

J. H. Graduate  
Exp. Exam. Ottawa

MANITOBA AND WESTERN EDITION

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. XXXV. WINNIPEG. OCTOBER 20, 1900. MANITOBA. No. 517

### A Battle of Giants.

MR. A. HUGHES, druggist, Medicine Hat, reports a battle between two stallions on the Shannon ranch near that town. A heavy Clyde stallion got loose in the stable one night, and fiercely attacked a valuable blood stallion. When discovered in the morning, the poor brute was one mass of ugly bites from the withers to the ears, the mane being deeply bitten into the flesh. Every one who saw the horse the next day or two strongly advised shooting him—all but Mr. Hughes, who recommended Dr. Warnock's Uckerkure, and persuaded Mr. Shannon to try it. The result was that in a couple of weeks all the wounds were completely healed. Mr. Shannon now believes that Uckerkure will heal any kind of a wound, no matter how bad. Sold in large bottles at \$1.

Made only by the  
**Western Veterinary Company,**  
 P. O. Box 478. WINNIPEG, MAN.

## BANK OF HAMILTON

HEAD OFFICE:  
 HAMILTON, ONTARIO.

Paid-up Capital, \$1,703,212;  
 Reserve, \$1,234,119;  
 Total Assets, \$14,827,357.

BRANCHES IN MANITOBA:  
 WINNIPEG  
 (CORNER MAIN AND McDERMOT STREETS;  
 C. BARTLETT, AGENT),  
 BRANDON, MANITOUL,  
 CARMAN, MORDEN,  
 HAMBOTA, WINKLER,  
 PLUM COULEE.

**Deposits Received and Interest Allowed**

GENERAL BANKING BUSINESS  
 TRANSACTED.

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

## SOMERVILLE & CO.

Steam Marble  
 and Granite Works,  
 BRANDON.

Dealers in Marble and  
 Manitoba Granite.

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

Rosser Avenue, Brandon, Manitoba.

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

WHEN WRITING MENTION THIS PAPER.

IN WRITING  
 PLEASE MENTION FARMER'S ADVOCATE

### CONTENTS OF THIS NUMBER.

	PAGE.
THANKSGIVING .....	571
ARGENTINE SHUTS OUT BRITISH BREEDING CATTLE .....	571
JUDGING AT THE FAIRS .....	571
IMPROVEMENT IN FAIR MANAGEMENT .....	572
THANKSGIVING DAY .....	572
FAVORS THE GENERAL PURPOSE STALLION .....	572
THE PLACE OF DAIRYING IN THE EVOLUTION OF AGRICULTURE .....	572
TWO POINTS OF SUPERIORITY .....	573
PREMIER ROSS AND THE DRESSED MEAT TRADE .....	573
THE LATE GARRETT F. FRANKLAND (ILLUSTRATED) .....	573
THE EDMONTON INDUSTRIAL EXHIBITION ASSOCIATION .....	573
THE BUTTER AND CHEESE MAKERS' ASSOCIATION .....	574
MADLES INJURED BY HOT SUN AND WIND .....	574
IMPORTATION OF DEERS AND SHIBUS INTO MANITOBA .....	574
SPRINGFIELD AGRICULTURAL SOCIETY FALL FAIR .....	574
THE UDDER AS AN INDICATOR .....	574
OUR SCOTTISH LETTER .....	575
BELSHAZZAR 1885 (ILLUSTRATION) .....	575
MATING THE EWES .....	575
FALL COLTS PREFERRED .....	575
PRINCE DANEGELT (ILLUSTRATION) .....	575
SELECTION OF A LAMB .....	576
WANTED—A CHANGE TO VIEW LIVE STOCK .....	576
SOUTH AMERICAN DRESSED MEAT LANDED IN ENGLAND IN POOR CONDITION .....	576
APPLE MARKET REPORT .....	576
SERVICE BULLS .....	576
AUTUMN FOALS .....	576
A LOSING GAME PERSISTED IN .....	576
JUDGING LIVE STOCK—SCORE CARD VS. THE OLD WAY .....	576
BACON IN THE BRITISH MARKET .....	577
HACKNEY MARK, MONA'S QUEEN, AND HER YEARLING DAUGHTER, TITANIA (ILLUSTRATION) .....	577
THE "DODDIE" IN THE ASCENDANT .....	577
BRANDON EXPERIMENTAL FARM NOTES .....	577
MANITOBA NATIVE SQUAW CORN (ILLUSTRATION) .....	577
WESTERN FAIR MANAGEMENT .....	577
PRINCE FRANK'S SON (ILLUSTRATION) .....	577
DR. W. M. SAUNDERS AT THE BRITISH ASSOCIATION .....	578
LATE FALL PIGS .....	578
TREATMENT OF CLOVER OR OTHER SOIL LAND IN THE FALL FOR GRAIN OR CORN CROP, ETC. .....	578
WORTH REMEMBERING .....	579
THE RUSSIAN THISTLE AS FODDER .....	579
SIMON SMART (ILLUSTRATION) .....	579
C. P. R. GRASSES AND GRASSES .....	579
MANITOBA PRIZE WHEAT AT PARIS .....	579
THE FAKE ELEMENT IN THE FAIRS .....	579
FALL WHEAT IN ALBERTA .....	579
NOTES ON THE TREATMENT OF FARMYARD MANURE .....	579
ANOTHER PROTEST .....	579
CANADIAN CHEESE WINS AT PARIS .....	580
PAIR OF TYPICAL LINCOLNS (ILLUSTRATION) .....	580
THE CATTLE INTENDED FOR DAIRY PURPOSES .....	580
HIGH SCORING BUTTER AT PARIS .....	580
PROTECTING COWS FROM FLIES .....	580
NOTES FOR OCTOBER .....	580
BEGIN POULTRY KEEPING ON A MODERATE SCALE .....	580
IMPORTED OXFORD DOWNS (ILLUSTRATION) .....	580
COST OF FEEDING SOME CHICKENS .....	581
FEATHER PULLING .....	581
FIRST PRIZE TAMWORTH SOW (ILLUSTRATION) .....	581
MELTING OLD COMBS (ILLUSTRATION) .....	581
RED SIDERS INJURIES .....	581
BREEDING FROM EWEL LAMBS .....	582
THE FOOD OF BLACKBIRDS .....	582
BOOSTS FOR POULTRY, WITH LADDER APPROACH (ILLUSTRATION) .....	582
ANOTHER DILUTION "SEPARATOR" .....	582
TRAINING YOUNG COLLIES .....	582
THE BEAUTIFUL TULIP .....	582
QUESTIONS AND ANSWERS: VETERINARY: COWS GIVING BLOODY MILK; INDIGESTION, FOLLOWED BY INFLAMMATION OF THE STOMACH AND INTESTINES IN SHEEP; PUNISHING TO BELIEVE BOATING; HORSE KICKED ON LEG; WEAK LETTOK IN FOAL .....	582
MISCELLANEOUS: GROWING AIRCHOKES FOR HOGS; NO MORE C. P. R. FREE SIDES; TREES FOR LIGHT SANDY SOIL; RIGHTS OF THIRD MAN .....	582
CHATTY STOCK LETTER FROM CHICAGO .....	583
HOME MAGAZINE .....	584
THE CHILDREN'S CORNER .....	584
THE QUIET HOUR .....	584
OSAMEA, HAWAII, H. I. (ILLUSTRATION) .....	584
POETRY—OLD FAVORITES .....	586
PUZZLES .....	586
GOSSIP .....	587, 590, 591, 592, 594
NOTICES .....	587, 590, 592
ADVERTISEMENTS .....	589 and 570, 587 to 596

PUBLISHED TWICE A MONTH, AT WINNIPEG AND LONDON, CAN.

**We Fell  
in Love**



with our business years ago, and that accounts for our expertness in watch repairing. We try to do the best of work so you will be our firm friends and send us everything in our line. A postal card will bring you a mailing-box. Upon receipt of watch we will advise you as to cost.

**D. A. REESOR, "THE JEWELER,"**  
 Brandon, Man.  
 Issuer of Marriage Licenses.

**Western  
Canada  
Business  
College,**

MARKET STREET,  
 OPPOSITE  
 CITY HALL

WINNIPEG, MANITOBA.

COURSES IN ALL COMMERCIAL SUBJECTS

**Shorthand  
AND Typewriting.**

YOU CAN SAVE YOUR TIME AND MONEY BY ATTENDING  
 OUR COLLEGE.

Our equipment new and modern.  
 Our instruction the most thorough.  
 Our systems the best.

Write for catalogue—

**W. A. SIPPRELL, B. A.,**  
 PRINCIPAL.

NOTE.—Eighty-six per cent. of our graduates have secured and are now holding good positions.



## Medicines. Write Us.

We can supply you with any Drug, Medicine or Toilet article advertised in this or any other paper.

Your letter order will receive prompt attention.

**W. J. MITCHELL,**

394 MAIN ST., WINNIPEG.

Agent for

**Pasteur Blackleg Vaccine,**

The original and genuine remedy for blackleg.

## 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.

## Pumps

Farmers, Read This:

IF YOU WANT A  
**GOOD PUMP,**  
WRITE TO US. WE CAN SUPPLY YOU  
FROM THE FACTORY AT FACTORY  
PRICES.

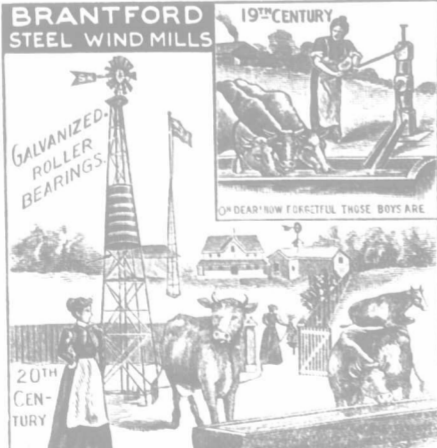
WE have been awarded the diploma at the Brandon Exhibition the last two years for the best exhibition of pumps over all competitors. We always have a good stock of wood and iron pumps and repairs of all kinds on hand. Try one of our **CATTLE PUMPS.** It fills a pail in about three strokes.

We are agents for  
Hages' double-action force pump.  
Myers' brass-lined cylinder pump.

Special discount till end of year. Write for illustrated catalogue. Address—

**BRANDON PUMP WORKS,**  
Box 410, H. CATER, Prop. Brandon, Man.

**BRANTFORD STEEL WIND MILLS** 19<sup>th</sup> CENTURY



**20<sup>th</sup> CENTURY**

MY! WHAT A COMFORT THAT BRANTFORD MILL!

**POWER AND PUMPING MILLS,  
STEEL TOWERS AND FLAG  
STAFFS, IRON AND WOOD  
PUMPS, MAPLE LEAF GRAIN  
GRINDERS, BEE SUPPLIES.**

**SHAPLEY & MUIR CO. LIMITED**  
BRANTFORD, CAN.

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

THE FARMER'S ADVOCATE.

## Blackleg Vaccine.

[SYMPTOMATIC ANTHRAX VACCINE]

WE SUPPLY THIS VACCINE IN TWO FORMS:

- A. SINGLE VACCINE:** each case containing ten doses. With this the animal is vaccinated but once. Price per case ..... \$1.50.
- B. DOUBLE VACCINE:** each case holds two vials—No. 1 containing ten doses of Primary or Weaker Vaccine; No. 2 containing ten doses of Secondary or Stronger Vaccine, which is injected eight days after the Primary (No. 1) Vaccine has been used. Price per case ..... \$2.00.

WRITE FOR LITERATURE.

SUPPLIED BY ALL DRUGGISTS.

WE also furnish this case containing the apparatus required to successfully prepare and administer Blackleg Vaccine.

Price, complete ..... \$6.00

IF YOUR DRUGGIST DOES NOT HAVE **BLACKLEG VACCINE, P. D. & CO.,** IN STOCK, YOU CAN PROCURE IT FROM

The Bole Drug Co., or  
The Martin, Bole & Wynne Co.,  
Winnipeg, Man.,

WHO WILL PROMPTLY MAIL YOU A SUPPLY ON RECEIPT OF PRICE..... m



**Parke, Davis & Co.,**  
WALKERVILLE, ONT.  
MONTREAL, QUE.

# Ogilvie's Flour

SPECIALLY MADE FOR

## FAMILY USE.

ALWAYS ASK FOR OGILVIE'S.

## "Pasteur Vaccine"

SAVES CATTLE FROM

# BLACK LEG

Nearly 2,000,000 successfully treated in U. S. and Canada during the last 5 years. Cheap, safe and easy to use. Pamphlet with full particulars, official endorsements and testimonials sent FREE on application.

**Pasteur Vaccine Co., Chicago.**  
BRANCHES: W. J. MITCHELL & CO., WINNIPEG, MAN.

## David Maxwell & Sons, ST. MARY'S, ONT.

PATENTED  
**STEEL ROLLER BEARINGS  
IMPROVED STEEL FRAME**

And combined Foot and Lever Drive, improvements you will not find on other churns. Do you want the best? Then don't purchase until you see it. Sold by the leading wholesale houses in the Dominion.

No.	CAPACITY.	Churns from
0	6 gal.	1 to 3 gal. cream.
1	10 "	1 to 5 "
2	15 "	2 to 7 "
3	20 "	3 to 9 "
4	25 "	4 to 12 "
5	30 "	6 to 11 "
6	40 "	8 to 20 "

**CANADIAN DAIRY SUPPLY COMPANY,**

236 KING ST., WINNIPEG, MAN.

Agents Manitoba and the Territories.



FOUNDED 1866

## Excelsior Life Insurance Co.

HEAD OFFICE, TORONTO, ONT.

Best Policies

For protection and investment.

Absolute security.

Agents wanted.

## WINDMILLS

If you are looking for

**Economical Power**

You will make no mistake in buying a

**Canadian Steel  
(Gald.) Airmotor**

J. W. HUGHSON, Invermay, writes: "I found your mill to be a great benefit to me, and there can't be too much said in its favor. When other mills will not work, it will."

**Grinders, Tanks,  
Pumps, etc.**

**Ontario Wind Engine  
and Pump Co., Ltd.,**

TORONTO, ONT.

Manitoba Agents: BALFOUR IMPLEMENT COMPANY, Winnipeg, Man.

Build your own Coiled Spring Fence at cost of wire only.

## THE LONDON Fence Machine

Beats them all

For speed, ease of operation and adjustment, quality of work, and durability.

It stands without a rival

As the best up-to-date machine on the market.

We lead in Coiled Steel Spring and Soft Galvanized Fence Wire. Write for prices.

## London Fence Machine Co.

151 YORK STREET,

Responsible agents wanted. LONDON, ONT.

on Mention the ADVOCATE.

## SOURIS COAL

The cheapest fuel in the market.

SHIPMENTS TO ALL PARTS.

WRITE US FOR AGENCIES.

**TAYLOR & SONS,**  
Box 567. WINNIPEG, MAN.

Mines at Roche Percee, Assa.

## CHAMPION Fruit EVAPORATOR

Dries all kinds of Fruits and Vegetables. Product of a superior quality.



Cut shows cooking stove size. We make four larger sizes, suitable for home or market use. All are fire-proof and portable. CATALOGUE FREE. **THE G. H. GRIMM MFG CO.** 84 Wellington St., Montreal, Q.



# FARMER'S ADVOCATE

AND HOME MAGAZINE

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

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

VOL. XXXV.

WINNIPEG, MAN., AND LONDON, ONT., OCTOBER 20, 1900.

No. 512

## Thanksgiving.

The recurrence of our annual national Thanksgiving Day brings with it reminders of the blessings of a beneficent Providence which in large measure have been realized by the Canadian people during the year. Peace and plenty are terms which have for so long a period characterized the condition of our people as a whole, that a comparison with the experience of many other lands in the same period easily leads to the acknowledgment that we have been a highly-favored people. It is true that the war cloud which a year ago had settled over South Africa, menacing the life and liberty of British subjects, and which later on broke in fury over that unhappy country, roused the patriotic spirit of our people and found a ready response to the call for volunteers to defend the honor of the nation, and that as a consequence there are some homes which are saddened by the loss of brave sons who laid down their lives for their country. The bereaved families have the sympathy of all, and the names and self-sacrifice of those who have fallen in the service of the empire will be honored and cherished by our common people. There is, however, great cause for congratulation that we as a Dominion are at peace with our neighbors, and that our country continues to enjoy immunity from the lamentable condition which inevitably comes to a land which is so unfortunate as to be the theatre of war.

The material prosperity which our people have enjoyed for the last few years gives promise of continuing. The farmers of this federation of Provinces have on the whole had a good year, the crops in all but one having been well up to the average of good years. Owing to exceptionally adverse weather conditions, the farms of the Province of Manitoba have not given the usual generous returns for the labor bestowed upon them, but this is a contingency that is liable to fall to the lot of any Province occasionally, and will not seriously check the progress of our Prairie Province, which is rich in its resourcefulness, nor the enterprise of its people, who have full faith in the future of the country and courage to demonstrate their confidence in its resources. Fortunately, a good proportion of its farmers have heeded the admonition to devote more attention to live stock, for which a good supply of feed is on hand, and which will serve a good purpose in this emergency in tiding over a trying year, and will furnish an experience from which lessons may be learned that will be helpful in ordering their future operations.

Live stock in nearly every line has been in active demand at good prices, the market for horses especially having greatly improved, while cattle of the beef breeds, as well as the dairy breeds, have sold readily at satisfactory figures. The dairy business has had one of the best years in its history, the pastures having in most sections kept unusually fresh throughout the summer season, producing a large and steady flow of milk, while prices for cheese and butter have kept at a higher average standard than for years. The demand for pork products suitable for the export trade has been uncommonly good during nearly the whole year, the prices for hogs ruling high almost continuously. As an adjunct to the dairy business, the raising of pigs has been one of the best-paying branches of farming, the by-products of the cheese factory, creamery and private dairy being largely used as food for pigs, and large numbers have been raised and prepared for market at a minimum cost and sold at paying prices.

As indicating the undoubted prosperity with which the country has been blessed, and the wonderful expansion in the export trade of the Dominion in agricultural products in the last few years, it is only necessary to compare the returns

from a few leading articles, showing that our sales of butter during the past year have amounted to over \$5,000,000, while in 1896 they were only \$1,000,000; of eggs, \$1,500,000, as against \$800,000; of cheese, \$20,000,000, as against \$13,000,000; bacon, hams and pork, \$12,800,000, as against \$4,450,000; wheat, \$11,500,000, as against \$5,000,000; poultry, \$2,000,000, as against \$18,000; and apples, \$2,500,000, as against \$1,500,000. Our export trade in live stock to the United States in the same time has grown by leaps and bounds, and while the volume of our exports of beef cattle and sheep to Great Britain (owing partially to unsatisfactory ocean freight rates) has not increased in as great a ratio as could be desired, yet prices during the last year to the feeder have been fairly satisfactory. Importations of pure-bred stock have been on a larger scale than for many years past, indicating an active demand, and while a large proportion of these have been sold to go out of the country, still a considerable number remain to be used as breeders to improve the home stock, and those sold have realized a fairly good profit to the importers.

The influx of population to our western provinces especially, has been a marked feature of the year; a very considerable area of agricultural land having been taken up, and largely by thrifty and industrious people, who are likely to make a success of farming.

We may well be thankful for the high stand taken by our agricultural products in the British market, and of our breeding stock in that of the United States. One of the strongest reasons in the present aspect of our affairs and in the outlook for encouragement is the decided intellectual activity aroused among the farming community, and which is steadily increasing. The farmer, his wife, his sons and daughters, are awake to the importance of true education—more in practical lines, a change which must inevitably come more and more into our educational system, from the primary and public schools up to our colleges and universities. The agricultural press, Farmers' Institutes, associations and conventions, all have their part in this uplifting to worthier ambitions, and as ours is largely an agricultural country, its prosperity is essentially dependent on the character of its agriculture. No country is more healthful for man or beast; no people more active or aggressive, more patient or plodding, more hopeful or self-reliant; and as no other class responds more readily to good times by spending their money freely than the farmers, so no other industry can stand the strain of adversity as well as can that of agriculture. The industrious farmers are the salvation of the country—the farmers feed us all—and their interests are worthy the most intelligent consideration and generous encouragement of those to whom especially the great national interests have been entrusted.

## Argentine Shuts Out British Breeding Cattle.

We have it on the authority of the *Live Stock Journal* (Eng.) that the Argentine Government has issued a decree prohibiting the further importation of animals from the United Kingdom of Great Britain and Ireland. Shipments that were on the way when the decree was issued would be allowed to land, provided the animals were free from all traces of foot-and-mouth disease. The step is said to be the result of an outbreak of that disease having occurred among a cargo of fine stock imported to the Argentine from England on one of the steamers. While the cablegram bearing the news to England mentioned only cattle, it is presumed that sheep are also included in the prohibition. This decision on the part of the Argentine Government is felt by British owners of pure-bred herds and flocks to be an unfortunate occurrence, since Argentine has for many years been probably their best customer, especially for high-priced Short-

horns and Lincolns. While it is possible that the movement has something of retaliation in it for shutting out live animals from Argentine, still, at the same time, it is not likely to be rescinded until there is a real need felt for breeding stock from Britain. In view of the situation, then, it would seem an opportune time for our Dominion Shorthorn Breeders' Association to set about, as has been frequently urged, a movement to capture this market which Great Britain is so loath to see slip from her grasp. Canadian breeders have been importing liberally of late years from Great Britain to improve their herds and supply the increasing demands on the continent, so that with none going to the Argentine, they will now have a better choice and more favorable opportunities to buy from the Old Country herds.

## Judging at the Fairs.

Now that the leading fairs of the year are over, and the incidents of the showyard campaign are fresh in mind, a review of the judging of live stock, with a view to deducting lessons that may lead to improvement, may not be out of place. While recognizing the hopelessness of ever arriving at a period when the selection of judges can be made wholly satisfactory to all exhibitors, we are yet of the opinion that in no country, on the whole, is more satisfactory judging secured than at the leading Canadian exhibitions. This applies in the broad, general acceptance of competency, as well as of fairness and freedom from bias, and it is a pleasure to recognize and commend the wholesome sense of honor as a rule manifested by the men who accept the generally thankless duty of placing the awards on the score of merit. That mistakes are sometimes made is admitted, but that is only human, and, as no man is infallible, these may well be forgiven when it is evident that they are errors of judgment only, or arise from the accidental overlooking of a defect for the time being, or the failure to give sufficient consideration to some point or quality of merit at the time. Then, there is the question of difference of opinion to be reckoned with, and the possibility that what appears to one a mistake may in the opinion of another seem justifiable and proper. In this, as in regard to most undertakings, it is easier to criticise or to find fault than to do better work, as many a preacher and many a teacher, as well as many a judge of stock, firmly believes, and for this reason they doubtless think, as we are disposed to admit, that criticism might well be characterized by more charitableness than is usually evident on the part of the public and the press.

The question of the number of judges calculated to do the best work and give the most general satisfaction is one that has not been finally settled, and is a perennial subject of discussion and difference of opinion, though it has clearly come down to a question of one versus two, except in the case of two failing to agree, when, if each man holds out for his own opinion, as he should if he has any decided preference, a referee, who is practically a single judge, breaks the tie, though he does not thereby necessarily declare that his favorite in the field has been given premier place. That this is possible was plainly demonstrated at the Western Fair, where, under a single judge, a heifer which at Toronto was placed first by the two acting judges was relegated to fourth position at London, the competition being the same. The reasonable inference is that, if the two judges at Toronto had disagreed on the disposition of first and second honors, and the judge who acted at London had been called as referee, the heifer placed fourth at the latter place would have been second at the former, and we are not sure that even the owner of the two, who was the same in each case, would have said it was wrong, and yet it is clear she was



## THE FARMER'S ADVOCATE

### AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN  
THE DOMINION.

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 Advocates, 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 CO.,  
WINNIPEG, MANITOBA.

not the choice of the London judge for even that position. This is only one instance of a number of reversals of the placing of animals in the various classes at the three principal Ontario shows this year, which are, to say the least, confusing to those who look to the judges for a standard to go by, and it does seem reasonable to expect that competent judges should come more nearly to agreeing on the relative placing of the animals in competition on the basis of merit. Of course, in some instances one animal may go off in condition in the interim between fairs and show to less advantage on its second or third appearance, but this contingency did not apply in the case we have cited. While we have no hesitation in stating our own preference, as a result of experience and observation, for the single-judge system, we have no quarrel with those who prefer to trust to two rather than to one, with the evident expectation that they will agree, but with provision for a referee if they differ. The difficulty in the latter case seems to be that some men lack the courage to disagree, and that compromises are sometimes made which do not reflect the real judgment of at least one of the twain, who may be the better judge and the freer from bias. As an alternative expedient to those who are timid of trusting all to one man who may not prove to be as strong and steady of nerve as is thought desirable, we commend for consideration the practice which we in this has been adopted at one or more of the State fairs over the line, of giving the single judge, if he comes to a hard place where he cannot fully satisfy himself, the privilege of calling in for consultation a brother from the company of onlookers in whose judgment he has confidence. It may be objected that the judge may be unfortunate in the selection of a second judge, when the reply is ready to hand, the second judge will fail to agree, and thereby do away with the possibility of being influenced by those less than a competent judge.

is the single judge who has been entrusted with the work and who knows he will be held personally accountable for its prosecution, and cannot shift the responsibility, since he must either have concurred with his chosen colleague or acted on his own judgment alone after the conference. One thing which appears to us important to be kept in view, both in the appointment of judges and in the actual work of judging, is to aim at the encouragement of a uniform type in each breed or class, having due regard, of course, to constitutional vigor and usefulness, and to suitability to the demands of our best markets. With these things in view, the work of the judges should show as much uniformity and consistency in rating as the character of the material brought before them will admit.

The suggestion that judges be required to give reasons for their rating of the prize animals, while it may in theory seem reasonable, is scarcely practicable on a large scale, since it would take up endless time, and, besides, many of the best judges would shrink from the ordeal of a public address, for which they have had no training, and the tendency would be to bring in talkative theorists having hobbies and fads to bolster up, and that class can invariably frame a plausible reason for their work, even if it be wide of the standard approved by well-informed and up-to-date, practical men. The almost universal failure of the score-card system to give satisfaction in the public judging ring, when on trial, well confirms our contention in this regard.

### Improvement in Fair Management.

[FROM OUR EASTERN EDITION.]

SIR,—I have read and re-read your most commendable and well-written editorial article in Sept. 15th issue, "After the Exhibition," and while I heartily endorse it in the main, still I quite realize the great strain agricultural fair boards are making in order to run their concerns to a financial success, oftentimes accepting money from shady men managing side shows of questionable character, which I do not in any way justify, but rather excuse, because directors are not exercising that careful selection of these that they should. Should an objectionable side show creep in, it should be promptly excluded from the grounds, and it is the duty of the local police in the corporation where the show is held to enforce the law against any gambling devices or games of chance. It is all very well to hold up the Royal Society of England as a model, but we have not arrived to the same plane as it, and we cannot hope to until the same patronage of wealthy and influential people is sympathetically bestowed, as it is in Britain. Can you explain why it is that the "select 400" of Toronto are not to be met in the hallways of the cattle and sheep buildings or at the side of the horse ring at the Industrial? Some few of these people, of course, are to be seen, but no general turnout of the elite. Is it for the reason that we have no "county" folk to set the example—to show that it is the correct thing to give commendation and encouragement to the successful breeders and feeders of prize animals? Speaking (or, rather, writing, in this case) generally, the manufacturing interests were not represented this year, and it looked to me as if the gulf between urban and rural people were widening. Now, if you abolish a certain class of catchy grand-stand performances, as well as the side shows, where is the money to come from to pay prizes? Gate receipts and entry fees will not do it, by a long way. Candidly, I believe that exhibitors of stock, etc., do not pay entry fees in proportion to the prizes for which they compete, probably not over one-quarter of that a man would require to stake to enter a horse in a race.

It would be a distinct gain to many boards, preserving them from falling into ruts, were steps taken to secure the presence upon them from time to time of new men, whose character and capacity would infuse the exhibitions under their charge with a spirit of progress and improvement. I might say still more in regard to this matter, but this is enough to show where I stand. I shall be glad to see you hammer away and set the brains of directors to work to devise improvements in the management of fairs regarding industrial features and in affording opportunities for viewing live stock.

AGRICULTURE AND ARTS.

### Thanksgiving Day.

The Dominion Government has fixed Thursday, Nov. 27th, as a day of national thanksgiving throughout Canada.

### Favors the General Purpose Stallion.

To the Editor FARMER'S ADVOCATE:

I notice, in your issue of Sept. 5th, that your representative at the Regina Fair gives another friendly hit at our Society for giving prizes to general purpose stallions. It is to be admitted that the use of a general purpose stallion with mares of any weight, say over 1,350 lbs., is a mistake: for in breeding horses for farm work we generally look for an increase in weight, however slight, coupled with a constitution better than either sire or dam possesses singly. But when we come to the breeding of mares of say 1,000 lbs. to \$1,200 lbs. and over, then the question arises, is it advisable to use your 1,800 or 1,900 lbs. registered stallion? The result of such use is often a nondescript colt, with Clydy legs and a body out of all proportion, an ungainly brute; in fact, almost unsalable. This is where the usefulness of the general purpose stallion comes in. Bred to mares of the last-mentioned weights, you get, as it were, a step up the ladder of improvement—a clean-limbed colt with a body to match, fit for the farm work this mating was intended to produce. This colt will be, then, a decided increase on the weight of the dam, and this is the colt that by gradual improvement (in weight, size and shape) is fit to be bred to the registered stallion when it is old enough.

1. It may be said, on behalf of the non-use of the G. P. stallion, that he may be unsound. Are not registered stallions and mares also found which are unsound? 2. It is claimed that the G. P. stallion may "throw back," and perpetuate the poor qualities of his ancestors. Not if intelligent selection has been made in regard to the parentage of such a horse.

Probably these are the views of many of the directors of the Regina Agricultural Association, and as long as there are such general purpose horses as gained first prize at the Spring Stallion and former shows, the Society need not be ashamed of giving prizes for such. Now, sir, it would be deeply interesting, as well as profitable, to see this subject discussed in your progressive paper.

Cottonwood.

DIRECTOR.

The Northern Elevator Co. is adding a drying plant to their cleaning elevators at Emerson.

### The Place of Dairying in the Evolution of Agriculture.

BY J. M'CAIG, ONTARIO.

It is not less true of agriculture than of other arts, that the story of its progress is the record of simple products succeeded by complex products, as well as of division and specialization of labor in the making of products. The comparative newness of our country, together with the comparative perfection in agricultural and other arts to which it has so suddenly attained, affords opportunities even within the life of the individual man to observe what the nature of agricultural development has been, for it is doubtless true that in many cases the same men have cleared the land that are now making application of the best and highest intelligence to the special arts of the breeding of choice stock or the making of butter. It is quite plain that the earliest and most primitive and elemental phase of agriculture is the raising of grain. The problem of the pioneer is bread. His earliest enterprise, in a wooded area at least, is the exchange of labor for land by cutting down the forests, the use of which land is the growing of wheat and other grains. In prairie countries the order is the same, for the kind of agricultural operation requiring the least demand of capital from the pioneer is the stirring of the virgin soil. It likewise yields the readiest and largest return for the labor invested. This operation is comparatively simple.

But "Man shall not live by bread alone." This is good philosophy even in a material sense. Apart from its use in conserving soil fertility, stock-raising following on grain-growing is a natural and orderly phase of development, as it represents the progress from simple to complex in product making, for whereas in the grain-growing phase grain is an ultimate product, in stock-raising it is only an intermediate and instrumental one, for instead of selling grain as grain, it is sold as beef or mutton or pork. The production of beef, then, to the best advantage evidently requires greater knowledge and versatility than the production of grain alone. In the early stages of the cattle business we find the cow doing duty not as a producer of beef alone, but as a producer of milk. This is not to say that in the present some cows produce beef only and others milk only. We cannot by any art get rid of the integrity or completeness of the cow kind. Every cow carries flesh, and is to a greater or less degree a milk-making machine. It is nevertheless true that the early cow has a general purpose character that is to a great extent lost through the operation of the principle of selection to single, special, definite, economic ends in later times. In primitive conditions cattle yield butter, beef, or draw the plow; in modern times they do not draw



the plow at all, and the work of providing beef is deputed to certain classes of the cow kind, that of providing milk to others. There has come about a distinct cleavage in cow society on the basis of characteristic tendencies, depending on early circumstances and accentuated by culture and selection. In other words, the law of specialization so universal in all industry takes another striking illustration from the cattle business.

There is one principle that is the spring of all such change. The character of all production is framed so as to give what mankind judges is the greatest reward for the minimum expenditure of labor. The progress of the world is the finding of the fittest means to satisfy the wants of the world. Biologists who dabble in sociology have hit upon the happy idea of considering the whole world, or the whole of society, as an organism, and of representing such society as showing the same features in its evolution as the single individual animal organism does. The animal organism is simple at first, complex later. It develops organs in accordance with its necessity and circumstances. Such change is the evolution of the fittest instrument for a given end. So in society, the division and specialization of labor are the developing of the fittest instruments to given ends. *In short, the economy of nature is economical.* It must be understood, too, that all change that is the outcome of man's effort is as much nature or as truly natural as the changes that the lowliest of the animal kingdom undergo farthest from his influence or direction, for man is as much nature as is the beast. We feel disposed to believe, likewise, that the differentiation that has taken place in the cattle species is economical. But this is another story, and is not intended for a counterblast against the advocates of the dual purpose cow. What a man keeps, whether beef stock, dairy stock, or a compromise between these, resolves itself into a matter of profit and loss based on his circumstances or his experience with any of these.

The important thing to recognize is that, agriculturally speaking, dairying is a complex business if it is conducted as part of the farmer's operations, as it is for the most part. To the primitive task of growing food, and later of growing animals from the foods produced, is added that of the breeding and rearing and managing of a special kind of cow product not produced for herself, but for an ultimate and more specific product to which she is the instrument, viz., milk. Is it not the case that we cannot even stop here, for milk itself is subject to general or special application as for cheese or for butter? Viewed from the standpoint of the evolution of the milk industry, it must appear that butter is the higher product, because it represents a finer and more discriminating selection of milk components than such as is made in the case of cheese; for in the case of butter the casein elements are rejected. Does it not appear, then, that the butter side of the milk industry is the one towards which effort is going to swing? It will be well for those who see in time on which side their bread is buttered.

Besides the warrant that the universal law of specialization gives to this opinion, we have one still more practical and no less important. This is the law of increasing discrimination in the selection of food products by society. Increased fastidiousness and niceness is a constant law of living. Even though cheese includes as much as is included by butter and cheese together as far as food elements are concerned, yet the tendency is undoubtedly to a discriminatory use of these commodities. It is likewise true that the consumption of the finer product, viz., butter, is becoming more general; it is a staple and ordinary commodity on the table of the ordinary workman where it was once a luxury. This heightening of the method of living is a very decided mark of industrial growth, and the overbalancing of rural population by town population, for though want is a feature of the industrialism of the city, and plenty a mark of rural occupation, yet the living of the country is simple, and that of the city mixed, fastidious and complex.

