again to the fountain.—(Longfellow.

Look not mournfully into the past; it comes not back again. Wisely improve the present; it is thine. Go forth to meet the future without fear, but with a manly heart.—(Longfellow.

Endeavor to be patient in bearing with the defects and infirmities of others, of what sort soever they be; for thou thyself also hast many failings which must be borne with by others. How seldom we weigh our neighbor in the same balance with ourselves.—(Thomas a Kempis.

You can't isolate yourself and say that the evil in you shall not spread. Men's lives are as thoroughly blended with each other as is the air we breathe. Evil spreads as necessarily as disease. Every sin brings suffering to others besides those who commit it.—(George Eliot.

How happy is he, born or taught,
Who serveth not another's will,
Whose armor is his honest thought,
And simple truth his highest skill.
This man is free from servile bonds
Of hope to rise or fear to fall;
Lord of himself, though not of lands,
And having nothing, yet hath all.
—Sir Henry Wotton.

I held it true, whate'er befall;
I feel it when I sorrow most;
'Tis better to have loved and lost,
Than never to have loved at all.
—Tennyson.

Small service is true service while it lasts;
Of friends, however humble, scorn not one;
The daisy, by the shadow that it casts,
Protects the lingering dew-drop from the sun.
—Wordsworth.

Sow love and taste its fruitage pure;
Sow peace and reap its harvest bright;
Sow sunbeams on the rock and moor,
And find a harvest home of light.
—H. Bonar.

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

Make yourselves nests of pleasant thoughts. None of us yet know, for none of us have been taught in early youth, what fairy palaces we may build of beautiful thoughts, proof against all adversity. Bright fancies, satisfied memories, noble histories, faithful sayings, treasure-houses of precious and restful thoughts which care cannot disturb, nor pain make gloomy, nor poverty take away from us—houses built without hands for our souls to dwell in.—(Ruskin.

SECOND-PRIZE MEMORY GEMS.

(By Miss Margaret L. A. Matheson, Massie, Ont.)
No stream from its source
Flows seaward, how lonely so ever its source,
But what some land is gladdened.
No star ever rose
And set without influence somewhere. Who knows
What earth needs from earth's lowest creature? No life
Can be pure in its purpose and strong in its strife,
And all life not be purer and stronger thereby.
—Mrs. E. B. Browning.

We have not wings—we cannot soar,
But we have feet to scale and climb,
By slow degrees, by more and more,
The cloudy summits of our time.
—Longfellow.

For mankind are one in spirit, and an instinct bears
Along,
'Round the earth's electric circle, the swift flash of
Right or wrong;
Whether conscious or unconscious, yet humanity's
Vast frame,
Through its ocean-sundered fibers, feels the gush of
Joy or shame;
In the gain or loss of one race, all the rest have
Equal claim.
—J. R. Lowell.

It isn't the thing you do, dear,—
It's the thing you leave undone,
That gives you a bit of a heartache
At the setting of the sun.
The tender word forgotten,
The letter you did not write,
The flower you might have sent, dear,
Are your haunting ghosts at night.
—Margaret Sangster.

We never can tell what our thoughts will do,
In bringing us hate or love,
For thoughts are things, and their airy wings
Are swifter than a carrier dove;
They follow the laws of the universe—
Each thing must create its kind—
They speed o'er the track to bring us back
Whatever went out of our mind.
—Ella Wheeler Wilcox.

By the cynic, the sad, the fallen,
Who had no strength for the strife,
The world's highway is cumbered to-day—
They make up the stem of life.
But the virtue that conquers passion,
And the sorrow that hides in a smile—
It is these that are worth the homage of earth,
For we find them but once in a while.
—Anonymous.

How sour sweet music is,
When time is broke, and no proportion kept;
So it is in the music of men's lives.
—Shakespeare.

We know not half the power for good or ill,
Our daily lives possess o'er one another;
A careless word may help a soul to kill,
Or by one look we may redeem a brother.
'Tis not the great things that we do or say,
But idle words forgot as soon as spoken;
And little thoughtless deeds of every day
Are stumbling-blocks on which the weak are broken.
—Anonymous.

To serve with lofty gifts the lowly needs
Of the poor race for which the God-man died,
And do it all for love—Oh, this is great.
—J. G. Holland.

I count this thing to be grandly true,
That a noble deed is a step toward God,
Lifting the soul from the common sod
To a purer air and a broader view.
—J. G. Holland.

THIRD-PRIZE MEMORY GEMS.

(By Miss Kate E. Crane, Burnstown.)
To live well in the quiet routine of life; to fill a
little space because God wills it; to go on cheerfully
with a petty round of little duties, little avocations,
to smile for the joys of others when the heart is
aching—who does this, his works will follow him.
He may not be a hero to the world, but he is one of
God's heroes.—(Dean Farrar.

Life is real! life is earnest!
And the grave is not its goal;
Dust thou art, to dust returnest,
Was not spoken of the soul.
Lives of great men all remind us,
We can make our lives sublime,
And departing, leave behind us
Footprints on the sands of time.
—Longfellow.

Then gently scan your brother man;
Still gentler, sister woman;
Though each may gang a kennel wrang,
To step aside is human.
—Burns.

Honor and shame from no condition rise;
Act well your part, there all the honor lies;
Worth makes the man, the want of it the fellow,
The rest is all but leather or prunella;
A wit's a feather and a chief a rod,
An honest man's the noblest work of God.
—Pope.

Think truly, and thy thoughts
Shall the world's famine feed;
Speak truly, and each word of thine
Shall be a fruitful seed;
Live truly, and thy life shall be
A great and noble creed.
—Bonar.

We live in deeds, not years; in thoughts, not breaths;
In feelings, not in figures on a dial;
We should count time by heart-throbs,
He most lives who thinks most, feels the noblest,
acts the best.
—Bailey.

The boast of heraldry, the pomp of power,
And all that beauty, all that wealth e'er gave,
Await alike the inevitable hour;
The paths of glory lead but to the grave.
—Gray.

Kind words are the music of the world. They
have a power which seems to be beyond natural
causes, as if they were some angel's song which had

lost its way and come on earth, and sung on undyingly, smiting the hearts of men with sweetest wounds, and putting, for the while, an angel's nature into ours.—(Faber.

There's a wideness in God's mercy,
Like the wideness of the sea;
There's a kindness in His justice,
Which is more than liberty.
For the love of God is broader
Than the measure of man's mind,
And the heart of the Eternal
Is most wonderfully kind.
—F. W. Faber.

Life is a leaf of paper white,
Whereon each of us may write
His word or two, and then comes night.
Greatly begin! Though thou hast time
But for a line, be that sublime:
Not failure, but low aim is crime.
—J. R. Lowell.

CAMERA COMPETITION.

As a new departure, we announce a "Camera Competition," which will surely give pleasure to the many lovers of amateur photography. We offer six prizes, as follows:—1st, \$3; 2nd, \$2; 3rd, \$1; 4th, \$1; 5th, 50c; and 6th, 50c; for the best photographs of country homes, groups of animals, gardens, pretty bits of scenery, or anything of that nature, subject to the subjoined rules: All photographs must not be less than 4x5 inches in size, and mounted, and must be the work of amateurs. All photographs must be clear and distinct in detail, and well finished. They must reach the FARMER'S ADVOCATE, Winnipeg, Man., not later than October 1st, 1901.

The photographer's name and post-office address, and the name and location of scene, must be written on back of photograph. Any person is at liberty to send more than one photograph if desired. We reserve the right to use any photograph entered in competition. All the prizewinning photographs will become the property of the FARMER'S ADVOCATE for the purpose of illustration. We also reserve the right to purchase at a fair valuation any photographs that do not win a prize. Postage stamps must be enclosed if competitors wish photographs that do not win a prize returned. Do not make any mistake in the address, as such delay might debar you from the competition. THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

Harvest.

"While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night, shall not cease." Such was the promise given to our common ancestors long centuries ago, when out from the ark, the dove, that messenger of peace, flitted far over the lowering water-wastes of the East, and found her a home upon the dry land.

The ages since then have recorded changes in the world without number. Slowly, but surely, the power of men's thoughts has deepened and widened, probing the mysteries of science, and grasping the hidden meaning of things that are and have been. Men have discovered, and men have invented; but each, like the coral insect, wrought his part and ceased to be—sowed his seed, as it were, leaving the harvest of benefits to be reaped by his fellow-men. So the longest and most useful lives have ceased, and in the same way, customs, beliefs, laws, cities, empires, and continents, have changed, or ceased to be; but always, since primeval ages, has there been summer and winter, heat and cold, seedtime and harvest; and at the present time, in Canada, we have summer, and heat, and harvest.

Just what that means, we rustic women know best. It means flies; it means long days with pitiless, scorching sunshine blazing in the back yard; it means early breakfasts, and sharp dinners, and suppers just on time; it means washings and ironings; and bakings, that make one long for Switzerland, not because of its scenery, but because of its half-yearly wash and baking of bread; it means fruit, and sugar, and a preserving-kettle; it means chickens that take the "gapes" and die, and ducks that will fall on their backs and die, and turkeys that die for no apparent reason whatever; it means—but there! "nuff sed" about the disagreeables. Ruskin says, "There is no solemnity so deep to a rightly-thinking creature as that of dawn," and to those who will see and hear, the time of harvest means still, solemn mornings, with the mists lying white in the valleys, and the wheat-stooks showing yellow in the early sunshine; it means cool evening shades, redolent with harvest perfumes, and with the cooing twitter of the cat-owl, and the song of the cricket sounding soft and clear; and what can be pleasanter than a ride through country lanes when "fades the glimmering landscape on the sight," or a slow paddle across the lake? If we cannot have these recreations, we can at least keep near us a book of favorite poems, and its restful thoughts will help to lift us above the small vexations of the day, and lead us into nobler lives.

Harvest is full of blessings and delights apart from its poetic side. The clusters of fruit in our gardens are good to the eye, and better to the

palate, and the sou
full barns, with the
ing to "build greater
Then glory to the
That shines in th
And thanks be to
And crowns the
But the use of tha
obsolete, and althou
and late during har
slavery it used to
vesting, as in other
we have now are th
and Maud Mullers
with the horse-powe
not bear to the rea
home-brewed ale,"
But they sometimes
food and tea, and
sweet to the gods th
to the weary harves
Finally—when the
has watched for the
last time until ano
home. That custom
for the most part
Romans always hel
called Cerealia, in
agriculture, Ceres,
and the custom is
tent, in parts, in a
I think that th
any other, should
We are greatly bles
never yet have w
autumn" and fan
perienced. We son
the Hessian fly, but
and whether they
largely on our sow
soever a man sowe
and sometimes th
sweet, must be rea
Augustine let us s
alone to make in t
Thou didst before
the division of
children of Thy sp
make their light s
division of night a
lution of the time
and the new arise
is come forth; an
with Thy blessing
laborers into Thy
than theirs; wh
laborers to new s
shall be not yet.
The Clusi Cooki
each member had
higher criticism.
ells says: "the mi
est appeal for the
has pronounced upo
whether it is wisdo
I cannot think
gentlemen favored
C. C. cards could
aise unfavorably a
ieres; so the am
be taken, like gale
bit of candor came
of the club, as she
critic,—a young law
doubt the common
n't want to seem g
avenue which gave
she gladly made th
ample; and thus,
up behind another
who, having been t
and her sister, had
That chicken
donald.
"Delicious, you
Dillon made it.
girls use blunders.
But Del is a genius
make her a Venus!
With a laugh the
the young men hu
wind had malicious
of Miss Dillon, wh
fed; for no praise
ver found his ton
stevily hunt for it
cleverly that Del
much to think an
until later, when s
bed.
She regarded h
her mirror. Yes, it
beauty was that
large and gray, w
her lips had the vi
ness, the softness,
feminine beauty we
And would a
that was lacking?
in the town, condi
wife, and Del had
membered with env
statuesque bust of
displayed at a d
join. The amount
tain her in society
now; a debt whi
mered to pay.
"I wish I cou
away."
Wishes, like ric
selves wings"; o
hurry home to
persistently as any
Del was awak
father "tapping a

palate, and the sound of the binder speaks of full barns, with the happy possibility of our having to "build greater."

"Then glory to the steel That shines in the reaper's hand, And thanks be to God, who has blessed the sod, And crowns the harvest-land!"

But the use of that "steel" has been long since obsolete, and although our farmers work early and late during harvest, it is by no means the slavery it used to be. Customs change in harvesting, as in other things. The only gleaners we have now are the birds, instead of the larks and Maud Mullers of old. We no longer thresh with the horse-power; and maidens nowadays do not bear to the reapers at noontide "flagons of home-brewed ale," as did Evangeline in Acadia. But they sometimes bear baskets of substantial food and tea, and never was ambrosia more sweet to the gods than the cold ham and cookies to the weary harvesters.

Finally—when the last sheaf is in, and the dog has watched for the mice under the stooks for the last time until another year—comes the harvest-home. That custom, too, has fallen into disuse, for the most part, but in ancient days the Romans always held a great festival, with games called Cerealia, in honor of the Greek goddess of agriculture, Ceres, on the last day of harvest; and the custom is still observed to a certain extent, in parts, in a christianized form.

I think that the harvest season, more than any other, should bring to us serious thoughts. We are greatly blessed, we people of Canada, for never yet have we known such "harvestless autumns" and famines as other lands have experienced. We sometimes have blights, such as the Hessian fly, but there are always other crops, and whether those are great or small depends largely on our sowing; for in all things, "whatsoever a man soweth, that shall he also reap"; and sometimes the harvest, whether bitter or sweet, must be reaped by other hands. With St. Augustine let us say: "Let us not leave Thee alone to make in the secret of Thy knowledge, as Thou didst before the creation of the firmament, the division of light from darkness; let the children of Thy spirit, placed in their firmament, make their light shine upon the earth, mark the division of night and day, and announce the revolution of the times; for the old order is passed, and the new arises; the night is spent, the day is come forth; and Thou shalt crown the year with Thy blessing, when Thou shalt send forth laborers into Thy harvest sown by other hands than theirs; when Thou shalt send forth new laborers to new seed-times, whereof the harvest shall be not yet." CHRYSOLITE.

Del's Art.

The Clusi Cooking-Club had given a banquet, and each member had invited a representative of the "higher criticism," i. e., a man; for, as Mr. Howells says: "the mind of a man is the court of highest appeal for the wisest women. Until some man has pronounced upon their wisdom, they do not know whether it is wisdom or not."

I cannot think that any one of the eight young gentlemen favored with the dainty, hand-painted C. C. cards could have found it in his heart to criticize unfavorably any dish prepared by such cuisinieres; so the "ample justice" done the viands may be taken, like celery, with a grain of salt. But one bit of candor came to the ears of Delys Dillon, chef of the club, as she walked home with her particular critic—a young lawyer whose long silences made Del doubt the common report of his eloquence. She didn't want to seem glum, but as they turned down an avenue which gave them the wind full in their faces, she gladly made that an excuse for imitating his example; and thus, without being perceived, they came up behind another pair of banqueters, two gentlemen, who, having been the chosen partners of the hostess and her sister, had only each other as company home. "That chicken pie was delicious!" said Mr. MacDonald.

"Delicious, you mean," said Bert Bates. "Del Dillon made it. She throws in brains; the other girls use blunders—when they don't hire a substitute. But Del is a genius; and a little art Dels-arte would make her a Venus!"

With a laugh at this brilliant play upon words, the young men hurried on, quite unaware that the wind had maliciously borne their remarks to the ears of Miss Dillon, who blushed, feeling vaguely mortified; for no praise of a woman's skill can sugar-coat a cavil at her beauty. But just then the young lawyer found his tongue—he had probably been on a still hunt for it all that time—and he used it so cleverly that Del enjoyed the rest of the walk too much to think any more of Bert Bates' criticisms until later, when she was in her room preparing for bed.

She regarded herself intently as she stood before her mirror. Yes, it was true; the only fault of her beauty was that it was "too thin!" Her eyes, large and gray, were lovely; her skin, snow-white; her lips had the vivid red of health; but the roundness, the softness, the exquisite curves of perfect feminine beauty were wanting.

And would a "little Delsarte" supply this grace that was lacking? There was a physical-culture class in the town, conducted by Mrs. Raum, a minister's wife, and Del had been begged to join. She now remembered with envy the beautifully rounded arms and statuesque bust of Mrs. Raum as she had seen them displayed at a dressmaker's. But Delys could not join. The amount which it cost her father to maintain her in society was "conscience money" to her now; a debt which sooner or later she was determined to pay.

"I wish I could do something for him, right away," she thought, dreamily, that night. Wishes, like riches, sometimes "take unto themselves wings"; only, instead of flying away, they hurry home to their originator, there to roost as persistently as any "Raven."

Del was awakened early next morning by her father "tapping at her chamber door."

"Del," he croaked, rather crossly, "you must get up and get me some breakfast. The girl's gone, and your mother has a headache."

Much surprised, Del proceeded to "get up and get" as required.

"Why did Mary leave?" she asked of her father, whom she found hovering around downstairs, doubtful of her value as a volunteer at the oven's mouth.

"Her father came for her; her mother is ill. Others besides us, you see, are compelled to call on their daughters for help, in a crisis. Lucky you belong to a culinary club, isn't it?"

Del suspected an insinuation; but she smiled, and said, somewhat saucily: "Don't mistake the crisis for a panic, sir! I'm equal to it."

Mr. Dillon laughed and went off to the library, while Del, her pride aroused, flew around and served an excellent breakfast in time for her father to enjoy it fully before office hours.

"Where the larder is so liberally supplied and the kitchen so convenient as ours, it is no task to cook," she said, loftily waiving the praises of her adoring family.

"Take care!" said her father. "If you make so light of the work, it may fall to you entirely. Mary will not come back, she is going to be married; and it is hard to find help—especially with a cook in the family."

