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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE  
SUCCEED  
FOUNDED 1874

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

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## THE Sovereign Bank

OF CANADA.

Head Office, TORONTO.  
Chief Executive Office, MONTREAL.

BRANCHES:

ATLANTIC	HENSBALL	OTTAWA
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This Bank is fully equipped to transact all business in accordance with modern ideas. Savings Bank Departments at every Branch. Deposits of \$1 received. Interest paid twice a year. No delay in obtaining money when needed. Interest allowed from date of deposits. No trouble, red-tape or delay.

D. M. STEWART, General Manager.

## Bicycles

direct from factory. Save agents', dealers' and travelers' expenses. Get you wheels at first cost. We have been established 15 years. Have a first-class line of bicycles, and you can have one or more

at factory cost.

Let us hear from you. We can save you money. Say what style of a wheel you want and we can fill your order.

Union Jack  
Bicycle Works  
TILLSONBURG, ONT.

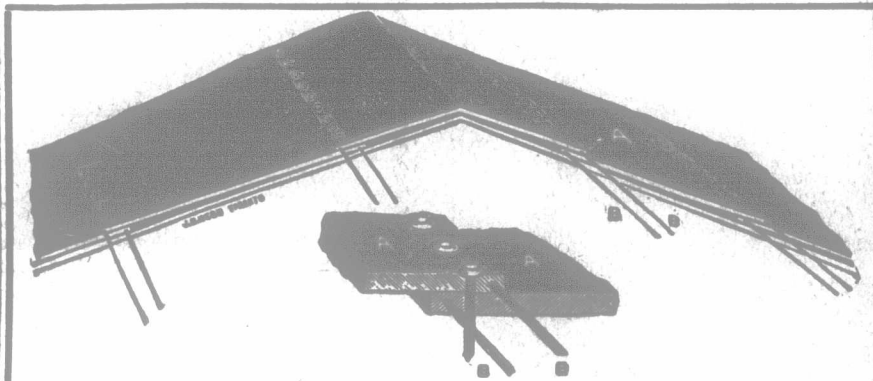
Sunlight Soap will not burn the nap off woollens nor the surface off linens.

## SUNLIGHT SOAP

REDUCES EXPENSE

Ask for the Octagon Box.

## PATERSON'S WIRE-EDGED READY ROOFING.

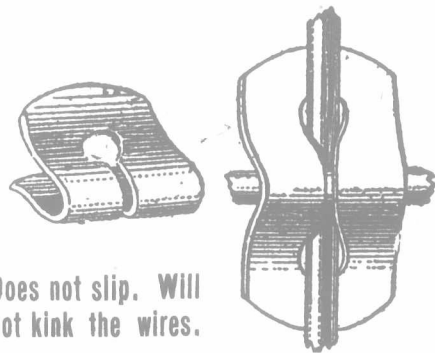


A shows method of laying Red Star Brand Wire-edged Ready Roofing, with 2-inch laps secured by nailing two inches apart. B shows wires running through the edges of the roofing, giving it great strength at the joints or laps—a very desirable feature, especially in localities where high winds prevail.

We offer you a durable, fireproof roofing material for less money than you would pay for the poorest quality of shingles. Wire-edged Ready Roofing is made in Canada by a responsible Canadian company, who stake their business reputation on the quality of the material they manufacture. For over 20 years our roofing has successfully stood the severe test of the variable climate of Canada, and our annual sales are now fully 100,000 rolls. You can buy our Wire-edged Ready Roofing and other Goods from almost any hardware merchant in the Dominion. Samples, testimonials and further information from

The Paterson Manfg. Co., Limited  
TORONTO and MONTREAL.

New Samson Lock.



Does not slip. Will not kink the wires.

SAMSON LOCK WIRE FENCE

Strong, durable, substantial; positively the cheapest in the end. Its construction: Laterals all No. 9 Hard Coiled Spring Wire; stays, No. 7 and No. 9 HARD STEEL wire. Stays immovably united to lateral wires with the NEW SAMSON Lock—the lock that will not slip up, down or sideways. Samson Lock Fences are "far and away the best." It's the Lock that does it. We also make a splendid line of ORNAMENTAL FENCES and GATES. Send for catalogue. Agents wanted. The LOCKED WIRE FENCE CO., London, Ont., Ltd.

## 2 IN 1 SHOE POLISH HAS NO EQUAL

TABLE OF CONTENTS.—The list of Contents in this issue of the "Farmer's Advocate" will be found on the page preceding the Home Magazine department.