The recognition of the constant operation of these two grand principles, viz., the natural tendency that all development has to specialization, and the growth of the discriminating habit in the choice of foods, should be to the butter man a solid and substantial encouragement for future expansion and concentration of effort. At the same time, he must recognize that his business is a complex one, depending on the careful breeding or selection of the best milk-making stock, the most economical feeding of these, determined not only by the suitability of foods to desired ends, but by relative suitability according to the market fluctuations; and, finally, he must know how to make and put in the public eye the best grades of the commodity possible, for to the best grade of all commodities comes the largest margin of gain, for they represent the greatest skill.

**Two Points of Superiority.**

Mr. F. D. Coburn, State Secretary of the Kansas Board of Agriculture, writing the FARMER'S ADVOCATE, under date of October 14th, 1900, says:

"I think I have said to you probably on more than one occasion that, besides making one of the most valuable agricultural and live-stock journals issued anywhere, you put into it some of the best-made illustrations used by any similar publication I am acquainted with."

**Premier Ross and the Dressed-Meat Trade.**

In a recent issue of the Toronto (Ont.) *Globe* there appeared what was evidently a very carefully prepared statement by Hon. Geo. W. Ross, Premier of Ontario, regarding the desirability of slaughtering cattle in the Province instead of shipping them alive to Great Britain:—

"Although the dealers have as a rule done well, they have often been put to inconvenience and loss by inadequate shipping facilities, by heavy freight charges, and sometimes by the loss of some of their cattle in transit. Many cattle dealers seem to think that if cattle were slaughtered in Ontario and cold storage provided for conveying the meat to Great Britain the profit would be greater. Even if the meat sold for a trifle less than it did when slaughtered in Great Britain, the saving in freight and insurance charges would fully make up for the difference.

"I cannot say that the Government has fully matured any scheme to aid in establishing the enterprise. An enterprise of this kind can best be managed by private capital. IT IS A GOOD RULE FOR A GOVERNMENT NEVER TO UNDERTAKE WHAT PRIVATE ENTERPRISE CAN BE PROPERLY ENTRUSTED WITH. I would, however, be prepared to consider any proposition from capitalists of good standing which would furnish reasonable assurance of success. I do not think we could grant a bonus for such an enterprise, but it might be worth considering whether we should not guarantee interest, say at 4 per cent. for five years, on capital to be invested up to at least \$250,000. This would place the enterprise beyond the experimental stage. If successful at all, its success would be assured in five years.

"Last year we exported to Great Britain 115,057 cattle, valued at \$8,564,257. If a slaughter house

year for five years, provided the scheme is well thought out and made a success. Canada is eminently a grazing country. There are thousands of acres in Muskoka specially well adapted for sheep and cattle that could be profitably used for stock-raising purposes. We could easily produce three or four times the amount of live stock now raised by our farmers, and I am confident if they were sure of a regular market, such as a large slaughter house would afford, they would raise a much larger number of live stock. Last year we sent to the United States \$6,988 head of cattle, valued at an average of \$16.10 per head. These were used as stockers by American farmers and ranchmen. Instead of sending the young cattle to the United States, our farmers should be encouraged to keep them until they were matured, and consequently more profitable, and ultimately sell them to be slaughtered here; besides, there are other advantages, such as furnishing employment to our own people, freight to our railways, labor for those concerned in transportation, outward freight for vessels which would cheapen the return freight, the utilization of the by-products, such as the hides and tallow, and many other sources of income which naturally arise from a large industry.

"As to the danger of creating a monopoly that would control prices, it does not follow that because we establish a slaughter house the present export trade would be abandoned. If it were found more profitable to ship the live stock, they would be shipped accordingly, and the price of cattle would be regulated, as the price of grain is regulated, by the market value of the commodity in the Old World.

"I cannot see why it should not be successful. We see daily fast freight trains with the names of Armour and Swift passing through Canada bearing the produce of the United States to the British market. Why should we not see freight trains bearing the name of some Canadian company passing over our own lines bearing Canadian produce to the Atlantic seaports? What Americans have accomplished surely Canadians need not shrink from. I see no reason why we should send our cattle to be slaughtered abroad any more than we should send our logs to be sawed abroad, providing we can by our own capital advance them a stage for the actual use of the consumer."

[EDITORIAL NOTE.—The number of cattle (115,000) given above by Mr. Ross as exported last year to Great Britain probably includes those from all Canada (counting in Manitoba and the Northwest) and not from Ontario alone, as we notice that is the number given in the last Dominion Statistical Yearbook issued by the Ottawa Government. Mr. Ross is right in assuming that Canada can produce as good an article in beef as any other country, but, as was pointed out in our last issue, our beef stock has been deteriorating and does not now top the British market. This has been due to the development of the dairy industry and the spread of dairy cattle, the use of immature sires and too few good sires of the beef breeds. What the country needs is not less high-class dairy stock, but more first-rate beef stock, because there is ample room in the vast and fertile areas of Canada for both. We agree with Mr. Ross that it would be a better policy for the Canadian farmer to finish his cattle rather than sell stockers to United States feeders.

Capitalists before launching into the dressed-meat industry will need to feel reasonably sure of a regular supply of good beeves in addition to what are likely to go forward to the Old Country alive, as it will probably be deemed profitable to continue that trade. Large numbers of the very best cattle that come into the Chicago and other American markets still go to Britain on the hoof. The promoters of a Canadian dressed-meat enterprise must also be prepared to compete with the immense and powerful corporations engaged in this business at Chicago and St. Louis. Some years ago a Toronto firm tried it on a small scale, but the results were most disappointing. There is room for a great industry here, but it will take time, capital and enterprise to develop. The flourishing condition of agriculture and other Canadian industries doubtless suggests the idea that the present is an auspicious time to promote the dressed-meat enterprise.]

**The Edmonton Industrial Exhibition Association.**

Notice is given in the *Territorial Gazette* of the incorporation of the Edmonton Industrial Exhibition Association, with a capital stock of \$15,000, divided into \$25 shares. The stock has been well subscribed. The Association propose buying a piece of land from the Hudson's Bay Co., lying in the town of Edmonton and beautifully situated for an exhibition ground, on the north bank of the Saskatchewan River.

W. G. POTTER, Winkler, Man.:—"I am a subscriber to your paper, and do not think that one year's subscription would have been lost even if a subscriber did not get any more than the last three copies of the *ADVOCATE*. They were worth more than \$1.00 to any man who owns a farm or has five or six head of live stock."



THE LATE GARRETT F. FRANKLAND.

Ex-Alderman G. F. Frankland, who was one of the pioneers in the exportation of beef cattle from Canada to Great Britain, died at his late residence, in Toronto, Oct. 2nd, aged 66 years. He was a native of Lancashire, England, and emigrated in 1854 to Toronto, where he started business as a butcher. He was a good judge of a beast, frequently officiating in that capacity at Fat Stock Shows, and with an eloquent tongue and facile pen, in season and out of season he advocated the breeding of high-class cattle and other stock. In 1871 he started in the exportation of live stock. In that year he sent to Montreal 270 head of fat cattle. When Sir Hugh Allan, of the Allan Steamship Co., saw the number of cattle, he declared it would be impossible to put so many aboard one vessel, but the same ship has since carried more than double the number. Mr. Frankland crossed the ocean nearly one hundred times, and for many years was widely known as the Cattle King of Canada.

would command even half the cattle shipped to Great Britain, it would mean nearly 200 head of cattle per day for 300 days in the year. Even the slaughtering of 100 cattle per day would be a pretty substantial industry for the Province. Besides, we exported 458,726 sheep. Provision could be made for slaughtering these also in Ontario, and sending the mutton abroad, as is done by New Zealand and Australia at the present time.

"The people of Great Britain would certainly purchase beef or mutton if sent by cold storage in the manner you suggested. In 1888 Great Britain imported 347,291,952 pounds of fresh beef and 371,168,112 pounds of mutton: of the beef, 257,819,072 pounds were imported from the United States, and 215,447,456 pounds of mutton were imported from New Zealand and Australia and the Argentine Republic. We can surely produce as good an article as either the United States or Australasia, and thus secure our full share of the British market. I think there is no danger of a market if meat of a proper quality is furnished.

"I think it would be to the advantage of the Province to expend as large a sum as \$10,000 per



### The Butter and Cheese Makers' Association.

The following announcement has been issued by the Executive of the recently-organized Butter and Cheese Makers' Union, relative to the meeting called for November 8th.

A meeting of the Butter and Cheese Union will be held in the City Hall, Winnipeg, on November 8th and 9th, for the purpose of rallying all those engaged in active dairying, and sizing up the present situation. It is urgent to look into the requirements of our trade, to inquire into the quality of the goods we are now producing, and to define the nature of the work required for their improvement. We need to investigate if all the forces which we have at our command are used in a way to produce the most good. In fact, we mean to study as much as possible all the conditions required for successful dairying in the Province.

At 9 a. m. a business meeting will take place.  
At 1.30 p. m. a general meeting will be held.  
At 7.30 a special meeting will be held for the benefit of the French people engaged in dairying.  
Friday morning, business meeting for the adoption of reports submitted by different committees, etc.

All those interested in the welfare of the Province are requested to attend.

### Maples Injured by Hot Sun and Wind.

The leaves of the Manitoba maple, or ash-leaved maple, in many parts of Manitoba during the past summer, particularly where these trees were grown as shade trees, were found to be brown and faded at the edges, more or less, often the whole leaf being affected. Mr. George Greig sent leaves from Winnipeg, with the statement that he had noticed the injury during the past summer in many parts of the city. The leaves became rusty and dried up. The lower part of the tree was affected first, and the injury gradually spread over the trees upwards. Mr. Greig was of the opinion that some other cause must be looked for than the dry weather. After examining many leaves from various parts of the Province and in the streets of Winnipeg, I am convinced that it is a direct outcome of the excessively hot weather of the three last days of June, aggravated, however, to a large measure by previous attacks on the foliage by the Negundo plant-louse (*Chaitophorus Negundinis*), which was very prevalent again this year. I could find no trace of any fungous disease, and upon submitting specimens to Prof. L. R. Jones, an eminent mycologist, of Burlington, Vermont, he replied as follows:

I have examined the maple leaves which you sent us, and find no evidence of a parasitic fungus. The injury very much resembles a trouble which I have noticed upon trees about Burlington this year. The trouble here was caused by a number of hot, dry days in the latter part of June, followed by one or two days of a strong, hot, dry wind. The foliage of many plants was dried out in this way in a single day, and has been noticeable ever since, especially on the side of the trees most exposed to the wind.

These were precisely the same days and conditions which this summer did so much harm in Manitoba and the Northwest Territories. Spruce trees were also seriously injured, some of these trees at Winnipeg, Brandon and Regina being so badly scorched as to turn chocolate-brown in two or three days, and many trees of various kinds were actually killed outright, the thermometer rising on the last three days in June to 98, 106 and 107 degrees Fahr., respectively, in the shade. J. F.

### Importation of Trees and Shrubs into Manitoba.

BY DR. J. FLETCHER, OTTAWA.

The Minister of Agriculture, in response to several applications from farmers and fruit-growers in Manitoba and the Northwest Territories, has made arrangements for fumigation of such nursery stock as it is permissible to import from the United States and other countries under the Amendments to the San José Scale Act. These shipments must be addressed so as to come into Manitoba through the port of Winnipeg, where a thoroughly-equipped fumigation station has been established, which is again this year under the superintendence of Mr. A. K. Leith, who was in charge last year, a thoroughly efficient officer, who will receive and treat with hydrocyanic acid gas all consignments. These will be treated promptly on arrival, and will then be forwarded to their destination without delay. The season this autumn during which these importations will be allowed will last from the 15th of October until the 15th of December, and there will be another season of a month or six weeks next spring, probably lasting from the 1st April until the 15th May. The same will give nurserymen and fruit-growers ample opportunity for importing any trees they may require. The fumigation of the trees will be away with any risk of importing the San José scale and other pests, and, as carried out by the expert fumigation station, will be a way in which the interests of the Province will be protected. The Federal Government, under the San José Scale Act, has provided for the following classes of trees and shrubs which may be imported into Canada:—

1. Greenhouse plants, including those which have been growing in the open air, and

2. Herbaceous perennials, including strawberry plants.
3. Herbaceous bedding-plants.
4. All conifers.
5. Bulbs and tubers.

Cottonwoods which have been grown in Minnesota and North Dakota may also be imported without fumigation, provided that they are shipped through the port of Brandon, where they will be examined to see that they really are cottonwoods.

By the recent order-in-council, passed at the instance of the Minister of Agriculture, the same five ports of entry as were named last spring for the fumigation of nursery stock were again mentioned, and a new port was added for the Province of British Columbia, at Vancouver. The ports of entry in Canada where trees may be fumigated and where fully-equipped Government fumigation houses are now erected are as follows:

Winnipeg, Man.—Superintendent, A. K. Leith.  
Vancouver, B. C.—Superintendent, Tom Wilson.  
Niagara Falls, Ont.—Superintendent, Neil Black.  
Windsor, Ont.—Superintendent, Colborne Wright.

St. John's, Que.—Superintendent, P. H. Dupuis.  
St. John, N. B.—Superintendent, Herbert Gould.

Opinions differ very much as to which is the better time for importing such shrubs and trees as are allowed to be brought into Canada under the Amendments to the original San José Scale Act. There is no doubt, I believe, that spring planting in Manitoba is far preferable to autumn planting, although there are a few hardy varieties of trees and shrubs which will succeed if planted with great care in the fall. In the spring, however, root growth begins at once, and the trees run no risk of being heaved or injured by frost, which destroys so many of those planted in the autumn, which have not become thoroughly established before winter sets in. Therefore, if possible, it is better, if the season is long enough to allow of this, to both dig and plant trees in spring, but this cannot always be done. The season at the localities to the south from which trees, etc., are purchased for importation into Manitoba being frequently more advanced, so that there is danger of the buds having burst during the journey if there has been any delay, these trees, consequently, could not be fumigated with safety. On the other hand, there is great advantage to nurserymen and others if they import stock as soon as it is ready for shipment in autumn, so as to have it on hand for distribution the following spring as soon as the weather admits of safe planting. The question of storing it through the winter is merely one of heeling in properly or of storing in a cold cellar. Moreover, if the bulk of an importer's shipments have been received in the autumn, he knows for certain what stock he has on hand, and has time in spring to send supplementary orders before the short spring planting season has passed away.

If private individuals decided to order shrubs and trees in the autumn, they must bear in mind that these should be unpacked immediately on receipt, the roots loosened up, and the plants heeled in with great care. A light mulching of straw or some other loose material will be a great protection not only against the changes of temperature in winter, but against the sun and drying winds of early spring.

### Springfield Agricultural Society Fall Fair.

The annual fall fair of the Springfield Agricultural Society was held at Dugald on October 2nd and 3rd, and notwithstanding the drawbacks of weather and roads, the fair was a success, although doubtless not up to what it would have been had the conditions been more favorable. This Society has well-fenced grounds and a good building fairly well adapted for the display of such exhibits as require to be under cover. There was a fairly good turnout of stock, the horse classes attracting the most attention. In several sections the competition was very keen, and the quality of the stock entered much above the average. R. Reed-Byerley showed the Clydesdale stallion, Gem Prince, but unfortunately there was no competition.

In draft brood mares, J. McLaughlin won with a good, big, useful entry. He also won in yearling colts, and 2nd on draft team; R. Reed-Byerley winning 2nd on brood mare, 1st on 3-year-old and 2nd on foal. W. A. Stuart won 1st on team, and James Holland won 1st on foal, besides several 2nds.

A large class of nine agricultural brood mares lined up before the judges. In the draft classes, the judges were James Ryan and Robert Watt, of Winnipeg. After careful review of the mares in this ring, Byerley's thick, low-set Clydesdale mare was selected for 1st place. She was by St. Regland, out of the celebrated Clydesdale mare, St. Cuthbert's Lady. J. M. Gunn was 2nd with a really good sort of a smooth, cleaner-legged type, and J. R. Morrison 3rd; Gunn winning also 2nd on the foal of his mare, with T. Lyons' foal by the Gem Prince, 1st.

In the mare and foal classes were the largest number of entries, and they were not only the largest number of entries, but the individuals were brought out in better fit. J. R. Morrison showed a foal in this class, without competition. In the yearling and 2-year-old classes were some fairly good entries. VanSlyck, J. R. Morrison, and D. Stuart being among the order named in a very well arranged group of brood mares with foals by side;

VanSlyck also winning on foal, with D. Munroe 2nd, and A. J. Smith 3rd.

In the young classes, the competition was not so keen, nor the animals so well brought out. J. Wright won on 3-year-olds and yearlings, and Mrs. Haines on 2-year-olds. The single drivers were a good, useful class; W. A. Stuart winning 1st, W. D. Avison 2nd, and R. Fisher 3rd. Saddle horses stood in the same order, with J. Wright in 2nd place instead of W. Avison.

Six lady riders entered the ring and put their horses through the various gaits required in a most commendable style, the prizes being awarded—1st to Miss Speer, 2nd to Miss Linklater, and 3rd to Miss Smith.

In the sweepstakes single driver, W. A. Stuart was 1st, with R. Fisher 2nd. A. E. Williamson, V. S., judged the light horse classes.

Probably owing to the backward state of the harvest, there were not as many exhibits brought out in live stock as one would expect; however, most of the entries made in the different classes were well worthy of the premiums.

In Shorthorns, Ed. Hudson had the best of it, winning 1st and sweepstakes on the 2-year-old bull, Plymouth Rover, a good, stylish, well-turned bull, only wanting a little more flesh to fit him for most any showing. Mr. Hudson also won 1st and 2nd on cows. Ed. Anderson showed a really good 2-year-old, winning 1st. C. Avison showed an aged bull in rather thin condition; W. Brett, a year-old; and Mrs. Haines' 2-year-old, Lord Roberts, won 2nd prize. Ed. Hudson also showed a number of capital grades, including six cows, winning 1st and 2nd on cows and 2-year-olds, as well as on herd of five females, and also a 1st on best beef animal. W. H. Perry showed a nice, smooth, good-quality 3-year-old cow, winning 3rd place with her. H. J. Bray won 1st on a very promising heifer calf; B. Studhams 2nd. W. S. Corbett showed a few Holsteins, and William Murray a number of Jerseys, including his fine large bull, Royal, of Mrs. Jones' breeding. To him was awarded the 1st prize and sweepstakes. There was no competition in this class.

Sheep were shown by A. Baxter, T. H. Smith, and Wm. Murray, the former winning most of the prizes on Shropshires, of fairly good quality, shown in field condition.

The swine exhibit was not large, Mrs. Haines being the only exhibitor of Berkshires. Kenneth McLeod showed Suffolks, and also a few Chester Whites. William Joly showed a Tamworth boar, Premier, bred by Baldwin, of Manitou, and also some very good cross-bred hogs in the bacon class. The cattle, sheep and swine were judged by H. O. Ayeart, of Middlechurch, and James Yule, of Crystal City.

The poultry class was small; a few turkeys and geese were forward, the principal exhibitors being T. H. Smith, J. Wright, A. Baxter, O. B. Harvey, R. Duffy, W. Murray, and K. McLeod.

Inside the hall a very excellent exhibit of field roots and vegetables was made, prizes being divided between a number of exhibitors. T. H. Smith, M. P. P., however, seemed to carry off the majority of the prizes in the single sections, besides the prize for collection of field roots, collection of vegetables, and variety of potatoes. H. Matthew and T. Lewis were also winners in these classes. As might be expected in a district so celebrated for supplying Winnipeg citizens with high-class dairy butter, the exhibit in this class was one of the most interesting in the hall. A lengthy prize list brought out a great number of entries, and Dairy Commissioner Murray, who acted as judge, pronounced the general quality of the butter of very high average, many of the scores running over 93 and 94. Throughout this class, the most successful winner was R. Duffy, who captured not less than eight 1st prizes and three 2nds. Mrs. T. H. Smith made four 1sts and three 2nds, while A. Baxter got three 1sts on butter and two 1sts on homemade cheese. W. Brett was also fortunate enough to capture a 1st prize. The domestic manufactures and ladies' work occupied a considerable space, and the various articles were much admired.

### The Udder as an Indicator.

While every cattle fancier recognizes the relative value of all the various points that go to make up an ideal whole, nearly every one has a particular point upon which he lays great stress in judging a dairy cow. I must confess that I am very partial to one special feature of every dairy cow. That point is not the color of the inside of the ear, nor is it the escutcheon, nor the length of the tail, nor the size of the umbilical, but it is the udder and its veins. The mammary gland is, in my estimation, the most reliable indication of a dairy cow. I think it may be considered more important than all others combined, in point of estimating actual production.

We may, and frequently do, see cows with an ideal head, neck, body, etc., but if her udder is not well developed the cow is a failure in direct proportion as this important feature is lacking. But do we ever see poor producers with well developed udders? It seems to me perfectly natural that as milk is secreted in the mammary gland, the greater development of that organ, the greater will be its product. I think that we, as breeders of dairy cattle, should pay more attention to the development of udders in our ideals of breeding. In order to do that, however, it would be well to have some expression as to what kind of an udder is ideal in shape, size and composition.—*Professor Howard.*



**Our Scottish Letter.**

The prevailing topic of conversation amongst our stock-owners here is not a pleasant one. More than six months ago an outbreak of

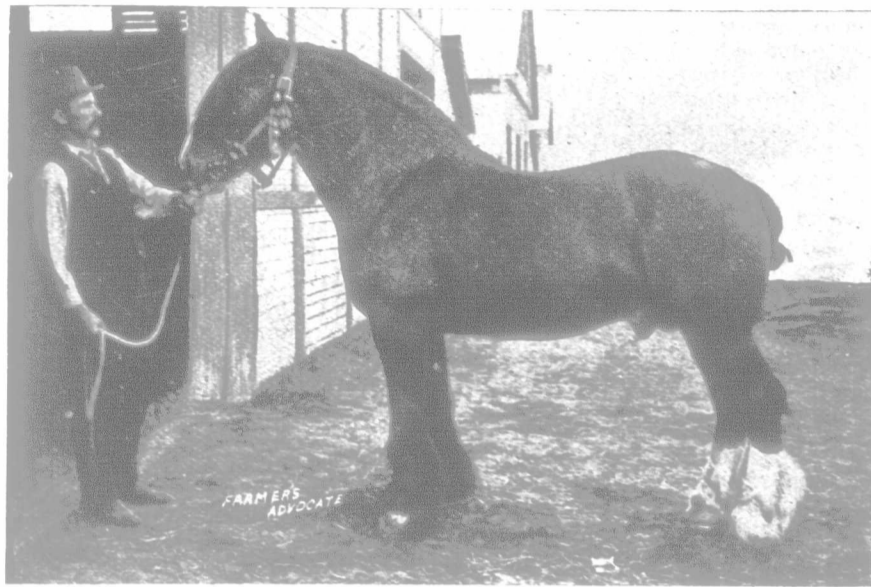
**FOOT-AND-MOUTH DISEASE**

was reported from Norfolk, and the Board of Agriculture foolishly, as some think, allowed the cattle first attacked to live as they were through the worst of the disease before it was detected. Some time after, another outbreak was reported in the same county, and on this occasion the

other cattle. Where calves are fed off fat at three or four months old, as is the case in some parts of England, the black calves got by an Aberdeen-Angus bull out of ordinary cross cows have sold as high as £5 a head. At one of the sales, Mr. Schroeter's, down in Sussex, a local fancier paid £19 for a steer calf which he means to feed for the Christmas shows, and £10 was paid for a heifer calf being nursed by her dam. The absence of horns and the high prices given by butchers for these black calves per cwt. make it certain that the breeding area for them will extend.

**THE LONGHORNS.**

A strenuous effort is being made to resuscitate the famous Longhorn breed of cattle, and the second volume of a new series of its herdbook has been published. About twenty years ago, or it may be more, the first attempt to found a herdbook for them was abandoned. The renewed attempt is highly commendable, but it may be doubted whether any good purpose is served by trying to make this breed popular. Mr. Westman, the Secretary, who is responsible for the recent publication, makes out a fairly good case for them, and certainly shows that as cheesemaking cows they are superior to the Shorthorn, but their hideous horns and hard, unfattenable carcasses are great drawbacks in these days when the demand is all for early maturity. Doubtless, as the breed on which the immortal Bakewell first experimented, one would not like to see the Longhorn extinguished, and they may linger long, but it does not appear to be sound business to breed cattle of their type at this time "SCOTLAND YET."



**BELSHAZZAR 13855.**

Imported Shire stallion. First prize and sweepstakes at Toronto Industrial, 1900, and at London Western, 1899 and 1900.

OWNED BY MESSRS. RAWDEN & M'DONELL, EXETER, ONT.

slaughter powers possessed by the Board were enforced with vigor. After a period had elapsed, during which the local authorities grumbled sorely about the restrictions, these were removed, and the cattle and sheep trade resumed its normal conditions. No more was heard of the disease until some weeks ago, when an outbreak was reported in the district of Holderness, near Hull, in Yorkshire. Once more the strictest measures were taken, and there is no further account of the disease in that quarter. But scarcely had the country time to recover from this scare, when an outbreak was announced in the Vale of Cluyd, in North Wales, right across England from Holderness, and hardly was it in hand when a further outbreak was reported in Wiltshire, and now, one week from to-day, the officials of the Board of Agriculture declared the disease from which lambs in Perthshire were affected to be the dreaded murrain, and to-day (Friday, 28th Sept.), for the first time for seventeen years, no market is being held in Perth, and the whole question of what is to be done is being considered by the leading lights of the Board of Agriculture in London. In connection with the Perth report, the diagnosis of the official experts is being challenged, and there is little doubt that there is some ground for suspending judgment. In the meantime, after the second outbreak in Norfolk, cattle affected with the disease were found to be coming in from Argentine ports, and the slaughtering ports of this country were shut against them. The Argentine authorities have now retaliated and closed the ports of that country to British cattle. This will have an injurious effect on the sales of pedigreed stock, which are due in ten days, and meanwhile the dislocation of trade in Perth and the north is serious. It will be most unfortunate if the diagnosis of the officials is pronounced incorrect, but it would be more unfortunate to have allowed foot-and-mouth disease to pass unchecked. It is better in a matter of this kind to be over-stringent than too lenient.

**ABERDEEN-ANGUS SALES.**

The series of sales of Aberdeen-Angus cattle conducted by Messrs. Macdonald, Fraser & Co. (Ltd.) has just been concluded. Three sales were held in the north of Scotland, and an equal number in the south of England. It is noteworthy that the best prices, both north and south, have been given by a new patron of the breed, and that his headquarters are in Ayrshire, in the heart of the great dairying districts of Scotland. Mr. Kennedy, of Doonholm, Ayr, is the gentleman in question, and he has made an excellent start, buying good cattle of good breeding and not overfed. He has been guided in his purchases by Mr. Ralston, Glamis, the agent of Lord Strathmore, whose herd is one of the best in Scotland. Generally trade at these sales has been satisfactory, good averages being realized, and some idea of the extent to which the breed is now cultivated in districts widely apart may be inferred from the fact that these sales have this week been held in Buckingham, Sussex, and Stafford, and, with the exception of one or two animals, all of those sold were purchased by buyers in England. Many landed gentlemen find these cattle to thrive well in the south and along the downs, and although the calves at first seem small, the prices given for them by the butchers show that per cwt. or stone they sell dearer than any

business to breed cattle of their type at this time of day.

**Mating the Ewes.**

Profit in sheep-breeding largely hinges on the proper mating of the ewes at this season of the year. Firstly, there must be no excessive increasing of the flocks, no overdoing of the fields with in-lamb ewes as winter comes on, and crowding later on with sheep and lambs. Secondly, all ewes mated ought to be in sound and thriving condition. Thirdly, the whole flock ought to be young, or, rather, not old. As regards over-stocking the ground, it is very tempting to increase our flocks, as they pay better than most other stock, and so long as there be room for increase without over-crowding, the larger flocks are decidedly advised. Yonder 20-acre unprofitable arable field may, perhaps, be put down to pasture, and will allow of a score more ewes being added to the regular breeding flock, but unless wider runs are given in harmony with the increase of the flock, no profit will be made; that is, of course, if the fields have carried an average of stock before. It is not practicable, as a rule, through decreasing other stock to increase sheep much, because ovines must not form the sole stock of the fields, nor that by a good deal. Neither may sheep-breeding to a profit be conducted if the flocks to which the rams are introduced are not sound in body or limb.

That ever-to-be-dreaded disease, foot-rot, has robbed many a flockmaster very sorely. And farmers have themselves to blame many a time. I have seen actually halty rams turned with sound flocks of ewes. The disease is contagious, therefore only needs wet weather to assist it to run through the whole flock, for that common foot-rot is very contagious is an accepted fact. No flock, therefore, is fit to mate that is not free from the disease, and no ram fit to use that is not sound on his feet. Else it is seen when the ewes get heavy in lamb the disease rages to a disastrous degree, for you may not dress the feet much at that stage of the ewe's pregnancy, lest you cause premature birth. And a dozen more ailments I could name had I space, that sheep are subject to, and which should be held if ruling sufficient to demand the culling of the sufferers from the breeding flocks.

Mating too old or too young animals is a common practice, but it is not attended with profit. The ewe is within the proper age to breed from when a yearling or one-shear year, until the month is full, as shepherds term it—that is, until there be eight broad incisor teeth put up. At the latter age she should be culled, because her next movement will

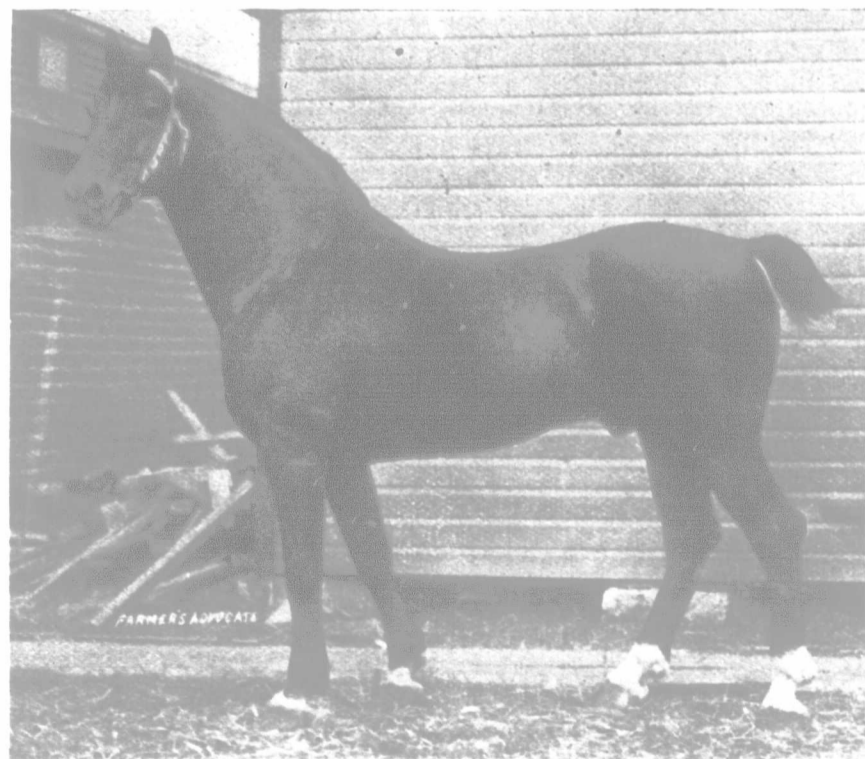
be downhill. The yearling has at mating time two full-sized incisors and six lamb's teeth in the front of the mouth. To breed the best lambs it is essential that ewes be not too old, not too young, yet how often do we see such mated as have teeth wide apart, or in some instances with scarcely any teeth at all.

Then there is the over-impatient flockmaster, who desires to get rich in a hurry. He cannot even wait for the lambs to pass the stage of lambhood before he must needs begin to breed from them. So they are mated when little over six months old, and bring lambs in their yearling season. But there are great losses, taking one year with another. There are bad yeaning times, dead lambs, abortion, and puny young lambs brought forth, which, although alive, hardly survive long, because of lack of milk and a bad nurse generally. And even at best the lambs are not fit to bring into the breeding flock at any time, as they do not make average specimens of their race, not one out of twenty. The greatest drawback, however, I have found in this early breeding is the loss of, now and then, the young mother, a drawback which would not befall were it not that mating had been conducted at too immature an age.

While the ram is with the ewes they should be kept in quite a thriving state, but I am not in favor of providing over-stimulating diet. In fact, I am against flushing in its true sense. So long as grass, "seeds," clovers, rape, mustard, and such-like go, the ewe's runs cannot be too fresh and fruitful, but it is better to draw the line at trough food, such as corn and cake. The latter food is over-stimulating, over-fattening, and is sure to be missed afterwards, because you may not continue forcing your flocks at high pressure all through until lambing time. And if you flush and do not keep up the stimulating rations to a considerable extent, your ewes become very poor against yeaning time, so that many a mishap and many a complaint befalls, abortion among others, that might have been prevented if more rational feeding had been practised all through. Wherefore it appears that flushing ewes at this season while with the ram does not lead to profit. A good deal more has to be said on profitable sheep-breeding, but must stand over for the present.—*Novus Homo, in Stock-breeder and Farmer.*

**Fall Colts Preferred.**

Fall colts can be successfully raised if one is prepared to care for them in the right manner. True enough, there are few fall colts raised in this part of the country. I will speak from what experience I have had, and that isn't much. I have raised two fall colts, and I like them better than the spring, for the reason that your mares don't have to work so hard as they do in the spring, and the flies don't have as long to torture the little colts while they are young. Then the next spring when grass comes the colts are a good age to wean and turn out. I think it a good plan to have two or more, so they will be company for each other. I let mine run with the mares all winter, stabling and feeding grain night and morning. I didn't have to work my mares while they were suckling, but better work



**PRINCE DANEGELT.**

Hackney stallion. First prize and sweepstakes, Winnipeg Industrial Exhibition, 1900. OWNED BY J. T. MOONEY, WAWANESA, MAN.

them in the fall and in the spring and raise colts, too, at the same time. I don't think a brood mare should be worked any during the time the colt is following her, as I think both the colt and mother will do better if not worked, unless it be some light work. I think the greatest reason that there are not more fall colts raised than there are, is because he majority have not tried it, and don't know the advantages of it.

J. L. GRIFFIN.







**Bacon in the British Market.**

The change in the mind of the British public in regard to the style of bacon is very marked. The present demand is for meat in which the lean and fat are well mixed; the big, fat hog, which was so popular some years ago, has had to give way to a pig of quite a different build. The modern bacon pig is an animal of great length; it is much deeper in its sides than its predecessor, and correspondingly narrower across the back. It is also light on the shoulder and has less weight of jowl. The

two eye sets were used, we noticed many vacancies in the rows, particularly among early varieties, but this year larger sets were used, and scarcely a vacancy has occurred in the rows.