"I'll agree to fill Mary's place at the same wages that you paid her, papa," said Del, while Delsartean visions danced through her head.

Mr. Dillon, surprised, referred the unexpected applicant for the domestic portfolio to his wife.

"Well," said the lady, doubtfully, "if you think you can, you may, Delys. It will be a harmless fad, at least."

Thus Delys Dillon deliberately descends from her place as budding belle, to take that of domestic drudge; but it was not exactly a freak which had prompted her. First, she felt a dutiful desire to contribute to the comfort and to the funds of the family; secondly, she was sure it would be useful to understand what should and what should not be expected of that labor-saving machine, a hired girl; thirdly, she wanted the money which Mary had received as wages.

She was as conscientious as clever, so the work

look so magnificently well? You used to be a scrawny child!"

"Doing? Why, housework," said Del. "Then Bert Bates was right!"

"About what?" "Oh, he and brother Tom were talking about the present rage for gymnastics among women, and Bert said he did not believe in it. 'Look at Del Dillon,' I heard him say. 'She has the shape of Venus, and the grace of Ganymede; but she is the only girl of our set who did not go in for Delsarte.'"

Delys laughed and blushed. "Another of Mr. Bates' mistakes," she said; but before she had time to explain, the gentleman mentioned came up and claimed her for the dance. He would have claimed her as a partner for life, had Del been willing; but she was already engaged to the young lawyer herein above mentioned. He, from their first meeting, not only had divined, but also had worshipped, the goddess concealed in the unrounded marble.

—E. W. Ball.

"A Menagerie."

Our picture represents a veritable "Multum in parvo," and all "alive 'o! alive 'o!" The owner of the show has made the most of his possibilities, and has pitched his tent out of the beaten track, where the good country folk have seldom a chance to see, even if they have ever read about such living wonders as he now presents before their astonished eyes.

The only apparently unmoved spectator is an old man with long coat and big umbrella, who is either reading the programme or is studying up a chapter on snake-charming, that he may confront the portly showman with questions which it may tax his ingenuity to answer. There is a look of disgust upon the face of the young man with the leather apron, of wonder and almost awe on the comely countenance of the young girl standing just behind her father, who has planted himself sideways before



(From the original painting by Paul Meyerheim.) "A MENAGERIE."

was well done; but she found, to her dismay, that although time is money, money is not convertible into minutes. You may have the brain of a Webster, the conscience of a coin-scale, the mind of a miser, yet will you not be able to make time and money too. What Mary did in twenty minutes, often took forty of Del's very longest ones; she found herself compelled to give up one or two society meetings, and that "little Delsarte" seemed more than ever impracticable.

"Not that I feel the need of exercise," thought Del, "but I did want to try it." In fact, Bert Bates' "random shaft" had gone rather deep.

But an idea had seized Del. Why might not housework, just as well as any other kind of exercise, be made the means of physical culture? Might not the sweeping and scrubbing, the lifting and carrying, the going up and down of housework result in the development of an "all round" physique, if intelligently directed to accomplish such an end?

Del was doubtful; it seemed like turning a treadmill into a ladder; but what is genius for, if not to find its own means, in spite of circumstances? She resolved to try it; and she began by dressing for her work much as she would have done for the gymnasium. She looked as well as she felt, in the loose, large-sleeved gowns which she adopted; and she found her taste called into pleasant activity in choosing colors and fabrics.

But while it was easy to cut the new gowns, it was hard to "cut" the twins Horry and Worry, who dog to death so many energetic, ambitious women; nevertheless, Del did both, and conserved energy for the time of need. Then she strove to divide her work equally between her right and her left hand; to be as graceful while using the broom and mop, as when using the racquet or the mallet.

Perhaps the cooking had some share in the result—for cooking, like conducting, seems to be a fattening occupation—but certain it is, that at the end of six weeks Del had gained five pounds; in six months she felt assured of success; and still later she smiled with inward triumph when a girl friend said to her, giving the bare arm, which Del was no longer ashamed to display, an affectionate squeeze: "Del, what have you been doing to make you

the lion's cage, and is gazing fixedly almost down the very throat of the performing snake, which looks so vicious and yet which is so powerless to injure him. The errand boy with the boots given him by the cobbler to deliver has run the risk of his master's displeasure by slipping under the tent, and he stands there fascinated and yet repelled, wholly unconscious that the mischievous monkey upon the pole above their heads is about to make a sudden descent upon the group, with the intention of stealing a hat or two to tear into ribbons with its humanlike claws. Perhaps the most speaking figures of all are those of the mother and two children, who, startled by the unexpected opening of the long beak of the otherwise quiet-looking big white bird, fly to her protection, believing that it is quite capable of swallowing them up at one gulp. The patient-looking camel, the caged lion, and the screaming cockatoos are all novelties to the remote country folk our artist has so cleverly portrayed, but not so to us, who are almost surfeited with circus exhibitions and the living wonders from almost every corner of the globe. H. A. B.

The Sponge and Its Uses.

Two little girls with snub noses and public school voices stood in front of the window of a Third Avenue drug store yesterday afternoon.

"My!" said one. "Look at the sponges. Most a thousand of 'em. What d'yer 'spose they use 'em all for? I didn't think they was so many slates in the world." The other little girl looked at her companion with withering scorn.

"Don't yer know," she sniffed contemptuously, "that windows has to be washed?"

FARM BOOKS.

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

SOIL AND CROP.

- THE FERTILITY OF THE LAND.—Roberts. 372 pages. \$1.25.
- A BOOK ON SILAGE.—Woll. 185 pages. \$1.00.
- SOILS AND CROPS.—Morrow & Hunt. \$1.00.
- FORAGE CROPS.—Thos. Shaw. \$1.00.
- SOILING, ENSILAGE, AND BARN CONSTRUCTION.—F. S. Peer. 247 pages. \$1.00.

LIVE STOCK.

- VETERINARY ELEMENTS.—A. G. Hopkins, B. Agr., D. V. M. \$1.50. A practical book for stockmen and agricultural students.
- THE STUDY OF BREEDS (CATTLE, SHEEP, AND SWINE).—Prof. Shaw. 400 pages; 60 engravings. \$1.50.
- HORSE BREEDING.—Sanders. 422 pages. \$1.50.
- LIGHT HORSES—BREEDS AND MANAGEMENT. 226 pages. \$1.00.
- HEAVY HORSES—BREEDS AND MANAGEMENT. 219 pages. \$1.00.
- CATTLE—BREEDS AND MANAGEMENT. 270 pages. \$1.00.
- SHEEP—BREEDS AND MANAGEMENT. 232 pages. \$1.00.
- CATTLE BREEDING.—Warfield. 386 pages. \$2.00.
- THE DOMESTIC SHEEP.—Stewart. 371 pages. \$1.75.
- THE SHEEP.—Rushworth. 496 pages. \$1.50.
- PIGS—BREEDS AND MANAGEMENT.—Sanders Spencer. 175 pages. \$1.00.
- FEEDS AND FEEDING.—Henry. 600 pages. \$2.00.

Vinton Series.

GENERAL AGRICULTURE.

- AGRICULTURE.—C. C. James. 200 pages. 30 cents.
- FIRST PRINCIPLES OF AGRICULTURE.—Voorhees. 207 pages. \$1.00.
- AGRICULTURE.—Storer. 1,875 pages, in three volumes. \$6.00.
- CHEMISTRY OF THE FARM.—Warrington. 183 pages. 90 cents.
- FARMYARD MANURE.—Aikman. 65 pages. 50 cents.
- IRRIGATION AND DRAINAGE.—King. 502 pages. \$1.50.
- IRRIGATION FOR THE FARM GARDEN AND ORCHARD.—Henry Stewart. \$1.00.
- SUCCESSFUL FARMING.—Rennie. 300 pages. \$1.50, postpaid.

DAIRYING.

- AMERICAN DAIRYING.—H. B. Gurler. 252 pages. \$1.00.
- THE BOOK OF THE DAIRY.—Fleischmann. 330 pages. \$2.75.
- MILK AND ITS PRODUCTS.—Wing. 230 pages. \$1.00.
- TESTING MILK AND ITS PRODUCTS.—Farrington & Woll. 255 pages. \$1.00.
- DAIRYING FOR PROFIT.—Mrs. E. M. Jones. 50 cents.

POULTRY.

- ARTIFICIAL INCUBATING AND BROODING.—Cypher. 146 pages. 50 cents.
- PRACTICAL POULTRY-KEEPER.—Wright. \$2.00.
- AMERICAN STANDARD OF PERFECTION.—Pierce. 278 pages. \$1.00.

APIARY.

- THE HONEYBEE.—Langstroth. 521 pages. \$1.50.

FRUIT, FLOWERS, AND VEGETABLES.

- VEGETABLE GARDENING.—Green. 224 pages. \$1.25.
- FLOWERS AND HOW TO GROW THEM.—Rexford. 175 pages. 50 cents.
- THE PRINCIPLES OF FRUIT-GROWING.—Bailey. 514 pages. \$1.25.
- BUSH FRUITS.—Card. 537 pages. \$1.50.
- HORTICULTURIST'S RULE BOOK.—Bailey. 312 pages. 75 cents.
- SPRAYING OF PLANTS.—Lodeman. 309 pages. \$1.00.
- THE NURSERY BOOK.—Bailey. 365 pages; 152 illustrations. \$1.00.
- AMATEUR FRUIT-GROWING.—Samuel B. Green. 5x7 inches; 134 pages, with numerous fly leaves for notes; bound in cloth, and illustrated. 50 cents.

PLANT AND ANIMAL LIFE

- THE STORY OF THE PLANTS.—Grant Allen. 213 pages. 40 cents.
- THE STUDY OF ANIMAL LIFE.—J. A. Thomson. 375 pages. \$1.75.
- INSECTS INJURIOUS TO FRUITS.—Saunders. 436 pages. \$2.00.

MISCELLANEOUS.

- THE HOME PHYSICIAN AND CYCLOPEDIA OF MEDICINE.—By seven eminent physicians, aided by specialists. 1,300 pages; illustrated. Cloth, \$4.75; leather, \$5.75.
- LANDSCAPE GARDENING.—S. T. Maynard. 338 pages. \$1.50.

HOW TO OBTAIN THESE BOOKS:

We will furnish present subscribers any of the above books for cash or as premiums for obtaining new yearly subscribers to the FARMER'S ADVOCATE at \$1.00 each, according to the following scale:

Books valued at from \$0.30 to \$0.65,	for 1 new subscriber.
.. .. .90 to 1.25,	for 2 ..
.. .. 1.50 to 1.75,	for 3 ..
.. .. 2.00 to 2.50,	for 4 ..
.. .. 2.75	for 5 ..
.. .. 6.00	for 12 ..

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

Cash to accompany names in every case. Subscriptions credited a year in advance from date received.

The WILLIAM WELD CO., Ltd., WINNIPEG, MAN.

Want a Good Watch?

We have succeeded in procuring from one of the most reliable jewelers in Canada a complete list of Gents' and Ladies' Watches of sufficient variety to suit every one, and have no hesitation in recommending them to our readers as premiums worthy of an effort to secure. These are not by any means trashy goods, but first-class in every particular, and we assure you that you will be pleased with whatever of the above premiums you may obtain. Let us hear from you at an early date with a good list of new subscribers accompanied by the cash, and take your choice.

Gents' Watches.

No.	Description	New Subscribers.
No. 1.	Yankee Nickel Watch.....	2
No. 2.	Trump Nickel Watch.....	4
No. 3.	Trump Gun Metal Watch....	5
No. 4.	No. 14 Silver Watch.....	8
No. 5.	7 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	10
No. 6.	7 Jeweled Gent's Elgin in Gun Metal Case.....	11
No. 7.	7 Jeweled Gent's Elgin in Sterling Silver Case....	14
No. 8.	7 Jeweled Gent's Elgin in 20-year Filled Case.....	18
No. 9.	7 Jeweled Gent's Elgin in 25-year Filled Case.....	21
No. 10.	15 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	15
No. 11.	15 Jeweled Gent's Elgin in Gun Metal Case.....	15
No. 12.	15 Jeweled Gent's Elgin in Sterling Silver Case.....	18
No. 13.	15 Jeweled Gent's Elgin in 20-year Filled Case.....	21
No. 14.	15 Jeweled Gent's Elgin in 25-year Filled Case.....	25

Ladies' Watches.

No.	Description	New Subscribers.
No. 15.	Gun Metal Swiss Chatelaine.....	4
No. 16.	Sterling Silver Swiss Chatelaine.....	5
No. 17.	Nickel American O. F., large size.....	5
No. 18.	Gun Metal American O. F., large size.....	5
No. 19.	Nickel, small size.....	9
No. 20.	Gun Metal, small size.....	10
No. 21.	Sterling Silver, small size....	10
No. 22.	7 Jeweled Elgin in 20-year Filled Hunting Case....	20
No. 23.	7 Jeweled Elgin in 25-year Filled Hunting Case....	22
No. 24.	15 Jeweled Elgin in 20-year Filled Hunting Case....	23
No. 25.	15 Jeweled Elgin in 25-year Filled Hunting Case....	25

Description of Watches.

The accompanying cuts fairly well represent all the Ladies' and Gents' Watches, and a description of each as numbered is as follows:

No. 1. American Nickel Key-wind Boy's Watch that is absolutely guaranteed to keep good time and give satisfaction.

No. 2. Gent's Nickel American O. F. Watch; stem wind, and push-in stem and turn to set hands. This is a very strong, reliable Watch.

No. 3. Same as No. 2, excepting that it has Gun Metal case instead of Nickel case.

No. 4. Is a smaller-sized Gent's Watch, has sterling silver case, O. F. Screw Back and Bezel; stem wind, and push-in stem and turn to set hands. This is the lowest-priced and most reliable Boy's or small Gent's Silver Watch that is on the market.

No. 5. Is fitted with 7-Jeweled Nickel, first-quality Elgin movement. The case is a 3-oz. O. F. Nickel case; stem wind and set; screw back and bezel case.

No. 6. Same movement in Gun Metal or Black Steel screw back and bezel case.

No. 7. Same movement with Sterling Silver O. F. screw back and bezel case.

No. 8. Same movement in 20-year guaranteed Gold Filled O. F. screw back and bezel case.

No. 9. Same movement in 25-year guaranteed Gold Filled O. F. screw back and bezel case.

Nos. 10, 11, 12, 13 and 14 are fitted in the same style of cases as Nos. 5, 6, 7, 8 and 9; the difference is in the movement, and the movement is 15-Jeweled Nickel, first-quality Elgin movement.

No. 15. Is a small-sized Swiss O. F. Gun Metal Chatelaine Watch.

No. 16. Is the same, only with Sterling Silver case, which can be had nicely engraved.

Nos. 17 and 18 are a good-quality American Watch, O. F. stem wind, and push-in stem and turn to set hands. These are a little larger than the usual Ladies' Watches, and are smaller than the usual Boys' Watches, though can be used for either Boys, Girls or Young Ladies.

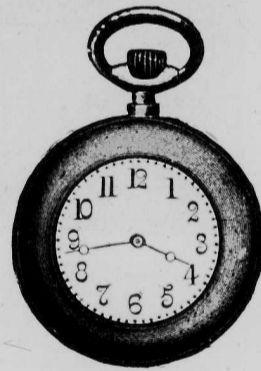
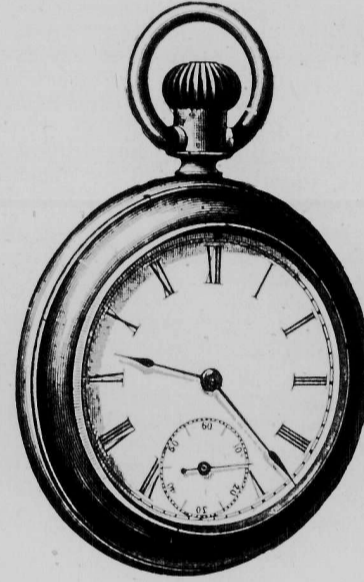
Nos. 19, 20 and 21 are small sized; in fact, are the exact size of cut. These are American Watches, O. F. stem wind, and push-in stem and turn to set hands, and are first-class timekeepers. Will give perfect satisfaction.

If a nice leather wrist case is desired with these watches, send two extra subscribers.

Nos. 22, 23, 24 and 25 are similar to the accompanying cut. These are regular Ladies' Hunting Watches. Nos. 22 and 24 are fitted in 20-year guaranteed Gold Filled cases, nicely ornamented, or to be had in plain or plain engine turned, and the same applies to Nos. 23 and 25, excepting that they are fitted in 25-year guaranteed Gold Filled cases, and 14k Gold Filled; 22 and 23 are fitted with 7-Jeweled Nickel, first-quality Elgin movements. Nos. 24 and 25 are fitted with 15-Jeweled Nickel, first-quality Elgin movements.

When making your choice of Watch as premium, be sure to mention its number as given in premium list, also whether Lady's or Gent's.

THE WILLIAM WELD CO., LTD., WINNIPEG, MAN.



HORSEMAN! THE O...

GOMBA CAUSTIC

None genuine without the name Lawrence, Will... Sole Importers & Proprietors for the U.S. & CANADA.

The Safest, Best BLIST... The place of all liniments for... Removes all Bunches or Blems... Cattle, SUPERSEDES A... FIRING. Impossible to pr... Every bottle is warranted to g... \$1.50 per bottle. Sold by... Express, charges paid, wh... use. Send for free descript... THE LAWRENCE-WILLIA...

ROXEY STOCK FARM... J. A. S. MAC... IMPORTER AND BREEDER



Shorthorn Cattle, Shro... spection invited. Correspond... easy. Prices Right. Full p... tion. Apply P. O. Box 403.