There is just one way to make the most money out of any business. The way to make the most money out of dairying is the Empire Way. The

## Empire Cream Separator

makes dairying easier, pleasanter and more profitable. It saves time, trouble and temper. It saves work because it is easy to operate and easy to clean. It saves worry because it is always ready, skims closely and is made to last. Our books about the money-making Empire Way of dairying are free to everybody. They are just common-sense talks in plain language, plainly printed for busy farmers and dairymen. Send for them. They are free for the asking.

Empire Cream Separator Co.,  
28-30 Wellington St., West, Toronto, Ontario.

## Farmers!

GIVE YOUR BOYS A CHANCE. You can teach them practical farm work, but successful farming means more than this. MAKE A 100-PERCENT FARMER OUT OF YOUR BOY by giving him a scientific course in Agriculture, Stock-raising, Poultry-raising, etc., BY MAIL. Now is the time to ask for FREE BOOKLET.

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## Are You Interested

in the study of BUSINESS or SHORTHAND? No better school in Canada than the

FOREST CITY  
BUSINESS & SHORTHAND  
COLLEGE, LONDON, ONT.

to qualify for position. Catalogues for a postal.

J. W. WESTERVELT, Principal.

## "PERKINS' AMERICAN HERBS

THE GREAT BLOOD PURIFIER.



is guaranteed to cure Constipation, Rheumatism, Sick Headaches, Nervous Troubles, Kidney Disorder, Liver Complaint, Stomach Troubles, Female Complaints, Neuralgia, and all skin diseases. Price, 50c. and \$1. Write for free booklet and samples. The National

Dr. J. H. Perkins, Herb Co., Limited, 173 Spadina Ave., Toronto, Ont.

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



# Binder Twine

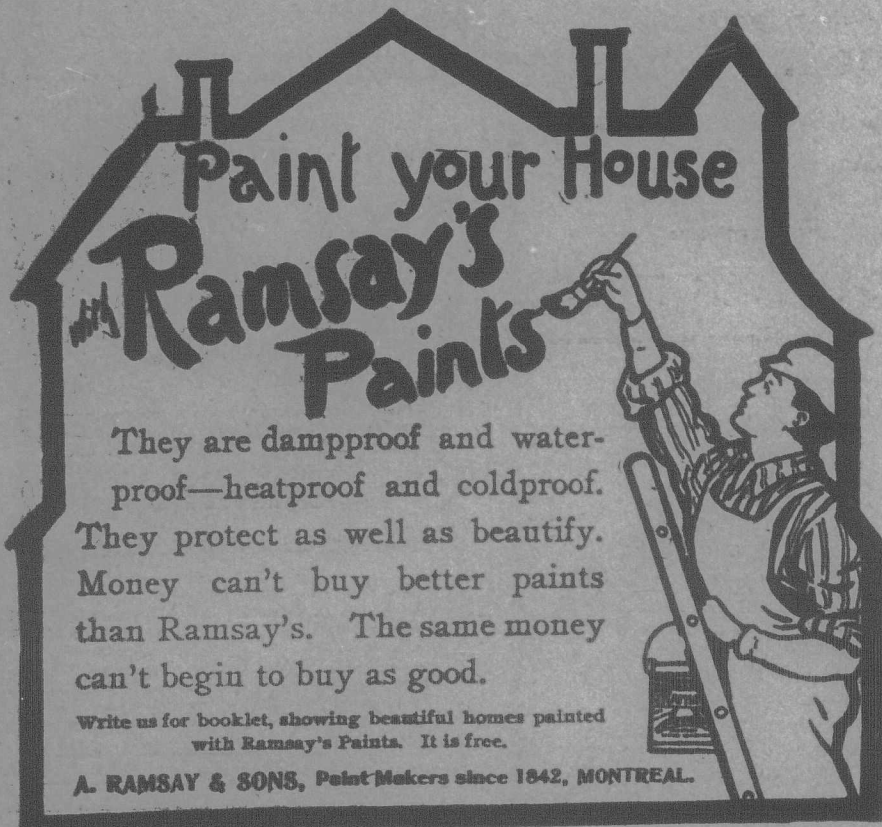
BLUE RIBBON,	650 feet per pound
RED CAP,	600 " " "
TIGER,	550 " " "
GOLDEN CROWN,	500 " " "
STANDARD,	500 " " "
SISAL,	500 " " "

Blue Ribbon is no doubt the Queen of Binder Twine. It runs six hundred and fifty feet to the pound, and is manufactured from most select Manila Fibre. Six hundred and fifty foot Twine is the only Twine manufactured entirely from Manila Fibre. Dealers should beware of so-called "Manilla" Twines which are advertised to measure less than 650 feet to the pound. They are mixed Twines. Write for Samples.

**CONSUMERS' CORDAGE COMPANY, LIMITED**

HALIFAX, N. S.