**Field Roots.**—Mangels will give somewhat less than an average crop, while Swede turnips and carrots are almost an utter failure, owing to the drought in spring and early summer. Garden vegetables, from the same cause, will prove a very light crop.

**Brome Grass.**—The first cutting of this grass only yielded about one and one-half tons per acre, but there is a fair crop of aftermath, which promises another ton per acre should the weather ever clear up sufficiently to dry it. The new sixty-five acre pasture field contains two small plots of this grass, and the cattle appear very partial to it, neglecting the native pasture to feed on it. This field encloses a lot of broken land, useless for any other purpose; and having two living springs of water, plenty of shelter, and a variety of grasses, it makes a very satisfactory pasture.

Owing to the drought in the early part of the season, the Brome grass failed to send up seed stalks, and there promises to be a shortage of home-grown seed. A large supply of last year's seed was kept over on this Farm, and a number of one-pound packages will be sent out for testing purposes.

**Tile Drains.**—This wet fall has given our tile drains a severe test. There is about 5,000 feet of various size of tile running through the Farm from west to east. These were put down ten years ago, and are still working satisfactorily. Had it not been for this drain, about forty acres of this year's crop would have been floating about in water. The tile is only four feet below the surface in some

Western or any other fair for five years, for the two reasons that the returns did not warrant the expense, and at that time of the year the agents could be more profitably employed in other ways. Mr. Maxwell, the secretary, concluded: "The meeting wishes me, as secretary, to thank you for the treatment received in the past. Should they again desire to exhibit, you will be given ample notice and time to see that suitable accommodation may be prepared. They wish your exhibition every success."

"The charge has also been made that passes are issued indiscriminately. This is not so. Family passes are issued only to the directors and the chief of police. Regular admission tickets are sent to aldermen, members of the Fair Association, railway managers, newspaper men and certain civic and government officials, who of necessity had to attend the fair, and limited tickets were given to the school trustees, members of the Public Library Board, city officials, hospital trustees, and members of Parliament for the western constituencies. Officers of the Association were asked to give passes to persons who had no earthly right to them. They were always refused."

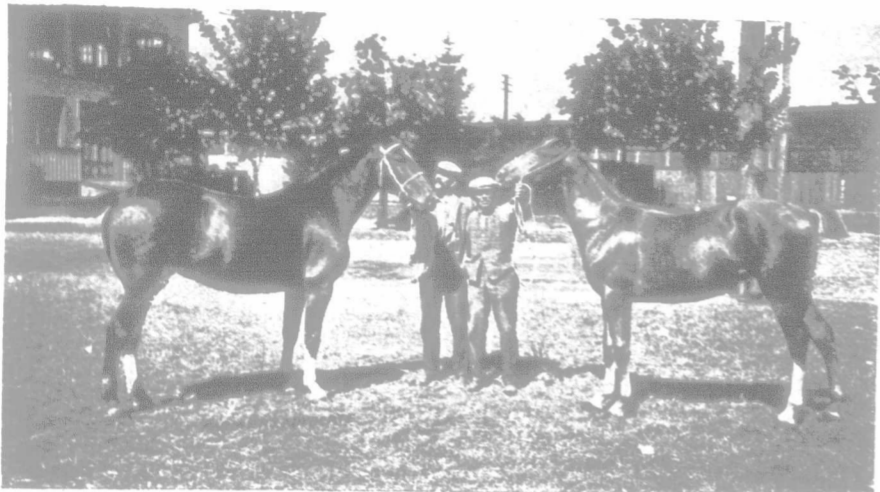
"The matter of side shows was a very serious one, but the onus of deciding whether they were proper must be borne by the police. It was their duty to learn their nature, and if wrong, to eject them. The Association was particular to state in all communications with side-show people and game operators that they must keep themselves within the law. The side shows—that is, good ones—were a necessity, but in future greater vigilance would be exercised."

"The exhibition is conducted as a means of benefiting the city, but it does not get the support from the citizens that it deserves. The directors do not draw one cent out of it. Theirs is all a labor of love. The business men of the city appear quite willing to have strangers come to the fair and spend their money, but they are not ready to help the fair along as they should with patronage and by exhibiting. This is the only fair that does not receive aid from the municipality. Winnipeg fair gets \$5,000 annually from the city, and \$3,500 from the Provincial Government. The Western gets between \$300 and \$400 from the Ontario Government. It is self-supporting."

"Next year a determined effort will be made to bring the citizens out on the early days, Monday and Tuesday, and to bring people here from the United States. In Winnipeg, 6,000 or 7,000 from the States go to the fair there."

"London compares most favorably in the matter of expenditure and economical management."

"The financial statement for 1900 is evidence of the success that attended the Western this year. The Fair Association has a balance of \$1,374.17, after meeting all expenses. The receipts were: Entrance fees, \$1,746.45; privileges and rents of booths, \$4,504.86; gates and grand-stand receipts, \$18,029.55; yearly permits for the use of track and stalls, \$190; special prizes and subscriptions, \$1,125; interest from bank, \$60; total, \$25,965.31. The expenses were: Prizes, medals, judges' fees, \$11,132.35; police, \$300.68; grounds and buildings and general expenses, \$3,741.45; printing, advertising, etc., \$3,625.82; office expenses, \$1,886.88; expenses of various departments, including attractions, fireworks, music, \$4,504.01."



HACKNEY MARE, MONA'S QUEEN, AND HER YEARLING DAUGHTER, TITANIA.

Mona's Queen (by Lord Derwent 2nd) won first for single Hackney mare or gelding, also English silver medal, and Titania (by Squire Rickell) won third at the Toronto Industrial, 1900.

OWNED BY ROBERT BEITH, BOWMANVILLE, ONT.

type of pig which the bacon-curers now find most profitable in their business is one of great length and depth, light in the shoulder and jowl, not too wide in the back, and carrying its width evenly from the shoulder to tail. This insures a deep, long ham, instead of the short, thick one which used to be so general. The back and belly should run in as straight lines as possible.

**The "Doddie" in the Ascendant.**

As showing how great has been the progress made by Aberdeen-Angus cattle during the past quarter of a century, a correspondent to the *Farmer and Stock-keeper* calls attention to the fact that twenty years ago there were only five breeders of the "comely Doddies" in England, while five years ago there were fifty-seven breeders, and to-day there are over one hundred! This increase is principally attributed to the high price now obtainable for Polled beef in the London market, coupled with the remarkable success achieved by the A.A.'s at the leading fat stock shows. In this connection we are reminded that these northern blackskins have won the championship of the London show twice in the last three years. In Ireland the progress made by the breed has been almost as marked as on the other side of the Channel. Ten years ago there were not a score of breeders of Aberdeen-Angus cattle in Ireland, to-day there are over fifty! As regards the feeding and early maturity of these Black Polls, the writer in our contemporary has been recently carrying out some experiments, and he finds that well-bred Polled bullocks under twenty months old will, with liberal feeding, make from two and a half to three pounds of increase in live weight, and that animals over twenty months old will make an average increase of 2 lbs. per day.

**Brandon Experimental Farm Notes.**

Our experience, like that of the average farmer of the Province, has been a very discouraging one this year. In early August, the yield of grain promised to be at least an average one, but on the 17th of that month a fierce storm struck the Farm, accompanied by hail, and nearly an inch of rain fell in a few hours. This beat the grain out badly, and some of the fields were levelled as if rolled. Since the above date, rain has fallen every few days. Some of the grain is in bad condition.

The yield of fodder corn on the Farm is a large one this year. After filling two silos, there is still about three acres stooked for dry fodder. One acre of this is Yellow Dakota Flint, which is expected to give a good yield of matured seed, and the fodder will be used to supplement the very poor straw we are sure to have this year.

A quantity of native squaw corn was grown on the uplands this year. The plants were so short that the fodder was hardly worth cutting, but the ears were fully matured, and we hope to have some seed of this very early variety for distribution. It never fails to mature here, and although not equal to sweet corn for table use, it is so much earlier that every farmer should grow a patch. The ears are very small, but quite interesting, with their various-colored kernels.

**Potatoes.**—This useful tuber has given an average yield, and all are now packed in bushel boxes in the cellar. Considerable complaint is heard in the neighborhood regarding rot; but the crop on this Farm is perfectly free from it and the quality is excellent. In former years, when only one and



MATURED MANITOBA NATIVE SQUAW CORN.

places, but fortunately there are no springs tapped by it; otherwise, I fear it would freeze solid during the winter months, but, as it is, the tile is quite dry by New Year's. S. A. BEDFORD.

Brandon Exp. Farm.

**Western Fair Management.**

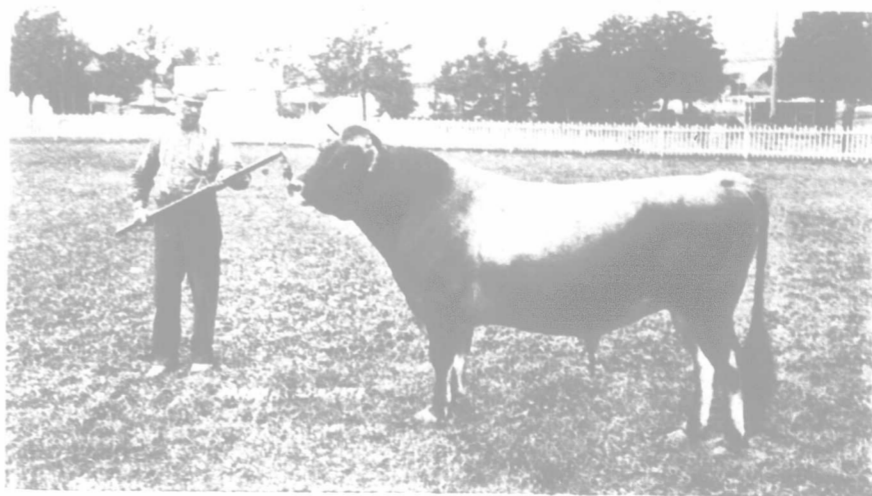
Col. Gartshore, President of the Western Fair, makes the following statement regarding the recent exhibition:—

"The impression has got abroad among the farming community that the implement men have not been very well treated by the fair management, and that for that reason alone they were not exhibiting. As far as the implement men are concerned, the fact is that we have never charged them anything but an entrance fee of \$1, for which we furnished them with light, power and space. They also received passes for admission to the grounds according to the number of men they have employed at the fair, and when sufficient passes were not granted, they could have been secured on application at the general offices. The Board may have appeared strict in the matter of passes, but the privilege is one that is very much abused. As for the implement men, I would say that three years ago they complained that they did not have enough room. They said if the Board of Directors would enlarge the machinery hall they would make an exhibit which would startle every person. The Board spent \$2,500 to please them, and they were pleased."

"A letter had been received by the Association that was signed by most of the manufacturers of Canada, that they had agreed not to exhibit at the

**Good Pen and a Good Paper.**

Your fountain pen to hand in good order, I am greatly pleased with it; it is perfection in every respect. I shall try to get some more subscribers



PRINCE FRANK'S SON.

First-prize Jersey bull, 3 years old, Toronto Exhibition. First and champion, Western Fair, London, 1900.

OWNED BY W. G. LAIDLAW, WILTON GROVE, ONT.

for the *ADVOCATE*. We are beginning to appreciate its value here as an educator for the farmer, where he can get all the knowledge required to make his farm profitable. A. D. FARQUHAR.

Berth Co, Ont., Oct. 6th, 1900.



### Dr. Wm. Saunders at the British Association.

The annual meeting of the British Association for the Advancement of Science was held a short time ago, at Bradford, England, and a copy of the *Observer* newspaper of that place to hand contains an excellent report of the proceedings of several sessions. At one of these, Dr. Wm. Saunders, Director of the Dominion Experimental Farm, read a comprehensive paper, entitled "Results of Experimental Work in Agriculture in Canada under Government Organization." After describing the inception of the Farms, he dwelt at length upon the investigations carried on in connection with the use of fertilizers, plowing under green clover, fall plowing and early seeding, selection of varieties of seed, growing fodder crops, fruit culture, tree-planting, and the destruction of noxious insects and combating fungous diseases.

In the lengthy discussion which followed, Dr. Saunders was very highly complimented upon his excellent paper. It was pointed out that in England the policy is to encourage more largely local effort, as there is practically no experimental or educational work of an agricultural character in that country entirely maintained from Government sources. Among other observations made were the following by Prof. Somerville, Professor of Agriculture at Cambridge:—

"At present in England there were eight or nine institutions that received Government support in the shape of annual grants. These grants, supplemented by local support, were sufficient to provide a staff of instructors and also facilities for the conduct of experiments. The educational work was carried on on orthodox lines, and the experimental work was devised and carried out on the initiative of the workers at the various centers. The result achieved during the last few years had been very extensive and had led to a belief on the part of the farmers themselves that the work was of distinct value to agriculture. But the value of the work was not so much in the way of placing models and examples, as it were, before the farmers as in making the farmers think in a way they had not thought in the past. Agriculturists, if they were not stirred up in some way, were apt to go along on lines that they had followed in the past. In many cases these lines were satisfactory, but also in many cases it was likely that improvements would be effective. When the farmers saw that these improvements led to better results, they began to devote more intelligence to their business. He considered that the work done in Canada was extremely valuable to farmers in this country, and he believed great advantage would be derived from the improvements in the variety of cereals and other plants. In the United States, also, especially in Wisconsin, valuable work had been done in the direction of improving the yield of cereals, not by extending the area planted, or by better manuring and tillage, but entirely by introducing new varieties of seeds. The improved yield from new varieties was often perfectly astonishing, and that without any increased expenditure on labor or manure. With regard to the advantages Dr. Saunders found could be derived from growing clover along with cereals, that was a point that had strongly been insisted upon by Humphrey Davy in the first decade of the present century, but he (the speaker) did not think the practice would be of value in this country, for the simple reason that the best farmers here hoed their wheat, and of course it was impossible to hoe the wheat if the clover plants were sown along with it. He did not propose to make any attempt to criticize Dr. Saunders' paper, which deserved the most careful consideration, and would no doubt prove of very great value to English agriculturists."

In an editorial review of the foregoing session of the Association the Bradford *Observer* says:

"Economics yesterday spelt Agriculture. There was a paper in the afternoon which might have attracted the merchants and manufacturers of Bradford if they had thought that the scientists could teach them anything about 'Trade Fluctuations' which was worth a guinea to learn, but all through the morning the farmer held the field—or, rather, the floor—where the attendance was very scanty. One of the marvels at the Chicago World's Fair was a cheese (22,000 lbs.) about as big as the great tun of Heidelberg. It came from Canada, which country exported in 1898 more than three and a half million pounds' worth of that esteemed comestible, besides much butter and innumerable quantities of pork and other stock. This for a country next door to Chicago itself was no small triumph. How was it brought to pass? Largely, argued Dr. W. Saunders to his fit, though small, audience in the Mechanics' School yesterday, by the institution under the auspices of the Dominion Government of experimental farms. In 1881 Canadian agriculture was in a bad way, and these farms were started, and in twelve years they had given the Canadian farmer so many wrinkles that he was able to achieve the record I have mentioned. It is surely needs to be added, that the agricultural economists present were entirely impressed with Dr. Saunders' argument, and considered that the experimental farms were the best of Mr. W. Saunders' plan, and that the State patronage and control of agricultural research is a necessary condition of progress in agriculture."

with pedagogy, and the personally-equipped farm being subject to the vicissitudes of its owner, as the case of Rothamsted has recently reminded us.

"Subsequently Professor Hall rather knocked the bottom out of his plea for State aid by recounting some experiments admirably conducted under the auspices of the South-eastern Agricultural Society with the object of ascertaining whether the British farmer could successfully set up as a sugar-planter. The eventual conclusion was negative, on the ground that although beet could be grown in the southern parts of England with as good a yield as that of the Continent, the margin of profit would be eaten up by the cost of carting it to the mill. This is a conclusion corroborated by the experience of not a few Prussian growers. But in Professor Hall's case it was reached by a thoroughness of testing and a carefulness of calculation which suggest that the existing experimental stations in this country are doing very good work."

While in many ways our Experimental Farms have been an admirable object lesson, and an incentive and aid to progress in several of the directions above specified, Canadians who know the actual history, for example, of the development of our great cheese and bacon industries, will be somewhat amused at the *Observer's* inference, that these were brought about by establishing experimental farms.

### Late Fall Pigs.

As a rule, it is preferable to have fall litters farrowed in September or early in October, which gives them time to lay a good foundation for a healthy and robust constitution, with plenty of muscle and strength of bone, by allowing them ample exercise in the pastures during the first two or three months of their life. They will then be in a condition to take on flesh rapidly when confined to the pen in winter, and will be less liable to become crippled by rheumatism than will pigs farrowed later in the fall and which cannot have the necessary exercise to develop strength. When litters come late in the fall or in the early winter months, they must have the best care and treatment possible under the circumstances. This includes a warm and dry pen for the sow when the time of farrowing approaches, and some extra attention to the little ones for the first few hours or, it may be, days after their birth, to give them a good start in the world. The sow should be fed sparingly of sloppy food for the first few days, and her feed increased gradually in quantity and strength as the pigs grow older and tax her strength more heavily by tugging at her for nourishment. Care should be taken that the pigs get some exercise daily after they are a week old, by letting them out with the sow for a run of a half hour or an hour on fine days, or if the weather will not admit of this, they should be encouraged or compelled to exercise in the pen. The pigs should, when three weeks old, have a section of the pen set apart for themselves by a low partition, with the bottom board six or eight inches from the floor, so that they can go in and drink warm milk from a low, flat trough, which the dam cannot reach, and thus taught to eat before they are weaned. The weaning should take place at about eight weeks old, and the milk supplemented by a little shorts or ground barley or oats with the hulls sifted out. Gradually kitchen swill may take the place of the milk if there is not enough of the latter for the youngsters. A mixture of hardwood ashes and salt should be constantly kept in a low trough or box in the pen, from which the pigs may partake at will. Where corn cobs are on hand, wholesome charcoal can be made by burning them and, when well charred, throwing water on them, and pigs will eat these with a relish. It is better to feed so as to encourage growth and not fatness in the first three or four months, and then to feed more liberally in the finishing period to prepare the pigs for market. It is wise also to avoid feeding much cold sloppy food in cold weather, as it is liable to cause indigestion and disease. Some very successful feeders feed meal dry in winter and give the drink in a separate trough, and if no more is given at a time than is taken up clean, the results are more likely to prove satisfactory, and if the pigs are given a run out on the ground on fine days for a short time where they can bite the earth and get a little grit, it will be found helpful in keeping them healthy. The treatment of breeding sows in winter to carry them through cheaply and in the best condition for successful breeding of spring litters is another subject, and one which may be summed up in a few words by the admonition to give ample room for exercise in a yard or field and feed mainly on whole or pulped mangels, with a slight mixture of shorts or meal, to which may profitably be added clover leaves or clover hay that has been passed through a cutting box. A few handfuls of corn or peas thrown around on the ground once a day will keep the sow in exercise and encourage mastication of her food, which will promote proper digestion and prove of advantage in its effect upon the coming litter.

### Appreciated in India.

A. Y. GILES, Commissariat, Transport Department, Vardiyur, Kashmir, India:—"I thank you very much for your courtesy in sending me the *Farmer's Advocate*, and your excellent publication. The illustrations contained in some of the articles is very good, and very English contemporaries."

### Treatment of Clover or Other Sod Land in the Fall for Grain or Corn Crop, Etc.

As the work of taking off the crops of grain, etc., has been finished, and as in the majority of cases the harvest has been a bountiful one, the next thing to do is to prepare for a continuation of our successes next year also. To accomplish this and obtain the best results, most of us will have to break up some of our clover or other sod fields, and the question naturally comes to our mind, what is the best treatment of a sod field for a grain crop next season? My way of treating it would be to thoroughly manure it first, spreading the manure as evenly as possible, in the latter part of September or early in October, and then plow it, laying each sod as squarely on its back as may be. Then, as soon as I am through with my plowing, I would thoroughly harrow it. This treatment excludes the air, and in a great measure the water also, and while the sod rots nicely, it does not become sour. In the spring I would re-plow it, using a gang plow, set very shallow for grain, but for corn or other hoed crops I would simply thoroughly cultivate it.

If stubble land is tolerably clear of weeds, and we intend to grow grain on it next season, I would adopt the same measures that I would with clover sod; but if it was bad with weeds, I would disk harrow it first, as soon as the harvest was off, and again as soon as the weeds began to grow, allowing it to lie until spring, when I would plow it in the ordinary way. If the stubble land intended for next year's corn or other hoed crop is dirty with weeds, my first effort must be to destroy these as effectually as may be, and to accomplish this I would adopt the following measures: First, gang plow it, not more than four inches deep, having first put on all the manure I could afford. Then I would thoroughly harrow it and sow to fall rye. As soon as the rye was well rooted I would turn my cattle onto it and pasture it until the snow came and covered it. Thus, while it affords pasture, the cattle are top-dressing it with another coat of manure. In the spring, as early as convenient, I would turn the heavy mat of rye sod under, plowing about six inches deep. This treatment will turn up and thoroughly mix the manure first plowed under in the fall, which will become immediately available for the young plants, while the heavy mat of rye turned under will ferment and act as artificial heat in the early, cool nights and days for the roots of the growing crop while it is decaying. In my opinion, this treatment is much more profitable than the sowing of millet, buckwheat, etc., except in the case of very poor, light land, and no means of fertilizing it. Then, I believe it would pay to gang plow it, and after harrowing thoroughly, sow to rape and pasture a sufficient number of sheep on it to keep it eaten down. By this process he gets feed for his sheep which they will relish, and their droppings enrich the land in a most effectual manner.

There is one mistake made by many farmers to which I would like to call your readers attention. It is the pasturing of stock on fields of clover on this year's seeding. This should never be done. In the first place, the tramping of cattle sodden and sours the land, making it unhealthy for the young clover plants. It also punctures the land, leaving holes for the water to lie in in the late fall, which freezes and causes the death of the plants all around them. In the second place, the plants need all the shelter which their first year's growth will afford to protect them in the winter. If the field is pastured and the clover is eaten down close instead of being left to form a mulch for the tender young plants and a protection from the cold, the farmer who practices this will be surprised next season with the poor crop of clover he has. As a matter of fact, it would pay much better to add mulch in the form of manure than to take away its natural protection.

I have been asked my opinion *re* harrowing, top-dressing and the sowing of clover and other seeds in old worn-out pastures *late in the fall*. I would say that I believe it would be a waste of time and material to do this in the fall. The proper time to do this is in the early days of September, when the clover seed is ripe and Dame Nature goes forth to sow. I never missed improving an old pasture by thoroughly harrowing in the early part of September, sowing broadcast and mulching with fine manure, and harrowing to cover seed with a green top of a tree weighted with a small log. Then, the first shower which comes, the seed sprouts and takes root, and there is sufficient warm weather left to give it a chance to grow and get well rooted before the bleak, late-fall cold days come.

Perth Co., Ont.

SAM PETERS.

Just as a mild feminine expression is rightly regarded as indicative of good milking and breeding qualifications in a cow, so also is a smart, bright appearance regarded as indicative of a good laying capacity among hens. Heavy birds with dull, sluggish temperaments very seldom prove free layers. The really good layer has a smart, active appearance, with a bright eye and generally "intelligent" look—if that term can be correctly applied to a bird. Good layers are always the most active members of the flock, and they never seem to tire looking for such food as comes within their reach. On the principle that all cows which are heavy milkers are also heavy feeders, it follows that hens which produce a large number of eggs must be more liberal feeders than those which produce only a very small number.



**Worth Remembering.**

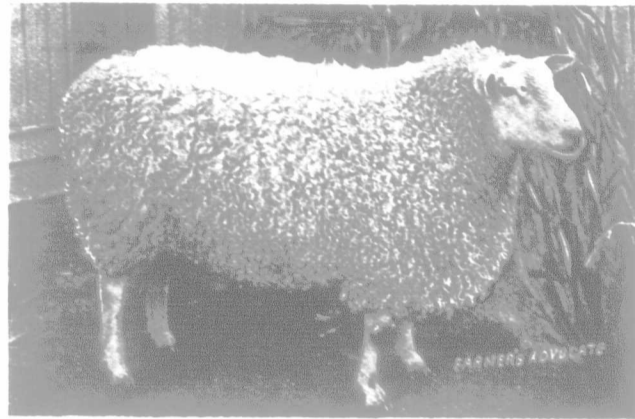
To the Editor FARMER'S ADVOCATE:

GENTLEMEN,—For keeping flies off cows, I have used this summer coil oil, sprayed with a hand sprayer, and I find it kills about one half of them at the spraying. As the cows are tied up, we go over them before milking, morning and night.  
Oxford Co., Ont. A. HUNTER.

**The Russian Thistle as Fodder.**

To the Editor FARMER'S ADVOCATE:

SIR,—I notice in the *National Stockman and Farmer* an item under the heading of "Thistle



SIMON SMART.

Two-year-old Leicester ram. First-prize shearing at London, 1899. Now in service at Maple Lodge Stock Farm.

BRED AND OWNED BY A. W. SMITH, MAPLE LODGE, ONT.

Hay," where it is stated that some sections of the West have just harvested their Russian-thistle hay, that Russian thistle is becoming an important adjunct to the wintering of stock in some parts of the grazing country, and the note concludes as follows: "And so another supposed evil turns out to be a blessing in disguise." It is well known that some years ago the Russian thistle was accidentally introduced by Russian settlers into certain parts of Manitoba, and that the Provincial Government, with most commendable zeal, made every effort to eradicate this pest before it spread further and became what it has been in some parts of the Dakotas and other western prairie States—a terrible menace to agriculture, settlers having been actually driven to abandon their farms rather than face the work of fighting it. The item referred to above has been sent to me for my opinion. My opinion is simply this: that although it has always been well known, since the so-called Russian thistle has been discussed in Canada, that sheep would feed upon it while in a young and succulent state, yet there are a great many plants which are far preferable to it for this purpose, without the danger which will always be imminent if such an aggressive plant as this is known to be allowed to spread, which it certainly very easily could do in a prairie country. I deny most strenuously that the Russian thistle is, or ever can be, "a blessing in disguise" for its economic uses. As a means of frightening our farmers to attend more carefully to the weeds upon their farms, this title may perhaps be accorded to it, but as a fodder plant or as a fuel, for which purpose it has also been commended, I claim that it is not worth the while of any farmer in our prairie regions to pay attention to it. The danger from this plant can be easily learnt from correspondents in those parts of Dakota where it still occurs. If farmers in Manitoba require hay, let them cultivate McKiver's western rye grass (*Agropyrum tenerum*) or smooth brome grass (*Bromus tataricus*). This will pay them far better, without making them a source of very great danger to their neighbors and the surrounding country. The experience of western farmers with tumbling mustard all through southern Manitoba and around Indian Head, and indeed wherever wheat is grown in the West, should warn them against introducing any such wolf in sheep's clothing as the Russian thistle or any other member of the family of tumbling weeds.

Central Experimental Farm. J. FLETCHER.

**C. P. R. Grains and Grasses.**

During the past season the C. P. R. Land Department have been making collections of grains and grasses from different districts, from which to prepare samples for exhibition purposes. Wm. Sharman, of Souris, has spent several months up in Northern Alberta, superintending the gathering and curing of samples, and in spite of the unfavorable weather, has succeeded in sending in several carloads of excellent material for samples, made up of wheat, oats, barley, peas and rye, timothy, brome and native rye grass, and quantities of native grasses, vetches and pea vines. Among the wheat is some very good samples of fall wheat, Dawson's Golden Chaff, grown near Wetaskiwin.

These samples, when nicely prepared, make not only pleasing displays, but they furnish practical object lessons of what are the capabilities of the country, and no doubt serve good purposes as immigration advertising.

**Manitoba Prize Wheat at Paris.**

Wm. Laugland, of Hartney, who had an exhibit of wheat at the Paris Exposition, and Wm. Stephen, president of the Virden Agricultural Society, which made a collective exhibit of grains and grasses, have received word that awards of merit have been made to their exhibits. Mr. A. K. Hogg, of Bates, in the Carman district, contributed a car of Fyfe wheat in the sheaf, and has also participated in the honor.

**The Faker Element in the Fairs.**

I am glad to see that the managers of agricultural fairs are getting a "raking over." The storm has been brewing for some time, so they can not be very much surprised at the severity of it. I had not visited the great Western Fair at London for some ten or twelve years till this fall, and what to me seemed the greatest advancement was the faker side shows. As I walked around listening to the noise and looking at the sights, I thought the name Agricultural might as well be dropped from the concern. What with the yelling of peanut men, the jingle of the merry-go-round, the hammering of tin pails, blowing horns and other heathenish ways of attracting attention, it seemed to me a slander on the honored names of Agricultural and Industrial Arts. But when I came to where those "hussies" were cutting up their capers in front of their establishment, and saw how the folks were roped in, I said it was a downright disgrace, and I just wished I was a director for a little while. I would make short work of their gathering in the dimes and so boldly offending the sense of decent people.

Young boys think it quite right for them to see all there is to be seen at the fair. If not, why is it there? Their fathers belong to the show, and they always go, and it is rather perplexing for them to be told that they may look at some things, but not at others.

I know that it will be said by some that we need not look at that which is displeasing, there is plenty of the good to claim our attention. But I think it is wrong to allow the faker fraternity to get their living and spread their filth and vice right under the sheltering wing of the honored names of Agriculture and the Industries. Let them stand on their own merits. If the fair can not live without them, it had better die at once, and die it will unless a change be speedily made, as there are many who say if they have to take as much faker with it as in the last one, it will be no more fair for them. All the talk about the revenue derived is about as rotten as it is in connection with the liquor business. To me there is nothing so humiliating or exasperating in the world as to be told by rulers and governors that this christian country can not be run without the money which it gets for letting that which is the source of all villainies spread itself, to blight and destroy the citizens of our christian country. And it is a libel on the intelligence and purity of the Canadian people to say that an exhibition can not be maintained on the lines of Agriculture, Arts and Industries without the bringing in of that which is debasing and immoral. Parents and children like an outing once in awhile, and for those on the farm what could be better than the fall exhibitions, but unless there is improvement on the one in London this year, both parents and children had better go elsewhere for their outing.

Huron Co., Ont.

MRS. EVERGREEN.

wheat, which, although worth more money per bushel, seems a very precarious crop in that district.

Mr. Wm. Sharman, of Souris, Man., who has been collecting grains and grasses for the C. P. R. Land Department in Northern Alberta, informs us that he secured some excellent samples of well-ripened fall wheat, and from what he has seen, considers the chances good for growing fall wheat in Northern Alberta. We shall be glad to publish the experience of any who have had experience in the growing of fall wheat.

**Notes on the Treatment of Farmyard Manure.**

In most countries of the Old Land the value of farmyard manure, or dung, as it should be called, is placed very high. As much as four shillings a yard has been paid for it immediately after being turned, and the incoming tenant has to take all the dung on the farm at a valuation. The usual plan is to cart the manure to the field during the winter, making a special point of driving the teams over the heaps *it is being made* to consolidate and pack the pile so completely that when spring comes it will cut like cheese, and no heating takes place. Then, one week before being required, it is turned in five-foot benches, and the heating it gets during this short period suffices to kill all weed seeds, besides leaving the dung in the best possible shape to be put upon the land. This is the next best way to spreading it on the land during winter. There can be no doubt of the advantage of spreading such manure on the land, rather than leaving it in heaps. The part under the heaps is made too rich, and the heap itself is dried out and made much more difficult to spread. The writer has had the experience of dressing a grass field heavily with fresh, long dung in the early winter, and in spring raking the whole of it as clean as possible with the sulky rake, and putting it into the turnip drills, the result being a double crop of hay and no appreciable difference in the turnips from those manured directly from the yard. The following crop of barley and seeds, however, showed the want of the soluble constituents which were washed from the dung during the winter and spring months. Perhaps the best way of all, however, to make and keep dung is to leave it in the pen where it is made until it is required to be put upon the land. The surface of the pen can be bedded or covered with straw once a day, and the droppings levelled and spread equally, so that the pen can be filled without leaving loose spots, which would heat and spoil before spring. We find, moreover, that the animals kept in such pens are singularly free from attacks of rheumatism during the severe cold of the winter months. We have noticed hundreds of attacks of this troublesome complaint following the cleaning out of pens during the prevalence of extremely cold weather, not only here in Canada, but even in the Old Land, where the climate is much more moderate. It is surprising how comfortable the animals can be made in a pen such as we have above described. The urine voided by the animals prevents anything like heating of the dung, but there is always a gentle warmth, which is very pleasant to the animals when lying down. By dehorning and feeding in loose boxes as above, one can hardly imagine the advantage obtained over the tying-up method, with the daily cleaning out and great waste of the valuable constituents in the



PRIZEWINNING AYRSHIRE.

Second-prize herd at Toronto, 1900: Yearling bull, White Cockade; imported cow, Eva of Barcheskie; her three-year-old granddaughter, Snowflake; her two-year-old daughter, Eva's White Pearl (first at Toronto and London); and yearling heifer, Little Love (first at Toronto).

PROPERTY OF A. HUME & CO., MEND, ONT.

**Fall Wheat in Alberta.**

Through Mr. George H. Shaw, Assistant General Freight Agent of the C. P. R., Winnipeg, we have received a very nice sample of fall wheat, grown in the vicinity of Pincher Creek by Mr. C. Kettles, who states that he usually sows from the 15th of July to the 10th of August, and the wheat is ready for harvesting from the 20th of July to the middle of August, and that his yields have run from forty to sixty bushels per acre.

If fall wheat can be successfully grown in Alberta, with such yields as above reported, it should prove much more profitable than spring

manure through exposure and leaking, not to speak of the opening of the doors and the consequent chilling drafts to the animals in a comfortable stable.  
J. G. DAVIDSON.  
Simcoe Co., Ont.

**Another Protest.**

To the Editor FARMER'S ADVOCATE:  
SIR, I must say I was very much pleased with the stand you have taken in denouncing fakers and side-show attractions. I believe they are a disgrace to our boasted Canadian civilization. They cannot be banished too soon. Sincerely yours,  
Norfolk Co., Ont. W. K. NEWTON.



### Canadian Cheese Wins at Paris.

A letter received by the Department of Agriculture, at Ottawa, shows the great success of the Canadian exhibit of cheese at the Paris Exposition, and the prospects for the growth of the trade of Canadian cheese in France. The following are extracts from the letter from Mr. W. A. McKinnon, in charge of this portion of Canada's exhibit:—

"In the permanent international competition, Canada's exhibits of dairy products, including butter, factory and cream cheese, were awarded



PAIR OF TYPICAL LINCOLNS.