Farm

WAN

TWIN

The above headline app... cial papers recently. The... the FARMER'S ADVOCATE... them how to get it. Bind... the East make good profits... profits by taking a few sh... ing so. Send for a list of... we have from all over the... tories.

Don't waste your time... times for twine, as many... season. Secure a share, a... twine you need and it wil... and let the other fellow do... will save the two freight ra... profit, besides getting goo... small investment.

A share is within easy... it is paid in instalments, t... per cent., which will be pa... You will get the twine as cl... with the best quality of ma... ship, as well as full weight... bundle without canvas ar... will not be soaked in oil... ic. per pound.

By signing the applicati... mailing to us, you will sav... pence, as it costs money to... personal canvass, and we ar... Company started with the... pence. Any information... write—

V. E. TANNER

or any officer of th...

JNO. HANBURY
N. WOLVERTON.....
E. L. CHRISTIE.....

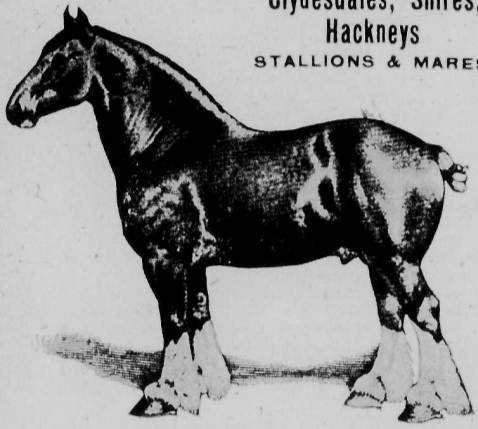
PLEASE MENT

FARMER'S AD

HORSEMEN! - THE ONLY GENUINE IS GOMBAULT'S CAUSTIC BALSAM.

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY or FIRING. Impossible to produce scar or blemish. Every bottle 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 free descriptive circulars. THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

ROXEY STOCK FARM, BRANDON, MAN. J. A. S. MACMILLAN, IMPORTER AND BREEDER OF PURE-BRED Clydesdales, Shires, Hackneys STALLIONS & MARES.



Shorthorn Cattle, Shropshire Sheep.—Inspection invited. Correspondence solicited. Terms easy. Prizes Right. Full particulars on application. Apply P. O. Box 403.

Farmers WANT TWINE.

The above headline appeared in the provincial papers recently. The August 5th issue of the FARMER'S ADVOCATE (on page 482) tells them how to get it. Binder-twine factories in the East make good profits. Participate in the profits by taking a few shares; others are doing so. Send for a list of the yards of names we have from all over the Province and Territories.

Don't waste your time going three or four times for twine, as many have had to do this season. Secure a share, and say how much twine you need and it will be ready for you, and let the other fellow do the running. You will save the two freight rates and middlemen's profit, besides getting good interest for your small investment.

A share is within easy reach of everyone, as it is paid in instalments, the first one being 10 per cent., which will be paid about 1st October. You will get the twine as cheap as is consistent with the best quality of material and workmanship, as well as full weight of 50 pounds to the bundle without canvas and lashings, and it will not be soaked in oil which is only worth 1/2c. per pound.

By signing the application for a share and mailing to us, you will save considerable expense, as it costs money to go and give you a personal canvass, and we are anxious to get the Company started with the least possible expense. Any information as to shares, etc., write—

V. E. TANNER, Brandon, or any officer of the Company.

JNO. HANBURY, PRESIDENT. N. WOLVERTON, VICE-PRESIDENT. E. L. CHRISTIE, SEC. TREASURER.

PLEASE MENTION THE FARMER'S ADVOCATE

GRAND JEWEL STOVES. Often Imitated, Never Equalled. Every Stove Warranted. Best Cookers, Strongest Heaters. Last Longest, Use Least Fuel. Made only by The BURROW, STEWART & MILNE CO., Limited, HAMILTON, ONTARIO.

INSPECTION INVITED. CAN BE HAD FROM ANDERSON & THOMAS, HARDWARE MERCHANTS, 538 MAIN ST., WINNIPEG, MAN. GOSSIP.

The Sterling Agricultural Society, with headquarters at Saltcoats, will hold its annual show on Tuesday, Oct. 1. The prize list has been advanced from \$370 in 1900 to \$600 this year. Good prizes are offered for stock, especially pure-bred cattle. A Government expert stock judge will be furnished by the Department of Agriculture. The delay in arranging date and prize list has been occasioned by want of information as to the amount of the Government grant, but that being now settled, the best show in the history of the Society is anticipated. In 1900 forty entries of pure-bred stock were made, whereas fully 100 are expected this year, with other entries in proportion. The prize lists will be ready for distribution in a few days.

A few miles south of Hamiota is located the Melrose Stock Farm of Geo. R. Rankin & Sons, breeders of Clydesdales and Shorthorns. The stallion now in service is McBain (2270), purchased from J. C. Smith, Brandon. McBain is a bay horse with some white on face and legs, is compactly built, well up to weight, and has good feet and limbs. As a sire he has made his mark, although yet a young horse, the yearling male winner in the Clydesdale class at Winnipeg, Little Bobs, being by this horse. The sire of McBain is McArthur (2207), a horse well known to habitués of the Manitoba show-rings, whose grandsire was Old Prince of Wales 673. The dam of McBain is Bessie of Overlaw (imp.), a Darnley mare. Several good mares are kept, which are breeding regularly. The cattle are largely of Scotch breeding, among them being several matrons obtained from Watts and J. E. Smith. The chief stud bull is the roan three-year-old General, by Lord Stanley 2nd (2260), a smooth, good-topped bull, but a little undersized. He carries the blood of Burmington Hero (324), and Baron Loran 2nd (238). The females are a uniformly good lot, bredy-looking, plenty of quality and constitution. Two roans, Matilda, by Knight of the Rose (23702), a thick, meaty, stylish heifer, and her dam, Lady May Gladstone 20410, by Eclipse (10225), at once command attention. Another daughter of the old cow is Lady Rankin 20331, a light roan by Royal Scott 13556, that getter of good ones, once the head of the Melrose harem. A red seven-year-old cow, Daisy Bell (Vol. 13), by Royal Scott, out of Lady Grievie 17058, is a substantial-looking matron of marked feeding ability. A white heifer with a wealth of flesh was the three-year-old Lady Scott, by Knight of the Rose, out of Lady Rankin. Other good ones were Rosalie 4th (Vol. 10) and Maggie G, a roan five-year-old by Royal Scott, out of Lady Ann Gladstone; Highland Mary 28808, a six-year-old by Royal Scott; Lady Alice Gladstone, Vol. 13. All bear out the appearance of uniformity of type, and of being profit-paying cattle. The farming operations carried on are quite extensive, 130 acres being in wheat and 120 in oats, summer-fallow calling for 75 acres. The Rankins believe in roots for the stock, and trees for wind-breaks and ornament. A former sire at stud was that good stallion, Bravery. The sweepstakes Shorthorn bull at the Hamiota fair was bred at the Melrose Stock Farm. Several bull calves are coming along well for the winter's trade.

Wanted Situation by a practical man as herdsman to take charge of Shorthorns or Her-fords for breeding, sale or the showing or waiting, with or without land. All butter and cheese maker. Long experience. Single man, English. Address: A. B., care Farmer's Advocate, Winnipeg, Man.

Clydesdales and Shorthorns. Young stallions, bulls, and heifers. Herd headed by Best Yearling—14371 and Mint-horn—24084—bulls bred by Hon. John Dryden and H. Cargill & Son. PRICES ON APPLICATION. D. McBeth, Oak Lake, Manitoba

SHORTHORNS. Fashionably bred, of both sexes and all ages. Nothing reserved. H. PARKER, Durham P. O. and Station.

"Alpha" De Laval SEPARATORS. Are now and always have been superior to all other makes in every material respect. See what two prominent Alberta farmers have to say:

Mr. S. FLACK, Red Deer, Alta.: April 15th, 1901. We have much pleasure in testifying to the merits of the No. 1 Alpha De Laval Separator which you set up for us January 1st, 1900. Since that date we have put a little over 25 tons of milk through it, at a cost of 45 cents for repairs, that being for rubber bowl-rings. It has been run twice per day every day since we have had it, and we think it runs easier to-day than when you set it up. We have every reason to believe it does excellent work, for whenever we have had the skim milk tested, the fat left in has been a scarcely measurable quantity. FRED SIMPSON & BRO.

Rat Portage Lumber Co. (Limited). Do you want Cedar Posts? Write Direct: JOHN M. CHISHOLM, Gladstone and Higgins Sts. Formerly Manager for Dick, Banning & Co. WINNIPEG.

LIGHTNING HAY PRESSES. HORSE AND STEAM POWER CATALOGS FREE. KANSAS CITY HAY PRESS CO. 439 MILL ST. KANSAS CITY MO. THE OLD RELIABLE.

PRAIRIE HOME STOCK FARM. CLYDESDALES, SHORTHORNS, SHROPSHIRE, BERKSHIRES and YORKSHIRES. Shorthorn herd headed by Judge, imp. Jubilee, and Rib-bon's Choice. Ayrshires of the best quality; herd headed by Surprise of Burnside. Oak Lodge Mighty 7th 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 one mile from the station. Visitors welcome. Prices and quality right. THOMAS GREENWAY, PROPRIETOR, Jas. Yule, Manager. Crystal City, Man.

J. E. SMITH FARM HORSES For Sale. Clyde and Shire Bred. Prices reasonable per carload. Write: High River Horse Ranch, HIGH RIVER, ALBERTA.

STRONZA FARM. Shorthorn bull calf for sale. Good individual, and bred in the purple. D. ALLISON, ROLAND, MAN. GALLOWSAYS. BULLS AND HEIFERS FOR SALE. APPLY TO T. M. CAMPBELL, St. Jean Baptiste, Hope Farm, Manitoba.

SHORTHORNS FOR SALE. of Scotch breeding, seven bulls and forty cows and heifers, mostly all in calf or calf at foot. A few Clydesdales of both sexes. Geo Rankin, Melrose Stock Farm, Hamiota, Man. SHORTHORNS FOR SALE. 2 young bulls 9 months old, got by Crimson Chief 24057. Several cows and heifers. ALEX. STEVENSON, Brookside Farm, Railway Station, Niga. Wakopa P. O., Man.

SHORTHORNS, YORKSHIRES AND TAMWORTHS. Stock of all ages and both sexes, at prices according to quality. Write W. G. STYLES, ROSSER P. O., sec. 12-13-1, west. C. P. R.

For Sale: Clydesdales, Shorthorns, Exceedingly well-bred mares, fillies, one (imp.) two-year-old stallion. Bulls, cows, heifers (all ages) from Calithness. Apply: PURVES THOMPSON, Pilot Mound, Man. PLEASE MENTION FARMER'S ADVOCATE.

THE WESTERN
FARMER'S

LIVE STOCK INSURANCE CO.

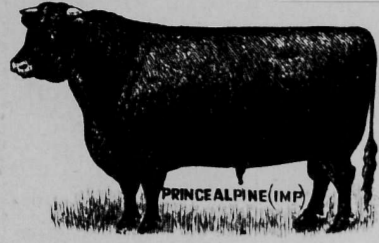
HEAD OFFICE :
251 GRAIN EXCHANGE
WINNIPEG

D. PRITCHARD, PRESIDENT. H. S. PATERSON, SECRETARY, P. O. Box 1382.

The best insurance is when risk is greatest. Claims paid for six months ending June 1st, 1901, \$3,000.00.

Write for particulars. LOCAL AGENTS WANTED.

W. S. LISTER, MARCHMONT STOCK FARM,
BREKEDER OF..... MIDDLECHURCH, MAN.

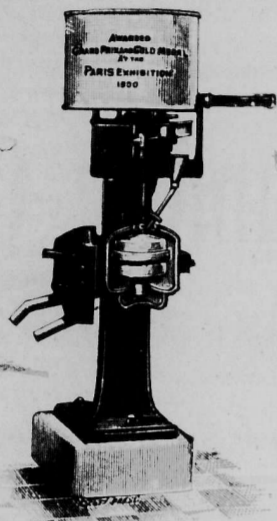


SCOTCH SHORTHORNS

Of the celebrated Glenythan family. Prince Alpine (Imp.) and Baronet (Imp.) at head of herd.

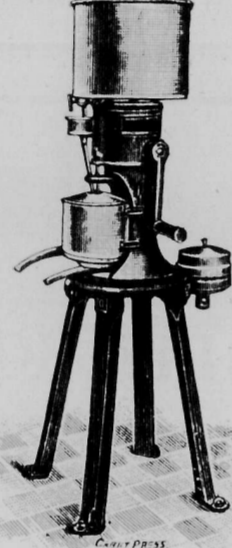
80 HEAD TO SELECT FROM.

Offers for sale 5 young bulls, and cows and heifers of all ages, of the most approved breeding. Farm seven miles north of Winnipeg. Telephone connection.



THE Melotte Cream Separator is perfection itself. It has no rubber neck bearing rings to become saturated with oil or hard from lack of oil. It has steel ball bearings in the neck bearing of the spindle. These steel balls run in a steel track, and are continually running in oil. This is the reason that the Melotte runs so easy. There are no loose rubber bowl rings to wear out, that is the reason that the cost of the spare parts is practically nil for the Melotte. A plumb is supplied with each separator, thus the operator can always see at a glance that it is level. The Melotte produces smooth cream, because the cream is delivered in a smooth, pure white enamel bowl casing and then to the cream can, having to fall but a short distance.

Try the Melotte in every way before purchasing a cream separator, and we do not fear the result.



Write for catalogue and terms to

MELOTTE CREAM SEPARATOR CO.

LIMITED,

243 KING ST., WINNIPEG, MAN.

P. O. BOX 604.

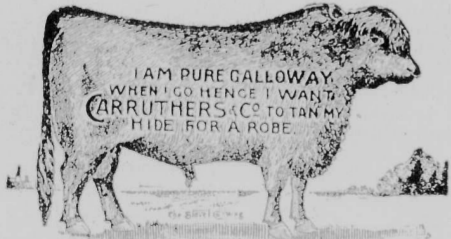
PHONE 175.

MAPLE GROVE STOCK FARM.

7 young SHORTHORN BULLS, by a son of Indian Warrior. Also a few choice heifers. Lord Stanley 25 = 29247 = at head of herd. Write

WALTER JAMES, ROSSER, MANITOBA.

15 miles west of Winnipeg, on main line C.P.R.

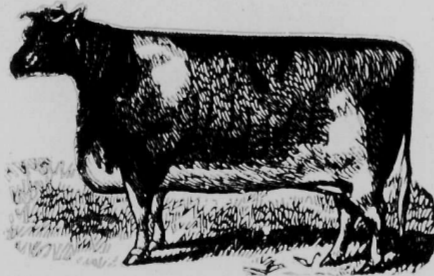


"What a Wise Old Chap!"

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.



PIONEER HERD OF SHORTHORNS

Won the gold medal at the last Winnipeg Industrial Exhibition; also first for bull and two of his get, first for cow and two of her progeny, and numerous prizes for individuals. They were bred right here, and I can usually show a few generations of their ancestors, and am always pleased to show them.

WALTER LYNCH, Westbourne, Man.

P. O., Railway and Telegraph.

SHORTHORNS

Gold Medal herd of 1899-1900. Bulls in service are: Noblemen (Imp.) and Toppman's Duks. Some good young bulls for sale.

J. G. BARRON, Carberry, Manitoba.

TWIN GROVE FARM.

Young Yorkshire pigs, stock boar two years old, and year-old sow. Prices still lower. Also Buff P. Rock cockerels. Write

J. S. LITTLE, Proprietor, Oak Lake, Man.

PLEASE MENTION FARMER'S ADVOCATE.

Thorndale Shorthorns.

8 BULLS, under one year, and about

100 FEMALES, of all ages, to choose from.

JOHN S. ROBSON, Manitou, Man.

SHORTHORNS

Have sold all bulls of serviceable age, but have a few choice females to go yet. Prices right; pedigrees good; cattle typical.

Wm. McDonald, Pilot Mound.

Shorthorns



and
YORK-SHIRE



Choice heifers by Imp. Knuckle Duster and Lord Lossie 22nd. Boars and prizewinning sows now due to farrow. Order early. White Plymouth Rock cockerels and eggs.

JAS. BRAY, Longburn.

D. FRASER & SONS,

EMERSON, MAN. Breeders and importers of Durham Catt' Shropshire and Southdown Sheep, and Pure-bred Poland-China Pigs a specialty. Young stock for sale. 9 y-m

FOREST HOME FARM.

SHORTHORNS, YORKSHIRES

AND B. P. ROCKS

at reasonable prices. A few choice young cows, heifers and heifer calves, Yorkshire pigs, both sexes, sired by Imp. Summer Hill Premier, and out of the choicest sows. Two young sows in pig for sale.

ANDREW GRAHAM,

CARMAN, C. P. R. POMEROY P. O. ROLAND, N. P. R. MANITOBA.

FOR SALE:

2 JERSEYS and 1 HOLSTEIN.

Cow, Mrs. St. Lambert No. 57464. Bull, Star Massena 30635. Holstein cow, Michigan Maid 2nd 1st. Good dairy business. Right prices. Property and cows together or separate, to suit purchaser. For particulars address:

ISAAC W. PEARCE, Moosomin Dairy, Moosomin, Assa.

POPLAR GROVE Herefords.

The great prize herd of Western Canada. Best beef cattle in the world. Sturdy young bulls for sale. Also cows and heifers. One hundred head to select from. J. E. MARPLES, Deleau, Manitoba.

Herefords.

The meat-makers Range favorites and stock-getters. FOR SALE: bulls of the right age and type. Also Barred Rocks—eggs or chickens. FRED WEST, DELEAU, MANITOBA.

HEREFORDS.