MONTREAL, QUE.



**Paint your House**  
**Ramsay's Paints**

They are dampproof and water-proof—heatproof and coldproof. They protect as well as beautify. Money can't buy better paints than Ramsay's. The same money can't begin to buy as good.

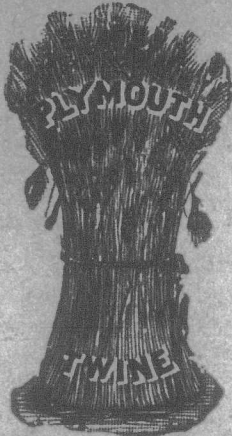
Write us for booklet, showing beautiful homes painted with Ramsay's Paints. It is free.

**A. RAMSAY & SONS, Paint Makers since 1842, MONTREAL.**

# Plymouth Binder Twine

IS THE

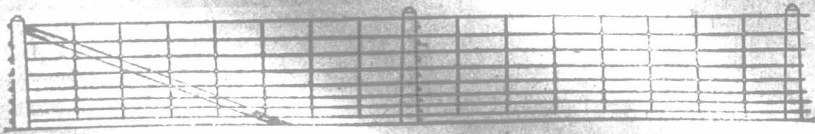
**Longest, Strongest,  
Most Even and Best.**



Our celebrated brands are Plymouth Special, Green Sheaf, Silver Sheaf, Golden Sheaf and Gold Medal.

They bind the maximum number of sheaves with the minimum amount of trouble and expense. We invite farmers to prove this advertisement by counting the sheaves they bind with Plymouth Twines.

## THE ANCHOR WIRE FENCE



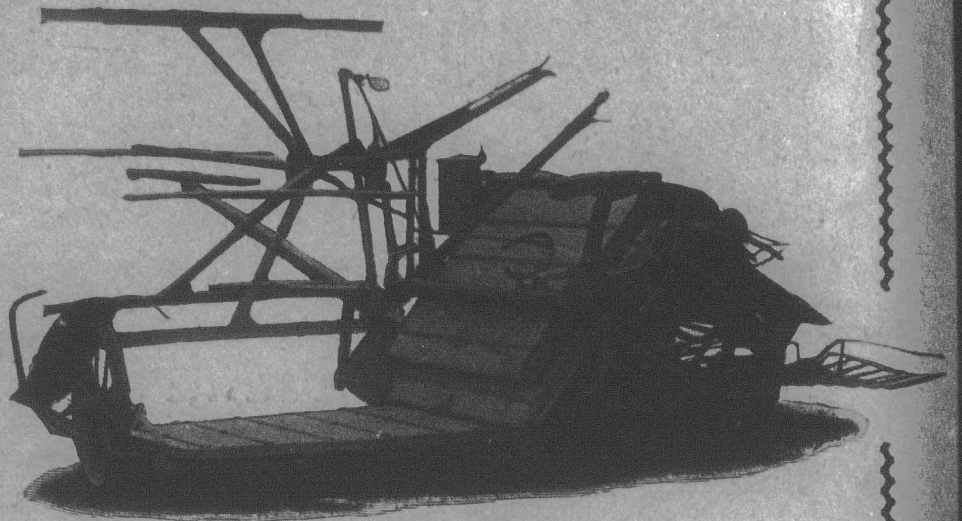
For Farm and Ornamental Fence and Gates, and all Kinds of Fencing Wire, write

**ESPLEN, FRAME & CO.,**  
STRATFORD, ONT.

Agents Wanted.  
Send for Catalogue.

# The Noxon No. 9 Binder

IS ACKNOWLEDGED BY PRACTICAL FARMERS TO BE THE BEST.



SOME SPECIAL FEATURES:

Built of Steel Throughout.  
Open Back.  
Removable Dividers.  
Telescopic Packer Shaft.  
Three Packers.  
Weight Trip.

The Lightest Made.  
A Pair of Poles Can Handle It.  
Runs Without Noise.  
Always Reliable.  
No Neckweight.  
Handles Tangled Grain Perfectly.

Our No. 3 Mower and Buffalo Steel Rake are the best in the market.

**THE NOXON CO., Ltd., INGERSOLL, ONT.**

We Solicit Your Order.



### IT'S MONEY IN YOUR POCKET

To use Pedlar Steel Ceilings.

The entire surface appears to be one beautiful combination of curves and angles, without beginning or without ending—a veritable triumph of the interior decorator's skill.

Churches, dwellings, meeting halls, stores, and offices when fitted up with Pedlar Steel Ceiling and Wall Patterns present an appearance of richness and stability that cannot be duplicated in lath or plaster. Besides they are economical.