Second-prize winners in class at Toronto, and were in first-prize flock.  
BRED AND OWNED BY EXHIBITOR, JOHN T. GIBSON, DENFIELD, ONT.

the highest possible diploma, the grand prize, and with the maximum number of points. Other grand prizes were awarded, but Canada alone received the maximum rating. One of the most gratifying results of the display is that Felix Potin, easily the first of high-class grocers in Paris, a member of the International Jury and a man who handles only the finest goods, and is exceedingly hard to please, has placed an initial order for Canadian factory cheese. This house is so important that if it can be induced to take up any new article in the trade, the success of that article is considered assured; it is, therefore, at once a tribute to the quality of Canadian cheese and a good augury for the establishment of a trade with France in that product. Among the qualified critics were the United States Commissioner of Dairying, the British and Danish jurors, the director of British dairy at the Exposition, and a number of Swiss exhibitors from the famous Gruyere district. The exhibits of Gruyere cheese aggregate 95,000 pounds, together with an assortment of various fancy kinds in smaller quantities. The fact that it was deemed wise to go to such expense shows the importance of the Swiss cheese trade with France, and the fact that competent judges think Canadian cheese can supplant Gruyere in public favor shows the great field open for this branch of Canadian commerce."

### The Calf Intended for Dairy Purposes.

One of the main difficulties in making dairying a success is the difficulty of securing the best machinery, not of iron or steel, but of flesh and blood; in other words, the best dairy cows. Such cows can not easily be bought, for the men who have ability to produce them know their value and their profit. Practically, the farmer who wishes a herd of choice dairy cows must grow them himself. While it is a difficult matter, it is not so difficult as one would imagine if he would but go at it in the right way.

The easiest way to secure this is to buy heifer calves from the best dairy herds in the neighborhood. These can always be bought, if not pedigreed, at reasonable prices. If a farmer will buy a dozen calves from reasonably good dairy cows, which can be found in almost any dairy neighborhood, and will feed them properly, and when they are fifteen or sixteen months old mate them properly with a sire whose dam and grandam have been good dairy cows, he will stand a chance of having half a dozen paying dairy cows in the lot and a progeny with dairy instincts.

What do we mean by feeding them properly? Feed them mainly on clover hay, corn fodder, and oats, with from one-third to one-half as much corn as oats during the cold weather in the winter season. If he finds that they get quite fat on this ration, leave the corn out altogether. Do not aim to make them fat, but aim to keep them growing. When turned on grass, without grain, next summer, let them get as fat as they like. There is no danger of grass fat hurting any breeding animal.

When they produce their first calves, break them to milk at once, and feed liberally, grass or no grass; feed all they will eat of a properly balanced dairy ration. If any of them are disposed to get fat, feed and milk all the same, but sell the fat to the butcher. Keep the cows that remain thin in flesh on full feed and a full dose of milk. You will find an interesting fact that they are of a like kind. The cow that when in good health and on full feed fails to get fat usually does so because she puts the milk

in the pail, just where you want it. If our readers will test this method they will make enough by it to pay for a farm paper during their lifetime. The plan is simple and feasible, and thoroughly practicable. There is no chance for any loss in it, and every chance for profit.—Wallace's Farmer.

### High-Scoring Butter at Paris.

F. W. Culbertson, buttermaker of the creamery at Sherman Mills, Me., was among those who sent butter to the Paris Exposition, it scoring perfect on all points except flavor. Mr. Culbertson won first premium on tub butter and first premium on prints at the Eastern Maine State Fair, on butter made the same as that sent to Paris, except that two-fifths more salt and color were used. His method of buttermaking is given as follows: We have 67 patrons, 20 of whom bring milk to the factory to be separated. This we run through the Alpha separator, at 77 degs. F. Some of the other patrons have farm separators, and others the deep-setting Cooley system. I steam out the pipes, tempering vat and separator bowls, cream and milk cans. The cream is cooled to 68 degs. and ripened with a 15-per-cent. starter. The gathered cream is put into the partly-ripened separator cream.

The starter is made by running fine milk through the separator, pasteurizing the skim milk at 175 degs. and cooling to 45; then I warm the milk to 75 degs., and add Keith's butter culture, and ripen to 34 or 35 Cc. for use. The cream used for this butter was 28 per cent. butter-fat, and churned at 54 degs., the butter coming in 54 minutes in granular form, one-half the size of wheat kernels, and the buttermilk looked watery.

I ran off the buttermilk and washed once with pure spring water at 52 degs. by revolving the churn slowly one-half minute. The water was then drawn off, leaving the butter medium dry, when I weighed and salted one-half ounce to the pound, and worked on a Mason worker two minutes; it was then set in the cooler about five hours, when I worked it again for two minutes more, and then put back into the cooler until the next morning, when I again worked it two minutes more, the butter being dry, mellow and waxy, and the grain like broken steel.

The tubs were soaked over night in cold water with some salt in it to form a weak brine. I rubbed salt on the sides of the tub and lined it with parchment paper, packed the butter solid, stroking the top off even and lapping the paper from sides of tub one-half inch over the butter, put on a cloth circle and some salt, then a parchment circle on top, and using universal tub tins to nail on cover, bending tub tin five degrees with my fingers, so the nails would be driven into the tub straight and not pull out of the tubs. The butter was colored one-half ounce to 100 pounds of butter. This butter was of light color, and salt, only about one-half as much of each being used for this Paris Exposition as for our trade in Maine and Boston. The butter scored perfect except flavor, which lost inevitably by changes, travel, and length of time before being scored.—Chicago Dairy Produce.

### Protecting Cows from Flies.

The question of flies on stock—particularly the horn fly on cattle—has for the last few summers set many minds at work considering what is best to do about it. Not only has there been serious loss from cows failing in milk, but young cattle and finishing steers stood still or receded during the three or four weeks the past summer when the flies were at their worst. During the past summer, Prof. W. L. Carlyle, Wisconsin Experiment Station, conducted an experiment to determine the relief from flies by stabling. Fourteen cows were divided into two lots as nearly equal in every respect as possible. During the daytime lot 1 was kept in a small paddock having an abundance of shade, and lot 2 in a comfortable stable provided with screen doors and windows. In other respects the two lots received the same treatment. The cows in lot 1 were constantly on the move fighting flies, while those in lot 2 were practically free from them. During the four weeks which the experiment lasted, lot 2 (stabled) consumed 85 lbs. more of green sorghum and sweet corn than lot 1 and lost on an average 19 lbs. more in live weight per cow. Comparing the results of the first two weeks of the experiment with the results of two weeks preced-

ing, the yields of milk and butter-fat of lot 1 decreased respectively 40.4 and 2.16 lbs., and of lot 2, 56.7 and 0.81 lbs. Similar results were obtained in comparing the first and fourth weeks of the experiment.

### Notes for October.

October is the month to prepare for winter.

If you neglected to whitewash your coops last month, it is not too late now; add an ounce of carbolic acid to each pailful of wash.

Gather your road dust and fill your dust boxes full; also store an extra supply of this valuable article for winter use. Remember that next month it will be too late.

Repair your houses, windows, roofs and doors, and make all weather-tight.

Kerosene your roosts, upper and under sides.

Separate your early-hatched pullets, placing the number in each coop you wish to leave there all winter. They will soon begin to lay, and must not then be moved.

Weed out all deformed and useless chickens; cull close; do not feed dead wood. Keep only your best specimens for next spring's breeders.

Watch your moulting hens, and if some look and act dull, and their combs are dark, put a little tincture of iron in drinking water.—Country Gentleman.

### Begin Poultry-keeping on a Moderate Scale.

Especially among beginners in poultry-raising, too little attention is given to the dangers of overcrowding, and too many chickens are annually lost through the ills and diseases which come from this cause. It is amazing to see with what rashness beginners approach the poultry business; calculations are made on raising up into the thousands of chickens the first year, with the result that the enterprise is abandoned, or nearly so, before the end of the first twelve months. The experienced and practical poultryman requires no advice on the subject. A word of warning to others may result in some good by showing the importance of commencing on a moderate scale and enlarging as experience dictates. As a matter of fact, the man who produces five hundred thoroughly good chickens in a season is doing quite a business in poultry, and where this is done, there certainly is a much better chance for the producer to go forward to larger numbers successfully than where more is attempted at the beginning without proper calculations as to the ultimate results.

Trouble arises when too much stress is laid upon numbers and too little upon quality. A flock of one hundred chickens properly housed and cared for will at maturity show a larger profit than three times that number stunted and poorly matured through unwholesome restrictions in their housing, range, or food.

Liberal range is of first importance, for without it we cannot get best results in fertility and vigor. Close confinement not only tells upon the growth, but the plumage and comb are also affected by the lack of exercise and health which go with larger, freer range. It is true that as many eggs can be got from hens kept in close confinement and fed stimulating forcing foods as can be had from fowls having larger range. There is, however, something further than the mere point of egg production to the average poultryman. This is the reproduction of the flock, and it is impossible with any animal living to get the same strength and vigor and the same proportion of desirable reproduction where the parent stock have not suitable exercise, abundant fresh air, and proper food. Thus, while satisfactory egg production may be had from the closely-



IMPORTED OXFORD DOWNS.

Shearling ram and pair of shearling ewes, first-prize winners at Toronto and London.  
PROPERTY OF J. H. JULL, MOUNT VERNON, ONT.

confined birds, every fact goes to prove that a very few generations of this method of keeping will undermine and ruin the constitution of the birds; there will be a falling off in reproductive vigor, the eggs will be more infertile, germs will be more and more lacking in stamina, a larger percentage will fail to reach the pipping stage, and a greater pro-



portion of those which pip will fail to get out and be strong, lively chickens. Of those that do hatch, a larger percentage will die, even where the parent stock are kept under the proper conditions. To get good market results, free range is not absolutely necessary, but we think there is little question that free, green range is the ideal condition for breeding birds, though fowls kept under moderate confinement, with an abundance of green food or a good grass run, will produce better hatching eggs than those deprived altogether of these conditions.

In discussing the subject of feed and range for commercial poultry, in the *Reliable Poultry Journal*, Mr. Geo. Pollard, an extensive Massachusetts poultryman, says:

"The very best market poultry which is produced comes from birds raised on a green range and fed largely on corn or corn meal and some form of animal food. It is altogether a mistake to suppose that in ordinary locations fowl can pick up enough worms, insects, etc., to supply them with the requisite animal food to give the quickest and most profitable growth. The same holds true of prolific egg production. To get the best results in either case, a liberal supply of animal food in some form must be provided. This matter of green range is one which has dashed the hopes of many a fancier who breeds and raises white birds. It is almost impossible to get birds that will stand the range necessary to get the best fertility and stamina in the breeding stock and yet hold the color of the plumage down to that whiteness which alone wins over every other consideration in the show room. There is no question whatever in the mind of the writer that the White Wyandottes and White Plymouth Rocks are being badly strained as practical birds through the intense desire to meet the views of poultry judges with regard to whiteness of plumage, while at the same time there is a strong desire to keep up the best points of their breeding value by the only way in which it is possible to do so, and that is by abundant green range, both for breeding birds and for chickens designed for the production of vigorous breeding stock."

**Cost of Feeding Some Chickens.**

To make the most profit out of chickens, they should be fed with such food as will provide the quickest growth, yet at the same time not cost too much. If one has the right kind of fowls, they can be fed very cheaply. For instance, a lot of Barred Rock and Brown Leghorn chickens hatched about June 15 were fed exactly the same. The Barred Rock eggs were laid by pullets not a year old, the pen being headed by a cockerel about a year old. The Brown Leghorn eggs were from old hens, the pen being headed by a cockerel. I set twenty-eight Rock eggs and hatched twenty-six chickens. The other 21 chicks in the experiment were Leghorns.

The chicks' first feed was a cooked cake made out of specially prepared food. Then they were fed a little bran and shorts, mixed quite dry. As soon as they were old enough they were given a few oats; after a while a few peas were added. Here is a table showing the exact amount of feed consumed:

Kind of food.	Amount.	Cost per cwt.	Total cost
Prepared.....	10 lbs.	\$1 00	\$ 0 10
Shorts.....	102 "	75	764
Bran.....	34 "	60	205
Oats.....	136 "	85	1 12
Peas.....	90 "	1 00	90

Total cost of feed consumed, \$3.09.

This cost of \$3.09 is from June 15th until Oct. 3rd, or a little better than 6½c. each. On Oct. 3rd, the Barred Rock cockerels weighed an average of five pounds each, and the Brown Leghorns three pounds each, thereby showing the difference in weight for the same amount of feed consumed. They had pure water before them at all times. By this method of feeding I lost but one chicken, and it was not right when hatched.

S. H. W.  
Huron Co.

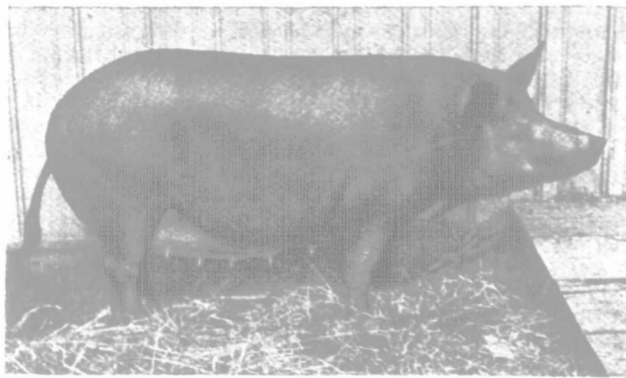
**Feather Pulling.**

Our attention was drawn to some bad cases of feather pulling and eating a short time ago on visiting a poultry farm where chickens were confined in coops and fed on a mixture of corn, oats and barley in a moistened state. They received no green food nor animal matter of any kind, but to the latter they were helping themselves on the mutual plan. Many were plucked bare in spots, and then they were not satisfied. Another flock confined in a roomy pen, but fed the same as the cooped birds, were active in the same business, but to a lesser degree, probably because they could more easily escape from each other. In a large, outdoor yard, without green food of any sort, was enclosed a flock of old hens that had been used as sitters. These were right into moulting, which was being materially aided by the same vice as those in the coops and pen. The pulling, however, was not confined to the old, loose feathers, but the bristling array of sprouting quills supplied a temptation not easily overcome.

It is only a short step to acquiring the habit of pulling the feathers for the sake of eating them alone. Once the habit is acquired, there is only one effective means of prevention, if the bird is to be allowed to live. A "poultry bit" must be provided, which will effectively prevent feather-pulling. Bits are sold by all poultry supply houses, or can easily be made at home. A good bit is made

of a piece of soft leather, sufficiently large to prevent the fowl from closing its beak tight enough to pull a feather, but not large enough to interfere with feeding. This bit is placed in the mouth and held in place by a piece of wire passed through the base of the comb. Another, and perhaps better form of bit, consists of a piece of soft wire bent to fit the upper bill, hooking into the nostrils.

Before applying the bit as a preventive remedy, make sure that the trouble you are dealing with is the feather-pulling habit and not due to depluming mites. When depluming mites are present, the fowls will often stand about picking at each other and occasionally pulling feathers. They evidently do this in the endeavor to relieve their mates from the irritation caused by the presence of the parasites. Any considerable bare area or bald spot on head and neck, breast or abdomen, should lead to an examination for the detection of depluming mites. Often the fowl will be seen pulling its own feathers, and will act uneasy, picking at itself about abdomen and vent and upon the breast. The bare area may not show any unhealthy skin, and may be partially covered with stubs and broken feathers. Examination of the bird will, if mites are present, show little scaly masses about the roots of the feathers around the margin of the bald spot. If these masses of scales are crushed, they break up into a powder composed of mites and debris. The mites are easily seen in the powdery mass by using a magnifying lens. These mites are readily spread through a flock by contact with infested birds. Anointing the infested area with sulphur ointment, or with one per cent. carbolyzed vaseline, taking care not to cover a large area at one time (as it may injure the bird), will destroy the mites. Another effective remedy is washing the fowl with warm soapy water containing creolin or sheep dip. Use two tablespoonfuls of creolin or sheep dip in half a gallon of water for the first bath. Rinse the bird thoroughly with warm soapy water, and again with pure, clean warm water. Dry the bird with a soft cloth, and keep in a warm place until the feathers are perfectly dry. This will kill all the mites on the fowl, but will not improve the appearance of the plumage. In addition to fighting these mites on the fowls, the poultry house must



**FIRST-PRIZE TAMWORTH SOW.**

Two years old. Toronto and London Exhibitions, 1900.

PROPERTY OF JOHN C. NICHOL, HURON, ONT.

be disinfected and cleaned thoroughly, to destroy any mites which may be harbored there. When these mites are destroyed, vigorous means should be adopted to get rid of them, as they ruin a fowl's plumage. Every case of supposed feather-pulling should be examined for these mites "on suspicion."

**Melting Old Combs.**

BY MORLEY PETTIT.

Late October and early November should be spent in winding up the affairs of the apiary. All hive parts which have been used during the summer should, before being stored for winter, be scraped clean of lumps or ridges of wax and propolis. Especially should the combs not in use be sorted and the exposed parts of their frames scraped before storing. While doing this, quite a lot of beeswax can be kept separate from the propolis and saved.

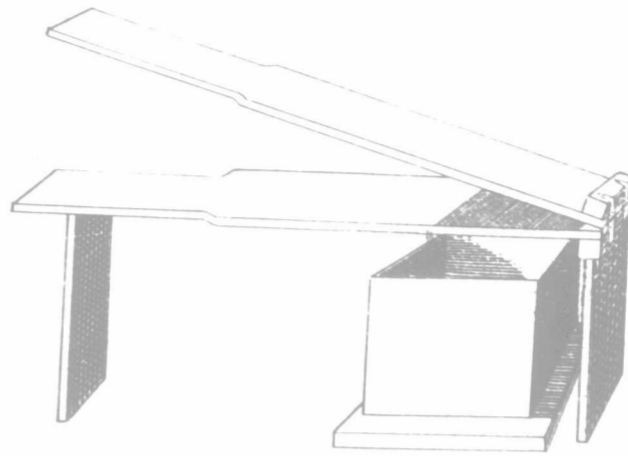
We divide combs into three classes: 1st, brood combs; 2nd, extracting combs; and 3rd, combs to be melted up. Brood combs may have a few drone cells in one lower corner, but otherwise must be all workers, be straight, and contain very little pollen. 2. Combs used for extracting may be partly or wholly of drone comb, but should contain no pollen. If a comb would belong to this class except for patches of pollen, cut them out and let the bees fill up the holes next summer with new comb.

In class 3 are the ones rejected from 1 and 2; combs heavy with pollen, old, crooked and unfinished combs. These are cut out of their frames and melted up. Where two or three rows of cells next the top bar are good worker cells, leave them in the frame as a starter for the new comb next season. These useless combs, and all odd bits of wax, may be melted and purified into nice bright cakes of commercial beeswax.

First put them into a rather long, narrow box, and pour cold water over them to clean them as far as possible of pollen and whatever else the water

will carry off. Chop them fine with a spade, and scrape to one end of the box, which has been raised higher than the other to allow the pollen-water to drain off. Change the water often for two or three days until the mass is thoroughly soaked and washed. Then put it into a caldron kettle, with enough water to float it nicely. The kettle should be in an arch, which prevents the fire coming higher up the sides than the level of the contents, else the wax may burn at the edges. When the mass has boiled well for a few minutes, press out the pure wax.

To do this you need a bag of burlap, such as binder twine is shipped in, about 10 in. x 18 in., with



WAX PRESS.

two loops at the top to hold it open by when pouring in the hot wax. The press is made of two strong boards, 1 in. x 1 ft. x 5 ft., laid one on the other, and strongly hinged together at one end, the other ends being trimmed down for handles. Sharpen a board and drive it into the ground beside the kettle for the press to rest on, and another for the end of the lower handle. Let an assistant hold the bag open while you dip it about three-fourths full from the surface of the kettle with a dipper, then lay it in the press with the open end folded under. Strips of wood 2 inch square and ¼ inch apart are nailed across the lower jaw of the press where the bag rests on it. Under the press a tin box about 20 inches each way has been set to catch the wax as it runs out. Press by putting your weight on the upper lever; shift the bag, and press again. This may be repeated until the beeswax is practically all out. Empty out the refuse which remains in the bag, refill from the kettle and press again. Repeat the operation until nothing remains in the kettle but hot water. Now wrap the box in old quilts or anything to hold the heat and cause it to cool very slowly, to allow any dross which may still remain to settle to the bottom of the wax. If it remains liquid for several hours before forming a cake, the under side will be found coated with a dark substance, which should be scraped off before selling the wax.

Be sure to choose a still, mild day for melting up old combs. With a cold wind it is almost impossible to get the wax pressed before it "freezes" all over the press and hangs in icicles in the box.

**Red Spider's Injuries.**

In various localities in the Province of Manitoba there have been noticed during the past summer, on many plants, but particularly upon raspberries, roses and plum trees, diseased and blotched leaves which were either entirely yellow or spotted. In most instances this injury was thought to be by a new fungous disease, but upon examination in all cases submitted, the cause of the trouble was found to be the spinning mites, which are classed in a general way under the head of "Red Spiders." It has been observed that these insects increase much more rapidly and do more injury in hot, dry seasons, and during the hot months of the summer, than in the cool, wet seasons. The larger number of complaints came in from Manitoba during the month of August, and were most of them concerning attacks upon raspberries. The leaves were noticed to turn yellow and then dry up, at first on the old wood, and later the leaves on the young shoots were also affected, and there was considerable anxiety as to whether the fruit crop for next year would be affected. On some canes, where all the leaves had been destroyed, it was noticed by Mr. G. H. Greig that new leaves were coming out again towards the end of August. Mr. Lyall, of Portage la Prairie, reported that raspberries, sweet peas and many other plants throughout his neighborhood were badly affected.

The abundance of red spiders in Manitoba and in many parts of the Northwest Territories during the past season is doubtless due to the exceptional drought which has prevailed throughout the West this summer. There are always a certain number of these spinning mites to be found on vegetation in all parts of Canada, but when the conditions are favorable for their increase, they multiply with incredible rapidity, and become a very troublesome pest of the fruit-grower and gardener, particularly in greenhouses. The female lays from five to ten eggs a day for about two weeks, the eggs hatch in three or four days, and the insects are full-grown in about ten days. The eggs are laid in large numbers upon the



food-plants, and the mites nearly always occur on the under sides of the leaves, beneath a light web, which is spun over the lower surface of the leaf. The name red spider has been given because some of the forms are of a bright scarlet color. By far the most numerous form is white, with small, dark marks on the back, and the insect has a greenish color after feeding on vegetation. These insects are exceedingly small and difficult to detect without a magnifying glass. Like all the true mites, they have four pairs of legs when mature, and only three pairs up till the last moult. Red spiders are often the cause of considerable loss among small fruits, bushes denuded of their leaves neither maturing their fruit properly during the year of attack, nor laying up nourishment enough to bear well the following season. The harm they do is sometimes great, because they are small and difficult to notice, and are thus frequently overlooked until a considerable injury has been done to the foliage of the plants upon which they occur, and secondly, because they are very difficult insects to destroy. There are two methods of combating them. The first consists of spraying the affected plants with an emulsion of coal oil and soap suds, or coal oil and milk, and the other of dusting the bushes with a dry application of sifted wood ashes, lime or powdered sulphur, or a mixture of one of the first two of these substances with the last named, in the proportion of one pound of powdered sulphur mixed with ten or fifteen of finely-slaked lime or wood ashes. This must be thrown well up under the leaves, and three or four applications must be made at short intervals. When red spiders have occurred one season, they are liable to appear again the next year, and although this is by no means certain, it is well to be sharply on the lookout to treat plants early in July, as soon as the mites are noticed on the lower leaves.

Central Experimental Farm. J. FLETCHER.

#### Breeding from Ewe Lambs.

Now that the craze for early maturity has taken such thorough possession of breeders of all classes of stock, flockmasters are, in many places, commencing to resort to the practice of breeding from ewe lambs as well as from ram lambs. It is doubtful if the practice is one that is to be commended, because experiences go to show that very disappointing results frequently attend breeding from such young animals. Where ram lambs are mated with mature ewes, satisfactory results may be obtained, but one well-known breeder of our acquaintance, who has recently been experimenting with shearing rams mated with ewe lambs in the hope of developing early maturity among his sheep, has had anything but encouraging results therewith, and has now decided to revert to his old plan of using his young sires with mature dams.

Among no breed of sheep is the development of early maturity so much fostered and encouraged as among Hampshire Downs, yet some of the leading admirers of that variety are by no means enthusiastic in their approval of breeding from ewe lambs. Professor Wrightson, who has had considerable experience in the matter, is by no means enamored of the idea, for, as he contends, "nature will not be hurried with impunity, and it is a mistake to make an animal undergo the trials of maternity when it has not itself arrived at half its normal size."

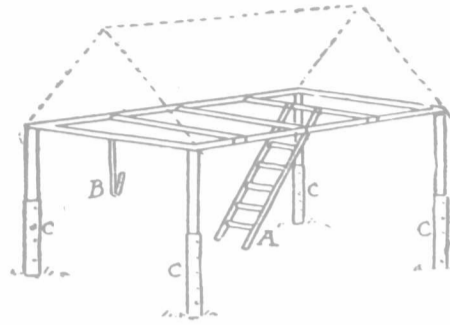
#### The Food of Blackbirds.

A bulletin has recently been issued by the U. S. Department of Agriculture on the food of the bobolink, blackbirds, and grackles. This bulletin has been prepared by F. E. L. Beal, Assistant Biologist of the Department.

The birds commonly known as bobolinks, meadow larks, orioles, blackbirds, grackles and cowbirds are all comprised in a group known as the family Icteridae, which is represented in the United States by twenty-nine species and subspecies. In this bulletin are discussed the food habits of the bobolink, the cowbird, the yellow-headed blackbird, the red-winged blackbird, the California red-winged blackbird, the rusty blackbird, Brewer's blackbird, the crow blackbird, and the boat-tailed grackle. These comprise all the important members of the group, with the exception of the meadow larks and orioles. The ravages of the bobolink in the rice fields of the South, and of some of the blackbirds in the grain fields of the Upper Mississippi Valley at planting and harvesting time, are matters of common knowledge, but the other food of these and other species is not so well known.

The bulletin is devoted mainly to the food of the various blackbirds during the summer months, and is based on a careful examination of the contents of more than 1,800 stomachs, representing nine species and several subspecies of American blackbirds. This examination, while confirming to a certain extent the popular estimate of their grain-eating propensities, has shown also that during the season when grain is not accessible these birds destroy immense quantities of seeds of harmful weeds, and that during the whole of the warmer portion of the year, even when grain is easily obtained, they devour a great number of noxious insects. It appears that the vegetable portion of the food is probably considerably less than the animal, and that the seeds of the most important portion consists mostly of weeds. The damage done by the red-wings and some other species has apparently arisen from their excessive number of individuals rather than from their habits

of the species, and there is no doubt that in the Mississippi Valley the red-wings and yellow-heads, and farther west, Brewer's blackbird, are much too abundant for the interests of the grain-grower. The bulletin is illustrated with 1 plate and 6 text figures.



ROOSTS FOR POULTRY, WITH LADDER APPROACH.

#### Another Dilution "Separator."

Among the exhibits of dairy apparatus which we observed at the Toronto Exhibition was what was called "Hunt's Ventilated Cream Separator," which, it was claimed, would take out "all the butter-fat" from milk in from 20 minutes to one hour, without the use of ice, reducing the cost of making butter, making churning easier, and leaving a better quality of skim milk for the calves. The apparatus itself was simply a well-made tin can, with a side glass gauge at the top and bottom to show the depth of cream, and a hollow tube up the center. Half a dozen cans were exhibited, the diameters of which ranged from about a foot to over 20 inches. The ordinary shotgun can used by dairymen is about 8 inches in diameter. What was called the ventilation feature of the Hunt separator was only a hollow tin tube about 2½ inches in diameter, running up from the bottom through the center of the can, open at the bottom, and with a movable cap for the top, the band of which was perforated. We asked the young man in charge of the cans a number of questions about the process for which so much was claimed, and suggested that he should have an actual test of their cream-raising capabilities made at the dairy department of the show. He courteously replied that we could take a can and try it ourselves, and if it did not do what was claimed we could have it for nothing. We accepted his proposition. He picked out a can and gave us a cloth strainer for the milk and told us to dilute the milk with an equal quantity of water, and to put the latter into the can first, straining the milk into it, which directions we carefully followed out that very afternoon. The herdsman in charge of Messrs. W. W. Ogilvie's herd of Ayrshire cows kindly furnished us with milk taken fresh from the cow for the trial, and Mr. R. W. Stratton, an instructor from the staff of the Ontario Agricultural College Dairy School, who was present doing the testing with the Babcock test in the public exhibition milking trials, consented to test the whole milk and the skim milk after separation for us. The milk (19 lbs.), diluted as directed, was set for one hour so as to give the process full justice. The cream began to rise very soon, and its depth was well defined, as seen through the gauge, and what rose seemed to come up in about forty minutes. Being half water, the skim milk looked thin, which might lead one to suppose the separation was good, but appearances are deceitful. Mr. Stratton's test showed that the whole milk was of very good quality, containing 4.7 per cent. of butter-fat, but the skim milk test, after the full hour had expired, showed that no less than 1.2 per cent., or actually about one-fourth of the fat contained in the milk, was not taken out, a very serious loss, and one which no dairy farmer can afford. Good work on the part of any of the standard makes of centrifugal separators will not leave over .1 (one-tenth of one per cent.) of butter-fat in the milk. The claim that the skim milk (half water) from the dilution can was extra good for calves might be partly accounted for by the large quantity of fat left behind. Since the milk is to be diluted with an equal quantity of water, a dairyman would also require double the can space that he would for the ordinary deep setting, and have double the quantity of "half-and-half" skim milk to handle. From an agent's price list we notice that these so-called separators are made in seven sizes, quoted, retail, at from \$5 (for from one to two cows) up to \$10.50, according to capacity, which we look upon as pretty steep prices for tin cans. We did not hold the party in charge of the exhibit to his promise to give us the can, as the weather was too warm to carry it away, and the writer really could not afford to maintain such a costly and wasteful luxury, and would not be heartless enough to give it to anybody else, when they could buy a shotgun can for \$1, and do their own diluting, if they imagined there was any virtue in it.

#### Training Young Collies.

BY ROBERT MEWEN.

It would be far from an easy task to lay down suitable hard and fast rules governing the training of collies; in fact, they are neither necessary nor desirable, but some hints on the subject may lead owners to the exercise of a little reasoning, by which beneficial results may be obtained in the management of all stock, and collies in particular.

Instinctively, each species of animal in a greater or lesser degree will exhibit the characteristic traits peculiar to it, or, in other words, will show those qualities which existed in a marked degree in its progenitors, else the recognized laws of breeding are astray. This applies to dogs quite as much as it does to horses, cattle, sheep and pigs, and the natural inference to be drawn is that any person requiring stock of certain qualities would select the produce of those sires and dams possessing them. It is just as reasonable for the farmer to expect assistance from his properly-bred collie as it is for the huntsman from his pointer or setter. The purchaser of a setter pup (except he has the leisure and opportunities of doing the work himself) customarily places it in the hands of a breaker, at an expense of from \$25 to \$50, before he undertakes to shoot over him. What does the farmer do? Too often simply nothing, and expects his *tyke* to do as it is bid without any instruction. A collie in Scotland is not considered thoroughly broken until it has been in training with a shepherd and worked daily for eight months or a year. In this country there are not the same opportunities, but full advantage must be taken of those at hand. A puppy is all the better of being taken when about 3 months old, and the more it is allowed association with the household, the more character and the sharper and brighter will it grow. It is sometimes maintained that a dog should never be brought into the house; that by so doing it is petted and spoiled. Of course, a dog can be (a child often is), but the one no more likely than the other. By its exercise the brain is developed and intelligence is produced, for a time escaping attention, the growth is so gradual, until some marked action is exhibited; and it must not be overlooked that while a collie must be built for a worker, he must also have brains. Instinctively, the collie is most devoted to his master, following him, if allowed (and he should be), into every room of his house, and at meal time he imploringly looks for a crumb from the table, which should not be denied him. Such little attentions will inspire confidence and the grateful desire to do something by way of return. In this frame of mind, he is easily taught to be promptly obedient, to come to heel immediately when called, until gradually he becomes a well-trained dog and a most useful adjunct to the farm.

#### The Beautiful Tulip.

BY JOHN B. PETTIT, WESTWORTH CO., ONT.

Those who are desirous of having an attractive display of early flowers next spring must make preparation this fall, and the time will soon be here when this work will have to be performed. The majority of farmers do not care to devote a great amount of time to the cultivation of flowers, and those who desire a display of bloom often look to those flowers needing the least care and cultivation. Such flowers are found in the bulbous class, and the hardy spring bulbs are the most satisfactory of all.

Of the so-called hardy bulbs, there is, in all probability, no other that gives the satisfaction as does the tulip. For beautiful forms and dazzling brilliancy of color it is far in advance of all other spring flowers, and nothing can equal its gorgeous appearance in whatever position it may be placed.

There are many classes of tulips, of which a few of the most distinct are: (1) Byblo-mens, (2) Bizzares, (3) Sweet-scented, (4) Parrot, (5) Darwin, (6) Gesneriana, (7) Single Early, (8) Double Early, (9) Variegated Foliage, (10) Duc Van Thol. These different classes have their characteristics, and there are most beautiful varieties in them all. While this is true, the very finest are to be found in the "Single Early," "Byblo-men" and "Bizzare" classes.

Tulips are of very easy culture, and, when the bulbs are once secured they will last a lifetime, not only giving regular yearly bloom, but also rapidly increasing annually. They will thrive in any kind of soil, even hard clay. While this is a fact, they will give much more satisfactory results if care is exercised in the selection of their location. They thrive best in a rich, deep sandy soil. This should be well spaded up and made fine before the bulbs are set. They should be planted four inches deep and from four inches to six inches apart, according to size of bulb. The bed should be slightly raised above the surrounding soil, so as to keep water from settling about the bulbs and roots.

Some people lift their bulbs every year. This is a mistake, for besides the annual labor in connection with lifting and re-planting, they will not give as fine flowers or multiply as rapidly. A spot should be chosen so they may remain unmoved for at least three or four years, then be lifted, the clumps divided and then re-planted.

Tulips should be planted in the fall, and as soon after September 1st as possible. While they may be planted on into November if the soil is not frozen, the results will not be so satisfactory. The bulb has to make the most of its roots in the fall before the ground becomes frozen, for as soon as the frost is out of the ground in the spring the flower buds begin to appear. There is then no time for the bulbs to make roots, but instead the root must be sustaining the flower and producing a new bulb. The sooner they are in the better, as more time is then given for root growth, and the more root the larger and finer the bloom the following spring.

Tulips are perfectly hardy, but they do much better with some protection during the winter. A covering of coarse stable manure over the bed after it is prepared in the fall, to the depth of four or five



inches, is the proper thing. This keeps the bulbs from being repeatedly thawed out and frozen up again, an action very trying on the vitality of the bulbs; besides, the strength is washed out of the manure down into the earth by the autumn rains and thus the soil is enriched. By this annual covering the flowers are made much larger and far more brilliant in color. Of course, any covering used must be removed very early in the spring.