The range favorites. Good rustlers and feeders. Prizewinners, either male or female, for sale.

JOHN WALLACE, CARTWRIGHT, MAN.

HILL GROVE SWINE HERD

O. I. C.

Of pure-bred Ohio Improved Chester Swine. Young stock for sale. Six young boars fit for fall service. Call on or address: A. E. THOMPSON, Prop., Hannah, N. D.

Pedigreed Improved Yorkshire Pigs

Sows and boars, four months old, for sale.

YORK SHAW, MIDNAPORE, ALTA.

Yorkshires.

Spring pigs of choice quality. Also two boars fit for service, and sows ready to breed, from large sows. Address—

King Bros., Wawanesa, Man.

DR. BARNARDO'S HOME.

The managers of these institutions invite applications from farmers and others for boys and youths, who are being sent out periodically, after careful training in English 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 Resident Superintendent, 115 Pacific Avenue, Winnipeg, or P. O. Box 970; and for older boys, possessing experience in farm work, to Manager, Dr. Barnardo's Farm Home, Barnardo, Man.

Boundary Herd of Poland-Chinas and Model Tamworths.

Forty head, as good as any and better than some is what I am offering. Never had a more uniform lot of pigs to offer the trade. Prices reasonable, correspondence and inspection invited.

W. L. TRANN, CRYSTAL CITY, MAN.

Chambers' Barred Rocks are winners. The shows prove it. Record 114. Head of the record. Has also Blk. Minorcas, Hamburgs, S. C. B. Leghorns, and S. L. Wyandottes. Eggs, \$2 a setting. See my exhibit at the next Brandon show. Stock bred by me is fit to head any yard. Write for particulars. THOS. H. CHAMBERS, Brandon.

MAW'S POULTRY FARM

WINNIPEG, MANITOBA.

I keep acclimatized utility breeds only of the very best, and can supply you eggs guaranteed to arrive in good order. Mammoth Bronze turkeys, Toulouse geese, \$2.00 per setting. Very large, deep-keeled Pekin ducks and English Rouen ducks, \$1.00. English White Leghorns, \$1.00. Large pure White Wyandottes and Laced, great winter layers, great table fowl (they pay to keep), \$2.00. Plymouth Rocks, straight "Hero" strain. They are the ideal fowl. Cockerels, last season, weighed nine pounds. Great egg strain. Great winter layers. Eggs, \$2.00 for 15; \$3.00 for 30. Large illustrated catalogue mailed free. You want to keep poultry for profit? The varieties mentioned in this ad. will suit you. M. MAW, Manager.

If it isn't an Eastman, it isn't a Kodak.

KODAK

quality and Kodak film quality have made the Kodak way the sure way in picture taking. A simple mechanism perfectly made—freedom from detail in operation—these qualities enable the Kodaker to give his entire attention to taking the picture.

Kodak cartridges are now made for two, six or twelve exposures. Kodak films have all the good qualities of the best brands of glass plates—and they don't break.

Kodaks, \$5 to \$35.

CANADIAN KODAK CO., Limited, Toronto, Canada.

Catalogue free at the dealers or by mail.

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 1892.

Northern Pacific Ry.

Round-trip excursion rates to points South, East and West. Through California tourist car every Wednesday.

SUMMER RESORTS,

DETROIT LAKES, MINN.

Good fishing, boating, bathing, hotels, etc. Round-trip tickets, \$10, good for 15 days. (Includes three days' hotel accommodation.) Tickets good for 30 days, \$10.50.

Ocean tickets to all points. Trains arrive and depart from the Canadian Northern depot, Water street, Winnipeg, as follows: Leaves Winnipeg daily at 1.45 p. m. Arrives at Winnipeg daily at 1.30 p. m.

For further information apply to any Canadian Northern Ticket Agent, or write:

CHAS. S. FEE, G. P. & T. A., St. Paul, Minn.

H. SWINFORD, General Agent, Winnipeg.

Geo. Allison, Elkhorn, horn bull to Jno. Beattie, P. Talbot, Lacombe, of the Territorial exhibit.

Lacombe had a s recently. Shorthorn entries from the north. Col. Gregory, and A. V. by Oswald Palmer; D. Grade cattle were show Flewelling, and Gregory.

S. T. Buchanan, of h soil, was a recent visit the West recently. Wh Macleod he invested in so carloads of horses, amon saddle horses bought at dealers in horseflesh ca the West just now.

Bradwardine has a satisfactory operation, issued, the owners of w The beeves are two-ye imals contributed are cents a pound is paid; if is allowed 5 cents a po members. Jno. Busfa English, Wm. Beamish Blackwell, Geo. Bridge Clendinning, Chas. M. Sr., Ed. Hunter, Jr., A. Ed. Bridgeman, Jno. E. and Thos. Foster, Chas.

A. E. Thompson, Han have just imported a Griffith's O. L. C. herd, Grove Chief 464 and 1 464. Those are of the length. Linden Queen; ing sow at the Winnipe to farrow in a few days lot too. Have made the few weeks: 1 sow to N. sow to J. A. Thompson, Stroader, M. Carmel, boars and three sows le got breeding purposes th

As noted in our rep nings at Brandon, very be gleaned as to the c birds from the cards. A the farmer's favorite, Rock, H. A. Chadwick, overlooked. The follo him in hot competitio expected, as the Chadw best that money can bu on breeding pen in the birds winning him the show, any variety. A scored a first and sweep our readers should bear for feathered stock. M man and likes to win. I can be no shadow of do of awards at the two l toba. Farmers, avail y tunity, buy a cockerel man who has them up color, and of the bluest!

MAW'S POULTRY FARM

WINNIPEG, MANITOBA. I keep acclimatized utility breeds only of the very best, and can supply you eggs guaranteed to arrive in good order. Mammoth Bronze turkeys, Toulouse geese, \$2.00 per setting. Very large, deep-keeled Pekin ducks and English Rouen ducks, \$1.00. English White Leghorns, \$1.00. Large pure White Wyandottes and Laced, great winter layers, great table fowl (they pay to keep), \$2.00. Plymouth Rocks, straight "Hero" strain. They are the ideal fowl. Cockerels, last season, weighed nine pounds. Great egg strain. Great winter layers. Eggs, \$2.00 for 15; \$3.00 for 30. Large illustrated catalogue mailed free. You want to keep poultry for profit? The varieties mentioned in this ad. will suit you. M. MAW, Manager.

If it isn't an Eastman, it isn't a Kodak.

KODAK

quality and Kodak film quality have made the Kodak way the sure way in picture taking. A simple mechanism perfectly made—freedom from detail in operation—these qualities enable the Kodaker to give his entire attention to taking the picture.

Kodak cartridges are now made for two, six or twelve exposures. Kodak films have all the good qualities of the best brands of glass plates—and they don't break.

Kodaks, \$5 to \$35.

CANADIAN KODAK CO., Limited, Toronto, Canada.

Catalogue free at the dealers or by mail.

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 1892.

Northern Pacific Ry.

Round-trip excursion rates to points South, East and West. Through California tourist car every Wednesday.

SUMMER RESORTS,

DETROIT LAKES, MINN.

Good fishing, boating, bathing, hotels, etc. Round-trip tickets, \$10, good for 15 days. (Includes three days' hotel accommodation.) Tickets good for 30 days, \$10.50.

Ocean tickets to all points. Trains arrive and depart from the Canadian Northern depot, Water street, Winnipeg, as follows: Leaves Winnipeg daily at 1.45 p. m. Arrives at Winnipeg daily at 1.30 p. m.

For further information apply to any Canadian Northern Ticket Agent, or write:

CHAS. S. FEE, G. P. & T. A., St. Paul, Minn.

H. SWINFORD, General Agent, Winnipeg.

PLEASE MENTION FA

hires.

quality. Also two and better than some and sows ready to Address—

wanessa, Man.

BOY'S HOME.

stitutions invite applications for boys and youths, especially after careful The older boys remain the Farm Home at Rus- receive practical instruction being placed in situations thirteen are placed from nipeg. Applications for dressed to the Resident avenue, Winnipeg, or P. s, possessing experience Dr. Barnardo's Farm

Poland-Chinas

amworths.

and better than some had a more uniform Prices reasonable, invited.

STAL CITY, MAN.

are winners. The shows improve it. Read the s. Hamburgs, S. C. B. s. Eggs, \$2 a setting. Brandon show. Stock yard. Write for par- MBERS. Brandon.

TRIAL FARM

MANITOBA.

breeds only of the very guaranteed to arrive very large, deep-keeled women ducks, \$1.00. \$1.00. Large pure bred, large water pay to keep, \$2.00. You want to keep zero" strain. They are season, weighed nine Great winter layers, 0 for 30. Large illus- You want to keep mentioned in this MAW, Manager.

it isn't a Kodak.

AK

film quality kodak way the re taking. A perfectly om detail in alities enable ve his entire the picture.

made for two, six or s have all the good of glass plates—and

to \$35.

CO., Limited, ada.

by mail.

MITH,

Kodak Co.

ll Kinds.

for amateurs.

WINNIPEG.

Established 1892.

cific Ry.

oints South, East and a tourist car day.

RESORTS,

S. MINN.

, hotels, etc. Round- days. (Includes three tickets good for 30

the Canadian North- reg, as follows:

p. m.

30 p. m.

ly to any Canadian

St. Paul, Minn.

t, Winnipeg.

GOSSIP.

Geo. Allison, Elkhorst, recently sold a Short-horn bull to Jno. Beattie, Asher Glen, Man.

P. Talbot, Lacombe, Alta., will take charge of the Territorial exhibit at the Pan-American.

Lacombe had a successful stock show recently. Shorthorns were represented by entries from the herds of H. Talbot, T. Talbot, Col. Gregory, and A. W. Laidman; Herefords by Oswald Palmer; Dobbies by H. Metcalf. Grade cattle were shown by P. Switzer, J. H. Flewelling, and Gregory.

S. T. Buchanan, of bay-carrier fame, Ingersoll, was a recent visitor, on pleasure bent, to the West recently. While at Pincher Creek and Macleod he invested in some land and a couple of carloads of horses, among them being a good saddle horse bought at Lethbridge. Eastern dealers in horseflesh cannot afford to overlook the West just now.

Bradwardine has a beef ring in active and satisfactory operation. Sixteen shares are issued, the owners of which contribute cattle. The heaves are two-year-old stuff. If the animals contributed are below the average, 5 cents a pound is paid; if above, the contributor is allowed 5 cents a pound. The following are members: Jno. Bastard, Wm. Bastard, H. English, Wm. Beamish, Thos. Jasper, Robt. Blackwell, Geo. Bridge, S. Clendinning, Geo. Clendinning, Chas. McTaggart, Ed. Hunter, Sr., Ed. Hunter, Jr., A. Common, A. Hayes, Ed. Bridgeman, Jno. English, Frank English, and Thos. Foster.

A. E. Thompson, Hannah, N. D., writes us: "I have just imported a pair of pigs from Mr. Griffith's O. L. C. herd, at Woburn, Ohio; Hill Grove Chief 4642 and Duchess of Hill Grove 4641. Those are of the bacon type, extra good length. Linden Queen 2288, the first prize breeding sow at the Winnipeg Industrial, 1901, is due to farrow in a few days, and I expect a grand lot too. Have made the following sales the past few weeks: 1 sow to N. Kartes, Mt. Carmel; 1 sow to J. A. Thompson, Hannah; 1 boar to Jos. Stroader, Mt. Carmel, N. D. I have five young boars and three sows left. These are all fit for breeding purposes this fall."

As noted in our report of the poultry winnings at Brandon, very little information could be gleaned as to the owners of the winning birds from the cards. An important breeder of the farmer's favorite breed, the Plymouth Rock, H. A. Chadwick, of St. James, was thus overlooked. The following winnings fell to him in hot competition, which is only to be expected, as the Chadwick stock is of the very best that money can buy or brains breed: First on breeding pen in the class, the same pen of birds winning him the cup for best pen in the show, any variety. At Winnipeg he again scored a first and sweepstake cup, a feat which our readers should bear in mind when looking for feathered stock. Mr. Chadwick is a sportsman and likes to win on merit, of which there can be no shadow of doubt if one scans the lists of awards at the two leading shows of Manitoba. Farmers, avail yourselves of the opportunity, buy a cockerel for your flock from a man who has them up to weight, correct in color, and of the bluest of blue blood.

Located in the good farming district of Bradwardine is Thos. J. Leicesters, who is now breeding a few Shorthorns in the white Rankin-bred bull, Honest Tom, a big, upstanding fellow, strong in the crops, well covered on his back, a good handler, and a head and horns that should commend him as a sire. He is by Knight of the Rose (2702), out of Lady Grieve (1768). Among the females were noticed Bradwardine Cherry Red, a 6-year-old, by Royal Dan (17105), and the red and white Mollie D, by Chief of Roseland, (21428). Among the Leicesters were Beatrice G (4040) and Louise 2nd (4038), by Gaunt's Revenue, a Gamley ram. The stud male is Dufferin 3006, Am. L. Record, bred by Gamley. Mr. Jasper has done some winning at the fairs with his stock, and evinces a desire to keep up with the crowd. His bull was sweepstakes at Hamilton Fair. At the farm was noticed a fine flock of geese, an evidence of Mrs. Jasper's skill as a poultrywoman. The lady in question recommends keeping the goslings in until feathered, and asserts that they do better, as by this method they get better attention, food and water being given regularly. The Jasper farm has 185 acres in wheat, 40 in oats, and 130 summer fallow, the latter having had one plowing and disking, in the spring cultivation ahead of the drill, also harrowing, is done, a harrowing being given also after the seeder. Three horses run the seeder and binder, four being used on the harrows. Stock threshing is preferred by the owner, the grain being cut two or three weeks previously. The farm finds teams, and pays 4 and 3/4 cents a bushel for wheat and oats.

Right in the heart of a wheat country, the Cladbourne Bros., of Ralston, are keeping pure-bred stock, Shorthorns and Clydesdales. At the head of the stud is The MacKinnon, a big boned, deep-bodied, active horse. Several registered mares are also kept. Chief interest centers in the Shorthorns, however, at the head of which is the two-year-old light roan, Novar, by Daylight 7430, bred by the Duke of Buccleuch, and imported by Arthur Johnston. His dam was Bright Daisy, by Bright Boy (6040), bred by Duffie Daylight, and belongs to the Crown Prince family, being by the Cicely bull, Cyprus (68594), a son of William of Orange. Novar is of the Cherry family (Dukeith Park). Bright Boy's sire was Gravesend, a Brawith Bud, so that Novar is well bred. He is a good individual, level and lengthy, and barring being a trifle sharp in the spine, which may disappear with more weight, is well fleshed on the back, and long; has plenty of size for his age, and masculinity, fitting him to be a sire. Among the females are some of the useful sort, among them a blocky red two-year-old of Bonny Daisy, a level-backed red and white, thick-meat Cleopatra heifer. Lovely Gem is a red Baron Linton cow, is a matron with plenty of length and depth, well developed brisket, and a breezy-looking appearance. Bonny Daisy, a capital handling cow, and a breeder, Thomas Speers, Oak Lake, getting her last calf, a bull, A three-year-old Cleopatra heifer is a deep, thick, long-quartered one, and was got by Royal Standard. Several other good things were seen all on the level, lengthy, square type so much desired as profitable meat-makers.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

About five miles east of Markdale, Ont., in the county of Grey, is situated Orchard Hill Stock Farm, the property of Mr. Arthur Johnston, whose P. O. is Vandeleur, Markdale being the nearest R. R. station. Mr. Johnston has been breeding pure-bred Shorthorns for a number of years. His herd was founded on the favorite family of Missies, a number of which are now to be seen on the farm. One of the first dams purchased by Mr. Johnston was that grandly-bred Missie cow, Lady Clonmore. She was sired by Baron Gano 2nd 2804, dam Imp. Melrose 2202, by Rapid Rhone. Another of Mr. Johnston's dams is Missie Melrose, sired by Imp. Royal George 17106, dam Lady Clonmore, described above. This cow is a beautiful red, of grand build and great substance. An extra nice Crimson Flower bred dam is Crimson Maid 3rd, sired by Imp. Clan Campbell 17096, dam Crimson Maid 15915, by Imp. Duke of Lavender. The Scotch Killeen Beauty family is represented by a nice, square, fleshy red heifer, Imp. Beauty 21st, sired by Mirabeau 150458, by the great Star of Morning, a bull whose record as sire of prize-winners stands as a bright gem in the firmament of Shorthorn breeding annals. To the selection of sires Mr. Johnston has paid particular attention, choosing only those showing the right kind of individuality as well as breeding. The sire in use at present belongs to that famous old Indian Chief tribe. He is Greenwood, Boy 30880, by Aberdale 23330, by Imp. Aberdeen, twice a first-prize winner at Toronto, dam Nellie, by Imp. Indian Chief, of immortal memory. In color he is a dark red, and is lengthy, deep, meaty, and well proportioned. His calves are certainly a superior lot, and should develop into choice animals. Mr. Johnston has lately purchased from Mr. H. Parker, Durham, to head his herd, the bull, Lord Lavender 26855, who has proved his worth as a sire while at the head of the River Farm herd. He is sired by Imp. Sittytown Stamp 18963, bred by Mr. Duffie, of Collynie; by First Choice. He is a massive, deep, lengthy animal, with splendidly sprung ribs. At the same time Mr. Johnston purchased, as an addition to his breeding cows, two extra nice ones, one a Kinellar Claret, the other a Buttercup, both now in calf to Lord Lavender.

River Stock Farm is situated in the outskirts of the town of Durham, Ont. The owner, Mr. H. Parker, has been engaged in the breeding of pure-bred Shorthorns for some 25 years, and his herd, which now numbers some 40 odd, contains a number of representatives of such fashionable Scotch families as Missies, Princess Beatrices, Clarets, Lusters, Floras, Waterloos and Butterflies. In the selection of sires Mr. Parker has always been very careful, as a glance over the list of a few of them will show: Sir Walter 13557, by Imp. Baron Lenton, bred by Mr. Cruickshank, dam Miss Ramsden, by Guardian 18928, who is a full brother in blood to St. Valentine, the champion; Lord Lavender, a Scotch Cruickshank Lavender. Following these is the present stock bull, Verschoyle (in dam), a beautiful roan, sired by Prince of Archers 71240, a son of Scottish Archer, and considered by competent judges to be as good a bull as his half-brother, the champion Marengo. Verschoyle's dam is Imp. Velvet Beauty, by Velvet Jacket 66161, a richly-bred Nonpareil. In symmetry and conformation Verschoyle is hard to fault, and coupled with speed, as are to be found in Mr. Parker's herd, the results cannot fail to be very gratifying indeed. Prominent among the dams is the Missie-bred cow, Missie of Neidpath 12th. She is sired by Guardian 18928, dam Missie of Neidpath 11th, by Royal Baron. She is an extra good type of animal, showing in her make-up those typical points of superiority one would expect to see in a cow so richly bred. A roan bull calf 11 months old, out of this cow and sired by Lord Lavender, is a jewel. He is for sale, and the man that gets him to head his herd will make no mistake. Another extra good cow is Butterfly of Durham 3rd, sired by Sir Walter 13557, dam Butterfly of Durham 14631. She is one of those deep, fleshy, short-legged kind that always look well. In fact, Claret, a very sweet representative is Claret Princess 2nd 14632, sired by Imp. Neptune 53340, a Kinellar Nonpareil, dam Claret Princess (imported), by Golden Prince. The cow, Princess Beatrice 8th, is certainly a credit to her illustrious family. She is sired by Guardian 18928, dam Princess Beatrice 2nd, by Duke of Leicester 8th (imp.). A number of yearlings and two-year-olds in this herd are good models, and cannot fail to develop into superior and useful animals, and if fashionable breeding counts for anything, no more desirable sorts can be found. Mr. Parker will price any animal in the herd, old or young, and is not asking fancy prices either. See his advertisement in this paper.

DATES OF JUDGING AT PAN-AMERICAN.

F. A. Converse, Superintendent of Live Stock, Pan-American Exposition, writes that dates of judging at the different classes in the live-stock division at the Exposition are as follows:

Swine class.....Aug. 28 and 29

Cattle class.....Sept. 16 and 17

Sheep class.....Sept. 25 and 26

Horse class.....Oct. 9 and 10

Poultry and pet stock.....Oct. 23 and 24

NOTICE.

THE BELLE CITY MFG. CO., of Racine Junction, Wis., have a new attachment for their feed cutters, and are now putting on blower carriers, as well as the different styles of carriers they have used before on their power machines. There will be a large shortage of feed this fall in many sections where the drought has cut off hay and corn fodder, and this is when the demand for feed cutters will come in, as the value of cutting is well known to most up-to-date farmers.

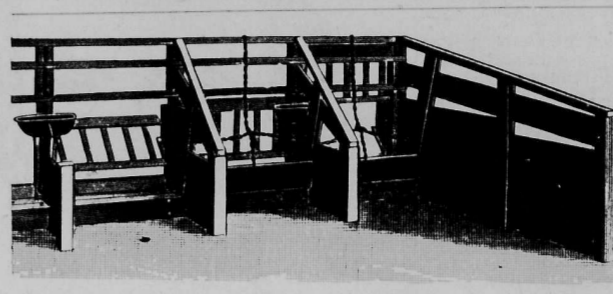
We recommend that our readers write to them for their latest printed matter, etc. Their advertisement will be found in another column.

SUMMERHILL OXFORDS.

Present offering: A choice lot of ram lambs and ewe lambs. Also 50 extra nice yearling ewes.

PETER ARKELL & SONS, Teeswater P.O. and Station.

THE Patented Cattle Stalls and Fixtures



Up-to-date Stalls.

Suitable for all kinds of stock feeding. Less lumber will build the above stall than any other in use. Special tie chains adapted for single stalls. Stock drinking basins a specialty. A full line of all stable fittings in stock. Write for circulars, blank forms, and full particulars.

A. M. RUSH, Box 178 HARRISTON, ONTARIO, CAN. Canada Patent: Sept. 30th, 1899, No. 61144. United States Patent: Feb. 19th, 1901, No. 668418. J. W. SNELL, WINGHAM, ONT., sole agent for Huron County.

FARM RIGHTS CHEAP.

Buy a Right and it will tell you how to have your lumber cut. Bill of Lumber given. A set of patterns sent, to enable you to make exact style as cuts. A printed scale showing plan of your stable. In short, the Right explains it all.

U. S. and Canada RIGHTS Promptly Issued.

Large English Berkshires.

My herd consists of sows imported from England; three of them (including a show sow) were selected from the herd of Geo. Green and were bred to his show boars. Young stock for sale (not akin). I. LAHMER, OLIVE, ONT.

GOSSIP.

After returning home from the Winnipeg Industrial Fair and resting the cattle for a couple of weeks, Mr. James Yule, Manager of the Hon. Thomas Greenway's stock farm, left for the Toronto and Buffalo fairs, with the following selection of Shorthorns from the Prairie Home herd: George Bruce, Sittytown Hero 7th, Ribbon's Choice, and Red Knight, in bulls. In females, Jenny Lind, Frieda, Village Princess, Matchless 25th, Lavinia's Blossom, Regalia, Crimson Mary, Bright Light, Lavender of Prairie Home, Jewel of Prairie Home, and Judge's Heiress.

The Oak Grove herd of Shorthorns, of Bottineau, N. D., are owned by David Clark, who believes that "the earth do move," and governs himself accordingly. A new importation from Prairie Home Stock Farm is the winning bull calf at Winnipeg, which Mr. Clark selected in June, thus showing his possession of that valuable characteristic, the ability "to pick the winner." At the head of the herd is Orange Earl, a Dryden bull, four years old, a getter of the right sort. The herd numbers 60 females, and from it has recently been sold for fall delivery seven young bulls at satisfactory prices.

Lake View Stock Farm is situated in the County of Grey, about nine miles south-west of the town of Meaford, on a beautiful eminence overlooking Georgian Bay, and is the home of an excellent herd of choice Scotch-bred Shorthorns, also of a splendid lot of Clydesdale horses, and up-to-date Yorkshire and Berkshire hogs. The owner, Mr. James Bowes, whose P. O. address is Strathairn, is a man of modern ideas, who believes that it is just as cheap to raise a pure-bred animal as a scrub. Acting on that belief and principle, years ago he founded a pure-bred herd of Shorthorns on such noted families as Crimson Flowers, Strawberrys, and Lavinias. These, coupled with the best Scotch bulls he could procure, have produced a herd that will stand favorably in comparison with any to be found. The stock bull in use at present is a substantial, evenly-built fellow, weighing 2,600 lbs., dark red, of grand character, and has proven himself a great sire, stamping his progeny with a perfect conformation. He is Royal Tim 2362, sired by Imp. Royal Member 1710, dam Coristine 1874, by Wm 13079, by Imp. Albert Victor 635. Prominent among the cows of this herd stands the roan Crimson Lily, sired by Scots Nobleman 17391, dam Rose of Lynden 13078, by that noted bull, Barnpton Hero 324. This cow, besides her rich breeding, possesses grand individual merit, being very thick fleshed, broad backed, and evenly proportioned, with well-sprung ribs. Another good one is Mary C, sired by Golden Lion 490, of the Stamford family; dam Queen of Scots 3rd 4405, by High Sheriff. She is a beautiful type of Shorthorn, and is an extra heavy milker. This cow should have been in the test at Buffalo. The Strawberry-bred cow, Srynga, is a very large, nicely-moulded animal, and has proven herself a jewel for her owner on account of her grand breeding qualities. She is sired by Sarawak 1434, by Monitor 2117. A yearling bull that, if present indications are a criterion to judge by, will certainly make his mark in the show-ring is Crimson Robe 3228, sired by Imp. Golden Robe 26386, dam Crimson Lily (described above). This youngster is an extra good one, showing those true characteristics of Shorthorn perfection so eagerly sought after. Another youngster that will surely come to the top is the 7-month-old heifer sired by British Crown, by British Statesman; dam Gloria, by Boulderman 2nd. A large number of 2- and 3-year-olds in this herd are nice ones, some in milk, some carrying their first calf. All the stock is in the pink of condition, and will be sold at a price. The Clydesdales are a good lot, large, well-developed, perfectly broken, useful farm animals, with the best of legs and feet. The Yorkshires and Berkshires on this farm are on a par with the rest of the stock kept there. Mr. Bowes' motto is, "The best is none too good." See his advertisement in this issue.

KEMP'S

INSTANTANEOUS Sheep Dipping Fluid kills ticks, lice and all parasites or insect life on sheep, hogs, horses, and cattle; destroys mange on dogs. The best dip in the market. Thorough, permanent, effectual. Cheapest and best disinfectant for surgical and medical purposes, barns and outhouses. Used in the proportion of 1 to 100. ONLY RELIABLE CATTLE FLY KILLER. If your druggist does not keep it, we will express a half-gallon tin (prepaid) to any address in Manitoba, B. C., or the Territories, for \$1.25. Elsewhere in the Dominion, \$1.00.

W. W. STEPHEN & CO., MEAFORD, ONT., AGENTS FOR THE DOMINION.

WE HAVE FOR SALE 20 EXTRA GOOD YEARLING RAMS

of our own breeding; also ram lambs and yearling ewes.

JOHN MILLER & SONS, BROUGHAM, ONT.

THOS. MERCER, MARKDALE, ONT., BREEDER OF SHORTHORN CATTLE and YORKSHIRE SWINE.

Stock of all ages for sale.

Alma Ladies' College.

TWENTY-FIRST YEAR.



THIS COLLEGE offers best advantages at reasonable rates. Preparatory and collegiate classes. Music conservatory studies, with or without University local examinations; best fine-art studio and leading record; thorough business college course; very successful education department; household science course prepares for Normal College or for self-improvement. Superior buildings, good equipment; teachers Normal certificated or European trained; good board, best health record. A well-managed residential college affords best educational conditions.

Write for new catalogue to—

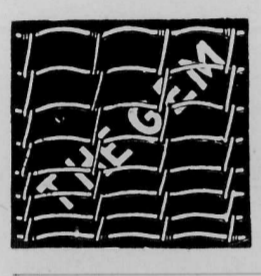
REV. ROBERT I. WARNER, M.A., PRINCIPAL, ST. THOMAS, ONTARIO.

What Ontario Farmers say about the Massey-Harris Binder.

ST. THOMAS, ONT., July 27th, 1901.
MASSEY-HARRIS Co., Limited, Toronto:
 Gentlemen.—I have tested your new No. 4 6-ft. Binder in long rye, fall wheat and short oats. It is a first-class machine in every respect. Two horses handled it easily. The knottier and new butter are great improvements on anything I have ever used before. It never misses a sheaf. As long as you continue to manufacture such machines I cannot understand why any Canadian would buy a machine manufactured in the United States or any foreign country. Myself and brothers use four of your binders, and they are all giving entire satisfaction.
 Yours truly,
THOMAS PARISH.

BINBROOK, ONT., July 27th, 1901.
MASSEY-HARRIS Co., Limited, Toronto:
 Gentlemen.—The new No. 4 Binder I purchased from your agents, Ford & Jeffrey, Caledonia, gave me great satisfaction. I put it together and started it myself. It bound right along, never missing a sheaf in cutting my heavy rye and wheat. The wheat had been cut down with the Hessian-fly, but it made a clean cut. I did not put on three horses, as my one span handled it like a new mower. I believe it will be a very desirable binder, and I consider it a wonder for the new century.
 Yours truly,
JAMES MOORE.

BRANTFORD, ONT., July 30th, 1901.
MASSEY-HARRIS Co., Limited, Toronto:
 Dear Sirs.—After giving the new No. 4 6-ft. Binder I purchased from you this season a thorough trial, I can truthfully say it fully meets my anticipation in every respect: the draft being light, the management easy, and the extra number of roller bearings, the iron-capped rollers and the improved steel cutter bar are very valuable improvements. My brother, who has travelled extensively through the Western States, has had an opportunity of seeing many different American binders work. He is now paying me a visit, and after seeing mine work is delighted with it—especially remarks its lightness of draft.
 Yours truly,
WM. RODDICK.



The **GEM** holds the record—120 rods of 10-bar fence, cross-wires 15 inches apart, woven in 10 hrs. Beat this who can.
 Cooled and other fence wire for sale at lowest prices.
McGregor, Banwell & Co.,
 BOX 23, WINDSOR, ONT.

BEAN RAISERS OF CANADA!
 As we have had frequent enquiries regarding our well-known
MILLER BEAN HARVESTERS,
 we are now prepared to quote price to Canadian farmers, delivered at Toronto. Our harvester has been on the market 20 years, and is used in every bean-raising State in the United States. Write for catalogue and price.
LE ROY PLOW CO.,
 160 Lake St., Le Roy, N. Y., U. S. A.



Guaranteed
Newton's Heave,
 Cough, Distemper and Indigestion CURE.
 A veterinary specific for WIND, THROAT & STOMACH TROUBLES.
 Strong recommends, \$1.00 per can. Dealers or direct.
Newton Horse Remedy Co. (D), Toledo, O.
 Trade supplied by Lyman Bros. & Co., Toronto.

WM. SMITH, COLUMBUS, ONT.,
 IMPORTER AND BREEDER OF
Clydesdale Horses & Shorthorn Cattle

L. BURNETT, GREENBANK, ONT.
 BREEDER OF
 Clydesdale horses, Shorthorn cattle, and Shropshire sheep.
 Four bulls from 12 to 14 mos. old, bred from imp. Cruickshank blood, for immediate sale.

Wm. Brash, Ashburn, Ont.,
 BREEDER OF
 CLYDESDALE HORSES and SHORTHORN CATTLE.

Clydesdales and Ayrshires
 Imported and home-bred. Also Dorset Horned sheep, and the leading varieties of poultry.
ROBERT NESS & SONS, Howick, Que.

CLYDE & SHIRE HORSES
 SCOTCH SHORTHORNS, LEICESTER SHEEP.
 Stock of different ages and sexes for sale. Two stallions, colts, and a few young bulls now ready. Also choice rams and ewes. Our stock won 1st prize at Toronto, Ottawa and Chicago in 1900. Write for what you want. My motto: The best is none too good.
J. M. GARDHOUSE, Fosedale Stock Farm,
 Malton, G.T.R.; Weston, C.P.R. Highfield, Ont.

4 Imp. Clydesdale Stallions
 31 Imported Shorthorn Cows and Heifers.
 7 Canadian-bred Cows and Heifers.
 3 Imported Shorthorn Bulls.
 5 Canadian-bred Bulls.
GEO. ISAAC & BROS., BOMANTON, ONT.
 COBOURG STATION, G. T. R.

CHAS. GROAT,
 BROOKLIN, ONT.,
 OFFERS THE
Clydesdale Stallion
 BRISKING KING 2506.
 Five years old. Prizewinner and sweepstake. Quality perfect. One yearling Shorthorn bull. Brood sows, Tamworth-bred.

FOR SALE.
 CLYDESDALE stallions, mares and fillies, representing the best blood in Scotland—Prince of Wales, Darnly, Macgregor and Lord Lyon—including the great sweepstake winner, The Marquis (1882), a grandson of Prince of Wales and Macgregor; also the first-prize 3-year-old at Ottawa this season.

THOS. GOOD,
 Richmond P. O., Ont.
 R. R. Station, Stittville, C.P.R.

W. G. HOWDEN, COLUMBUS, ONT.,
 BREEDER OF
CLYDESDALE HORSES, SHORTHORN CATTLE

Agents Wanted
 for the New Pictorial Stock Doctor and Live Stock Cyclopedia, revised to 1901 with the assistance of the Professors of the Ontario Agricultural College, Guelph. The finest illustrated, cheapest and best book of its kind ever published. Large wages to agents. A full-page announcement of this book appeared in the ADVOCATE of the issue of June 5th. Particulars mailed free. Address **WORLD PUBLISHING CO., Guelph, Ont.**

Ridgedale Farm Holste'n-Friesians for Sale.
 2 yearling bulls; also bull and heifer calves; all of choice breeding. Prices always reasonable. Write, or come and see them. **R. W. WALKER,** Shipping stations: Fort Perry, G.T.R.; Murtle, C.P.R. om

LAKE VIEW STOCK FARM.
 SCOTCH SHORTHORNS, both sexes, all ages.
 As good as the best.
Meaford Station, G. T. R. North **JAMES BOWES,** Strathclair P. O.



90 HEAD
 High quality, Early-maturing
Herefords
 Prizewinners.
 Young bulls, cows, helpers.
 The blood of "Corrector," "Eureka," "Ancient Briton," and "Rupert," on an "Anxiety" foundation. Send for illustrated catalogue.
H. D. SMITH, COMPTON, QUE.

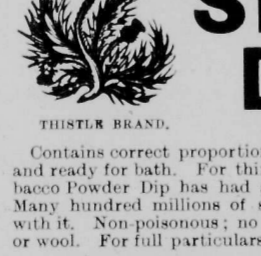
For Sale Two choicely-bred **SHORTHORN BULLS**, 12 and 18 months; also cows and heifers, with calves at foot and bred again to imported Red Duke = 36984 = (77585). 54 head to select from. **DAVID MILNE & SON,** Ethel, Ont.



SPRING GROVE STOCK FARM
 Shorthorn cattle and Lincoln sheep. Herd prize and sweepstake 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 Brawith Bud tribe. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply
T. E. ROBSON, ILBERTON, ONT.