Most pleasing effects can be produced by filling a whole bed either with one variety or with two or three varieties coming into bloom at the same time. In planting more than one variety, care should be exercised to select colors that will blend and also varieties whose flower stems are near the same length. Nothing gives greater displeasure to the true gardener than to have a bed of tulips made up of a hundred varieties, some in bloom to-day and others not until two weeks hence; some dwarf, some tall; some single and some double. Solid colors is what pleases the true florist.

A few of the finest named varieties are: "Canary Bird" (yellow), "Cerise Grisdeline" (beautiful rose), "Cottage Maid" (delicate rose, white stripes), "Keizer's Kroon" (bright crimson, broadly edged with yellow), "L'Immaculee" (pure white), "Pottebaker" (bright canary yellow), "Van Der Neer" (the finest of all violets, extra large), and "Proserpine" (rose, shaded with salmon, extra fine). These mentioned are all "early single" tulips. Finest among late tulips are "Byblomens," "Bizzares" and "Parrots."

The tulip, the flower that many years ago caused men to go crazy, and the financial ruin of men of wealth; the flower that was then and is now admired by all, and the growing of which furnishes employment for thousands in Holland, should be extensively planted by every flower lover in the land.

**QUESTIONS AND ANSWERS.**

**Veterinary.**

**COWS GIVING BLOODY MILK.**

T. M., Bruce Co., Ont.:—"You would much oblige by giving a remedy for the following trouble: We have two cows giving bloody milk out of one quarter of their udder for a week. One is much worse than the other, giving nearly pure blood sometimes, and it is with great difficulty that the clots can be got from her sometimes. Is it caused by a rupture of a blood vein?"

[Bloody milk is caused by rupture of small vessels in the udder, caused either by external violence or inflammation of the gland, or a congenital weakness. Milk the affected quarters three times daily. Feed lightly, so as not to cause a large secretion of milk. Give three times daily as a drench: 1 oz. tincture of iron, shaken up with a pint of cold water. If the weather remain warm, it will be good practice to bathe the quarters with cold water. The condition is very liable to recur.]

J. H. REED.]

**INDIGESTION, FOLLOWED BY INFLAMMATION OF THE STOMACH AND INTESTINES, IN STEER.**

F. R., Brant Co., Ont.:—"I turned my cattle into the orchard on Saturday. On Monday they all, except the cows, seemed sluggish, and did not get up until late in the morning. On Tuesday they seemed all right, except one which did not go off with the others. However, he got up when I went to look at him, and I drove him, with a little coaxing, down the lane towards the others. Next mid-day we found him dead. When turned over, some bloody water ran from the mouth, and part of the back bowel was projecting from the anus. When opened, the gray cutaneous lining of the first and second stomach would peel off and tear at the merest touch. A small part of the jejunum was a dark red. In the orchard and clover stubble adjoining, to which the cattle then had access, is a swampy place where much peppermint grows. Is it likely that the animal had eaten some poisonous weed? If so, could you give me any idea of what the plant might be, that I might look for it, and much oblige."

[Your steer evidently got something to eat that caused indigestion. It may have been the change of food, especially if the clover mentioned was plentiful. A sudden change of food often causes digestive trouble. The others that showed symptoms of sickness either had not eaten so much or had sufficient vitality to recover. It would have been good practice to have given each animal that showed signs of sickness a good purgative of Epsom salts at once: 1 to 2 lbs., according to size. It is not probable the animal had eaten some poisonous weed, but the digestive trouble caused inflammation of the mucous membrane of the digestive tract, resulting in death.]

J. H. REED.]

**PUNCTURING TO RELIEVE BLOATING.**

YOUNG FARMER, Parry Sound Dist.:—"Four days ago I had two cows badly bloated from getting into a field of grain. I had to puncture both to save them. They came around all right, but one has not healed where it was opened. Wind keeps passing in and out. If she has a full feed, some of it escapes through the opening. What can I do for her?"

[You do not mention what kind of an instrument you used to perform the operations, but from results, I presume it was a knife, and you made too large an opening. If the wound be not healed by the time you receive this, keep her on short allowance of sloppy diet. Do not allow her to fill the rumen for a week or ten days. If this should not effect a cure, the wounds in both skin and stomach

will have to be opened or enlarged, the edges scarified and then stitched. The wound in stomach must be stitched with carbolized catgut. It requires an expert to perform this operation. If the opening in the skin be closed and that in the stomach not, the gas and food will escape from the rumen and, not being able to escape further, will lodge between the walls of the stomach and the abdominal walls and create inflammation. I trust a cure will result without an operation.]

J. H. REED.]

**HORSE KICKED ON LEG.**

W. M., Restigouche Co., N. B.:—"I have a horse that got kicked last fall on the gambol part of his leg, and it became swollen and stiff, so that he has no use of that leg; he can hardly put it to the ground. He has been in pasture all summer, but don't appear to be getting any better."

[Your description of the part kicked is very indefinite, as the term "gambol part" is used by many to indicate different parts of the hind limb. If the injury was received on the hock joint it is probable a bony union of the bones has taken place and he cannot be cured. If higher up, unless there has been fracture, followed by imperfect union, he should recover. It is so long since the injury was received, the lameness has become chronic, and it probably would be well for you, if possible, to have him examined by a veterinarian. If this be not convenient, I would advise repeated blistering with the following: Take biniodide of mercury, 2 drs.; powdered cantharides, 2 drs.; lard or vaseline, 2 ozs.; mix well. Clip the hair off the enlargement and apply the blister with good friction, putting a little on at a time and rubbing well in, then a little more, and so on for half an hour. Tie his head so that he cannot bite the part. In 24 hours rub well again with the blister, and in 24 hours longer wash off with warm water and soap, and apply a little sweet oil or hog's lard. Oil every day until the scale comes off. Blister in this way every three weeks.]

J. H. REED.]

**WEAK FETLOCK IN FOAL.**

SUBSCRIBER, Wellington Co., Ont.:—"What treatment would you recommend for a colt which came weak on fetlocks? It is strong and healthy every other way, but goes over until it walks right down on fetlock."

[The cause of the above condition is a weakness of the extensor muscles, which are situated on the anterior aspect of the arm, and a too rigid condition of the flexor muscles which are on the posterior aspect. Applications of liniments or lotions do no good. Treatment consists in supporting the limbs by means of appliances which prevent the fetlock joints flexing and going forward. If this can be done the parts will gradually gain strength. There have been many different appliances tried with varying success. I have found better results from the following than from any others: Get your harnessmaker to cut a piece of thick felting, such as is used for housings, collar pads, etc., to fit the leg from the knee to the foot. Have the felt so that the edges will not meet by one-half an inch. Get three pieces of green elm or hickory about one inch wide and a quarter of an inch thick, two the same length as the felting, and one one inch longer. The long one is placed in front so that the extending inch of wood will rest upon the hoof. One of the others on each side. Six straps with buckles on one end are now attached to the felting and stays about equal distance apart. This appliance is buckled snugly to the limb, sufficiently tight to prevent shifting, but not tight enough to check circulation. The colt must be kept in a small paddock in the stable, as it is not well to give much exercise. The appliance requires to be removed for a few minutes twice daily in order to allow a circulation of air around the limb, else probably there will be scalding, especially in warm weather. If any parts are becoming scarified or sore, place some cotton batting over them. The raw surface mentioned should be kept clean and dressed regularly with one part carbolic acid to seventy parts sweet oil, or with zinc ointment.]

J. H. REED.]

**Miscellaneous.**

**GROWING ARTICHOKE FOR HOGS.**

R. C., Wellington Co., Ont.:—"A neighbor of mine wishes to know, through the columns of the FARMER'S ADVOCATE, whatever information you may have re artichokes as a profitable vegetable to grow. How are they grown? For what purpose principally are they grown? Do they make good hog feed, etc., etc.?"

[Except for hog feed, we believe artichokes are very little grown, and even for that purpose comparatively few farmers pay any attention to this crop. The sort of land and the same treatment that will answer for potato-growing will suit well for artichokes. The land is manured in fall, winter or spring, cultivated well in May, and planted as potatoes are planted during the latter half of May. The rows should be not less than three feet apart. The land should be cultivated during the summer until the plants grow too large to work among. The crop can be harvested with a plow or potato harvester after cutting and removing the stalks, or the hogs will leave very few to waste if allowed access to the patch without rings in their noses. Sometimes portions of the patch are left till spring, when the hogs will root them out and do well on them before they can get pasture to support them. For late fall or early spring hog feed, there is no crop gives better returns than a good yield of artichokes, supplemented with a light corn or barley diet.]

**NO MORE C. P. R. FREE SIRE.**

E. E. G., Russell, Man.:—"Having seen in the columns of your valuable paper that the C. P. R. has in the past made a practice of furnishing the farmers of Manitoba with pure-bred sires, I would like to know if they still continue the practice, and if so, how would a person go about getting an animal? Wishing the FARMER'S ADVOCATE every success."

[The above question was submitted to Mr. F. T. Griffin, Land Commissioner of the C. P. R., who answers as follows: "I understand that it is not the intention of the Company to distribute any thoroughbred stock next season."]

**TREES FOR LIGHT SANDY SOIL.**

W. S., Stockton, Man.:—"I wish to plant out a bluff of trees, interspersed with shrubs, on light sandy land. Will you kindly suggest some suitable varieties of trees and shrubs for this purpose, and also state whether I should replace the light soil with black loam or use manure to enrich the land; also, what tree would you recommend to sow on this class of soil?"

[The following trees do well on sandy soil if the land is well cultivated: Russian poplar, Siberian poplar, common native poplar, spruce, and ash-leaved maple. The following shrubs can be planted in among the trees: Artemesia (old man), spiraea, lilacs, and caraganas. If the soil is very light, a little black loam should be mixed with it; if only fairly light, a good coat of thoroughly-rotted manure spread all over the land should be sufficient; but the principal dependence should be in cultivating. Not a weed or blade of grass should be allowed to rob the trees of moisture. Ash-leaf maple seed is the only one that should be sown on this class of soil.]

S. A. BEDFORD.]

**Brandon Exp. Farm.**

**RIGHTS OF HIRED MAN.**

SUBSCRIBER, Deloraine, Man.:—"Will you please inform me through your paper if a man hired to a farmer by the year is supposed to be on the farm every Sunday to do the chores. If he goes to church in the afternoon and does not get back till dark, can he keep back his wages for lost time?"

"2. If a team of horses runs away and hurts a man in my employ, am I supposed to pay him his wages while he is not able to work?"

"3. How many holidays is a man supposed to have, hired by the year?"

[When a man is hired by a farmer as an ordinary laborer, he is supposed to do the customary work on a farm, which will include the chores on Sunday, and if he wishes to have Sunday off, he should stipulate for that when making the agreement.]

2. When an employee has a temporary illness, under a permanent contract, the master is liable for the wages, but not where he is engaged by the day or week.

3. A man hired on a farm is not legally entitled to holidays.]

**Chatty Stock Letter from Chicago.**

**FROM OUR OWN CORRESPONDENT.**

Following table shows current and comparative live stock prices:

prices:	Extreme prices now.	Top Prices		
		ago.	1899	1898
Beef cattle.				
1500 lbs. up.....	\$5 20 to 6 00	\$5 75	\$6 95	\$5 75
1350 to 1500 lbs.....	5 00 to 6 00	5 85	6 85	5 80
1200 to 1350 lbs.....	4 60 to 5 90	5 80	6 55	5 70
1050 to 1200 lbs.....	4 40 to 5 80	5 75	6 40	5 60
900 to 1050 lbs.....	4 35 to 5 60	5 55	6 25	5 50
Fed Westerns.....	1 75 to 5 65	5 70	6 95	5 65
Stillers.....	5 10 to 5 50	5 30	5 55	5 00
Stockers and feeders.....	2 50 to 4 75	4 75	4 75	4 70
Hogs.				
Mixed.....	5 00 to 5 35	5 70	4 75	3 92
Heavy.....	4 85 to 5 42	5 62	4 75	3 92
Light.....	5 10 to 5 45	5 70	4 80	3 92
Pigs.....	3 50 to 5 15	5 25	4 75	3 75
Sheep.				
Natives.....	2 50 to 4 15	4 25	4 10	5 00
Western.....	3 00 to 4 25	4 25	4 00	4 00
Yearlings.....	1 00 to 4 25	4 25	4 10	4 15
Native lambs.....	3 50 to 5 40	5 75	5 35	6 35
Western lambs.....	1 00 to 5 10	5 25	5 15	5 60
Feeding sheep.....	3 25 to 4 00	4 00	3 80	4 30
Feeding lambs.....	1 40 to 4 75	4 70		

A well-known feeder from Cass County, Iowa, had in four cars of good heavy cattle. He says the cost of feeding cattle and corn are too high for feeders. Old corn 30c. to 31c., and new corn starting at about 25c.

Another Chicago man, back from a trip to one of the best feeding regions of Iowa, says he was surprised to see the number of good heavy cattle that were fed for a year, which feeders feel will not pay out at present prices.

The big cattle feeders are holding on to some of their big droves of cattle, that ordinarily would have been marketed several months ago. These cattle are getting heavier every day, of course. When the complaint of buyers is that many of the best cattle are already too heavy, with corn sure to be dearer, it looks as if buyers ought not to be too severe upon owners of big cattle, or next year they will be looking in vain for the kinds they now say are "too heavy."

The bulk of the store cattle are selling 25c. to 40c. lower than a year ago, though the top price for good feeders is not much different.

Hog prices are not to be complained of. The packing season is well on, and instead of packers being able to make the usual breach in prices, they find themselves confronted with moderate supplies of good hogs, a big demand from all quarters, with diminishing instead of accumulating stocks of provision, and what looks like another "corner" in mess pork.

Sheepmen are confronted with the high feed problem, and are wondering whether they will be repaid for putting so much money into making mutton. The demand for feeding sheep and lambs is so strong as to leave a very small margin between prices for such stock and the ripe, heavy sheep and lambs. For instance, some feeders recently offered \$1.70 for 1,500 Utah lambs, that sold to slaughterers in the Chicago market at \$1.75.

The general live-stock situation looks fairly good, but it will take some nerve to do business this winter.





### THE CHILDREN'S CORNER.

#### The Lookout Regiment.

Names of new recruits are: Lida Bowman, Ethel Letson, J. H. Pilkey, Hilda Beaumont, and Jean Rogers.

I must congratulate the company in West Montrose; it is now the largest in the regiment. How would you like to choose one of your number as captain, and let him report progress as to the work you are doing? I think it would be nice to find some child who is likely to be overlooked by Santa Claus, and get a big stocking filled for him by Christmas time. The stocking could be made of black or colored print. Let me know if you decide to do this, and I will gladly send a contribution.

Don't forget that the "Child-Hero Competition" closes on the 1st of November. I am constantly getting letters from children who say they always like to read about the Lookout Regiment. I hope you will all be on the lookout for a chance to play Santa Claus this Christmas. It is great fun if you begin your preparations a good while ahead, then you haven't to hurry at the last.

May I ask J. M. Matchet to let me know whether the prize sent several weeks ago arrived safely? The other prizewinners have acknowledged theirs.

Cousin Dorothy.

#### Five Little Brothers.

Five little brothers set out together  
To journey the livelong day.  
In a curious carriage all made of leather  
They hurried away, away!  
One big brother and three quite small  
And one wee fellow, no size at all.  
The carriage was dark and none too roomy,  
And they could not move about.  
The five little brothers grew very gloomy,  
And the wee one began to pout.  
Till the biggest one whispered, "What do ye say?  
Let's leave the carriage and run away!"  
So out they scampered, the five together,  
And off and away they sped!  
When somebody found that carriage of leather,  
Oh, my, how she shook her head!  
'Twas her little boy's shoe, as everyone knows,  
And the five little brothers were five little toes.

#### A Sailor Lad.

"When shall we know the enemy has given in?" asked a lad, a tailor's apprentice, who had run away from his trade and entered the navy as a common boy, about the year 1689.

"When the flag is hauled down," answered a sailor, "the ship will be ours."

"Oh, if that is all, I'll see what I can do." At that moment, the ship that the lad was on was engaged in a terrible fight with one of the French squadrons, that lay yard-arm to yard-arm next, and were both obscured in the smoke of each other's guns. In an instant the lad had mounted the shrouds, passed from the yard of his own ship to that of the enemy, and with quick agility ascended to the maintop-gallant masthead, struck and carried off the French flag unseen by anyone, and worked his way back to his own ship in safety. Before he reached the deck, however, the English saw that the enemy's flag had gone, and shouted, "Victory, victory!" The French crew, seeing their color gone, and thinking it had been struck down by the admiral's orders, fled from their guns, and a panic ensued, during which the English boarded the French vessel and captured her.

In the midst of it all, the new boy came down the shrouds with the French flag wrapped around his body, and showed it with glee to his messmates. The news quickly spread to the quarter-deck, and the blushing boy was led into the presence of the admiral, who not only praised him for his bravery, but made him then and there a midshipman. Promotion followed promotion after that, and the tailor's apprentice was afterwards known as Admiral Hopson, one of England's most gallant sailors. —From "Heroes of Britain."

#### A Japanese Game.

This game is called "Yimari." It is played with a soft rubber ball. All the children stand in a circle. One player begins the game by bouncing the ball on the ground; if it rebounds against his hand, he hits it again. Probably it will rebound in front of another player, who hits it, and so the game goes on without scrambling or pushing. Any player who fails to hit the ball when it bounces in front of him moves out of the circle and plays no more. The last one left wins the game. —Play this game some day when you are tired of the old ways of playing ball.

#### Epitaph on a Schoolboy.

This epitaph was copied by Bishop Warburton from an old church in England:

"Here lies, to parents, friends and country dear,  
A youth who scarce had seen his 17th year;  
But in that time so much good sense had shown  
That Death mistook it for 71."

### THE QUIET HOUR.

#### My Brother's Keeper.

"Rest not in hope want's icy chain to thaw  
By casual boons and formal charities!  
Learn to be just, just through impartial law;  
Far as ye may, erect and equalize;  
And what ye cannot reach by statute, draw  
Each from his fountain of self-sacrifice!"

I promised to tell you something about the effort that has been made, during the last ten years, to cheer and uplift the poor of New York. As I said before, we can only take a peep at a few of the improvements, for their number is countless. Perhaps the greatest help has been given by men who try to do things on a strictly business basis, giving justice rather than what is usually called charity: men who have built model tenements, which bring in three or five per cent., instead of fifty, in which human beings may live decently and comfortably. Some of these are provided with plenty of baths, free library and reading rooms, and a laundry, where the lodgers can wash their clothes, with every convenience (a great improvement on the old custom of doing the washing in the living-room). All the advantages of these large and comfortable buildings may be had for very reasonable prices. They are not an encouragement to pauperism, but rather help those who are willing to help themselves. The inmates of such tenements are expected to be respectable and self-reliant, and to honestly pay for what they get. Compare these handsome houses, with their small, but clean, comfortable and well-lighted bedrooms, with the old tenements in the "Mulberry Bend." These used to be "jammed with a reeking mass of human wrecks, that huddled in hall and yard, and slept, crouched in shivering files, all the way up the stairs to the attic."

The great lesson of the brotherhood of man is beginning to be learned, and it needs to be pressed home to each one of us, for we are only too ready to fancy, as the first murderer did, that we are not responsible for our brother's welfare.

Special efforts are being made to help the children, who were formerly crowded out of the schools by the thousand. Many millions of dollars have been spent during the last few years on schools; and their need of healthy, happy play is also recognized at last. Playgrounds are springing up in the most crowded localities, where playgrounds were never dreamed of ten years ago. If no other spot can be found, they are perched up on the roofs of the schools. Gymnasiums and skating rinks are not now the luxuries of the rich only. Newsboys are provided with hotels of their own, where they are given a lift if they need it, but are expected to pay back every cent advanced to them. They are so proud of the trust reposed in them that they very seldom fail to justify it. One boys' club started with a handful, and can now count thousands of members. The rough gangs that used to educate boys to be loafers, thieves and vagabonds have evolved into clubs which bring out all the manliness that lies hidden under a rough exterior.

The necessity of doing something for the children is evident when the police records describe the arrest of "burglars" six and seven years of age! A gang of five was once arrested in a bunch, five criminals, all about eight years old! Those rescued by the Children's Aid Society have a very different record; they nearly all turn out respectable and honest.

The worst tenements, which were fairly rotting to pieces, have been pulled down, and small parks have, in many cases, taken their place. Marvellous indeed is the reformation worked by those bits of green. One of the most energetic reformers, who had worked hard to secure these parks, returned after a short absence, to find one in what had been perhaps the worst spot in the city. It was real grass, grass in the "Mulberry Bend!" His delight could not be satisfied with the sense of sight, he must walk on it to assure himself that it was not a dream. Suddenly a policeman's cane was laid smartly across his back, and he was startled to hear the angry command: "Hey! Come off the grass! D'ye think it's made to walk on?"

However, as he says, he had his revenge, having just had a hand in marking five blocks of tenements for destruction, to let in more light. Where they had been, parks were to be made, where the sign, "Keep Off the Grass!" should never be seen. He tried to explain this to the policeman, but all the answer received was a gruff "G wan now! I don't want none o' yer guff!" The old saying, "Cleanliness is next to godliness," has a good deal of truth in it, too. People are improving since they got a chance to wash themselves. "The great unwashed" prefer to be clean, if they get half a chance. The free river baths admitted more than five million customers during one summer.

A great deal has indeed been done, but there are still many dreary lives both in city and country. Are we doing our share towards brightening them? Are we obeying the command, "Bear ye one another's burdens"? Christ left his glorious home in heaven that He might help men in the truest way—that is, by becoming one with them and sharing their sorrows. Many noble men and women

have followed His example; they could not enjoy luxury while their brothers and sisters were hungry and forlorn. It has been said: "Charity in our day no longer means alms, but justice. The social settlements are substituting *vital touch* for the machine charity that reaped a crop of hate and beggary. They are passenger bridges, not mere shutles for the delivery of coal and vegetables—bridges upon which men go *over*, not *down*, from the mansion to the tenement. We have learned that we cannot pass off checks for human sympathy in settlement of our brotherhood arrears. The Church is hastening to enter the life of the people."

We may not be able to devote our lives to this work, but we can all do more than we have done. If the effort should cost us a sacrifice of time or money, or even of a little personal comfort, shall we not say with David: "I will not offer burnt-offerings to the Lord my God of that which doth cost me nothing." No sacrifice made for God is left unrewarded. In this case, certainly virtue brings with it its own reward, for

"All worldly joys go less  
To the one joy of doing kindnesses."

Christmas will soon be here. Are you going to make it only a time for presents and extra good food for those who live well all the year 'round, or are you going to stretch your circle of Christmas brightness so that it may include some of the "other half"?

"That vast throng,  
The multitude of peoples, nations, tongues,  
Shall stand before His throne, and every act  
Of human kindness He will own as His,  
And crown, as service rendered unto Him."

### Recipes.

#### TO KEEP KNIVES FROM RUSTING.

Rub a little sweet oil on the knives before putting away. Wrap in tissue paper, and keep in a dry place. If the rust has fixed on any of the knives, rub with coal oil.

#### HASHED MUTTON.

This is a nice way for using up cold mutton. Slice a good-sized onion into a saucpan with a bit of butter. Stir all together until nicely browned. Cut up your meat, and add it to the onions, stirring it until browned also. Cut up a few carrots and turnips in nice pieces, and add them. Now barely cover with water, and simmer very slowly for two hours. Thicken with a little flour, and season to taste. Put in a little browning, if not brown enough, and serve.

#### LIGHT PUDDING IS VERY WHOLESOME.

Ingredients—Quarter of a pound of bread-crumbs, quarter of a pound of flour dried and sifted, two ounces of sugar, quarter of a pound of mutton suet, four tablepoonsful milk.

Method—Put suet, bread-crumbs and flour in a basin, beat the eggs and sugar well together, add seasoning and milk, stir well into the dry ingredients, and steam in a buttered mould for an hour and a half. The mould should have a buttered plate and cloth on the top to prevent the water from getting into the pudding.

#### RECIPE FOR SHORTBREAD.

Mix together  $\frac{1}{2}$  lb. flour and 2 ozs. sugar. Rub finely into it 4 ozs. butter. Then begin to knead it hard with your hands till it begins to bind together. No moisture required. Work at it till it is quite soft and easily shaped without cracking. Make it oval or round, as you please, and crimp the edges. Put a piece of buttered paper on a baking tin, place on it the shortbread, and bake in a slow oven till quite brown (pale). It will take about an hour to one and a half. Move it carefully off the paper, and let it get cold.

#### TO KEEP CISTERN WATER SWEET.

Most housewives know how rapidly the water in a cistern collects impurities, and they also know what a troublesome, though necessary, task the cleaning out of that cistern is. Well, it need not be done nearly so often if you get 6d. worth of charcoal; fasten it up in a muslin bag, with one or two stones, and suspend it in the cistern. The stones keep the charcoal immersed in the water, from which it seems to attract all impurities. If it is renewed say once a month, the cleaning out of the cistern, under ordinary circumstances, need only be done once a year.

#### A WORD TO THE COOK.

Don't forget to put an apple in your cakebox. Cake can then be kept for weeks without getting stale. Poultry, when served cold, is much improved in appearance by being glazed. Half an ounce of gelatine dissolved in a pint of water and colored with extract of beef makes an admirable glaze. Small glass jars or large tumblers are better than china for jam pots, because should the preserves not keep well, it will be immediately detected. If baked potatoes are wanted in a hurry, boil the raw potatoes for about fifteen minutes, and then place them in a hot oven until done. Cooked in this way, they will be quite as nice as if all the cooking were done in the oven.

Policeman (to tramp) "I want your name and address." Tramp (sarcastically) "Oh, yer do, do yer? Well, me name is John Smith, and me address is No. 1 The Open Air. If yer call on me don't trouble to knock, but jist walk in."



**Onamea, Hawaii.**

This is a world of contrasts, and all the more beautiful because it is so. We are told that not even two leaves are exactly alike in form and shape, even upon the same tree; no two minds in such thorough accord as to be as one, and that even when two pairs of eyes gaze upon the same landscape, the one pair will see beauties to which the other pair is blind, all of which preamble goes to show that the ADVOCATE is only following the law of Nature in presenting from time to time in pictorial form some of earth's varied scenes, leaving its readers free to choose which pleases them best. In our last issue we took them in fancy to the mountain peaks of our magnificent Rockies. This time we ask them to come with us to beautiful Hawaii, the "Paradise of the Pacific." Our picture is a fairly typical one of the islands of the Hawaiian group, about midway in the North Pacific, upon which civilization had left no mark until after their discovery by Capt. Cook, some 120 years ago, although in some vague records and charts, hidden away amongst the archives of Madrid, it is surmised that the Islands had at least been sighted by Gaetano about two centuries earlier. Evidently, the rest of Europe knew nothing about them, and the Spaniards themselves must have forgotten their very existence. Capt. Cook at once realized the importance of their position and the value of their resources. Barring a little thievishness, hardly to be wondered at under the circumstances (for it is opportunity

mental eye, the white sands girdling the Island of Onamea, to hear the refrain of the blue waves lapping the shore, to feel the breeze which causes the featherlike palm branches to sway gracefully over head, and to almost long for a plunge into the placid waters of the North Pacific. We say "almost," because a sea bath even at Hawaii is not without its drawbacks. The playful and voracious shark has to be reckoned with, and although the natives are reckless and frequent bathers, and white people are assured that if enough of them go in at one time, or even that one of them may venture in alone provided he makes a tremendous "splashing" of the water, yet we would not advise our readers, should they find themselves on the shore of Onamea, to take any risks. Go to Hawaii, if our picture tempts you to do so, but 'ware sharks!  
H. A. B.

**Wedding Presents.**

We have all of us read of, and sympathized with, the newly-married couple who, on "taking stock" of their wedding presents, found that they had seventeen butter dishes, twelve pickle stands, twenty-three butter knives, and ten dozen doyls. The tale may be slightly exaggerated, but there can be no doubt that many young people just starting housekeeping find themselves considerably embarrassed by the number of similar

**Spoiling Love Matches.**

When your son goes a-courting, or some young man surprises you by paying attention to the little girl you have always thought of as "little Fannie," pause awhile before you decide on opposing their desires and thwarting their hopes. And do not set your face against the match, and make the young people miserable, unless it is really right that you should do so.

There is so much sweetness in the continuance of one's first love—in having nothing to look back upon—no regrets, no old love letters to tear up, or locks of hair to put in the fire.

A life hardly goes quite right that is cut down to the very roots, and allowed to grow again. Don't say "No" because you do not like the young man's grandfather, or because there was difficulty twenty years ago about that acre of marsh land, or because there was an argument between your aunt Priscilla and the girl's second cousin Sally, which ended in their not speaking to each other, and in saying a good deal against each other to make up for it.

Old feuds, old prejudices, of the stupidest sort, have parted many a pair whom heaven evidently intended to join together. And there are sour old maids and wicked old bachelors who might have been good, happy old couples now if some other old couple in the past had not interfered without good reason.



ONAMEA, HAWAII, H. I.

which makes the thief), the natives appear to have been hospitable and friendly, and Capt. Cook considered them of a type superior to the Polynesians, with whom he had become already acquainted. The newcomers, history tells us, were not wholly without their share of acquisitiveness. If the natives coveted their more civilized weapons and tools, they, on their side, coveted and possessed themselves of the tempting fruits and foods which the Islanders offered in exchange. Reprisals followed, stringent laws had to be enacted, and it was in the carrying out of these laws that Capt. Cook lost his life, "stabbed from behind with one of the iron daggers he had so extensively used in bartering with the natives." To the older folks, who were geographically fed upon the old discarded school-books of the past, Hawaii was known better by the name bestowed upon it by its discoverer, viz., the Sandwich Islands, but if they have followed its history since Capt. Cook cast anchor there, when he was searching for a north-west passage around America, they will know that the Hawaii of to-day has gone through many vicissitudes, survived many internal disruptions, and is now a flourishing little Republic, with nearly every advantage offered by the advanced civilization of this more fortunate era.

The peaceful picture we present to you creates almost a longing to visit Hawaii. It needs but little effort of the imagination to see, with the

articles—many of them of doubtful utility—of which they find themselves possessed. It is, I admit, a dilemma which it is difficult to avoid. Occasionally a younger sister of the bride can be "confidentially" consulted, and a hint obtained as to what present would be really acceptable. Then, again, old friends can study utility more than mere acquaintances. I know a dear old maiden lady, with a very large circle of friends, whose wedding gift is invariably a complete set of brushes—hair brushes, clothes brushes, boot brushes, and brooms of various descriptions. Her present is always acceptable, for it saves the young people buying such articles; and in every part of the house there is something which serves to keep the kind donor's memory green.

Another useful present for a bride is a toilet glove box, with a few pairs of really good gloves in it. The French have a proverb which tells us that a woman who is well gloved and well shod is well dressed; and to the young woman whose dress allowance is somewhat limited, such a gift is doubly welcome, as it saves her pocket, and helps to make her "look nice" during the visits which she pays after her return from the honeymoon.

The principal thing to be studied is the suitability of the gift to the social position of the recipients. Wedding presents should be chosen with care, and with strict regard to the daily requirements of the home which they are to grace.

**Good Health.**

**DAMP ROOM.**

To ascertain whether or not a room is damp, about a couple of pounds of fresh lime should be placed therein after hermetically closing doors and windows. In twenty-four hours it should be weighed, and if the lime has absorbed more than about 1 per cent. of water, the room should be considered damp, and classed as unhealthy. "Family Doctor."

**GIVE CHILDREN FRESH AIR AND SUNSHINE.**

Children should live out of doors. They ought to be brought up in the fresh air and sunshine. Without it they droop and die, for "life is a sun child," and its beginnings cannot thrive deprived of its native element. In childhood the foundation is laid for mature life. Pale, delicate, hothouse children, when brought up in the heated atmosphere of the luxurious modern home, have no stamina for the future. A robust, hardy childhood, secured by plenty of outdoor life, even in cold weather, simple, nourishing food at regular hours, without meat, cake, sweets or pastry, clothing that permits of perfect freedom in the making of mud pies and other childish delights, besides the "early to bed" of the old nursery rhyme, would help to lessen the terrible mortality among children, and insure to them some backbone for the needs of adult life.



POETRY---OLD FAVORITES.

Kissing's No Sin.

Some say that kissing's a sin;
But I think it's none ava,
For kissing has woun'd in this world
Since ever there was twa.

O, if it wasna lawfu',
Lawyers wadna allow it;
If it wasna holy,
Ministers wadna do it.

If it wasna modest,
Maidens wadna take it;
If it wasna plenty,
Pair folk wadna get it.

---Anonymous.

The Chess-Board.

My little love, do you remember,
Ere we were grown so sadly wise,
Those evenings in the bleak December,
Curtained warm from the snowy weather,
When you and I played chess together,
Checkedmate by each other's eyes!

Ah, still I see your soft white hand
Hovering warm over Queen and Knight;
Brave Pawns in valiant battle stand;
The double castles guard the wings;
The Bishop, bent on distant things,
Moves, sidling through the light.

Our fingers touch, our glances meet,
And falter; falls your golden hair
Against my cheek; your bosom, sweet,
Is heaving. Down the field, your Queen
Rides slow, her soldiery all between,
And checks me unaware.

Ah me! the little battle's done;
Dispersed is all its chivalry,
Full many a move since then have we
Mid life's perplexing checkers made,
And many a game with fortune played;
What is it we have won!

This, this at least,---if this alone.

That never, never, nevermore,
As in those old still nights of yore,
(Ere we were grown so sadly wise),
Can you and I shut out the skies,
Shut out the world and wintry weather,
And eyes exchanging warmth with eyes,
Play chessas then we played together!

---Robert Bulwer-Lytton.

The Groomsman to His Mistress.

Every wedding, says the proverb,
Makes another, soon or late;
Never yet was any marriage
Entered in the book of fate,
But the names were also written
Of the patient pair that wait.

Blessings then upon the morning
When my friend, with fondest look,
By the solemn rites' permission,
To him-self his mistress took,
And the destinies recorded,
Other two within their book.

When the priest fulfilled his office,
Still the ground the lovers eyed,
And the parents and the kinsmen
Aimed their glances at the bride;
But the groomsman eyed the virgins
Who were waiting at her side.

Three there were that stood beside her:
One was dark and one was fair;
But nor fair nor dark the other,
Save her Arab eyes and hair;
Neither dark nor fair I call her,
Yet she was the fairest there.

While her groomsman---shall I own it!
Yes, to thee, and only thee---
Gazed upon this dark-eyed maiden
Who was fairest of the three,
Thus, he thought: "How blest the bridal
Where the bride were such as she!"

Then I mused upon the adage,
Till my wisdom was perplexed,
And I wondered, as the churchman
Dwelt upon his holy text,
Which of all who heard his lesson
Should require the service next.