SHORTHORNS: We are offering for sale 8 bulls, 12 and 18 months to 3 years old, by Mungo 2nd and Scottish Bard. Also a few cows bred to Baron's Heir.
ROBT. GLEN, Owen Sound, Ontario.

LIDLAW'S CONCENTRATED TOBACCO POWDER

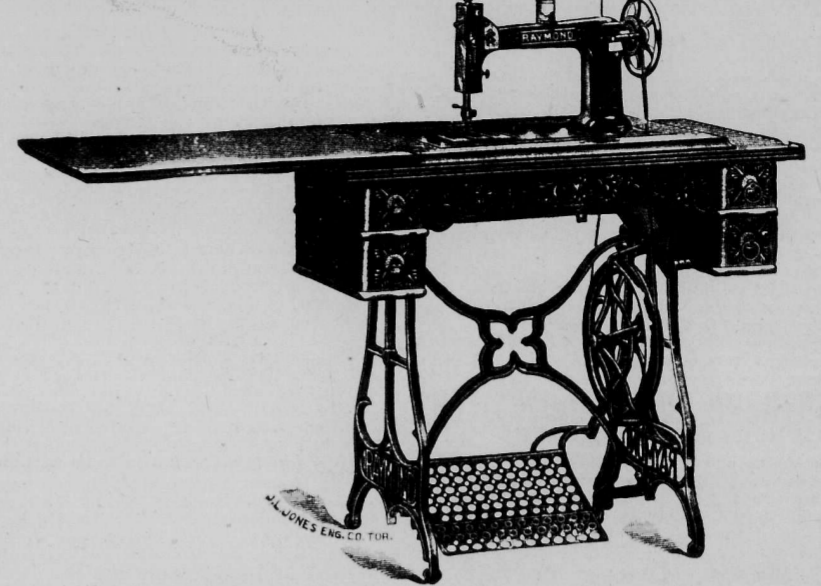


Sheep Dip.
 THISTLE BRAND.
 Contains correct proportion of sulphur, all mixed and ready for bath. For thirty years Laidlaw's Tobacco Powder Dip has had steadily increasing sale. Many hundred millions of sheep have been dipped with it. Non-poisonous; no injury possible to sheep or wool. For full particulars and prices, write—
ROBERT MARR,
 WALKERTON, ONT.
 Sole manufacturers: Laidlaw, Mackill & Co., Limited, Richmond, Va.

RIG. CASTRATION.
 DR. J. WILSON, V. S., WINGHAM, ONT.
 Specialist in the castration of ridgelings. Terms and testimonials on application.

PLEASE MENTION FARMER'S ADVOCATE.

The Raymond



STILL THE MOST POPULAR AND MOST RELIABLE
Family Sewing Machine
 ON THE CANADIAN MARKET, AFTER A CONTINUOUSLY SUCCESSFUL RECORD OF NEARLY FORTY YEARS.

The steadily increasing demand for the Raymond has necessitated the recent enlargement of old premises and building of new, all of which are being run to their full capacity.
THE 1901 "RAYMOND" is unsurpassed for style, finish or utility. The above is a cut of **STYLE "DROP HEAD"**. The other styles are "Cabinet," seven-drawer with cover, five-drawer with cover, and three-drawer with cover. In all, five styles; finished in the best quarter-cut oak. For sale in all the leading towns and cities of the Dominion.

MANUFACTURED BY
The Raymond Manuf'g Co'y, Ltd.,
 GUELPH, ONTARIO.
JOSEPH A. MERRICK, BOX 518, WINNIPEG, MAN.
 GENERAL AGENT FOR MANITOBA, N.-W. T., AND B. C.

Agricultural College, GUELPH.

A large staff and first-class equipment, furnishing the kind of education needed by young men intending to live on the farm or follow any kind of practical or professional pursuit connected with farming.
 (1) **Two Years' Course for Associate Diploma, Sept. 13th.**
 (2) **Four Years' Course for B. S. A. Degree, Sept. 13th.**
 (3) **Dairy Course, Jan. 4th.**
 (4) **Two Weeks' Course in Judging Live Stock and Seed Grain, Jan. 8th.**
 (5) **Four Weeks' Course in Poultry Raising, Jan. 10th.**
 Send for circular giving full information as to cost, terms of admission, etc.
 July, 1901. **JAMES MILLS, M.A., President.**

Men Wanted

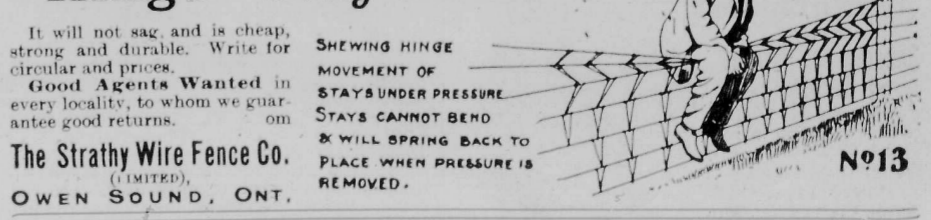
To sell Nursery Stock and Seeds on salary or commission. Part or full time.
 First-class Outfit furnished

FREE OF CHARGE

We can give you the best chance right now of any firm in the business. If you cannot start now, let us talk it over and you can arrange territory and details and start later. Write us and get terms.

CHASE BROTHERS COMPANY,
 Established 1857. Nurserymen, Colborne, Ont.

THIS CUT ILLUSTRATES THE ONLY
"Hinge" Stay Fence



It will not sag and is cheap, strong and durable. Write for circular and prices.
 Good Agents Wanted in every locality, to whom we guarantee good returns.
The Strathy Wire Fence Co. (LIMITED), OWEN SOUND, ONT.
 SHOWING HINGE MOVEMENT OF STAYS UNDER PRESSURE. STAYS CANNOT BEND & WILL SPRING BACK TO PLACE WHEN PRESSURE IS REMOVED. N°13

Please Mention The Farmer's Advocate.

SOUTH AUSTRALIA Professor of Agriculture.

Applications will be received by the Government of South Australia, Adelaide, or by the State Agent, 1 Crosby Square, London, E. C., England, for the position of Government Professor of Agriculture.

The duties of the office are: (1) To superintend the Agricultural College and Experimental Farm and teach classes thereat. (2) To advise the Government on all points relating to agriculture. (3) To lecture to agriculturists when required.

The applicant must be competent to make analyses of soils and to conduct such scientific and practical experiments as the Government shall consider necessary.

The salary will be £500 per annum with rations, house and fuel. The term of engagement is five years, subject to satisfactory performance of duties. Applicants must be in good health and under 45 years of age. The passage of the successful applicant will be paid to South Australia, and his salary will commence on his arrival there.

Further information may be obtained upon application to the Honorable the Minister of Agriculture, Adelaide, or to the State Agent for South Australia, 1 Crosby Square, London, E. C., England.

Applications will be received up to 1st of November, 1901.

SHORTHORN BULLS AND HEIFERS

FOR SALE.

Choice quality and best Scotch breeding. Imported and home bred. Imported Knuckle Duster (72793) and Imp. Royal Prince head the herd, which has furnished the Provincial Fat Stock Show champion three out of the last five years. Catalogues on application.

H. SMITH, HAY, ONT.

Exeter Station on G. T. R., half a mile from farm.

For Sale: 3 Shorthorn bulls of first-class breeding, sired by such noted bulls as Scotland's Fame (imp.) and Bold Britain, bred by John Isaac, Markham. Also some choice cows and heifers. F. A. GARDNER, Britannia, Ont. PERL COUNTY.

JOHN DRYDEN, BROOKLIN, ONTARIO.

CRUICKSHANK SHORTHORNS AND CHOICE SHROPSHIRE SHEEP.

Fifty superior yearling rams ready for August delivery.

ARTHUR JOHNSTON

Greenwood, Ontario, Canada.

HIGH CLASS SCOTCH SHORTHORNS

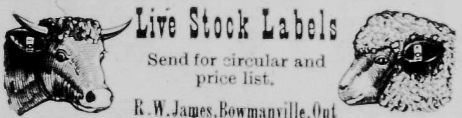
(First Importation Made in 1874.)

(My recent importation of 30 head has just arrived home from quarantine. Herd now numbers over 120 head.)

OFFERS FOR SALE

- 40 Imported Cows and Heifers.
- 40 Home-bred Cows and Heifers.
- 11 Imported Bulls and Bull Calves.
- 13 Home-bred Bulls and Bull Calves.

Railway stations—Pickering, on main line of Grand Trunk Railway, 22 miles east of Toronto, and Claremont, 23 miles east of Toronto, on the C. P. Railway. Catalogues on application.



Live Stock Labels

Send for circular and price list. R. W. James, Bowmanville, Ont.

SHORTHORNS.

FOR SALE.—Bulls: Two 1 year old and one 8 months. A few heifers of choice breeding and superior quality. AMOS SMITH, Trowbridge P. O., Listowel Stn.

SHORTHORNS (imported)

3 BULLS: 1 two-year-old, 2 one-year-olds. A few cows and heifers. THOS. RUSSELL, EXETER P. O.

SHORTHORN CATTLE AND LINCOLN SHEEP.

Imp. Prime Minister at head of herd. Seven young bulls for sale—good ones. Also a few females. Stud rams all imported from H. Dudding, Esq.; the same blood as the 1000-guinea ram.

J. T. GIBSON,

DENFIELD, ONT.

SPRINGFIELD FARM

HEED OF Shorthorns, Oxfords, and Berkshires.

Young bulls and Heifers on hand. Also a few choice Berkshires.

CHAS. RANKIN, Wyebridge, Ont. SIMCOE CO.

PLEASE MENTION FARMER'S ADVOCATE.

NOTICES.

The Ontario Veterinary College, Limited, Toronto, Canada.—The annual announcement of this well-known institution has just been received by us. The session will commence this year on October 16th, and we understand, from the number of applications received for entrance, that there are excellent prospects for a successful session.

Central Business College, Toronto.—If the success of this excellent school may be measured by its annual enrollment of over 700 students, and this enrollment is any evidence of the popularity of the school, based upon the thoroughness of the work, it will be readily conceded that this institution occupies the foremost position among the leading schools of our Dominion. Its circulars afford interesting reading matter, and are mailed free to anyone writing for them. See card in this issue.

The Woodward Watering Basins, for watering stock in the stables, are manufactured by the Ontario Wind Engine & Pump Co., Toronto, as advertised in this issue. The system of supplying water in the stall, where the animal can drink at will, has been proved a decided success, especially in the case of milking cows, the additional production of milk paying the whole expense in a very short time. In the case of cattle being fed for beef, the results are also quite as satisfactory, and the expense is such that any farmer can have the basins, and few can afford to be without them.

The Dorset Ewe is the title of a useful little book published by H. H. Miller, manager of the sheep department of the Tranquility Farms, and one of the most successful shepherds in America, and Mr. Joseph E. Wing, a well known breeder of Dorset sheep and feeder of lambs. The book is in paper cover, is well illustrated and printed, and is full of useful information, not only about Dorset sheep, but about the care and management of sheep and the treatment of ailments to which they are liable. It contains but 51 pages, but it is a case of much in little. The plans of sheep pens and hints on feeding are well worth the price of 25 cents. The book may be had from Joseph E. Wing, Mechanicsburg, Ohio.

Blower Attachments for Fodder Cutters.—No farm implement of recent invention is more successful than the blower attachments for fodder and ensilage cutter, a pipe attachment designed to carry the cut fodder to any desired place. The blower manufactured by the Belle City Manufacturing Co. is especially popular for its simplicity and ease with which it may be adjusted to old or new machines. This can be done in a short time and without the aid of a mechanic or the return of the cutter to the factory. Piping can be used to carry fodder almost any distance without scattering. Write the Belle City Manufacturing Co., Racine, Wis., and get their latest printed matter on this line of machinery.

A Good Thing for Farmers.—Small threshing machines for the individual farmer are coming more into popular favor in some districts every year, and in proof of this we give our readers part of a letter received by the manufacturers from Samuel & Jones, of De Groot, N. Dakota, dated July 7, 1901: "Two years ago we bought a 32-inch Columbia separator, manufactured by the Belle City Manufacturing Co., of Racine, Wis., and have run it with a 12-horse-power gasoline engine and a Parsons feeder, to our entire satisfaction. As a flax machine, the Columbia has no equal. We average 50 bushels per hour, using four teams in the field, and our crew consists of seven, all told. We find that we have been able to thresh all kinds of grain and put it in the wagon at a less cost than it would take to stack the same. We thresh from 750 to 800 bushels of wheat per day, and have threshed 1,400 bushels of oats in one day. We threshed 350 bushels of flax several times in the afternoon, and expect to make a better record this fall, as the machine is just as good as new, and we have more experience."

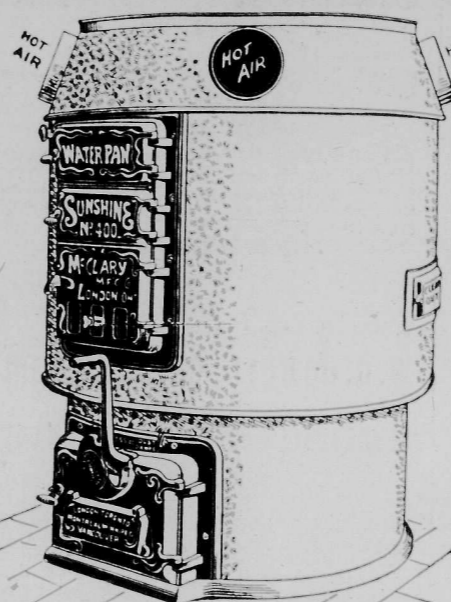
GOSSIP.

English Shorthorns, topped with Cruickshank bulls, are advertised in this paper by Mr. Wm. Bell, Alnwick, Northumberland, who has been a very successful prizewinner at English shows.

Mr. George D. Fletcher, Binkham, Ont., reports the recent sale, from his Greengrove herd of Shorthorns, of a choice young bull, of the Missie family, to Mr. Hugh Thomson, of St. Mary's. Mr. Thomson has been a frequent visitor to this herd, and states that he never visited it without purchasing one or sometimes a number. As Mr. Thomson is a judge of pedigrees as well as animals, this is sufficient proof that the breeding in this herd is all right. During the past few years, stock from this herd has circulated throughout Alberta, Manitoba, Ontario, and the United States. In each case where introduced the result has been greatly increased demand; so much so, that it has been found necessary to increase the number of the herd to supply the demand. Mr. Fletcher will exhibit his stock bull and a few young things at Toronto Exhibition.

Mr. Henry Dudding's annual sale of Shorthorn cattle and Lincoln sheep, held at Riby, Lincolnshire, on August 7th, was largely attended, and the stock offered superior in quality and condition, but to the absence of South American buyers, owing to the closing of their ports, must be attributed the serious falling off in the prices realized as compared with the brilliant successes of the Riby sales in former years. The only Canadian buyer present was Mr. E. Rattye, Gore Bay, Algoma, Ont., who was a liberal buyer, securing no fewer than 12 head, 10 females and two bulls, including the roan four-year-old Duthie-bred bull, Pride of Fortune, by Pride of Morning, dam Flora 92nd, by William of Orange. The highest price of the day was 15 guineas for the two-year-old heifer, Ombersley Bride, bought by Mr. Thorley. The prize-winning heifer, Floradora, went to the Marquis of Camden, at 100 guineas. Mr. Dudding was allowed a reserve bid of 200 guineas on Hawthorne Blossom 10th and she remains at Riby Grove, and the four two-year-old heifers made an average of £90 (\$450). The average on the 49 head sold was £30 14s. The same causes that affected adversely the sale of the cattle accounts for the low prices obtained for the sheep, which figured an average of only about \$65 for the rams. By far the largest buyer was the firm of Patrick Bros., Hilderton, Ont., who secured about 50 head, including all of the 23 yearling ewes offered.

Sunshine Patterns Sold



Two weeks ago the Summit Foundry Company, of Geneva, N. Y., bought duplicate iron patterns of the "Sunshine" Funnace, so that they could manufacture and sell this splendid Canadian heater in the United States.

The Summit Foundry Company could have bought duplicate iron patterns of any other funnace made in Canada, but they preferred the "Sunshine."

This in itself proves that the "Sunshine" is the best heater made in Canada.

Free Pamphlets telling all about this heater sent to any address.

THE McCLARY MFC. CO.'Y.

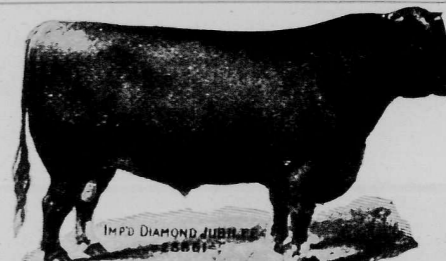
London, Toronto, Montreal, Winnipeg, Vancouver; St. John, N. B.

T. DOUGLAS & SONS, STRATHROY, ONT.

Scotch Shorthorns

100 HEAD TO SELECT FROM.

Offer for sale 20 young bulls and cows and heifers of all ages, of the most approved breeding, bred to (imp.) Diamond Jubilee = 28861 =, at head of herd. Farm one mile north of town.



J. & W. B. Watt, SALEM, ONT.

Clydesdale horses, Scotch Shorthorn cattle, Leicester and Oxford sheep, Berkshire pigs.

Our SHORTHORN herd was founded over 30 years ago, and contains such tribes as the Village Buds, Matchless, Missies, Mildreds, Stamfords and English Lady, upon which we have employed such bulls as Barmpton Hero 324, Young Abbotsburn 6236, Challenge 2833, Perfection 9100, Lord Lansdowne (imp.) 2712, Clan Stuart 14381, Canada 13536, Sittiton Chief 17660, Royal Sailor (imp.) 18959, Royal George 28513, Clipper King 16293 and Judge 23419, all of which have been first-prize winners wherever shown. Royal Victor 34681 and Royal Wonder 34682, by Royal Sailor (imp.), and out of English Lady and Mildred dams, now head the herd, assisted by Roan Cloud 31317, by Lord Gloster 28885, and out of Melody 21992, a descendant of the Buckingham family. We are now offering young bulls, cows and heifers for sale, of Scotch type.

Farm 2 miles from Elora Station, G. T. R. and C. P. R., 15 miles north of Guelph.

- 6 imp. Bulls, 14 months to 2 years.
- 20 imp. Heifers, 2 and 3 years old. Safe in calf.
- 2 Home-bred Bulls, 12 and 16 months old.
- 10 Home-bred Heifers, Scotch topped.
- 25 Choice Yearling Ewes, from imp. Ram.

Our imp. cattle are representatives of the following Scotch families: Clarets, Claras, Beautys, Marr Roan Ladys, Urys, range Blossoms, Secrets, Matildas, Miss Ramsdens, Jills, Floras, Annes, Lady Fragrants, and others.

Burlington Junction, G.T.R., is our station. Telegraph and telephone office within half a mile of the farm. Catalogues on application.

W. G. PETTIT & SON, Freeman P. O., Ontario.

HILLHURST SHORTHORNS

THREE COLLYNIE-BRED BULLS IN SERVICE:

- Scottish Hero, Joy of Morning, Scottish Beau, By Scottish Archer. By Pride of Morning. By Silver Plate.

The herd comprises straight Scotch, Cumberland, Gloucestershire, and Canadian strains; bred to produce the best and most economical MEAT and MILK MAKERS.

Shropshire and Hampshire Down Sheep.

M. H. COCHRANE, COMPTON CO., P. Q.,

G. T. R., 117 MILES EAST OF MONTREAL, HILLHURST STATION.

Rapids Farm Ayrshires.

REINFORCED BY A RECENT IMPORTATION of 20 cows, 2 bulls, and a number of calves, selected from noted Scotch herds, and including the male and female champions at leading Scottish shows this year. Representatives of this herd won the first herd prize at the exhibitions at—

Toronto, London, and Ottawa, in 1900.

Come and see or write for prices.

Young Bulls and Heifers for Sale, bred from High-class Imported Stock.

Robert Hunter, Manager

for W. W. Ogilvie Co., Lachine Rapids, Quebec.

WORKS W

C

IT F

IT CURES Cur Diseases or Par other bony Tum peerless remedy

It is the safe

For S

THE

CLEVELAN

GOMBA

S

160

Hea

CATALO

WORKS WONDERS. **Gombalut's** WORKS WONDERS.

Caustic Balsam

IT REMOVES BUNCHES

ON HORSES OR ANY OTHER LIVE STOCK, THEREBY INCREASING THE VALUE OF THE ANIMAL FULLY 50 PER CENT.

IT CURES Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Windpuffs, all Skin Diseases or Parasites, Thrush, Diphtheria, Pink Eye, all Lameness from Spavin, Ringbone, and other bony Tumors; also all obstructions in circulation, and imparts new life and vigor. It is a peerless remedy for all Throat and Bronchial Troubles. Impossible to produce any scar or blemish.

It is the safest and best blister. A trial will surely convince you of its merits.

For Sale by all Druggists OR SENT BY PREPAID EXPRESS ON RECEIPT OF \$1.50.

THE LAWRENCE-WILLIAMS CO.,

SOLE AGENTS FOR THE UNITED STATES AND CANADA.

CLEVELAND, OHIO.

TORONTO, CANADA.

GOMBAULT'S CAUSTIC BALSAM IS THE ONLY GENUINE

AND ABSOLUTELY SAFE AND RELIABLE BLISTER.

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 OF 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 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, Ont.

SHORTHORNS

SCOTCH IMPORTED.

Young imported cows with calves at foot for sale. A number of the calves are imported in dam.

Some of the families represented in the herd are as follows:

160
Head

AUGUSTAS
CLARAS
NECTARS
GOLDIES
JENNY LINDS
VICTORIAS
MATILDAS
BESSIES
CROCUSSES

ROSEBUDS
BRAWITH BUDS
LANCASTERS
MAYFLOWERS
AMARANTHS
BUTTERFLYS
CLIPPERS
EMMAS
BROADHOOKS

MEDORAS
MINAS
VILLAGE MAIDS
BEAUTYS
MISS RAMSDENS
FLORAS
RAGLANS
LUSTRES
GEMS OF THE VALE

160
Head

Herd headed by the Imported Bulls, GOLDEN DROP VICTOR and PRINCE BOSQUET.

IF INTERESTED, COME AND SEE US, OR WRITE

H. CARGILL & SON,

CATALOGUE FREE.

CARGILL, ONTARIO, CANADA.

Sold
go the Summit
any, of Geneva,
duplicate iron
e "Sunshine"
at they could
nd sell this
ian heater in
tes.

Foundry Com-
bought dupli-
ns of any other
n Canada, but
d the "Sun-

proves that the
the best heat-
ada.

address.
CO'Y.
St. John, N. B.



Clydesdale horses,
Scotch Shorthorn
cattle, Leicester
and Oxford sheep,
Berkshire pigs.

tributes as the Village
upon which we have
nge 2833, Perfection
ittytton Chief 17000,
ge 23419, all of which
l Wonder 3482, by
ert, assisted by Roan
e Buckingham family.

north of Guelph.

cattle are representa-
the following Scotch
Clarets, Claras,
Marr, Roan Ladies,
nge Blossoms, Secrets,
Miss Ramsdens, Hilt,
Annes, Lady Frag-
d others.

gton Junction, G.T.R.,
station. Telegraph
telephone office within
mile of the farm,

es on application.
, Ontario.

ORNS

tish Beau,
Silver Plate.

ains; bred to produce

n Sheep.

. Q.,
ST STATION.

res.

a number of calves,
male champions at
erd prize at the ex-

, in 1900.

r Sale, bred from

Manager

High-class Shorthorns and Yorkshire Pigs.

Just now three 10-months bulls, got by imp. Sirius 15281, great big massive fellows with lots of flesh and quality—away above the average. Also a few superior young cows in calf, and 5 or 6 heifers. We are booking orders now for the spring trade. Can ship some in six weeks.

JAS. McARTHUR, GOBLE'S, ONT. Goble's Station, G. T. R., 10 miles east of Woodstock, 2 miles from farm. Visitors met.

NOW, FOR THE FIRST TIME,

We offer you two herds to select from. Having purchased the entire herd of T. G. Yeomans & Sons, we now have 250 head on hand, of the best families, and with largest official backing. We want to sell 100 head before fall at least 50 or 60 before starting for the fairs. Great inducements to quick purchasers.

HENRY STEVENS & SONS, LACONA, OSWEGO CO., N. Y.

To Rid STOCK of Flies, Lice, AND ALL SKIN DISEASES, USE

West's Fluid

WHICH IS ALSO A SURE CURE OF CONTAGIOUS ABORTION.

Standard Sheep Dip is Good, also Cheap.

Manufacturers: The West Chemical Company, TORONTO, ONT.

Pedigree forms free to customers. Art. for Manitoba: W. R. ROWAN, 132 Princess St., Winnipeg.

NEWCASTLE HERD OF

Shorthorns and Tamworths.

One choice 2 year-old heifer. About a dozen boars, ranging from 2 to 4 months old; also a few nice young cows—all from Toronto prize stock. Be sure to write for prices. COLWILL BROS., Newcastle, Ont.

J. R. McCallum, Iona Station, Ont.

Offers young SHORTHORN BULLS and HEIFERS, of choice breeding, at reasonable prices. Iona Stn. on M.C.R. half a mile from farm.

YOUNG SHORTHORNS FOR SALE

Our present offering includes several choice young bulls fit for service, sired by "Scotland Yet," and out of Warfare (imp.) dams; also bull calves from Blue Ribbon (imp.), and out of Royal George cows. Inspection and correspondence solicited.

A. & D. BROWN, M. C. RAILWAY, IONA, ONTARIO.

GREENGROVE HERD OF SHORTHORNS.

This herd was founded over 18 years ago, and contains such Scotch-bred tribes as the Missies and Mysies, Languishes and Butterflies, and is now headed by the famous stock bull, Spicy Robin—28259—, a worthy grandson of Imp Royal Sailor—18959—, and of Brampton Hero and of Ruby Vengarth—15559—, and is of the noted English Lady family. Some good young stock for sale. For prices and particulars, address GEORGE D. FLETCHER, BINKHAM, ONT. C. P. R. Station, Erin.

Shorthorns, Berkshires, Leicesters

An offering at present the grand stock boar, Crown Prince; also some young ones. ISRAEL GROFF, ALMA, ONTARIO.

Hawthorn Herd of Deep-Milking Shorthorns

Stock for sale of both sexes. Herd headed by the Isabella bull, Golden Eagle—39943—, by Golden Measure.

Wm. Grainger & Son, Londesboro, Ont.

English Shorthorns.

Booth and Bates Shorthorns, topped with Cruickshank bulls. Young cows, bulls and heifers always on hand for sale. Eligible for the American herdbook. Royal and Highland prizewinners included for the last two years. Close on \$400 won in prizes last year and this.

WM. BELL, Ratchegh Farm, Alnwick, Northumberland, Eng.

GEO. RAIKES, BARRIE, ONT.,

BREKDER OF SHORTHORNS & SHROPSHIRE.

YOUNG STOCK FOR SALE.

SHORTHORNS:

We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruickshank, with Lavendar and Miss Ramsden dams. THOS. ALLIN & BROS., Oshawa, Ont.

BONNIE BURN STOCK FARM

40 rods north of Stouffville Station, Ont., offers Shorthorns, Shropshires, Berkshires. Pigs just weaned, good breeding, good quality, including a few choice out of imp. sow. Pairs not akin at low prices. D. H. RUSSELL, Stouffville, Ont.

FOR SALE:

SHORTHORN BULLS AND HEIFERS

from such sires as Mariner (imp.), Royal Judd 17499, Sultan Selam (imp.), Grandier 29251, and Roseville About 30874, on a Victoria foundation. Also one extra Kinellar Stamp 10-mos. red bull. Come or write.

Huron County, THOS. CUDMORE & SON, Hurondale, Ontario.

and Telegraph Office.

IN WRITING PLEASE MENTION FARMER'S ADVOCATE.

Maple Lodge Stock Farm

ESTABLISHED 1854.

SHORTHORNS—First-prize milking strains, and best Scotch breeding. Imp. Knuckle Duster and Imp. Sir Wilfred in service. LEICESTERS—Thirty choice shearing rams and 100 ewes and ram lambs for sale.

ALEX. W. SMITH, MAPLE LODGE P. O., ONT.

HOLSTEINS

FOR SALE.

I am now offering Holstein calves of both sexes, out of such cows as Panarista Pauline, Inka Darkness 3rd's Jessie DeKoi, DeDicker's DeKoi, Belle Burke Mechthilde, Pietertje Hartog DeKoi, and others, all closely related to DeKoi 2nd and Netherland Hengerveld, the greatest of Holstein cows.

J. A. CASKEY, Madoc, Ont.

4 HOLSTEIN BULLS 4

FOR SALE: From 4 to 7 months old, having sires in their pedigrees from such strains as Inka, Netherland, Royal Aggie, and Tritonia Prince, and out of imported females that have proven their worth at the pail. THOS. B. CARLAW & SON, Warkworth.

Maple Glen Stock Farm.

EXHIBITION OFFERING: Two bull calves under 1 year. Also a Sylva and an Abbekirk bull calf, with spring and fall heifer calves of Sylva breeding, bred from winners and ones that will make winners. Prices according to quality.

C. J. GILROY & SON, Brookville, on C.P.R. and G.T.R. Glen Buell, Ont.

UNADILLA FARM.

F. L. GREEN, GREENWOOD, ONTARIO,

BREKDER OF

St. Lambert Jersey Cattle and

Yorkshire Pigs.

My Jerseys are bred for business. Both sexes for sale. I offer an extra choice bull, dropped Feb. 27th, 1901, for sale, a son of Queen May of Greenwood, who made 18 lbs. butter in 7 days, and is at Pan-American now. A lot of very choice Yorkshires on hand. Also Barred Rocks, Light Brahmas, and Bronze turkeys. Prices right.

BRAMPTON JERSEY HERD.

For sale: 2 yearling bulls; 8 bull calves, sired by Brampton's Monarch (imp.), and out of first-class cows. A number of cows and heifers in calf. Also some unregistered cows and heifers, fresh-calf and springers—grand family cows.

B. H. BULL & SON, BRAMPTON, ONT.

JERSEYS FOR SALE.

Two choice bull calves of the highest breeding and of true dairy type, at moderate prices.

W. W. EVERITT, Chatham, Ont. DUN-KIN PARK FARM, P. O. BOX 552.

SPLENDID

Jerseys for Sale.

Two bull calves and two heifer calves that will equal anything I know of; age, 1 to 3 months; price, \$30 to \$60. One yearling heifer, blood of old Massena, 140 pounds butter in one year, \$100. One yearling bull, extra breeding, \$80. All registered. Crated and put on express car.

MRS. E. M. JONES, Box 324, BROCKVILLE, ONT., CAN.

CHOICE AYRSHIRE BULLS.

I OFFER: Five bull calves, one dropped in each of the months of August, November, December, January, and April. Good individuals, and from deep-milking strains.

W. W. BALANTYNE, STRATFORD, ONT.

"Neidpath Farm" adjoins city, on main line G. T. R.

Water Basins.

WOODWARD WATERING BASIN

O. W. E. & P. CO. MANUFACTURERS TORONTO

The Woodward Water Basin.

For four months we have endeavored to set out why you should adopt the Woodward Water Basin. We are prepared to guarantee all we have said and let facts substantiate our statements. Get further particulars by writing the

Ont. Wind Engine & Pump Co., Ltd., TORONTO.

"RAPID-EASY" GRINDERS



DO MORE WORK with SAME POWER than ANY OTHER Grinder. Made for use with Tread Power, Sweep Power, Windmill or Steam Engine.

PERTH, ONT., Feb. 26th, 1901.

I bought one of your No. 2 Rapid-Easy Grinders from your agent, Mr. John Ditttrick, and I must say that it more than pleases me and exceeds my expectations. It is noiseless, RUNS EASY, grinds FAST; there is no bother with it. On one occasion we brought from our granary what we considered a good day's grinding, but, to our surprise, were done before two o'clock, and it took two men doing all they could to carry the grain fast enough to keep the Grinder going. I do not say this for any blow, but am just speaking of the machine as I found it. I got the machine on trial. We have used other Grinders, but NONE TO COMPARE WITH THIS.

JAMES McLAREN, [NOTE.—Mr. McLaren is son of Senator McLaren, of Perth.]

RENFREW, ONT., Aug. 12th, 1901.

The Rapid-Easy Grinder I bought from your agent, Mr. P. O. Reilly, of Renfrew, is a dandy. I use three-team sweep power, and can grind 40 bushels per hour. It is a very fast Grinder, and the best in the market, judging from my experience.

JOS. ROUSELLE, Buy your machine and prepare now to do your grinding. Further particulars upon application.

J. FLEURY'S SONS, AURORA, ONTARIO.

Medals: World's Fair, Chicago, 1893; Paris, 1900.

THE ONTARIO VETERINARY COLLEGE

(LIMITED), TEMPERANCE ST., TORONTO, CANADA.

Affiliated with the University of Toronto.

Patrons: Governor-General of Canada, and Lieutenant-Governor of Ontario. Fee \$65.00 per session. Apply to ANDREW SMITH, F.R.C.V.S., Principal. 18-2-y-om

TREDINNOCK AYRSHIRES

Imported bulls at head of herd: Glencairn 3rd, Napoleon of Auchinbrain, 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.

Farm close to St. Anne Station, G.T.R. & C.P.R., 20 miles west of Montreal.

Ayrshire

HERD OF 150 cows and heifers, bred from deep milkers, with large teats, of a commercial stamp. Established over half a century. J. & A. Wilson, Boghall Farm, Houston, Renfrewshire, Scotland.

PEDIGREE AYRSHIRES.

Cows and heifers, all bred from prizewinning stock at the leading shows.

Robert Wilson, Mansurrae, Bridge of Weir, Renfrewshire, Scotland.

SHEEP BREEDERS' ASSOCIATIONS

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEVERING, Secretary, Lafayette, Indiana.

Great Dispersion Sale of Ayrshires

OCTOBER 23RD, 1901.

Will offer our herd of 50 Ayrshires at public auction, at our farm near Rockton, 4 miles north of Copetown, on the Grand Trunk Railway, at which station rigs will meet all trains the evening before and morning of day of sale. Sale to start at 12 o'clock, noon, sharp. Terms—\$50 and under, cash; over that amount, 11 months' credit, or 6% per annum off for cash on all sums entitled to credit. Catalogues ready after Oct. 1st, and will be mailed on application to THOS. INGRAM, Jas. McCormack & Son, Auctioneer, Guelph.

Ayrshire Bulls:

Write to J. YULL & SONS, Carleton Place.

for special prices on Ayrshire bulls from 14 years to 6 months. Four over 15 months, fit for service, from special milking stock. Sired by prize bull, Jock of Burnside—1684—, also females of all ages. Shropshire sheep of all ages; a number of fine ram lambs. Berkshire pigs of either sex, of the best bacon type. B. P. Rocks.

Maple Cliff Dairy and Stock Farm.

AYRSHIRE CATTLE, IMPROVED BERKSHIRE AND TAMWORTH PIGS.

FOR SALE: 5 bull calves, a few heifers; young pigs, pairs not akin; 2 boars, 4 months old; young pigs. Farm adjoins Central Experimental Farm, Ottawa. R. REID & CO., Hintonburg, Ont.