Whose will be the next occasion
For the flowers, the feasts, the wine?
Thine, perchance, my dearest lady;
Or, who knows? it may be mine,
What if 't were---forgive the fancy,
What if 't were---both mine and thine!

---Thomas William Parsons.

Reminiscences of Tennyson.

Of the winning of Emily Sellwood much will ever remain untold, wife and son preserving what is surely a wise reticence regarding a long period of trial in the closest relationship of the poet's life. For Emily Sellwood and Alfred Tennyson had met in 1839, when she was seventeen and he twenty-one. Arthur Hallam, we are told, was then staying at Somersby with the Tennysons, and asked Emily Sellwood to walk with him in the Fairy Wood. At a turn of the path they came upon Alfred, who at the sight of the slender, beautiful girl of seventeen, in her simple gray dress, suddenly said to her, "Are you a Dryad or an Orond wandering here?" Once having their orbits had almost crossed, for in his boyhood Tennyson had taken music lessons from Mr. Southey, well known teacher in Horn-castle, and Emily Sellwood was a girl with its attic window looking upon the market stalls.

Miss Emily Sellwood was the daughter of a subaltern in the army, and her father, who was also a poet, had been a friend of the poet's. She was also the daughter of the Rev. Mr. Southey, who was in 1839 the vicar of the town of Somersby. The family felt, with Tennyson, a strong attraction to the poet, and Emily Sellwood was a friend of the poet's.

Tennyson narrates the incident in one of his sonnets. Before the ceremony Emily had been weeping, till her sister, smiling, chid her---

"No tears for me!
A happy bridesmaid makes a happy bride."

But weary years had to come between ere the bridesmaid became the bride. An engagement was entered into; but Tennyson was not in a position to marry, and here it was that he faced the severest temptation of his life. Had he chosen to publish then, he might have married; had he chosen to write prose articles for the reviews even, many an editor would have been pleased to add his name to his list of contributors. But Tennyson would not. In a smaller man such a resolve would have been intellectual coxcombry; in Tennyson it was the intuitive recognition of his high calling, the answer to the whisper that lingered in his ear from his dawn of life, steadfast obedience to the command from far, far away to follow the gleam. Great gifts had been given to him to use worthily, and he set his face against giving to the world what he considered immature work. How far Emily Sellwood upheld him in his determination we cannot know for certain, for the extracts from their correspondence published in their son's "Memoir" contain little that is personal; but of her loyalty to his decision we have abundant proof. Her family, however, viewed the matter from a different standpoint; it was hardly to be expected that the poet's sense of consecration would be favorably regarded when it appeared to involve the sacrifice of his betrothed. And so, in 1840, when the prospect of Tennyson making an income sufficient to support his wife---or, for that matter, any income at all---seemed to be as remote as ever, the engagement was broken off by the lady's relatives; and Miss Sellwood and Tennyson silently acquiesced. Ten ripening years passed, and it was in the spring of 1850 that Tennyson next met Miss Sellwood at Shiplake-on-the-Thames. Separation had only drawn the two closer together, and the way now seemed clearer. Tennyson had three hundred pounds in bank; Moxon, his publisher, advanced another three hundred pounds; and Mr. Sellwood found the household furniture. It did not promise luxury, but it sufficed, and an early date was fixed for the wedding.

In Shiplake Church, with its tower half-clothed with ivy, rich in painted glass windows and carved oak ornaments, on the 13th of June, 1850, Alfred and his betrothed were wed. The cake and the dresses arrived too late, and Tennyson used to remark that it was the nicest wedding he had ever been at. The only guests were the bride's father, some of the Lushingtons, and two or three other friends.

It was at Tent Lodge, Coniston, that Carlyle first met Mrs. Tennyson; and he was touched with her thoughtfulness in closing a window on hearing him cough. When introduced he slowly scanned her from head to foot, and then gave her hand a hearty shake. To Mrs. Carlyle he wrote---

"Alfred looks really improved, I should say; cheerful in what he talks, and looking forward to a future less detached than the past has been. A good soul, find him where or how situated you may. Mrs. Tennyson lights up bright, glittering blue eyes when you speak to her; has wit, has sense; and were it not that she seems so very delicate in health, I should augur really well of Tennyson's adventure."

Carlyle was right. Of all the great literary men of the nineteenth century, not even excepting Robert Browning, Tennyson was most fortunate in his married life. "The fear of God," he said in after-life, "came into my life before the altar when I wedded her." In all things his wife was his adviser. "I am proud of her intellect," he said.

William Wordsworth died on April 23, 1850, and there were not a few candidates for the vacant poet-laureateship. The babel of tongues was great; but Tennyson was the popular favorite, and in the early winter came the offer of the appointment. The Queen had not forgotten the idyllic charm of "The Miller's Daughter," and Prince Albert's admiration of "In Memoriam" was profound. Tennyson records that the night before the offer reached him he dreamt that Prince Albert came and kissed him on the cheek. It is interesting to note that although the Queen and Prince Consort were well acquainted with Tennyson's work, some members of the Government were not. "We know nothing of this gentleman," wrote Lord Palmerston to Samuel Rogers. "Are his writings such as befit a laureate to the Queen?"

Tennyson's acceptance was by no means a foregone conclusion. "I have no great passion for Courts," he said, "but a great love of privacy. It is, I believe, scarce £100 a year, and my friend R. M. Milnes tells me that the price of the patent and Court-dress will swallow up all the first year's income." He wrote two letters, one accepting and one refusing, remaining for a time undecided which to send.---From "Tennyson," by Evan J. Cuthbertson.

Mrs. Sweeney---"But phat about the squarin' av the board and lodgings for the fortnight before yez go?" Pat (bundle under arm) "Well, indade, Mrs. Sweeney, I've never bin in the habit av squarin' any wan, to tell yez the truth; but if ever I do make a beginnin', take my oath for it, it's your own decent self shure'll be squared first, bekase, to tell yez straight-wardly, a finer landlady than yourself I never met wid."

Healthfulness of Mountains.

It is well known that the chemical composition of the atmosphere differs but little, if at all, wherever the sample be taken; whether it be on the high Alps or at the surface of the sea, the relation of oxygen to nitrogen and other constituents is the same. The favorable effects, therefore, of a change of air are not to be explained by any difference in the proportion of its gaseous constituents. One important difference, however, is the bacteriological one. The air of high altitudes contains no microbes, and is, in fact, sterile, while near the ground and some 100 feet above it microbes are abundant. In the air of towns and crowded places not only does the microbe impurity increase, but other impurities, such as the products of combustion of coal, accrue also. Several investigators have found traces of hydrogen and certain hydrocarbons in the air, and especially in the air of pine, oak, and birch forests. It is these bodies, doubtless, to which the curative effects of certain health resorts are ascribed. Thus the locality of a fir forest is said to give relief in diseases of the respiratory tract. But, all the same, these traces of essential oils and aromatic products must be counted, strictly speaking, as impurities, since they are not apparently necessary constituents of the air. As recent analyses have shown, these bodies tend to disappear in the air as a higher altitude is reached, until they disappear altogether. It would seem, therefore, that microbes, hydrocarbons, and entities other than oxygen and nitrogen, are only incidental to the neighborhood of human industry, animal life, damp, and vegetation.---From the London Lancet.

The Ill-Natured Wife.

There is nothing more objectionable and annoying than a nagging, discontented, ill-to-please wife. And, unhappily, the type is by no means extinct, as many a poor man can testify. If he talks, he is noisy; if silent, he is sulky; if he reads, he is unsociable; and if he goes for a walk by himself for the sake of a little peace and quietness, he is cruel and selfish. Paradoxical though it sounds, the only comfort he has in his own home is when he is out of it. If he hopes to make the air a little clearer by bringing home a present, he is told it is just like him to bring home something that is not wanted, whereas if he had brought so-and-so there would have been a little sense in it. And if he brings nothing, or forgets some small commission, he has to listen to half an hour's steady talking as to the disgraceful way he treats his poor hard-working wife, who left a good comfortable home to be made miserable by him, or he has to endure an evening of chilly silence while his wife sulks in the next room. I could go on, but space forbids.

Some people's tempers wince at every touch,
You always do too little, or too much;
Thus, always teasing others, always teased,
Their only pleasure is to be displeased.

Answers to Sept. 20th Puzzles.

- 1-Cash, dash, fash, gash, hash, lash, mash, pash, rash, sash, wash.
2-A part.
3-Regal-exile-given-alert-lents.
4-Wasp-as-p.
5-Grape-rape-ape.

SOLVERS TO SEPT. 20TH PUZZLES.

Mrs. Annie Rodd, "Diana," "Grace," J. G. McLean, Sila Jackson, "Ike Leicle," "Essex," Lizzie Conner, "Sartor," "Eneri."

ADDITIONAL SOLVERS TO SEPT. 5TH PUZZLES.

"Essex," "Amy," Helen McLure, Lizzie Conner.

COUSINLY CHAT.

My Dear Cousins---The result of last quarter's puzzle contest is now ready, and I presume the contestants are eagerly awaiting its publication. The prizes for original puzzles are awarded as follows: 1st (\$1.00) to E. L. Sawyer, Toronto, Ont.; 2nd (\$50) to G. J. McOrmae ("Ike Leicle"), St. George's, P. E. I.; and 3rd (\$25) to "Nota Bene." Will "Nota Bene" please forward his address, as it has been mis-laid! Prizes for solutions: 1st (\$1.00) to Miss Helen McQueen ("Diana"), Salem, Ont.; 2nd (\$1.00) to J. G. McLean, Kentville, N. S.; 3rd (\$50) to Miss Margaret G. Purdy ("Grace"), Rockton, Ont. "Essex," "Eneri," Sila Jackson and Lizzie Conner were very close followers, while "Sartor," "Ike Leicle," Mrs. Annie Rodd and "Amy" made a very good showing.

"Essex."---Your "too deep" was answered by most of the puzzlers. The other answer was not so far off the mark. I expect to hear from you in our new contests. Why not get some of your "young hopefuls" to work?

"Amy."---Arranged matters all right, and you did not come out very far behind.

"Diana." I must congratulate you on your repeated success. Do you know "Sartor"?

Lizzie Conner. You were "so near and yet so far." If you do not care to try the "Essay," what about the poetry contest? This ends the puzzling for a time, but now that the fairs and harvest homes are all over and the long evenings give time for mental recreation, I hope the old puzzlers will enter the contests which have been and will from time to time be announced. I desire suggestions for a new name for our department, since I believe Tom has laid aside his oars. Those of you who are clever with your pencil might favor us with a neat heading, but in any case send your name suggestions whether illustrated or not. Any one may offer not more than two suggestions, and to the one sending the most suitable I will give a 50c. bound book. This contest will be open until Nov. 20th. Mark envelopes, "Name Contest," and sign full name and address as well as words of plume.

Address all work to MISS ANN ARMAND, Pakenham, Ont.



The Rest Cure.

At the nursing homes and private hospitals in many large towns the rest cure is a very expensive remedy in which to indulge. Any woman with sufficient strength of mind can, however, conduct it on her own behalf without leaving her home. It is done in this way: There must be complete isolation from friends and relations; no letters are to be written, and those that are received are to be put aside unopened. Only the lightest of literature is to be read, and it must be of a sensible and non-exciting character. For the length of time that a patient feels she requires complete rest she must stay in bed—say for a fortnight or three weeks. She must not neglect her meals during this period: indeed, the more nourishment she can take the more complete her cure will be. Milk is by far the most important item of her daily food. She ought to begin by drinking a glass of it even before she has finished her night's sleep that is to say, if she happens to wake up early. Then she takes another glass with her breakfast and another at noon. Her 5-o'clock tea consists of milk, for tea and coffee are both forbidden her. Last thing at night she has another glass of this exceedingly nutritious beverage. It stands to reason that her cure cannot be a success unless she banishes from her mind every worrying thought, and this she will find a very difficult task to do. She must drink no wine nor spirits, and when she feels that she can come back to the world with strength and nerves, she must not do so suddenly. Instead, she must get up for a short time each day, and return to her usual duties by degrees.

WASHINGTON AND GRANT.—One day during his presidency, Grant came into the room where his cabinet was assembling, quietly laughing to himself. "I have just read," said he, "one of the best anecdotes I have ever met. It was that John Adams, after he had been president, was one day taking a party out to dinner, at his home in Quincy, when one of his guests noticed a portrait over the door and said, 'You have a fine portrait of Washington there, Mr. Adams.' 'Yes, was the reply, 'and that old wooden-head made his fortune by keeping his mouth shut,'" and Grant laughed again with uncommon enjoyment. The apocryphal story gained a permanent interest in Grant's mouth, for though he showed no consciousness that it could have any application to himself, he evidently thought that keeping the mouth shut was not enough in itself to insure fortune, and at any rate was not displeased at finding such a ground of sympathy with the Father of his Country.—Scribner.

ADVERTISING IN CHURCH.—The American soldiers in the Philippines see some strange sights. Lately a crowd of them attended a church service in their honor. There was much praying and singing. The image of an old saint drew their attention. Above the image was the picture of an eagle. On the banner which streamed from the eagle's bill was the following legend: "The Old Reliable Condensed Milk." The artist had copied the eagle from a milk can. The padre explained that he thought it was an American motto.—San Francisco Argonaut.

Humorous.

Curate—"Oh—er—by the way, Mr. Bloggs, I was wondering whether you would give me a small subscription for a most excellent object. I mean the repairing of the cemetery wall." Wealthy Parvenu—"Not me, sir. The cemetery wall don't need any repairing. Them as is inside can't get out; an' them as is outside don't want to get in. Good mornin'."

An Irishman, fond of expressing his views on things in general, had the habit, when he had no listeners, of talking to himself. A countryman of his, meeting him one day, said to him: "Pat, does it never occur to you that your constant muttering to yourself is a great annoyance to people who happen to be about? Why do you talk so to yourself?" "Shure, sor, I have two reasons for that." "And what are they, pray?" "Weel, wan of them," replied Pat, "is that I like to talk to a sensible man, an' the other is I like to hear a sensible man talk."

In a country village in Perthshire an old woman was in the habit of keeping a number of hens. One day she went to town to sell eggs, and on reaching a grocer's shop went into it and said calmly—"Wanting any eggs, sir?" "Yes, old wife, I would like a dozen or two, but we had a meeting not to give any more than 'd. per dozen." "A'richt, then, here ye' are," she said. About a week afterwards the same old woman called on the grocer with more eggs. The grocer, on seeing the eggs, replied—"These eggs are very small this time, missus." "I believe that," she said, "but my hennies had a meeting not to lay big eggs unless they got a big price for them."

A certain young man was a victim of misplaced confidence. He was particularly sweet on a very young lady, and called one evening, after having previously paid her several visits. The girl's parents, thinking both too young to begin keeping company, gave a gentle hint to that effect—first, by calling the girl out of the room and sending her to bed, and, secondly, by the lady of the house bringing into the room a huge slice of bread spread with butter and jam, saying to the youth in her kindest way—"There, laddie, tak' this an' rin' awa' hame; it's a lang wye, an' yer mither'll be anxious!"

The Complaining Woman.

Her trials may be very real, but all the same the complaining woman receives little sympathy. Her voice contains a continual note of fretfulness, and her face wears always an expression of deepest injury. Her grievances are against everybody, from the butcher who has sent her a fat bit of beef to the minister who has called twice on her neighbor since he looked near her. The complaining woman, no doubt, works very hard, and receives scant thanks for doing so. She loves her husband and children devotedly, but still she is constantly "nagging" at them. She is so much engrossed with her own troubles and wrongs that she loses all earth's bright sweetness, and, though she may be at heart the best and kindest of women, the world never finds it out.

Large Families.

There seems to be a desire just now to find out who has the largest family in the world. The latest claimant to the honor is a Frenchman called Bresson, who has just celebrated the birthday of his forty-first child. It was born to his third wife, who is the mother of fourteen. His first wife bore him fifteen children, and his second wife twelve. Thirty-two of the children are still living, or were up to a few months ago, when the father last heard from them. Most of them are married and raising families of their own, and they have become so scattered that he can scarcely keep track of them. He kept the names of his grandchildren until they numbered over one hundred, and then gave up the record.

The End of Summer.

Good night! for the shadows lengthen  
Over the meadow grass,  
And the gates of sunset are open  
For the dying day to pass.  
Good night! the mountains are fading,  
The voices of singing cease;  
And the twilight, gracious and tender,  
Is filling the valleys with peace.  
Good night! for the summer is ended—  
O summer of sunshine and balm!  
With its riches of royal splendence,  
Its curtains of silence and calm.  
O friends, whose faces of smiling  
Have rainbowed its passage with light,  
Whose heart, more warm than its pulses,  
Have been rest and a refuge, Good night!  
Good night! for the summer is ended;  
O valley of quiet delight,  
O mountains, for ever unwearied,  
For ever unwandering, Good night!  
Good night! be it bravely spoken,  
Though song on the lip should cease;  
For the joy of the vanished summer  
Shall fill all the winter with peace.

Our Greatest Men.

The following is the list, in order according to the number of votes each received, of what the readers of an English magazine consider to be the twelve greatest British-born subjects of the Queen: The Prince of Wales, Lord Salisbury, Lord Roberts, Lord Kitchener, Mr. Joseph Chamberlain, Mr. Cecil Rhodes, Lord Roseberry, Sir Henry Irving, Mr. A. J. Balfour, Mr. Rudyard Kipling, The Archbishop of Canterbury, Lieut. Colonel R. S. Baden-Powell. Among those who came closely after the elected twelve were the Duke of York, the Duke of Cambridge, Sir Arthur Sullivan, Dr. W. G. Grace, Lord Wolseley, Sir Redvers Buller, Sir George White, Sir John Lubbock, Dr. Conan Doyle, Sir H. M. Stanley, "Fighting Mac," General French, Lord Charles Beresford, Sir William Mac-Cormac, Mr. Hall Caine, the Lord Chief Justice, George Meredith, and "Ian Maclaren."

Scene—Railway Station. "How long does the train stop here," the old lady asked the brakeman. "Stop here," he answered. "Four minutes. From two to two to two-two." "I wonder," mused the old lady, "if that man thinks he is a whistle?"

Clydesdales and Shorthorns.

Young stallions, bulls, and heifers. Herd headed by Best Yet—1437—and Mint-horn—2484—bulls bred by Hon. John Dryden and H. Cargill & Son. PRICES ON APPLICATION. D. McBeth, Oak Lake, Manitoba.

IT'S A WINNER.

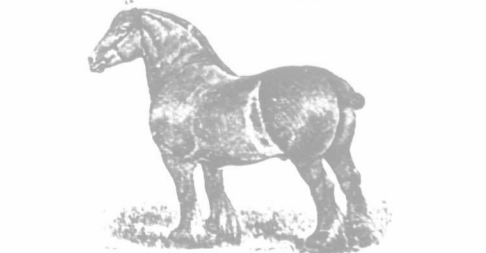
So is our Ideal Flax note-paper and envelopes. 120 sheets of paper with 100 envelopes, mailed for 60 cts. This is only one of the many snags we offer. We carry a full stock of office, school, municipal supplies. Write us for catalogue. Our store is "value."

The FORD STATIONERY CO., One door north of P. O.

Elsewhere in this issue will be seen the advertisement of Elder Bros., Virden, offering Berkshire swine. This herd was established years ago by the late James Elder, stock breeder of the highest excellence being used. The sons have been keeping up the herd, and now offer young stock of either sex for sale. Pigs from their pens were successful in capturing the first prizes at the Virden Show last summer, and parties in want of good Berks would consult their own interest by writing or calling at Hensall Farm, Virden. At the autumn show and sale of Jersey cattle at Brimley Hall, Birmingham, Sept. 28th, there was an entry of 70 animals. Mr. Edward Smith's cow, Speedy, which won 1st prize in the class for cows and heifers culled before June 1st, 1898, and bred in the Island, was sold for 22 guineas. Mr. J. Evans cow, Morant, which headed the class for heifers in the Island, was sold for 22 guineas. The first prize heifer in each of the above classes sold for 19 and 19 guineas respectively.

FARMERS Can Become Surveyors, Business Men, Architects, Civil, Steam, Mechanical or Electrical Engineers. Write for our Farmers' Circular, telling of farmers who have successfully changed their occupation without loss of time or money. INTERNATIONAL CORRESPONDENCE SCHOOLS, Box 1417 Scranton, Pa.

J. E. SMITH Has received from Ontario a shipment of twelve Shorthorn bulls, which are for sale. Also for sale a number of home-bred heifers, sired by Lord Stanley II. 22299, and supposed to be in calf to Golden Measure (Imp.) 172615—20957.



For sale, a number of Clydesdale mares and fillies, all registered; will be served by Prince Charles Imp. All animals for sale, except the stock bulls, Lord Stanley II. 22299, and Golden Measure Imp. 172615—20957, and the Clydesdale stallion, Prince Charles Imp. These, being the best that money and experience could buy, are required by many of the high reputation of the stock of the Brandon and South Hill Farms. Come and see the stock, or write for what you want, to J. E. SMITH, P. O. Box 274, Smithfield Ave., BRANDON.

Harry Leadlay, who has for years been Western Manager, with headquarters in Winnipeg, of the Toronto Hide & Wool Co., has, in partnership with his brother, bought out the Western business of the Company. The business will be carried on under the firm name of H. & A. Leadlay.

At a meeting of the directors of the Provincial Mutual Hail Insurance Co. of Manitoba, of which John Renton, Deloraine, is President, the Manager, Robert Strang, Winnipeg, reported that owing to the poor crop prospects during the early part of the season, the amount of new business done had been small this year compared with previous years. The damage done by hail, which had been unusually prevalent, and continued later than usual, had been very heavy, amounting in their case to some \$20,000. This will necessitate the levy of a full assessment, while it will be impossible to pay losses in full.

Mr. R. A. Lister, head of the firm of R. A. Lister & Co., Dunstable, England, recently made his annual visit to Manitoba. As a result of his visit, several changes have been made in affairs of the Company in Manitoba, most important of which is the sale of the entire right of the Melotte separators for Manitoba and the Territories to the Melotte Cream Separator Co., of Winnipeg. The R. A. Lister Company will continue to handle the Alexandra separator and the usual full line of dairy supplies.

The Creamery owned by the R. A. Lister Company, at Morris, has also been transferred to the Morris Creamery Association, the Company retaining half of the stock, the remainder being taken up by local men, Messrs. M. Laurie, Alex. Scott and others. Mr. Alex. Scott, who has been in charge of the Creamery since its organization, will continue as Manager; M. Laurie, President; and Mr. Chisholm, Sec. Treas.

At the dispersion sale of the herd of Shorthorns owned by Mr. Wyatt, Aylesbury, England, Sept. 28th, the average price for the 104 head sold was \$22 50, 2d. The highest price, 100 guineas, was paid by Miss Alice de Rothschild for the red cow, Ada. Miss de Rothschild bought 75 guineas, and others from 70 to 95 guineas each.

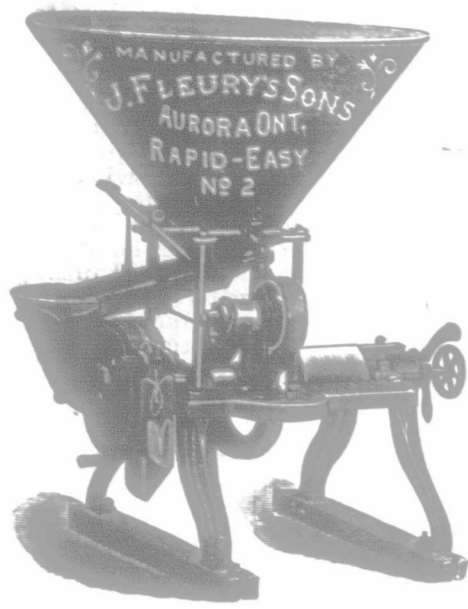
WILD AND IMPROVED LANDS FOR SALE. Several good farms at present for sale or rent, in the celebrated Edmonton district. All approved. Terms reasonable. Apply for information to O. C. PEDERSON, Box 155, Strathcona, Alta.

HORSEMEN! THE ONLY GENUINE IS GOMBAULT'S CAUSTIC BALSAM. Sent genuine without the signature of The Lawrence-Williams Co. Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O. 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.

Sheep Breeders Should Use "Standard" Sheep Dip (Non-poisonous) (Oil of Tar), which is a cheap and sure cure for Scab, Ticks, Lice, and Foot Rot, etc. Write for circulars and testimonials. Manufacturers: The West Chemical Co., TORONTO, ONT. For contagious abortion use WEST'S FLUID.

A cable message announces that at the Duthie and Marr sale of Shorthorn bull calves at Tillycarn, Aberdeenshire, October 9th, Mr. Duthie's offerings—22 head—averaged \$750, and Mr. Marr's 15 averaged \$630. The highest price, \$1,865, was made by one of Mr. Duthie's calves. The averages last year at the joint sale made by these two far-famed breeders were \$625 for Mr. Duthie's and \$585 for Mr. Marr's.





### RAPID-EASY GRINDERS

Will do More Work with Same Power than Any Other.

Most durable and handsomest machine on the market. Adapted for use with tread power, 4- to 10-horse sweep-power, windmill or steam engine of any power.

A fine Lithographic Hanger showing this machine, and information in reference to it, on application.

In writing, state what power you wish to use.

NEWMARKET, ONT., Oct. 10th, 1900.

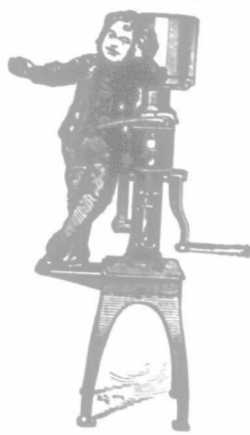
Your Rapid-Easy Grinder does first-class work, and gives me satisfaction in every respect. I have seen several other Grinders and their work, and they are not in it at all with your Grinder. I cannot speak too highly of it.

R. W. HOWARD.

**J. FLEURY'S SONS,**  
AURORA, ONTARIO.

Medals for plows: Chicago, '93; Paris, 1900.

## The De Laval Cream Separators



**H**AVE just been awarded the Grand Prize by the International Jury of Awards at the Paris Exposition, over many separator exhibits from various Countries, the De Laval superiority being unquestionable in every material respect.

For circulars, prices, etc., write or call on

**Canadian Dairy Supply Co.,**

236 KING ST. WINNIPEG, MAN.

### Our Self-Binder, HANDY, DURABLE and ATTRACTIVE.

Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of two NEW subscribers and \$2.00.

### Bagster's NEW COMPREHENSIVE Teacher's Bible,

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

#### HOW TO OBTAIN IT—

Would retail at from \$3 to \$4. We will send (carefully packed, post paid) this Bible to anyone sending us the names of TWO NEW SUBSCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

The BALANCE of this year's issues given FREE to all NEW SUBSCRIBERS for 1901.

Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums right away. In every case cash must accompany the new names.

ADDRESS

**The Wm. Weld Co., Ltd., Winnipeg, Man.**

## Want a Good Watch?

**W**E 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 the same class of goods as are hawked around fair grounds, 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. 11 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.....	4
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.

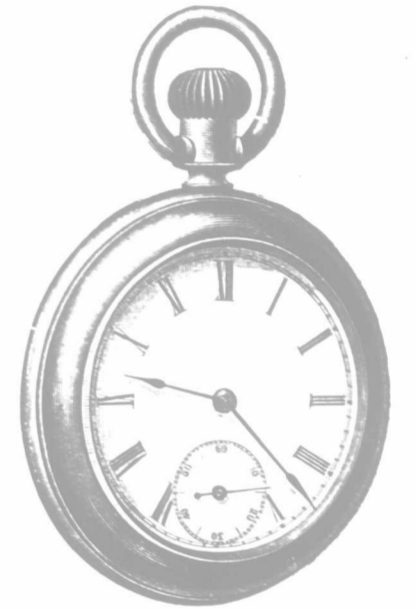
**Nos. 19, 20 and 21** are small sized; in fact, are the exact size of cut. These are American Watches, O. F. stem wind, and push-in stem and turn to set hands, and are first-class timekeepers. Will give perfect satisfaction.

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; Nos. 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 Wm. Weld Co., Ltd., Winnipeg.**





"WHEN BUYING, WHY NOT GET THE BEST?"



# Mikado Cream Separators

EXCEL ALL OTHERS IN EASE OF RUNNING, CLEAN SKIMMING, AND SIMPLICITY OF CONSTRUCTION.

The Manitoba Cream Separator Co., Ltd.,  
151 BANNATYNE AVE., WINNIPEG, MAN.

**SHORTHORNS, YORKSHIRES AND TAMWORTHS.**

Stock of all ages and both sexes, at prices according to quality. Auction sales of farm stock undertaken. Improved farm and wild lands for sale in the Winnipeg district. Correspondence solicited.

**W. G. STYLES,**  
Sec. 12-13-1. West, Rosser P. O., C. P. R.

**FOREST HOME FARM SHORTHORNS**

Cows and heifers, prizewinners at Winnipeg and Brandon Fairs, and others equally good. Yorkshire pigs—a few choice ones of both sexes. B. P. Rock Cockerels—large, strong, well-marked birds. First orders received get the choice.

Carman, C. P. R. Roland, N. P. R.  
**ANDREW GRAHAM,**  
Pomeroy, Man.

**SHORTHORNS & COTSWOLDS.**

The proper kind bred and kept on our farm. Good stock for sale at easy prices. Rams for sale, and fine yearling bull still here. Also bull calves.

**D. HYSOP & SON,** Box 492, Killarney, Man.

**D. FRASER & SONS,**

EMERSON, MAN.  
Breeder and importers of Durham Cattle, Shropshire and Southdown Sheep, and Pure-bred Poland-China Pigs a specialty. Young stock for sale.

**"PRAIRIE HOME STOCK FARM."**

Bulls at head of herd:  
Judge—23419—and Imp. Jubilee—28858—



Yorkshire and Berkshire Swine.  
Clydesdale Stallions and Shropshire Sheep.  
Shorthorn and Ayrshire Cattle.

THOS. GREENWAY, Proprietor.  
JAMES YULE, Manager, Crystal City.

**POPLAR GROVE HEREFORDS**  
THE LARGEST HERD IN CANADA.  
STOCK OF ALL AGES FOR SALE.  
**J. E. MARPLES,**  
DELEAU, MAN.

—For—  
**Galloways**

APPLY TO  
**T. M. CAMPBELL,**  
Hope Farm, St. Jean Baptiste, Manitoba.

**SHORTHORNS**

Masterpiece—23750—by imp. Grand Sweep, out of an Indian Chief dam, at head of herd. Imp. Large Yorkshires for sale.

**JAMES BRAY,**  
LONGBURN, MAN.

**Shorthorns and Berkshires.**

BREEDING AND QUALITY RIGHT.  
Write or call for prices.  
3 nice young bulls for sale now.

**R. L. LANG,** Spruce Bank Farm, OAK LAKE, MAN.

**THORNDALE STOCK FARM, MANITOU.**

**JOHN S. ROBSON, PROP.**  
Females of all ages FOR SALE.

**LAKE VIEW RANCH**  
**Herefords and Galloways**

Young bulls for sale. For prices write

**J. P. D. Van Veen,** FILE HILLS P.O., N.-W. T.

**JERSEY BULLS**

2 high-class Jersey Bulls for sale. Also farm lands.

**H. R. KEYES,** Ly-m Midway, Man.

**MAPLE GROVE FARM.**

High-class Shropshires, Rams and Ewe Lambs for Sale.

My sheep are stock bred by John Campbell and Hammer & Sons, the noted Ontario breeders. Won all first prizes with my Shrops at Winnipeg this year.

**D. E. CORBETT, SWAN LAKE, MAN.**

**Hensall Farm Berkshires**

Good Pigs of all ages FOR SALE by  
**Elder Bros.,**  
Hensall Farm, Verdun, Man.

**Yorkshires**

14 spring 2 years and 20 sows for sale. 12 sows just farrowed, from the same sows, and first prize sow under 2 years of age. Winnipeg and Brandon.

**WAWANESA, MAN. KING BROTHERS.**

**"DOMINION" PIANOS AND ORGANS**



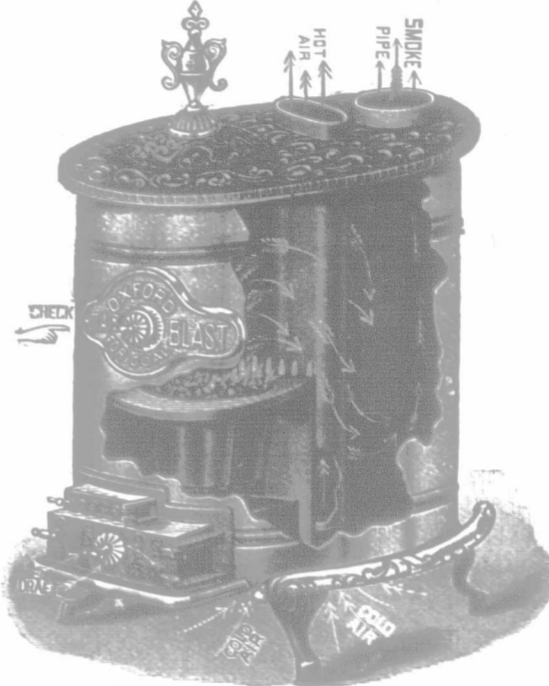
HAVE been before the public for thirty years, and are in use to-day in 60,000 Canadian homes. If you want a piano or organ that is above criticism, get a "DOMINION."  
For catalogues address—



THE "Dominion" Organ and Piano Co., Limited, Bowmanville, Ont.

**OXFORD HOT AIR BLAST.**

Will keep fire twenty-four hours or longer. A powerful double heater. Has large ash pan.



Burns every kind of soft or hard coal without the annoyance of dirt and constant care required by other stoves to keep a steady fire.

Has the most powerful circulation of warm air of any heater in the market. Ask your dealer for the GURNEY FOUNDRY CO.'S

**OXFORD HOT AIR BLAST, WINNIPEG.**  
153-155 Lombard St.

Winnipeg Industrial, 1900. 14 FIRST PRIZES. 5 SECOND PRIZES.	Fort Rouge Poultry Yards Still lead them all in	Western Fair, Brandon, 1900. 12 FIRST PRIZES. 5 SECOND PRIZES.
--	--	--

Golden Wyandottes, Indian Games, Black Langshans, Pekin ducks, Belgian hares, and Fancy pigeons. A few choice birds for sale at reasonable prices. Have also for sale very cheap, to make room for winter: Light Brahmas, Plymouth Rocks, and White Wyandottes.  
For prices and particulars, write **S. LING & CO., Winnipeg, Canada.**

**Maw's Poultry Farm, Winnipeg.**

**BREEDS BEST STRAINS OF UTILITY BREEDS.**  
Thoroughly acclimatized and best adapted to our climate. Have for sale stock and eggs of Mammoth Bronze Turkeys, Toulouse Geese, Imperial Deep-keeled Pekin Ducks, English Rouen Ducks, White Wyandottes, White Leghorns, Silver-Laced Wyandottes, Light Brahmas, Hero Strain Plymouth Rocks. Homing Pigeons from best imported Belgian stock, same as used by the army for carrying messages from beleaguered cities. Large illustrated catalogue, giving list of prizes and medals won at all leading exhibitions, with prices, description and pedigree of stock mailed free on receipt of address. I am North-west agent for the celebrated **CYPHERS INCUBATOR AND BROODER.** Mr. Cyphers is the discoverer and patentee of the diffusive principle in artificial incubation, thus saving the lives of thousands of chicks that die in the shell in ordinary incubators. It is asbestos-coated and perfectly fireproof. Supplies and regulates its own moisture, and so simple a child can operate it with success. Write for particulars.