Ayrshires and Yorkshires

We offer at low prices any two of our three Feb. and March bull calves, bred from our imported bull and from heavy-milking dams. We reserve one 6-months bull calf for showing. All are in show fit. Choice females of different ages. A few spring pigs still on hand.

Alex. Hume & Co., Menie, Ont.

PLEASE MENTION FARMER'S ADVOCATE

EUROPEAN ADVERTISEMENTS.

W. W. Chapman,

Secretary of the National Sheep Breeders' Association, Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and Late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W. Oables—Sheepcote, London.

FAMOUS ALL OVER THE WORLD

ALFRED MANSELL & CO., LIVE STOCK AGENTS AND EXPORTERS, SHREWSBURY.

BRITISH STOCK selected and shipped to all parts of the world. Write for prices to ALFRED MANSELL & CO., Shrewsbury, England, or to our American representative, Robert Miller, Stouffville, Ont., Canada.

HAMPSHIRE DOWN

SHEEP.

SPLENDID MUTTON, GOOD WOOL, GREAT WEIGHT.

THIS HIGHLY VALUABLE

English Breed of Sheep

Is unrivalled in its rapid and wonderfully early maturity, possessing, too, a hardness of constitution adapted to all climates, whilst in quality of mutton and large proportion of lean meat it is unsurpassed. Full information of

JAMES E. RAWLENCE, SECRETARY HAMPSHIRE DOWN SHEEP BREEDERS' ASSOCIATION, SALISBURY, ENGLAND.

LEICESTER RAMS.

Ram lambs and ewes sired by the first-prize ram at Toronto, '99. Also Shorthorn cattle and Berkshire pigs.

MAC. CAMPBELL, NORTHWOOD, ONT.

50 SHROPSHIRE

FOR SALE

Shearing and two-shear lambs ready for the fall bred by Mansell, England, will bring them. Phelpsston station, G. T. R. 10 miles east. Simcoe Cou.

1901 Imp

of Shropshire ram quality, from the offered at reasonable

ROBERT MILLER, W. H. BEATTIE, W

IMPORTER AND

Shropshire sheep, collie & Mammoth Bronze turke

HIGH-CLASS S

A flock of 75, of good shearing rams, ram lam fellows, Flock headed by y for prices. Abram Rude om C. P. R. a

PLEASE MENTION F

The Patent F

AS USED

HECLA F

is the most valuable im construction in recent this patented method iron which go to ma radiator into ONE 5 There is no danger of let the dust, smoke an house. Another featu it will burn

EVERY KIND

COAL, WOOL

Send us a sketch of give you an estimate.

CLARE BR

PRESTON

and WINNIPEG,

BROAD LEA

We have a choice lot of 1 our imported rams, Roya King let, some weighing 1 good shearing ewes and ewes and rams fitted for sh we are offering for sale at

HENRY ARKE

Phone and telegraph, Teeswater.

"Farnham Farm

FLOCK ESTABLIS

Forty superior yearling rams extra fine imported, rams rams. Forty yearling e lambs. Stock good and p

HENRY A

Guelph, Ont., G.T.R.

GOODWOOL

Shropshire

One- and two-shea ewe l

C. H.

P. O. BOX 192, OR

SHROPSH

LAMBS FOR SA

WM. PIERCE, BRINSLEY P. C

50 SHRO

FOR S

Shearing and two-shear lambs ready for the fall bred by Mansell, England, will bring them. Phelpsston station, G. T. R. 10 miles east. Simcoe Cou.

1901 Imp

of Shropshire ra quality, from the offered at reasonable

ROBERT MILLER, W. H. BEATTIE, W

IMPORTER AND

Shropshire sheep, collie & Mammoth Bronze turke

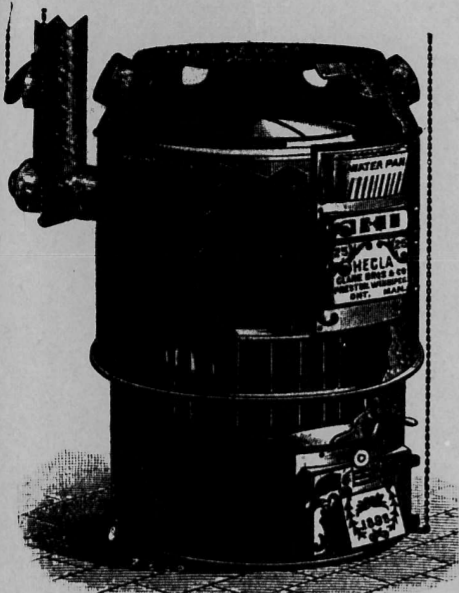
HIGH-CLASS S

A flock of 75, of good shearing rams, ram lam fellows, Flock headed by y for prices. Abram Rude om C. P. R. a

PLEASE MENTION F

GRINDERS

with SAME POWER than... Made for use with... Windmill or... No. 2 Rapid-Easy Grinders... Dittick, and I must say... RUNS EASY, grinds... with it. On one occasion... what we considered a... to our surprise, were done... it took two men doing... the grain fast enough to... I do not say this for any... of the machine as I found... We have used other... COMPARE WITH THIS... JAMES McCLAREN... of Senator McLaren... Ont., Aug. 12th, 1901... I bought from your agent... new, is a dandy. I use a... and can grind 40 bushels... st Grinder, and the test in... my experience... JOS. ROUSELLE... and prepare now to do... application.



ONTARIO.

ADVERTISEMENT.

NATIONAL SHEEP BREED-

Kent or Romney... Breeders' Association... of the Southdown

Agent, Exporter and... of registered stock... exported on com-... ren, and all enquiries

HOUSE, ARUNDEL... LONDON W. W... don.

ER THE WORLD... ELL & CO.,... AND EXPORTERS... BURY.

and shipped to all parts... to ALFRED MAN-... land, or to our Ameri-... Miller, Stouffville, Ont.,

DOWN

EP.

GOOD WOOL... EIGHT.

of Sheep

and wonderfully... too, a hardness... all climates, whilst... large proportion of... assed. Full infor-

AWLENCE,

DOWN SHEEP... OS,

BURY, ENGLAND.

RAMS.

the first-prize ram at... cattle and Berkshire... om

ORTHWOOD, ONT.

APPLEY'S COOKERS.

10.00 to \$45.00. Made of... No flues to rust or... blow up. Guaranteed to... feed in 2 hours, and to... in stock tanks 200 feet... heat dairy rooms. Cat-... prices moderate. Free... HARDWARE CO., Box 215... (Gratka, Ill.) London, Ont

FOR SALE.

and

TSWOLDS

shearlings of both... lambs, sired by Imp.

ANGMAID,

P. O.

N, G. T. R.

The Patent Fused Joint

AS USED IN OUR

HECLA FURNACE

is the most valuable improvement in furnace construction in recent years. By means of this patented method we fuse the steel and iron which go to make up the dome and radiator into ONE SOLID CASTING. There is no danger of cement falling out, to let the dust, smoke and gas escape into the house. Another feature of the Hecla is that it will burn

EVERY KIND OF FUEL

COAL, WOOD OR PEAT.

Send us a sketch of your house, and let us give you an estimate.

CLARE BROS. & CO., PRESTON, ONT., and WINNIPEG, MANITOBA. -om

BROAD LEA OXFORDS.

We have a choice lot of lambs this year, bred from our imported rams, Royal Warwick 3rd and May King 1st, some weighing 17 lbs. at birth. Also some good shearing ewes and rams. Also a few shearing ewes and rams fitted for show purposes. All of which we are offering for sale at reasonable prices. -om

HENRY ARKELL & SON, Teeswater, Ont.

"Farnham Farm" Oxford Downs.

FLOCK ESTABLISHED 20 YEARS.

Forty superior yearling and two-year rams. Two extra fine imported rams. Sixty yearling ranch rams. Forty yearling ewes. One hundred ram lambs. Stock good and prices reasonable. -om

HENRY ARKELL, Guelph, Ont., G.T.R. Arkell, Ont., C.P.R.

GOODWOOD FARM.

Shropshires for sale.

One- and two-shear ewes. Ram and ewe lambs.

C. H. ROWE,

P. O. BOX 192, ORILLIA, ONT., CAN.

SHROPSHIRE

LAMBS FOR SALE.

WM. PIERCE, BRINSLEY P. O., ONT.

50 REG. SHROPS. 50

Shearing and two-shear rams; also stock ram, bred by John Miller & Sons, and this season's crop of lambs ready for the fall trade. Foundation stock bred by Mansell, England. Prices moderate. A card will bring them. ROWAT BROS., Phipps station, G. T. R., 5 Hillsdale, Ont. 5 miles east. Simcoe County. -om

1901 Importation

of Shropshire rams and ewes of finest quality, from the best breeders, now being offered at reasonable prices. -om

ROBERT MILLER, Stouffville, Ontario.

W. H. BEATTIE, Wilton Grove, Ontario,

IMPORTER AND BREEDER OF

Shropshire sheep, collie dogs, White Holland and Mammoth Bronze turkeys, and Barred Rocks.

HIGH-CLASS SHROPSHIRE.

A flock of 75, of good type. Two-shear rams, shearing rams, ram lambs, ewe lambs, fine lusty fellows. Flock headed by a fine imported ram. Write for prices. Abram Rudell, Hespeler P.O., Ont. -om

C. P. R. and G. T. R.

PLEASE MENTION FARMER'S ADVOCATE.

FAIRFIELD LINCOLNS.

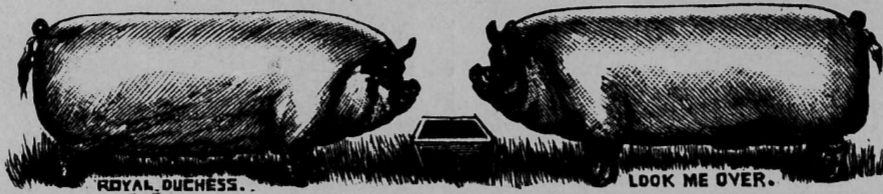
Rams and ewes (all ages), consisting of those bred at Fairfield and importations from the flocks of Dudding, Dean, Wildsmith and Wright. A new importation of 103 head will arrive at Fairfield, Sept. 1st, including first-prize yearling ram, yearling ewes, ewe lambs and ram lambs, also first-prize and champion 2-year-old ram and third-prize 2-year-old ram at the Royal Show, and 70 yearling rams and 30 yearling ewes. I can supply show flocks that will win.

J. H. PATRICK, ILDERTON, ONT., CAN.

One mile from Ilderton. Post office. Telegraph office. 10 miles from London. Railway station.

Summer Hill Herd

HEADQUARTERS FOR THE IDEAL BACON HOG AND EASY FEEDERS.



The largest herd of imported and Canadian-bred Yorkshires in America. Out of 121 exhibits at the leading shows in '99 and 1900, including Toronto and London, we gained 116 awards. Expert judges both at London and Toronto were unanimous in pronouncing our herd far superior to that of our strongest competitors. Won most of the best prizes offered, including first prize for best pen of pure-bred bacon hogs, also grand sweepstakes over all breeds in a class of 13 entries. The foundation of our herd was laid by personally selecting the choicest stock from the most noted breeders in England and Scotland. We have the ideal bacon type—size without coarseness, and easy feeders. Pigs of all ages for sale at moderate prices. Write us for particulars. Telephone, Millgrove, Ont. Telegraph 254 Bay St. S., Hamilton, Ont. -om

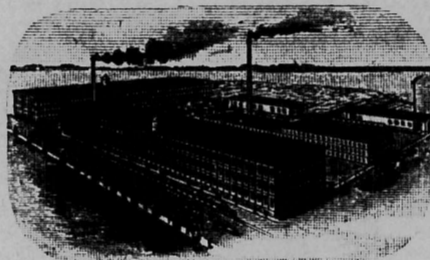
D. C. Flatt & Son, Millgrove, Ont.

"ONE GRADE ONLY AND THAT THE BEST."

OUR MOTTO FOR THIRTY-FOUR YEARS.

Our aim is to produce "THE BEST" carriages at a reasonable price, and most intelligent farmers know that

M'LAUGHLIN CARRIAGES ARE GOOD CARRIAGES.



Always Reliable.

Always the Best.

Here's our new factory: the largest and best equipped under the British Flag. ANNUAL CAPACITY—14,000 HIGH-GRADE VEHICLES.

SEE OUR CUTTERS, SLEIGHS, AND CARRIAGES

at all the leading exhibitions, and ask our representatives all the questions you like about any of them.

OUR CATALOGUE AT ALL AGENCIES, OR FOR THE ASKING.

We are making 3,200 handsome Cutters and Sleighs for the season. -om

THE M'LAUGHLIN CARRIAGE CO., OSHAWA, ONT.

THE COLUMBIA THRESHER

A time and money saver for the farmer. A small Thresher of great capacity, that can be run by light power and operated by few men.

Write for Illustrated Catalogue and Price List—FREE.



BELLE CITY MFG. CO., Racine, Wis. Box 133

BELLE CITY FEED and ENSILAGE CUTTER

with blower carrier attachment. All sizes. Catalogue and latest book about ensilage sent free on request. Write for it.

SHROPSHIRE WILLOW LODGE BERKSHIRES FOR SALE

AT HOLWELL MANOR FARM.

Extra choice ram and ewe lambs from imported Mansell rams. Single or in large lots. Satisfaction guaranteed or money refunded. Also Barred Rock cockerels at \$1.50 a pair. -om

D. G. GANTON, ELMSVALE, ONTARIO. WM. WILSON, SNELGROVE, ONTARIO.

Ripley's Fly Remover

Instantly removes all flies, mosquitoes, lice and other insects from cattle, horses and other animals sprayed with it. It is healing to any sore. Animals rest easy and feed quietly all day. Cows give 1/4 more milk, which is a big saving. 1 gal. will protect 500 cows. Money refunded if animals are not protected. Endorsed by the best class of people. Order at once and secure agency, you can sell hundreds of gallons. Price, cash with order or C. O. D.—1/4 gal., 70c; 1 gal., \$1.25; 2 gal., \$2.40; 5 gal., \$5.25; 10 gal., \$10.00. Ripley's Special All Tin Compressed Air Sprayer for applying same, 90c; all copper, \$2.00; 3 gal. Galvanized Compressed Air Sprayer for applying on large herds, \$6.35; made of copper, \$10.00. The Ripley Hardware Co.

Gentlemen:—For three years I have been experimenting with different things to keep flies off my cows, but not until I tried your Fly Remover and Compressed Air Sprayer was I successful. I used this last year and found that it cost less than one cent per week per cow. With your Compressed Air Sprayer it takes but a few minutes to put it on, and the result has been that my cows were free from flies, and during the year gave 6400 pounds of milk each, with 1168 3/4 pounds of butter per cow. I can heartily recommend it to all stock owners.—JOHN ARMSTRONG, Pres. State Board of Agriculture, De Smet, S. D., June 4, 1901. RIPLEY HARDWARE CO., LONDON, ONT., CANADA. U. S. Factory at Grafton, Illinois.

The Waggoner Extension Ladder

and the Lindenwood Extension Step-Ladder

Are unrivalled for lightness, strength and handiness. For picking apples, peaches, plums, etc., and for stacking and general farm use, no farmer can afford to be without them. The Waggoner Extension Ladder will save you one-fourth more fruit off the high limbs than a common ladder, and will pay for itself times over the first season. We make also a beautiful lawn swing. It stands alone on the lawn, and can be folded and carried indoors.

We shall be glad to send you free our full illustrated catalogue. Our Winnipeg agent is F. J. Holland; and H. L. & J. T. McGowan handle our goods in St. John, N. B., for New Brunswick. -om

The Waggoner Ladder Co. (Limited), London, Ont. Factory: 403-408 York St., London.

GRAMMING MACHINES, PATTERING COOPS, Incubators and Brooders POULTRY SUPPLIES. A. J. MORGAN, MFR., LONDON. Catalogue free. -om

FOR SALE: Berkshires (both sexes), Shorthorn stock bull, cows, heifers and young bulls. Prices reasonable. Write or come and see us. -om A. J. C. SHAW & SONS, Thamesville, Ont.

Fresh Berkshire Blood, from the most noted prize herds of Eng. and the U. S., including among others the famous sow, Elphick's Matchless—never beaten, and imported at a cost of nearly \$400. We can offer some especially good young pigs, in pairs and trios not skin, of splendid length and type. Also young sows, bred to good boars. All at very reasonable prices. We are making no reserve for show this season, so our best are for sale. Take Kingston Road electric cars to the door from the city. DUREHAM & CAVAN, East Toronto, Ont. -om

IMPROVED YORKSHIRE

boars ready for service, sows ready to breed, and younger pigs of all ages. Also show pigs can be had by writing.

H. J. DAVIS, WOODSTOCK, ONT. Importer and breeder of choice Large White Yorkshires and Shorthorn cattle. -om

NORTH BRUCE HERD OF YORKSHIRES

Boars fit for service, and young stock of both sexes on hand and for sale. -om

WILLIAM HOWE,

BRUCE CO. NORTH BRUCE, ONT.

YORKSHIRES

Headed by Oak Lodge Prince 5071. Litters 15 weeks, either sex; 2 sows to farrow.

WM. TEASDALE, Dollar, Ont. Northern branch G.T.R., 15 miles from Toronto. -om

FOR SALE: Yorkshires and Holsteins

Best type and quality. Young stock constantly on hand. Prices right. -om

BRICKLEY P. O., instead of Warkworth.

BARRED ROCKS (Exclusively). I have a few good breeding hens from one to two years old to dispose of at 75c. apiece. Will also have a quantity of cockerels and pullets later on. -om

A. E. SHERRINGTON, Box 100, Walkerton, Ont.