**Roxey Stock Farm, BRANDON, MAN.**

**J. A. S. MACMILLAN,**  
IMPORTER AND BREEDER OF PURE-BRED

**Clydesdales, Shires, Hackneys.**



INSPECTION INVITED.  
PRICES RIGHT.

APPLY **P. O. BOX 403.**  
PLEASE MENTION FARMER'S ADVOCATE.

**THE Gold Standard Herd**



Are home from the exhibitions, where they won 27 prizes, including 17 firsts, against the strongest aggregation of home and Ontario bred stock that ever appeared in a Winnipeg showing, including first-prize winners at Toronto in 1899. I now offer for sale the first-prize sow under 6 months at Winnipeg, Brandon and Neepawa; the litter of first-prize sow; also three beautiful litters, ready to ship, of three prizewinning sows—Rosamond, Naomis and Jubilee-Bett. Address—

**J. A. MCGILL, Neepawa, Man.**

**LEICESTERS!**

Young rams and ewes for sale. Write or call on  
**A. D. GAMLEY,**  
Box 193. BRANDON, MANITOBA.



# Our Farmer's Library

A RECENT bulletin prepared by Prof. J. B. Reynolds, of the Ontario Agricultural College, gives a list of meritorious books on Agriculture, Live Stock, Dairying, and Fruit Growing, from which we have made a selection and added a few others. How to obtain, see below :

### 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.

- 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.

### 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. \$5.00.
- CHEMISTRY OF THE FARM.—*Warrington*. 183 pages. 90 cents.
- FARMYARD MANURE.—*Aikman*. 65 pages. 50 cents.
- BARN BUILDING.—*Sanders*. 280 pages. \$2.00.
- 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.

### POULTRY.

- ARTIFICIAL INCUBATING AND BROODING.—*Cypher*. 146 pages. 50 cents.
- PRACTICAL POULTRY-KEEPER.—*Wright*. \$2.00.

### APIARY.

- THE HONEYBEE.—*Langstroth*. 521 pages. \$1.40.

### FRUIT, FLOWERS, AND VEGETABLES.

- VEGETABLE GARDENING.—*Green*. 224 pages. \$1.25.
- FLOWERS AND HOW TO GROW THEM.—*Reeford*. 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*. 389 pages. \$1.00.
- THE NURSERY BOOK.—*Bailey*. 365 pages; 152 illustrations. \$1.00.
- AMATEUR FRUIT-GROWING.—*Samuel B. Green*. 587 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.

## HOW TO OBTAIN THESE BOOKS :

We will furnish present subscribers any of the above books 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 "
"	5.00	for 9 "

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 easily select a list of books suited to his needs, and for a small outlay in cash, or later in obtaining new subscribers for the Advocate, secure the nucleus of a useful library.

Cash to accompany names in every case. \$1.00 pays each new subscription from now to end of 1901.

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

### NOTICES.

**Deafness Cured Scientifically.**—The book of testimonial letters sent to all who write to the Wilson Ear Drum Co., Louisville, Kentucky, U. S. A., is full of attestations from users of this wonderful device in all parts of the American continent, that they have been deaf, and now hear by its use. Such a multitude of voluntary statements, all to the same purport, may well have sufficient weight with those so afflicted to at least lead them to send and secure the free book for themselves. It is claimed that the common-sense method of supplying an invisible drum to the ear is both scientific and simple, and that the cost is but trifling, even though the benefits are not taken into consideration.

**"What's the Time?"**—A booklet with this title, just published by the Chicago, Milwaukee & St. Paul Railway, should not only be in the hands of every traveller, but should have a place on the desk of every banker, merchant or other business man. The four "Time Standards" which govern our entire time system and which are more or less familiar to most of the travelling public, but by many others little understood, are so fully explained and illustrated by a series of charts, diagrams and tables that anyone who chooses can become conversant with the subject in question. There are also some twenty-four tables by which, almost at a glance, the time at any place being given, the hour and day can be ascertained in all the principal cities of the world. A copy of this pamphlet may be had on application to George H. Heafford, General Passenger Agent, Chicago, enclosing two-cent stamp to pay postage.

### All About the Airmotor.

We have received from the Ontario Wind Engine and Pump Co., Toronto, a copy of the 15th edition of their catalogue and price list, containing a photo-engraving of the successful president and manager, Mr. S. H. Chapman, and a complete illustrated description of the windmills, pumps, grinders, tanks, nozzles, and the various parts used in connection therewith. A useful lot of tables are given for computing the size of pulleys, gears, etc., for obtaining given speeds, the capacity of tanks, the discharge of pipes, and the capacity of pumps. It must be gratifying to this progressive firm to know that the character of its products has been such as to nearly treble its business in the past few years, involving repeated enlargements of their establishment. The policy by which such results have been achieved has been by trying not "how cheap" can a machine be built, but "how good," and then place it upon the market at as low a figure as is consistent with a safe margin of profit. This 120-page pamphlet is well indexed, and all interested in pumping or power machinery, would do well to secure a copy for reference.

The Red Deer Butter and Cheese Manufacturing Association and the Rosebud Dairy Company have been incorporated under the Territorial Dairymen's Ordinance.

Messrs. A. Gilmore & Sons, Athelstan, Que., makes an offering elsewhere in this issue that merits attention. This is a good season to secure well-bred poultry, because it can be sold cheaper than in spring, and a greater choice secured. Pigs at 8 weeks old are all ready to go on with. See the advertisement.



## "Look at This."

I have received instructions from Geo. Claxton to sell the following farms :  
 One section, all fenced, as follows : W. 1/4 30, 15, 12; frame buildings and painted; stable, 10x80; stable, 16x30; granary, 20x32; machine shed, 16x30; hog house, 16x60; shed frame to hold 100 head cattle. Frame house, stone cellar; full-size house, 18x34; kitchen, with upstairs, 16x18. This house cost \$1,800. The above buildings cost \$4,000.  
 The E. 1/4 19, 15, 12; 3.0 acres cultivated on section, and more to break; price, only \$9,000. 4 miles from Keyes.

Also N. E. 1/4 15, 15, 12; good rich land; 80 acres broke; fenced; and only \$1,200.

Also 1 section, north of Plumias; uncultivated; good land; N. 1/4 10, 18, 12. This is situated in one of the best mixed-farming districts in Manitoba. Easy terms and fair treatment to good farmer. "It is a bargain." Apply to or call on

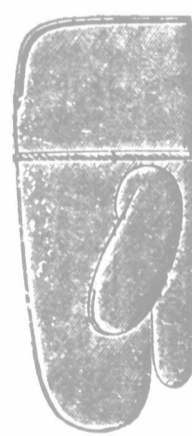
H. R. KEYES, Keyes, Man.

**Pasteur Vaccine for Blackleg.**—It is well known that blackleg is particularly troublesome in the fall, and perhaps a word on the subject of blackleg vaccination may be of interest. The merits of the operation are well proven, so that a discussion on that point is not necessary. However, in spite of the fact that cattle-raisers recognize the necessity of vaccination, many of them put it off from week to week, trusting that "luck" will see them through, and it is these cattle-raisers especially to whom we desire to point out the danger of such a short-sighted policy. By deferring vaccination until the disease breaks out in your herd or in your immediate neighborhood, you sustain an unnecessary loss in the first instance, and court disaster in the second. Such being the case, vaccinate early in the fall, and place yourself on the safe side. NOW is the time to vaccinate; do not postpone it, and then feel sore when you lose from blackleg. The success of the operation depends largely on the reliability of the vaccine. Don't be imposed upon by vendors of so-called cheap vaccine, and exercise due caution against new or experimental vaccines. It is a good plan to use that which has proven successful and reliable by many years of constant use. If you cannot readily obtain it in your neighborhood, ask your druggist to purchase it for you. Stipulate that it bears the name and trade-mark, PASTEUR.

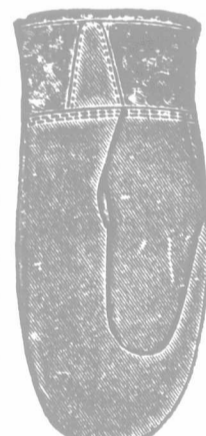
Write to the Pasteur Vaccine Co., of Chicago, or to W. J. Mitchell & Co., of Winnipeg, who handle the original and genuine article, and obtain some information which will be of special interest to you at this time, particularly regarding the vaccine which is ready for use as sold.

IT PAYS TO ADVERTISE IN THE FARMER'S ADVOCATE.

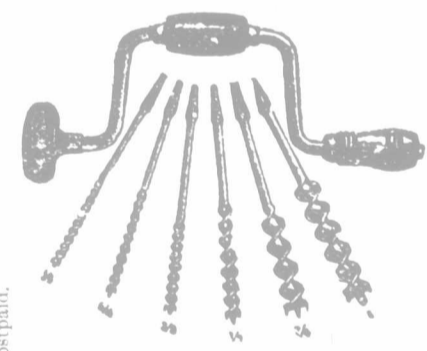
## Send for Illustrated Price List.



Mitts—A first-class farmer's mitt, beautifully and warmly lined, only 60c. per pair, postpaid.



Mitts—Common but well lined ones 50c. per pair, postpaid.



Brace and 6 Auger Bits, only \$1.50; postpaid, \$2.00.

Shot, per bag of 25 lbs., only \$1.40.

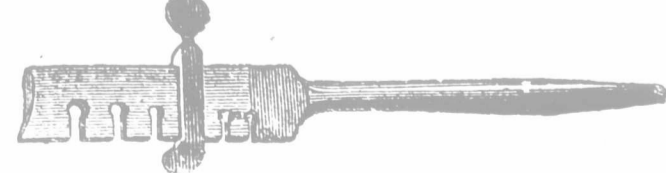
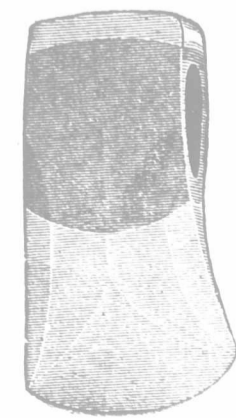


Head Light  
Silver steel  
Lance Tooth Saw,  
WILKINS & CO  
TORONTO.



Shotgun—A first-class single-barrel breech-loading shotgun, only \$5.00.

Crosscut Saws—The Headlight is the best and fastest cutting saw made. Is four gauges thinner on the back than the front, enabling it to do its work with wonderful rapidity. What is further, every saw is guaranteed. In 5, 5 1/2, 6, 6 1/2 and 7 ft. lengths, only 50c. per foot.



Sawsets—We are showing a cut of a sawset worth 65c., but on account of having bought a large quantity we are offering them at the small sum of 35c. each, postpaid, until they are all sold.

Solid Steel Axes only 50c. each.

## WILKINS & CO.,

166 and 168 King St. East, Toronto.



# "Post" Fountain Pen.

SOMETHING THAT EVERY MAN, WOMAN, BOY AND GIRL NEEDS.

It is a wonderful tribute

to the greatest invention in fountain-pen construction of the age.

THE PRICE OF THIS POST IS **\$3.00**. IT CANNOT BE PURCHASED UNDER THIS PRICE ANYWHERE.

The patentee has a hard-and-fast agreement with the trade and agents that \$3 shall be the lowest retail price. By a special agreement we are in a position to make

**A Great Offer:** We will send one of these pens to anyone who sends us three new subscribers, accompanied by \$3.00 in cash.



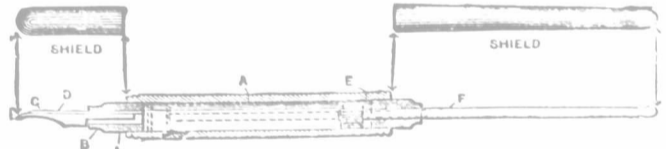
General Lew Wallace, the author of the greatest book of the age, "Ben Hur," also "Prince of India," "Commodus," etc., says in a letter in his own handwriting: "The fountain pen, Post, was received, and I have taken the liberty of trying it thoroughly. Please accept the excuse for failure to acknowledge sooner. "I have tried every pen of the kind on the market, and now unhesitatingly give the preference to the Post. It not only feeds itself with less care, but has the immeasurable advantage of re-supply without inking the fingers. I do all my work with it."

*Lew Wallace*

TO show our confidence in this pen, we will send you one on trial for a week upon receipt of \$1.00, which, if not entirely satisfactory, you can return to us and we will refund you the \$1.00 paid us. If satisfactory, you must send us the names and addresses of the three new subscribers and \$2.00 additional cash.



THE only self-filling and self-cleaning pen manufactured in the world. To fill the pen, put the nib in ink and draw the piston rod up. To clean, put the nib in water and draw the piston rod backwards and forwards a few times.



A, Barrel; B, Nozzle; C, Pen; D, Feed; E, Plunger; F, Rod.

The world's greatest singing evangelist, who has thrilled thousands and tens of thousands, now raises his voice in praise of the Post Fountain Pen.

Mr. Sankey sends the following characteristic letter: "I have used the Post pen for some time, and have had great satisfaction with its use. It never fails or gets cranky. One can at least have clean hands by using the Post, whatever the heart may be."

*Frank Sankey*

ADDRESS—

THE **Wm. Weld Co., LTD.**, WINNIPEG, MAN.

## EPPS'S COCOA

**GRATEFUL COMFORTING**  
Distinguished everywhere for Delicacy of Flavour, Superior Quality, and Highly Nutritive Properties. Specially grateful and comforting to the nervous and dyspeptic. Sold only in 1-lb. tins, labelled **JAMES EPPS & CO., Ltd.**, Homoeopathic Chemists, London, England.

## EPPS'S COCOA

### GOSSIP.

John Campbell, Fairview Farm, Woodville, Ont., in his new advertisement in this issue offers a few Shropshire rams and a choice lot of imported and home-bred ewes. The offering should meet with a ready response from breeders wishing to secure Shropshires from a flock of high repute. Besides winning nearly all the first prizes at Toronto this year, a flock bred directly from Fairview Shropshires captured many first prizes and sweepstakes at Winnipeg, while an eastern breeder in Nova Scotia, who had four ewes from Mr. Campbell two months ago, strengthened his former purchases by another from the same source, winning nearly all in sight at P. E. Island and Nova Scotia Provincial Fairs. Breeders in Iowa, Indiana and Ontario have also captured premiums galore with Shropshires from Fairview, which speaks well for the uniform excellence of the Fairview flock. Write Mr. Campbell for circular and prices.

## Bigger Profits

Your Cheese and Butter making will pay you bigger profits if you use **WINDSOR SALT**—pure, soluble, even crystals. Economical to use.

THE **Windsor Salt Co., Limited.** WINDSOR, - ONT.

THE ROY ROY MINES.  
ARE YOU SATISFIED WITH

# 3%

ON YOUR MONEY?

If not, do as others have done who have made money—invest in a sound, substantial Mining Company, where the risk is no greater than in the business you are engaged in, and the profits larger.

One British Columbia stock (Le Roi) was sold here for a few cents a share, and is now worth over \$40 a share.

There are many opportunities for making money in mining if judgment is used.

Co-operation is necessary in mining, and those who co-operate on a good thing get rich. If you are interested, drop me a postal (only cost you a cent), and I will give you full particulars. You don't have to invest, and investigation is cheap and profitable.

A. E. Welch, 207 Dundas St., London

PLEASE MENTION FARMER'S ADVOCATE.

## THREE BULLS

Fit for service, the best I ever offered, for sale. Also some fine two-year-old and year-old heifers.

GEORGE RANKIN, Ramotha, Man.

## LEICESTER RAMS

FOR SALE: Of first class breeding, including Winnipeg Industrial diploma ram. Apply to

DUNCAN SINCLAIR, Oakville, Man.

## BLACK MINORCAS.

Young stock for sale—some beauties. Satisfaction guaranteed.

A. M. ROBERTSON, KEEWATIN, ONT.

**Norwood Bridge Poultry Yards.** Houdans, White Plymouth Rocks, White Wyandottes, Bronze Turkeys, and Pekin Ducks.

Stock from my prizewinning birds for sale. First-class stock. Fair dealing. Reasonable prices. **JOSEPH WILDING, Proprietor,** Norwood Bridge, Winnipeg, Man.



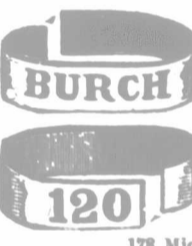
## The Good Enough Sulky Plow

CAN NOT BE BEAT.

The Price will please you and its work will surprise you!

Write for illustrated circular. It will pay you.

**CANADIAN MOLINE PLOW CO.** Winnipeg, Man.



## METAL EAR LABELS

Used by all Live Stock Record Associations.

Sheep size, per 100..... \$1.50

Hog size, per 100..... 1.50

Cattle size, per 100..... 2.00

Punch and Pliers for attaching labels to ear, each \$1.00. Name on one side and any numbers wanted on reverse side. F. S. BURCH & CO.

178 Michigan St., Chicago, Ill.

## THE Very Best

PLACE FOR THE FARMER'S SON TO SPEND THE WINTER MONTHS IS AT THE **Winnipeg Business College.**

WRITE FOR HANDSOME CATALOGUE (FREE).

G. W. DONALD, SECRETARY.

## 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, 15 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.

## STEAMSHIP Tickets

If you are going to the Old Country, or sending for your friends, apply to our nearest railway or ticket agent, who can supply outward and prepaid tickets at lowest rates.

Steamers leave Portland, Maine, every Saturday, St. John, every Wednesday; New York, every Wednesday and Saturday.

**W. P. F. CUMMINGS,** General Agent, C. P. R. Offices,

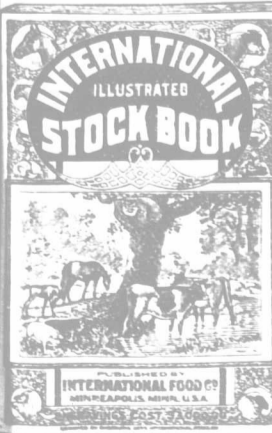
WINNIPEG.

## STAY AT HOTEL LELAND

The Leading Hotel of the West.

ALL MODERN CONVENIENCES. RATES, \$2 to \$4 PER DAY. BUSES MEET ALL TRAINS.

**W. D. DOUGLAS, Prop.,** Winnipeg, Man.



## A \$3000.00 STOCK BOOK FREE.

We will mail you a copy Free, POSTAGE PREPAID, if you write us and answer 4 questions: 1st—Did you ever use "International Stock Food" for Horses, Cattle, Sheep or Hogs? 2nd—Is it for sale in your town in 25-lb. pails? 3rd—How many head of stock do you own? 4th—Name this paper. The engraving shows cover which is printed in 6 brilliant colors. The book is 9 1/2 by 9 1/2. It contains 183 large colored engravings of Horses, Cattle, Sheep, Hogs, Poultry, etc., with a description of the different breeds and practical points on breeding, raising and fattening stock. It also contains a very finely illustrated and valuable Veterinary Department. The engraving cost us \$3000.

WE WILL GIVE YOU \$14. WORTH OF "INTERNATIONAL STOCK FOOD" IF BOOK IS NOT AS STATED.

"International Stock Food" is a safe vegetable stimulating tonic and blood purifier. It fattens Cattle, Hogs or Sheep in 31 days—less time and saves grain by aiding digestion and assimilation. Is extra good for breeding animals. 500,000 farmers endorse it. Many use 200 lbs. per year. It makes Colts, Calves, Lambs and Pigs grow very rapidly and only costs 3¢ per 3 Feeds for One Cent. Guaranteed to make Hogs weigh 300 lbs. at 6 months. It will Save your Hogs from Cholera. Your money will be refunded if it ever fails for any use. We feed it to our stallions, brood mares, colts, driving horses, speed horses, etc., every day. Beware of inferior imitations.

Largest Stock Food Factory in the World. **INTERNATIONAL FOOD CO.** We occupy 15 floors, also 22x100 feet each. Capital Paid in \$200,000.00. MINNEAPOLIS, MINN., U. S. A. Will also soon greatly enlarge our factory.

Our Stations: Buttonwood 2 1/2 by Nutwood 600 and International Stock Food by Hartford 35 1/2 at "I. S. F." every day. Our "International Stock Food Steer" is the largest in the world and weighed 3100 lbs. at 3 years.



## KENDALL'S...

### SPAVIN CURE



The old reliable remedy for Spavin, Ringbone, Spits, Curbs and all forms of Lameness. It cures without a blister because it does not blister.

Dr. B. J. Kendall Co., North Pastaget, Ont., Feb. 10, '98.  
Dear Sirs:—Will you please give me a remedy for heaves I have a mare that is afflicted. I take pleasure in stating that I have cured a curb of four years' standing with your Kendall's Blister, by using it only once and then applying your Spavin Cure. As long as I have horses, I will not be without Kendall's Spavin Cure and Kendall's Blister in my stable.  
Very truly yours,  
ADOLPHUS GAUTHIER.

Price \$1. Six for \$5. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address  
DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

FOR SALE OR TO LET, a well-equipped hennery, with 10 acres of land, dwelling house and barn. Apply to A. Gray Farrell, Smith's Falls, Ont.

Important Auction Sale of Shorthorns. THURSDAY, NOV. 1st, 1900.

Twenty registered animals (6 bulls and 14 cows and heifers). Write for catalogue. As the proprietor has rented his farm, all live stock and farm implements will be sold without reserve.

F. A. NELLES,  
Caledonia Station, on YORK P. O.,  
G. T. R. on Ont.

FOR SALE.  
AS WE ARE DESIROUS of reducing our stock before winter, we will offer a choice lot of Yorkshire pigs, of either sex, from six to eight weeks old, registered, at four dollars each. Also, Toulouse geese, Pekin ducks, Light Brahmas, Brown Leghorns and Black Minorcas at reasonable prices. Nothing but choice stock shipped.  
Post office, railroad station on and telegraph  
Athelstan, Que.  
A. Gilmore & Sons.

Parkhill Berkshire Herd and Poultry Yards  
Offer great bargains this month. Extra good brood sows and young sows ready to breed; also boars, all ages. POULTRY: B. and W. Rocks, W. and S. L. Wyandottes, Leghorns, Hamburgs, Black Langshans and Light Brahmas; Pekin and Rouen ducks; Toulouse geese and M. Bronze turkeys.  
Write for prices.  
D. A. GRAHAM,  
on Parkhill, Ont.

FLEMING'S LUMP JAW CURE  
TRADE MARK  
QUICKLY CURED.  
A case of lump jaw in your herd means immediate loss; it may mean the infection of the rest of your herd; it may result in the distribution of the germs all over your pastures. All loss and danger can be positively averted by prompt use of  
Fleming's Lump Jaw Cure  
The only radical cure known. Is endorsed by the most prominent ranchers and shippers of the continent. Easy to use. Is applied externally. One to three applications cure. Leaves jaw sound and smooth. Cannot harm in any way. One bottle usually cures two or three ordinary or one severe case. Price \$2.00. Sold by druggists. Can be sent anywhere by mail.  
Money cheerfully refunded if the remedy ever fails.  
FREE: Some important reports and an illustrated treatise on Lump Jaw. Write for them.  
FLEMING BROS., Chemists  
St. Croix, Ont.

Catalogue Printing our Specialty.  
Many of the best...  
London Printing & Litho. Company, Ltd.,  
LONDON, ONTARIO.

## Rosedale Stock Farm.

CLYDE AND SHIRE HORSES.  
SCOTCH SHORTHORNS.  
LEICESTER SHEEP.  
A choice lot of Leicester ewes and rams with superior quality and as good blood as is obtainable. My motto, "The best it none too good."  
J. M. GARDHOUSE, Highfield P. O.  
Malton Sta., G.T.R. on Weston Sta., C.P.R.

## NEW IMPORTATION

Just arrived. Personally selected from the best studs in England and Scotland.

## CLYDESDALES

By the champion winners, Baron's Pride, McGregor, Flashwood, Prince Alexander, Prince of Carruchan, etc.

Shires, Suffolks, Percherons and Hackneys  
By the leading sires of the day, all combining size, color, quality and action.

Fourteen first prizes and six second prizes won at the recent State Fairs of Illinois, Iowa, and Wisconsin, in the very hottest competition. Inspection cordially invited.

ALEX. GALBRAITH, Janesville, Wis.

## 9 CORDS IN 10 HOURS

NO BACKACHE  
WEIGHTS ONLY 45 LBS.  
EASILY CARRIED  
SAVES DOWN TREES  
BY ONE MAN with the FOLDING SAWING MACHINE made at Essex Centre, Ontario. NO DUTY TO PAY NOW. Send to Main Office for FREE catalogue showing LATEST IMPROVEMENTS, and testimonials from thousands. First order sources agency. Address: Folding Sawing Mach. Co. 55 N. Jefferson St., Chicago, Ill.

## THORNCLIFFE Stock Farm

The largest stud of Clydesdales in Canada, headed by the Champion Stallion of all ages,  
"LYON MACGREGOR."



## Stallions and Colts

From the best blood in Scotland and Canada. Ayrshire bulls and heifers from imported stock Jersey heifers and bull calves, sired by the prize-winning bull, Distinction's Golden. Best milking strains, with good teats.  
Terms reasonable.  
A visit to Thorncliffe will well repay you.  
ROBT. DAVIES,  
on Thorncliffe Stock Farm, TORONTO.

## JOHN DRYDEN, BROOKLIN, ONTARIO,

OFFERS SIX YOUNG SHORTHORN BULLS, ready for service, at reasonable prices. Strong, active, masculine.  
GOOD QUALITY AND CHOICE BREEDING.

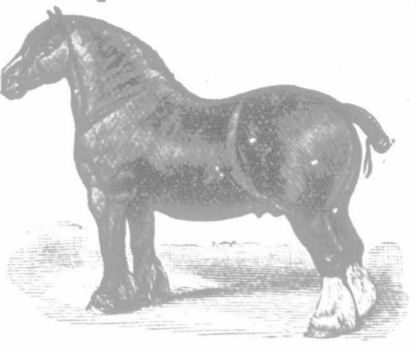
## BARRED PLYMOUTH ROCKS and GOLDEN WYANDOTTES.

For sale: Fine young birds of above varieties—cockerels and pullets. Being short of room, will sell very reasonably to quick buyers. Satisfaction guaranteed, on Write JAMES ROW, Avon, Ont.

An interesting decision was given at Emerson county court recently, in the cases of the Manitoba Farmers' Mutual Insurance Company against Reeve, Lindsay and another farmer, which were heard by Judge Locke. The company sued for last year's dues on hail insurance, C. P. Wilson appearing for the company, and H. M. Howell, Q. C., for the defendants. The hearing lasted two days and resulted in the company being non-suited on the judicial grounds that the assessment was not made in the terms of the act and that owing to the defendant in terms of the act was not provided by the company.

PLEASE MENTION FARMER'S ADVOCATE.

## Shipment of Clydesdale Stallions



THREE YEARS OLD AND UPWARDS,  
just arrived in good condition from Scotland by Steamer Trutonia.

Among them are the largest Clydesdales ever imported.  
We are the largest importers in Canada.  
Correspondence solicited.

Dalgety Bros., 463 King St., LONDON, ONT.

## ARCHIE CROZIER,

BREEDER OF SHORTHORN CATTLE, YORKSHIRE AND BERKSHIRE PIGS, AND LEICESTER SHEEP, WARMLY ENDORSES

## Thorold Cement.



Barn of Archie Crozier, Beaufort, Ont. Size of wall, 15 x 120 ft. Wall, cistern and floor built with THOROLD CEMENT. The holes showing along the top of the wall are for ventilation.

Read what Archie Crozier says about THOROLD CEMENT: BRADBURY, ONT., AUG. 11, 1900.

ESTATE OF JOHN BATTLE, Cement Manufacturers, Thorold, Ont.:  
GENTLEMEN,—It is with pleasure that I testify to the good qualities of your Thorold Cement for building purposes. I have just completed a Basement Wall, Cistern and Floor throughout the entire building. Size of wall is 15 x 120 feet, 8 ft. above floor, and a 2-ft. footing. 12-in. wall above footing. I also put in door-sills and window-sills of cement. I used 280 lbs. of cement in the whole job. I consider it a cheaper and a better job than either brick or stone, and, furthermore, I have saved by building with cement 2,900 cubic feet of space over and above what I would have had if built with stone. Therefore I give credit to the Cement for \$160 on space. The work was under the direction of our man, Mr. Geo. W. Read, who understands his work well. I do highly recommend your Thorold Cement to any person intending to build any kind of buildings, for strength, durability, and extra space.  
I mail you a photo. of our basement wall, and am sure you will be pleased with its appearance, for every person that sees it, either from Western Canada or any other place, say they never saw its equal for appearance, or from an architectural point of view.  
Breeder of Shorthorn Cattle, Yorkshire and Berkshire Pigs, and Leicester Sheep.  
Correspondence solicited.

## Estate of JOHN BATTLE, Thorold, Ont.

An opportunity is afforded those who want Shorthorns to secure them of either sex, and in a variety of ages, at the auction sale on Nov. 1st, 1900, of F. A. Nelles, York, Ont., who would not think of disposing of his good herd had he not rented his farm. An announcement of the sale appears in our advertising columns in this issue. Catalogues, with extended pedigrees, are now ready for all who write for them.

Mr. John Isaac, Markham, having rented his farm and decided to retire from farming, will hold a dispersion sale of his entire herd of Shorthorns, including the 40 head of imported animals now in quarantine, about the middle of December. The advertisement and further particulars will appear in the next issue of the FARMER'S ADVOCATE. It will be a rare opportunity to secure high-class Scotch-bred Shorthorns.

Fortunately, the increasing demand for the very best class of horses is being met with an opportunity to secure them. No less an authority on horse individual excellence and pedigree than Mr. Alex. Galbraith, Janesville, Wis., the secretary of the American Clydesdale Association, has recently imported a personally selected consignment from the most noted studs in the United Kingdom, and from the most celebrated sires of the day. Shires, Suffolks, Percherons, and Hackneys are also offered in Mr. Galbraith's advertisement which appears in this issue.

MR. A. S. HUNTER'S HEREFORDS AT BURLINGHAM, ONT.

Those most interested in Hereford cattle will no doubt have noted Mr. A. S. Hunter's new advertisement, in which the reader sees at a glance that this herd stands among the foremost in importance in the country. Mr. Hunter has exceptionally good facilities for the production of up-to-date stock, aided by the luxuriant pasture lands of Grey County, in which he resides. In the herd are to be found representatives of the best English tribes, animals rich in beef-producing conformation, and by the best obtainable sires. To those desirous of obtaining young, healthy Herefords, we would direct their attention to Mr. Hunter's new announcement, and to act quickly.

PLEASE MENTION FARMER'S ADVOCATE.

PLEASE MENTION FARMER'S ADVOCATE.



**Stallions**  
**OLD**  
**ARDS,**  
 from Scotland by  
 Clyde dales ever  
 in Canada.  
 63 King St.,  
 NT.

**14th Importation.**

**MR. F. S. PEER**, of Mt. Morris, N. Y., will sail for England, Scotland, and the Channel Islands, November 10th, and will be pleased to have further commissions from Canadian breeders. Stock selected by Mr. Peer won the highest honors this year at Toronto, Ottawa, and Halifax Exhibitions. Send for circular, terms, and estimated cost of importing what you require, to above address.

**FOR SALE.**

**CLYDESDALE** stallions, mares and fillies, representing the best blood in Scotland—Prince of Wales, Darnly, Macgregor and Lord Lyon—including the great sweepstakes 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, Stittsville, C.P.R.

**MAN OR WOMAN** to employ and superintend agents—\$50 per month and expenses. Experience not required. Permanent position. **ZIEGLER CO.,** 276 Locust Street, Philadelphia.

**Bonnie Burn Stock Farm**  
 Forty rods north of Stouffville station, Ont., offers for sale Shorthorn bull calves and yearling heifers, Shropshire lambs and shearlings (both sexes), on **D. H. RUSSELL, Stouffville, Ont.**

**Pure Scotch Shorthorns for Sale.** Two bulls and fifteen months old, and three two-year-old and two one-year-old heifers. All right. Good ones. Meadowdale station, C. P. R. **S. J. PEARSON & SON, Meadowdale.**

**SPRING GROVE STOCK FARM**

Shorthorn Cattle and Lincoln Sheep. Herd prize and sweepstakes at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by **Topman**—17847—champion at Winnipeg, Toronto, London and Ottawa, 1899. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply **T. E. ROBSON, Ilderton, Ont.**

**R. & S. NICHOLSON**

**SYLVAN P. O., PARKHILL STATION.** Scotch Shorthorns, imp. and home-bred. The Imp. Clipper bull, Chief of Stars, heads the herd. Nine bull calves for sale, 8 to 10 mos. old (extra good ones), sired by Royal Standard. Inspection invited.

**W. D. FLATT**  
 Hamilton, Ont., Can.,  
 IMPORTER AND BREEDER OF

**Shorthorn Cattle.**

MY herd is one of the largest in America, both imported and Canadian-bred. A very choice importation of 27 head now in quarantine and due out Oct. 11. New catalogue of the herd ready for distribution Oct. 1. Address all communications to

**James Smith, Mgr.,**

**MILLGROVE, ONT.**

**Shorthorns for Sale.**

**12 FEMALES**, from 1 to 7 years old, descended from Red Knight (53512), Hopeful (53069), Crown Prince 10637, Canada 10336, and Riverside Stamp 23589, on a Crimson Flower and Stamford foundation. All in good breeding form.

**WM. SHIER,**  
 SUNDERLAND, ONT.

**Maple Lodge Stock Farm**  
 ESTABLISHED 1854.

**SHORTHORNS**—An excellent lot of young bulls, and a special value in young cows and heifers in calf to our imported Kin-kle Duster.

**LEICESTERS** Imported and home-bred—the best.

**ALEX. W. SMITH,**  
 MAPLE LODGE P. O., ONT.

IN WRITING  
 PLEASE MENTION FARMER'S ADVOCATE.

ASK FOR  
**KHAKI**

THE COUNTRY DEMANDS  
 A CHANGE IN THE COLOR  
 OF

**FLOOR PAINT**

THE NEW COLOR—

**KHAKI**

Covers well—  
 Does not show the Dust—  
 Durable and Permanent.

THE  
**IDEAL PAINT**

FOR  
 LASTING QUALITIES  
 AND ECONOMY.

SOLE MAKERS

THE  
**CANADA PAINT CO., LIMITED**

MONTREAL AND TORONTO.

ASK FOR  
**KHAKI**

**HAWTHORN HERD**  
 OF DEEP-MILKING SHORTHORNS.

We are offering 5 young bulls for sale, of first-class quality, and AI breeding.

**Wm. Grainger & Son, - London, Ont.**

**SPRINGHURST SHORTHORNS.**

The herd is largely of Cruickshank and other Scotch sorts, and is headed by the Liverpool-bred bull, Knuckle-Duster (imported) (27393). Herd has furnished the Fat Stock Show champion three times in the last five years.

Choice young stock (both sexes)  
 FOR SALE.

**H. SMITH, - HAY, ONT.**  
 Exeter Station on G. T. R., half a mile from farm

**A QUICK, SHARP CUT**  
 hurts much less than a brute, crush or tear. Done with the **KEYSTONE KNIFE**—the best. Quick, sharp cut. Cuts from four sides. Cannot crush or bruise or tear. Most humane method of dehorning known. Ask highest award World's Fair. Write for free circulars before buying. Owned and Manufactured by **R. H. McKenna, V.S., Picton, Ont.**

**JAS. DORRANCE,**

SEAFORTH, ONTARIO,  
 BREEDER OF

**Shorthorn Cattle and Berkshire Pigs**

Young stock always for sale.

**SHORTHORN CATTLE**  
 AND LINCOLN SHEEP.

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

**J. T. GIBSON,**  
 DENFIELD, ONT.

**SCOTCH SHORTHORN BULLS AND HEIFERS**

HERD ESTABLISHED 1872.  
 See list as imported Royal George and imported Warfare have put us where we are. Imported Blue Bull, now head of herd.

**A. & D. BROWN,**  
 ELGIN COUNTY, IONA, ONTARIO.

**H. CARGILL & SON,**

CARGILL, ONTARIO, CANADA.

WE have the largest herd of Cruickshank and Scotch-bred imported cattle in Canada. Herd headed by the Duthie-bred Golden Drop bull, imp. "Golden Drop Victor," assisted by the Marr-bred Princess Royal bull, imp. "Prince Bosquet." The herd was augmented in August last by a fresh importation of fifty-two head, personally selected by Sylvester Campbell, of Kinellar, an expert judge both as to individuality and pedigree. The cattle in this lot will compare very favorably with any lot yet imported. All females of suitable age are bred to the very best bulls obtainable. Correspondence or personal inspection invited. Catalogue and service list upon application.

Cargill Station is on the Farm, Half a Mile from Barns, and 70 Miles North-west of Guelph. See Catalogue for Map.

The Breed THAT FIRST MADE Hillhurst Famous  
 THE HIGHEST-PRICED  
**SHORTHORN FEMALES**

Ever sold in Great Britain and the sire and dam of the 4,500-guinea Duke of Connaught were bred at Hillhurst. To-day "Joy of Morning," the highest-priced Scotch-bred bull ever imported to Canada, and "Scottish Hero," brother in blood to the Royal champion "Marengo," are in service in a herd of 65 Scotch and Scotch-topped Shorthorns in a hilly limestone district, where cool summers, green pastures and winter food more closely approach Aberdeenshire conditions than any other part of the continent. **HAMPSHIRE DOWN** and **SHROPSHIRE SHEEP.**

**M. H. COCHRANE,**

HILLHURST STATION, COMPTON CO., P. Q.

**W. G. Pettit & Son,**  
 FREEMAN, ONT.

IMPORTERS AND BREEDERS OF

Scotch Shorthorns  
 and Shropshire Sheep

OFFER FOR SALE:

- 20 Imp. bulls.
- 40 Imp. cows and heifers.
- 6 Home-bred bulls.
- 30 Home-bred cows and heifers.
- 7 Shearling rams.
- 20 Ram lambs.
- 25 Ewe lambs.

Our importation of this year arrived home August 17th, and is one of the largest made this year. Selected by ourselves from the leading herds in Scotland.

Our new Catalogue, with full information, is now ready to mail.

Burlington Junction Station, Telegraph and Telephone Offices, within half a mile of farm.

**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. Will be represented at the Exhibitions at—

... Toronto, London, and Ottawa, in September.

Do Not Fail to See Them.

Young Bulls and Heifers for Sale, bred from High-class Imported Stock.

**Robert Hunter, Manager**

for W. W. Ogilvie Co., Lachine Rapids, Quebec.



**W. C. Edwards**  
 AND COMPANY,  
 IMPORTERS AND BREEDERS

Laurentian  
 Stock and  
 Dairy Farm,  
 NORTH NATION MILLS, P. Q.

Pine Grove  
 Stock Farm,  
 ROCKLAND, ONTARIO.

**Ayrshires, Jerseys, Shropshires, Berkshires**

Our excellent aged herd of Ayrshires is headed by our noted imported bull Cyclone. Tam Glen heads the young herd, and Fawn's Son 2nd of St. Anne's heads the Jerseys. The young stock are all from time-tried dams.

**A. E. SCHRYER, Manager.**

**Scotch Shorthorns and Shropshires.**

The imported Missie bulls, Marquis of Zenda and Scottish Pride, at the head of herd, assisted by British Knight. We have a few extra good young bull calves that will be ready for the coming season.

**JOS. W. BARNETT, Manager.**

We can be reached either by steamboat, the C. P. R., or C. A. R.; the C. A. R. making connection with the G. T. R. at Coteau Junction. Rockland is our station on all lines. 7-1-y-cm-

**SCOTCH SHORTHORNS.**

100 head to select from.

Imp. Diamond Jubilee = 28861 = at the head of the herd. 25 grand young bulls, and cows and heifers of all ages, of the most approved breeding.

**T. DOUGLAS & SONS,**  
 Strathroy Station and P. O.,  
 Farm 1 mile north of the town.

**Shorthorns and Leicesters.**

Herd Established 1855.

A number of young bulls, cows and heifers for sale. Herd headed by imported Christopher 28859, and Duncan Stanley 15264—Grand milking cows in herd. Also a number of Leicesters of both sexes, from imported foundation.

**JAMES DOUGLAS,**  
 CALEDONIA, ONT.



**90 HEAD**

High-quality,  
 Early-maturing

**Herefords**

Prizewinners,  
 Young bulls,  
 cows,  
 heifers.

The blood of "Corrector," "Eureka," "Ancient Briton," and "Rupert," on an "Anxiety" foundation. Send for illustrated catalogue.

**H. D. SMITH, COMPTON, QUE.**

**SPRINGBANK FARM.**

Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale.

**JAS. TOLTON, WALKERTON, ONT.**



**HEREFORDS FOR SALE.**

THE HERD of upwards of 90 head of registered animals; contains the blood of the best English herds, with imported True Briton and Likely Lad at the head. Stock of both sexes and all ages for sale. Correspondence or a personal visit invited.

**A. S. HUNTER,**  
DURHAM, ONT.

**Herefords for Sale.**

Three or four one-year-old bulls. Cows and heifers.

The Plains Farm, Arkell; Moreton Lodge, next the O.A.C. College; containing 200 to 250 acres each.

**The F. W. Stone Stock Co.,**  
Guelph, Ont., Can.

**Maple Glen Stock Farm.**

The home of officially tested, Advanced Registry, dairy test and showing-win- A grandson of Sylvia now for sale. Price is in keeping with breeding and performances.

**C. J. GILROY & SON,**  
Brockville, on C.P.R. or G.T.R. Glen Buell, Ont.

**Water Basins**  
Common Sense Logic.



Point 4. No up-to-date Dairyman who studies economy can do without our Water Basin. No other device in your barn can save you as many dollars and cents. Prove it.

Point 5. (See next issue.)

**Ontario Wind Engine & Pump Co.**  
LIMITED.  
TORONTO.

**OWING TO DROUTH**

will sell five Holstein-Friesian heifers, two or three years old, for \$350. Fine animals, of rich breeding, and bred to the great butter-bred bull, Johanna Rue 2nd's Paul De Kol (21724), at head of our herd. Also bull calves at reduced prices. Fine chance to start herd of pure-breds.

**SOUTH SIDE FARM CO., ST. PAUL, MINN.**

**Maple Hill Holstein-Friesians**  
SPECIAL OFFERING.

Bull calf 8 months old, sired by DeKol 2nd's Paul DeKol Duke. Bull calf one week old, sired by Daisy Teake's King. Also several fine females, all ages.

**G. W. CLEMONS,**  
HARRISBURG STN., -011 ST. GEORGE P. O., ONT.

WE WANT TO SELL A FEW

**Holstein Heifers, coming 2 years old**  
or a few young Cows.

THEY are of the richest and largest producing strains, fine individuals, and bred to as good bulls as there are living. We have a few bull calves and yearling bulls also for sale.

**HENRY STEVENS & SONS.**  
LACONA, OSWEGO CO., N. Y.

**BROOKBANK**

Is headquarters for Holstein bulls. They are going fast; be quick if you want one. In writing, state age, etc., preferred.

**GEO. RICE,**  
Oxford Co. Currie's Crossing, Ont.

**GLEN ROUGE JERSEYS.**

**WILLIAM ROLPH, Markham, Ont.,** offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right.

**FOR SALE.**

**6 YEARLING JERSEY BULLS.**  
sired by Brampton's Monarch (imp.), and from tested cows; also registered and high grade springer.

**B. H. BULL & SON, BRAMPTON, ONT.**

IN WRITING  
PLEASE MENTION FARMER'S ADVOCATE.

**GOSSIP.**

King Bros., Wawanesa, have now a herd of forty pure-bred Yorkshires. They purchased the two sows shown so successfully at the Winnipeg and Brandon Fair by Brethour & Saunders, of Burford, Ont.

Mr. Charles Lawson has sold his prize horse, Raphael (10619), bred by Mr. Cross, of Knockdon, to Mr. George Campbell, Markham, Ont., and he also sails early in Sept. This is a three-year-old got by the great horse, Sir Everard (5353), to which was thrice awarded the Glasgow premium, and one of the best breeding horses of our day. His dam was the fine mare, Robina (11283), a prize mare in her time, and got by Harold (2851), also a prizewinner.—*Scottish Farmer.*

Mr. A. W. Smith, Maple Lodge, Ont., writes regarding the Leicester ram of his breeding illustrated in this issue: "He was 1st at London last year, beating the winners at Toronto and Ottawa. He has superb quality, which, alas, does not get recognition with too many judges at our shows, and although got a large looking sheep, carries a weight of 310 pounds at two years, which is surely enough. Then, with his very handsome, though strong and masculine head, great heart girth, thoroughly covered back and loin, and full leg of mutton, and thoroughly covered with a coat of beautiful, lustrous wool, he satisfies me as nearly as we get them. Then his breeding is the best. His sire and sire's sire were both 1st prize shearings at Toronto and London. His dam was by a Balfour ram and out of a Polwarth ewe. His sire won for us this year 1st and championship at New York State Fair, Syracuse."

Messrs. A. Hume & Co., Menie, Ont., write us regarding their 2nd-prize herd of Ayrshires at Toronto, illustrated in this issue. They are: The yearling bull, White Cockade, 1st at Toronto in 1899 as bull calf under six months; 1st at London, 1900, as 1 year old. Next is the imp. cow, Eva of Barcheskie, twice 2nd-prize cow at Toronto, and by her side is her granddaughter, the 3-year-old cow, Snowflake, 2nd at Toronto as yearling in 1898, and 3rd in 1900 as 3-year-old cow. Then the yearling heifer, Little Love, 1st at Toronto in 1899 as heifer calf under six months, and again was put at the top in 1900. Then to the left is the beautiful unbeaten 2-year-old heifer, Eva's White Pearl, as her name indicates, a daughter of the imp. cow, Eva, winner of 1st both at Toronto, London and elsewhere in 1900. We had to leave out the heifer under one year, which, with the others named, composed the herd as shown, but she is of the same quality and breeding, winner of 2nd both at Toronto and London.

**TO THOSE WANTING**

**A SURE PRIZEWINNING BULL**  
to head their Jersey herd, I offer

**Prince of Belvedere 11655**

5 years old, solid bronze fawn. Dam, 17½ lbs. butter a week; his dam, 20 lbs. 6 ozs. a week. Also, Golden Fawn Cow, 5 years, superb udder, grand butter record.

Also a Young Stock, both sexes and rare quality.

**MRS. E. M. JONES,**  
Box 324, -011 BROCKVILLE, ONT.

**SHOW AYRSHIRES FOR SALE.**

As we are not going to show any cattle at the fairs this year, we will sell the imported prizewinning bull, Napoleon of Auchenbrain, champion and head of first prize herd at Toronto, 1898. Also first-class 2-year-old bull and three choice bull calves of last fall. These are all fit for the showing, as we kept them for that purpose. For prices and particulars come and see, or write.

**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 -011

**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. -011

**Maple Cliff Dairy and Stock Farm.**

**FOR SALE:**

Ayrshires—6 yearling bulls, females any age. Tamworths—10 boars and sows of different ages. Berkshires—3 boars, a number of sows. -011

**R. REID & CO., Hintonburg.**

Farm 1 mile from Ottawa. Electric cars to farm. -011

**EUROPEAN ADVERTISEMENTS.**

**FAMOUS ALL OVER THE WORLD.**

**ALFRED MANSELL & CO.,**

LIVESTOCK 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.

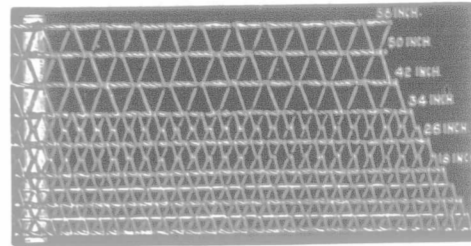
**W. W. Chapman,**

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. Cables—Sheepcote, London. -011

**ELLWOOD Steel Wire Fences.**



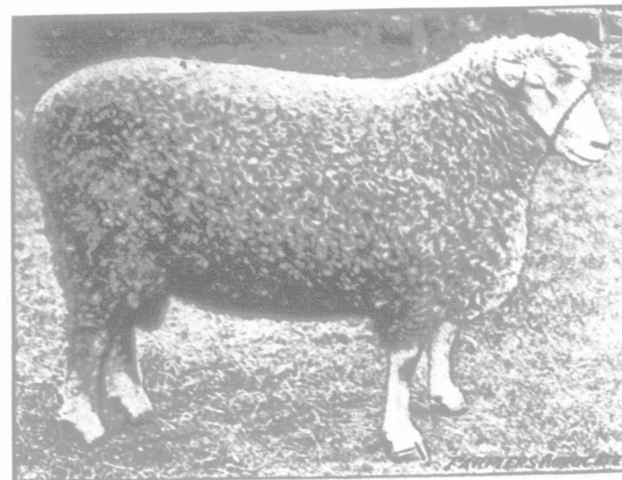
Six styles, all heights, for every fencing purpose on Farms, Ranches, Orchards, &c.

**Strong, Humane, Cheap, Durable.**  
**FULLY GUARANTEED.**

Heavily Galvanized Best Steel Wires. We have agents everywhere. ELLWOOD FENCES are easy to get, easy to pay for, easy to put up. If you cannot find an agent write to the makers.

Ellwood Standard Style.  
**AMERICAN STEEL & WIRE CO., Chicago or New York.**

**. Fairfield Flock of Lincoln Sheep. .**

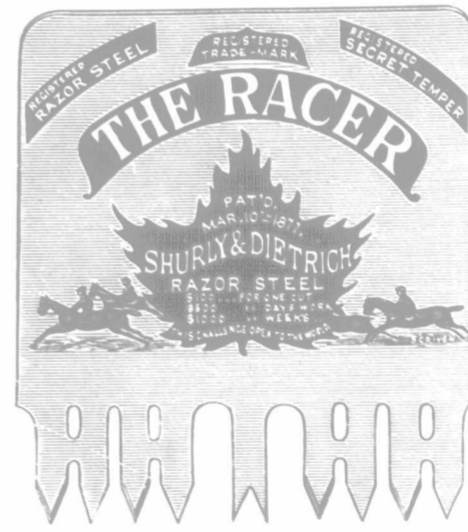


THE largest flock of imported Lincolns and the largest number of Royal first-prize winners of the breed in America. Representatives of this flock won the first flock prize at Toronto last year and this, and the championship at London both years. Over 60 imported sheep now in flock, and over 100 field rams and ewes, purchased in England, to follow soon. A large number of yearling rams and ewes, ram lambs and ewe lambs for sale.

Write us for prices, or come and see.

**J. H. & E. PATRICK, ILBERTON, ONT.**

**The Razor Steel, Secret Temper, Cross-cut Saw.**



WE take pleasure in offering to the public a saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A saw to cut fast "must hold a keen cutting edge."

This secret process of temper is known and used only by ourselves.

These Saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back. Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good, ask your merchant to let you take them both home, and try them, and keep the one you like best. Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a saw for one dollar less, and lose 25 cents per day in labor. Your saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

MANUFACTURED ONLY BY  
**SHURLY & DIETRICH,**  
Galt, Ontario.

**LIGHT YOUR HOME WITH Sunlight Gas**

The best light in the world. No more expensive than coal oil.

WRITE FOR PARTICULARS TO

**The Sunlight Gas Co., Ltd.,**

1, LITTLE ST. ANTOINE ST., MONTREAL

SEE TESTIMONIAL BELOW.

E. GUILLET & SONS,

The Canadian Fur Hat Works,  
Marieville, P. Q., June 21st, 1900.

THE SUNLIGHT GAS CO., Ltd.,  
Montreal, P. Q.

GENTLEMEN, We are in receipt of yours of the 14th inst., re enquiry about our gas machine. In reply, would say we are now on with it on the third year, and must say it works first class in every respect, and I feel convinced there is not a better machine made, and I have seen a good many. Yours truly,  
E. GUILLET.



**BIRMINGHAM SHORTHORN SHOW AND SALE.**  
At the annual autumn show and sale of Shorthorns at Bingley Hall, Birmingham, Sept. 11th, there were 236 entries, of which 125 appear in the list reported as having been sold. The general quality of the stock is said to have been not of a high-class description, and except in a few special cases the prices realized were very moderate, a large proportion being drawn at 21 guineas, which suggests the probability that reported lower than 21 guineas. Fifty guineas was reached in about a half dozen instances, 82 guineas twice, and these figures were exceeded only in the single case of Mr. J. H. Wheatling's Jasper Prince, purchased by the Marquis of Camden at 135 guineas. When it is remembered that a good list of cash prizes were offered as an inducement to the entry of a superior class of animals, the sale can hardly be described as a very satisfactory one.

**MR. J. FLOWER'S ANNUAL SALE OF HAMPSHIRE DOWNNS.**

One of the most successful sales ever held by Mr. J. Flower, of Chilmark, Salisbury, of his celebrated Hampshire Downns was that which took place at Butford Fair last August, the annual sale place of his noted ram lambs. Of these, 100 were catalogued, eight being let for the season, a period of five to seven weeks. The first one made the very satisfactory price of \$55, the agent of Lord Carnarvon being the purchaser; \$90 being the next highest price, to Mr. Dibden; whilst the remaining six realized values that brought the average for the eight let ram lambs to \$36 per head all round. For the ram lambs sold, the demand was as good as could be; in fact, there was the keenest competition all through, and the average worked out, including the eight ram lambs let, at \$78 per head. The draft of the month ewes sold even better privately. Of these, there were 140, and the whole of them were purchased by one buyer, at \$28 per head all round, a record price for so large a number of this age, and one that fully typifies the high value of Mr. J. Flower's flock.

**IT PAYS TO ADVERTISE IN THE FARMER'S ADVOCATE**



Present Offering:

Dorset lambs (either sex). Shropshire lambs (either sex). Chester White pigs (June and Sept. litters) of the bacon type.

For particulars, write to R. H. HARDING, THORNDALE, ONT.

Shropshire Rams and Ewes

Newly imported from the greatest English breeders. Home-bred rams and ewes of best quality. Scotch Shorthorns and Clydesdale horses for sale at moderate prices, and in large numbers, by

ROBERT MILLER, STOUFFVILLE, ONT.

LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH. NON-POISONOUS. THE ORIGINAL Non-Poisonous Fluid Dip

Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large breeders.

For sheep. Kills ticks, maggots; cures scab; heals old sores, wounds, etc., and greatly increases and improves growth of wool.

Cattle, horses, pigs, etc. Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly. Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.

No danger, safe, cheap, and effective. Beware of imitations.

Sold in large tins at 75 cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to breeders, ranchmen, and others requiring large quantities.

SOLD BY ALL DRUGGISTS. SEND FOR PAMPHLET.

Robert Wightman, Druggist, Owen Sound, Ont. Sole agent for the Dominion.

Shropshires FOR Sale

Rams and ewes of good breeding, fine lusty fellows. Prices reasonable.

ABRAM RUDELL, HESPELER, ONT.

SHROPSHIRE SHEEP AND CHESTER WHITE SWINE.

WM. E. WRIGHT, GLANWORTH, ONT.

Fairview Shropshires.

A few good rams still on hand. A splendid lot of ewes

(imported and home-bred), bred to my best stock rams, are now offered at good values. They are the producers of winners.

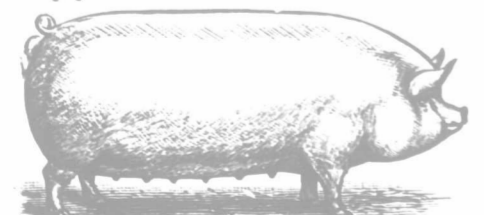
JOHN CAMPBELL, Woodville, Ont., Can.

Snelgrove Berkshires.

When others fail to please you with a good pig, come to us. Our herd is bred from the best strains of the Large English Berkshires. We now have a very promising lot of young pigs, April farrow, sired by Colonel Brant 3350 (first prize under 12 months, Toronto, 1900) and Dictator 5911. Write for prices.

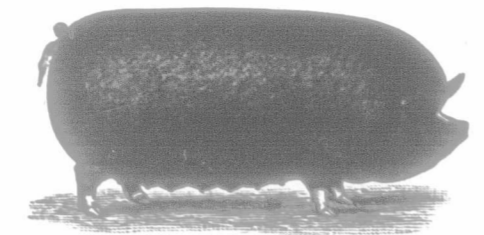
SNELL & LYONS, Snelgrove, Ont.

OAK LODGE Type of Yorkshires



We have now on hand a large herd of pigs of different ages, and they are as good as we have ever offered. The winnings of this herd have been greater than all other herds combined at the largest Canadian exhibitions.

All stock shipped to order, fully guaranteed. Brethour & Saunders, Burford, Ont., Can. PLEASE MENTION FARMER'S ADVOCATE.



Berkshires Large, lengthy, English type. Five first prize boars in service. Spring pigs ready for shipment. Boars fit for service. Sows ready to breed. GEORGE GREEN, Fairview, Ont.

TAPE BROS., importers and breeders of Ridge town, Ont., Jersey Swine. Duroc Jersey Swine. Ridgetown, Ont.

Large White Yorkshires.

An offering during this month a grand lot of boars and sows ready for breeding. Pairs supplied, not skin, from show stock; also several sows in pig to imported boar. Young pigs from 2 to 3 months old, all of the most improved bacon type. Registers furnished. Express prepaid. Address:

H. J. DAVIS, BOX 290, WOODSTOCK, ONT.

The Coldspring Herd of TAMWORTHS won the sweepstakes at Toronto last year, and as we have made no preparation to exhibit this year, we can ship exceptionally choice things of both sexes and all ages.

NORMAN M. BLAIN, Brant Co. Coldspring Farm, St. George.

Address Belleville Business College. BELLEVILLE, ONTARIO.

NOW OPEN. FALL TERM IN THE Central Business College, TORONTO. Enter any time. Ten teachers. Sixty type-writing machines. Unexcelled facilities for assisting graduates to positions. Write for calendar. W. H. SHAW, Principal. Yonge and Gerrard Sts., Toronto.

ONTARIO BUSINESS COLLEGE BELLEVILLE, ONTARIO. Send for the illustrated catalogue for 1900; 152 pages, specially interesting (32nd year). Address: ROBINSON & JOHNSON, F.C.A.

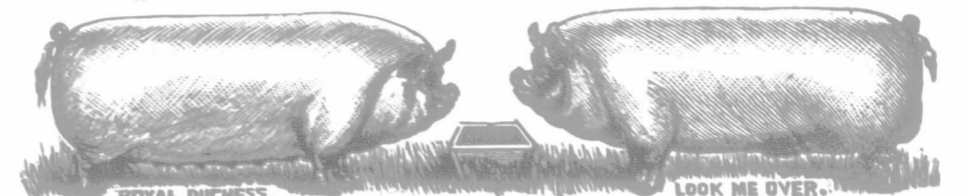
CENTRAL Business College STRATFORD, ONTARIO. A school that is doing the best work in business education in Canada to-day. Our magnificent catalogue gives full information. Send for one. Enter now if possible. W. J. ELLIOTT, Principal.

EARN MORE MONEY BY HOME STUDY FREE SCHOLARSHIPS TO A LIMITED NUMBER IN Electrical, Mechanical, Marine, Engineering Stationary or Locomotive American School of Correspondence, Boston, Mass.

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

Family Knitter Cheapest, Simplest, Best. Price, \$8.00. Write for circular. Dundas Knitting Machine Company, DUNDAS, ONTARIO.

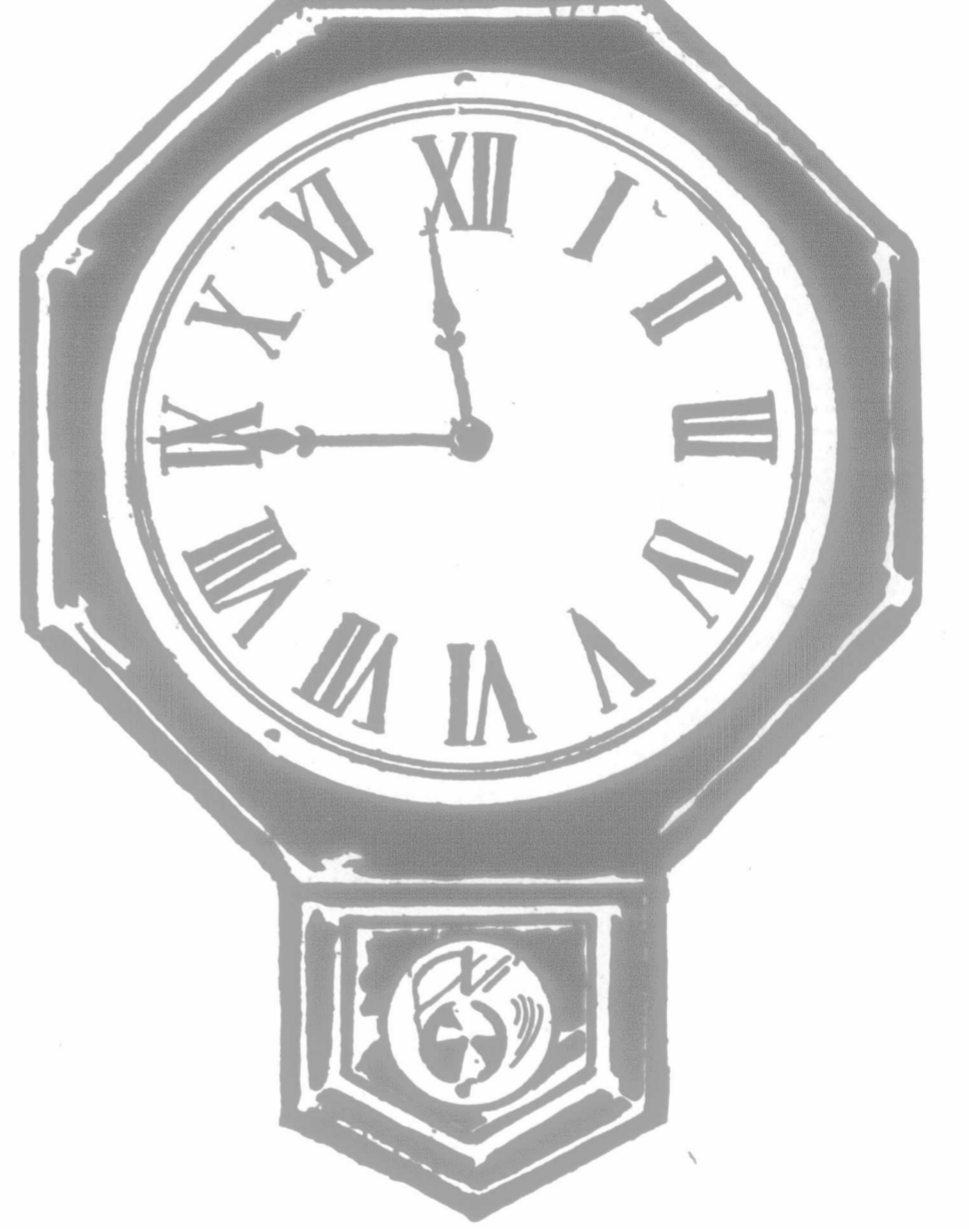
Summer Hill Herd HEADQUARTERS FOR THE IDEAL BACON HOG AND EASY FEEDERS.



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.

D. C. Flatt & Son, Millgrove, Ont.

Detroit Business University. THE LEADING BUSINESS TRAINING INSTITUTION OF AMERICA. Over 33,000 students in profitable employment in different parts of the world. William F. Jewell, Pres. Platt E. Spencer, Secy.



Making Time.

A quarter to twelve and all the morning's work done—all those burdensome pots and pans clean as a whistle, bright as a new pin; the woodwork radiant, and the kitchen linoleum looking like new.

So easy too—with "Sobrite." "Sobrite" is as good as an extra pair of hands in housework.

SOBRITE 10 CENTS Rapid action cleaner, will not scratch



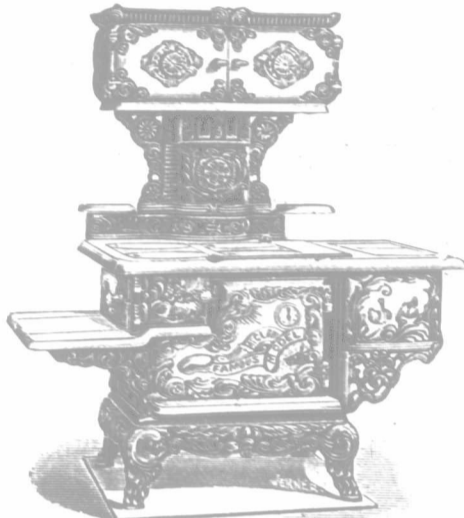
**Highest Quality Always.**

If you want Dry Goods of the latest and newest kinds, Groceries of the finest and freshest quality, and everything that you Eat, Drink, Wear or Use the best that can be obtained, then trade at the Hudson's Bay Stores.

Have you tried TETLEY'S TEA? It is one of the most fragrant and refreshing Packet Teas in the world. We are sole agents for Manitoba, the Northwest Territories and British Columbia.

**Hudson's Bay Stores.**

**A "Famous Model" Range For Wood**



CAN BE FITTED FOR COAL IF REQUIRED.

Brightens Life

**Farmer's Home**

- THERMOMETER** in oven door shows EXACT COOKING HEAT for pies, cakes, bread, etc.
- VENTILATED OVEN** allows of a constant circulation of PURE WARM AIR.
- STEEL OVEN BOTTOM** (that cannot crack or warp) heats oven quickly.
- CEMENTED BOTTOM** causes even baking of food.
- ASBESTOS OVEN FRONT** prevents heat escaping.
- EXTRA HEAVY FIRE EXPOSED PARTS, SECTIONAL FIRE-BOX LININGS AND STOVE TOP THAT CANNOT WARP.**

**THE McCLARY MFG. CO.,**

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER.



"NATIONAL" NO. 1 HAND POWER. Capacity, 330 to 350 lbs. per hour.

**THE NATIONAL FARM Cream Separator**

Manufactured by the Raymond Mfg. Co. of Guelph, Limited, manufacturers of the celebrated Raymond Sewing Machines.

THE National is an up-to-date machine, leading all others in separating cream by centrifugal force. It is the farmers' choice, because it runs easy, skims fast and clean, and makes a perfect cream, containing any per cent. of butter-fat desired. It is also easier to clean than any other. The National is built of the very best material suitable for the construction of a high-speed machine, and with proper care should last a lifetime. The bearings are interchangeable and easily adjusted. Every machine is guaranteed to do good work, and a trial of the "National" is solicited before purchasing any other. The already large sale of the "National," and the growing demand for it, shows how much the Canadian farmers appreciate a Canadian-made machine that does its work so easily and well, and at the same time returns such a large profit on the small investment. Ask for the "National"; try it and buy it.

**THE CREAMERY SUPPLY CO., GUELPH, ONT.,**  
General agents for Ontario.

**MESSRS. CAMPBELL & GLENN,**  
381 TALBOT ST., LONDON, ONT.,

Agents for the Counties of Middlesex and West.

**The Raymond Mfg. Co'y of Guelph, Ltd.**  
GUELPH, ONT.

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

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

**W. A. DUNBAR,**  
VETERINARY SURGEON,

512 JEMIMA STREET, - WINNIPEG.

Special attention given to all cases of "Blackleg" and "Milk Fever" in cattle. Consultations by letter or telegraph promptly attended to. TELEPHONE 56. 25-2-m-y

**BELL PIANOS AND ORGANS**

BUILT TO LAST A LIFETIME BY THE LARGEST MAKERS OF PIANOS & ORGANS IN CANADA.

**The Bell Organ & Piano Co., Ltd., Guelph, Ont.**

(CATALOGUE NO. 40 FREE ON REQUEST.)

**J. J. H. McLEAN & CO.,**

530 MAIN STREET, WINNIPEG, WHOLESALE AND RETAIL AGENTS FOR MANITOBA

**Government Analysis.**

LABORATORY OF INLAND REVENUE,

OFFICE OF OFFICIAL ANALYST,

Montreal, April 8, 1895.

"I hereby certify that I have drawn, by my own hand, ten samples of the

**St. Lawrence Sugar Refining Co.'s**

EXTRA STANDARD GRANULATED SUGAR, indiscriminately taken from ten lots of about 150 barrels each. I have analyzed same and find them uniformly to contain:

99.99 to 100 per cent. of pure Cane Sugar, with no impurities whatever."

(Signed) **JOHN BAKER EDWARDS, Ph. D., D.O.L.,**  
Prof. of Chemistry and Public Analyst, Montreal.

**HIGHEST HONORS EVERYWHERE**

PRESENTED TO

**Massey-Harris Co., Limited,**

as Manufacturers of the best Farm Implements in the world.

**MASSEY-HARRIS CO., Limited,**

AWARDED

**GRAND PRIZE**

AT THE PARIS, FRANCE, EXPOSITION

AND

**GRAND GOLD MEDAL**

AT THE VERONA, ITALY, EXHIBITION.

In each case this was the HIGHEST AWARD OBTAINABLE.

PLEASE MENTION FARMER'S ADVOCATE