When we know you are interested, we'll send our handsome catalogue.

**THE PEDLAR PEOPLE, OSHAWA, ONTARIO.**



## Varicocele Cured to Stay Hydrocele Cured in 5 Days

**VARICOCELE** Under my treatment this insidious disease rapidly disappears. Pain ceases almost instantly. The stagnant blood is driven from the dilated veins and all soreness vanishes and in its stead swelling subsides. Every indication of Varicocele vanishes and in its stead comes the pleasure of perfect health.

**Hydrocele** I cure to stay cured, Contagious Blood Poison, Kidney and Bladder Troubles, Nervous Debility, and allied troubles. My methods of treatment and cure are original with me and cannot be obtained elsewhere. I make no experiments. All cases I take I cure.

**Certainty of Cure** Guarantee to cure you or return your money. What I have done for others I can do for you. I charge for a permanent cure will be reasonable and no more than you will be willing to pay for benefits conferred. I CURE YOU at Home.

**H. J. TILLOTSON, M. D.** Write me your condition fully and you will receive a plain envelope a scientific and honest opinion of your case. **FREE of Charge.** My home treatment is successful. My books and lectures mailed FREE upon application.  
**H. J. TILLOTSON, M. D., 255 Tillotson Building, 34 Dearborn Street, CHICAGO.**

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



**THE MILNER PETROLIA WAGON CO. LIMITED**  
**PETROLIA**

MANUFACTURERS OF

**Farm Wagons and Trucks**  
**COMBINATION RACKS, ETC.**

Strictly First-class. Fully Warranted.

ASK YOUR DEALER FOR THEM, OR WRITE TO US DIRECT IF NO AGENT NEAR.



**Sunshine Furnace**

**Flues Easily Cleaned**

Cleaning out the flues of most furnaces is so difficult and complicated that only an expert can do it, and experts' services usually come high. The flues in the Sunshine Furnace can be cleaned from two different clean-out doors and from the feed-door, so that there is no part of the flues which is not easily reached. A special brush for this purpose is always supplied, and the operation is so simple that a boy can perform it. The whole Sunshine Furnace construction is on the same plan of simplicity. Sold by all enterprising dealers. Write for booklet.

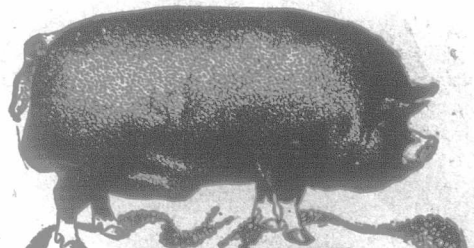
**McClary's**

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B.

**Shropshires at West Midland Show.**

The sheep section at this show is one of its leading features, and here we find the very best exhibition of Shropshire sheep. Here your representative had the pleasure of renewing acquaintance with Mr. Telfer, of Telfer Bros., Canada, who is thus far the first Canadian sheep man we have met this season.

The proverb, "blood will tell," was well confirmed in the result of the contest in a notably good class of twenty-three yearling rams, the winner being a splendid sheep from Mr. H. B. Manders' flock. This grand ram won the blue ribbon of the Shropshire show season, the Mansell memorial challenge cup, and certainly makes a fitting successor to many illustrious sheep which in former years have won this coveted trophy. To show how blood tells, we give a bit of reference to his pedigree: his dam was one of Mr. A. E. Mansell's choice stud ewes, and was purchased at the dispersal sale at Harrington Hall. This grand ewe was the dam of that notable Mansell ram, Blood Royal, sold for a very high figure for export, and she traces right away back to the very best foundation stock of the late Mr. Mansell. Mr. R. P. Cooper's second winner was another excellent ram, as also was Mr. M. Williams' third winner, one of the very best in the class, in respect to quality of fleece. Pens of three yearling rams produced a grand entry. Here the winners, Sir P. A. Muntz's pen, though big, upstanding and masculine sheep, failed to carry popular opinion with them, the preference at the ringside being freely given to the trio that won second honors for Mr. B. Wall's flock, which were much better in fleece, shoulders, quality and type. Mr. R. P. Cooper's pen did full credit to his well-known flock, being matchy and good. Mr. E. Nock, with two pens, one fourth, the other h. c., had a splendid lot of sheep. Mr. R. P. Cooper went ahead in the two-shear ram class, with the low-down, wide and deep, blocky type, with a grand fleece and leg of mutton. Mr. M. Williams, however, with one of special merit and quality, ran the winner very close, leaving only the barren honor of r. n. for Sir P. A. Muntz's very masculine ram, whose weight and substance, with good top, made him a ram of considerable value. The yearling ewe class, as a whole, was of special merit, every pen being included in the award list. The winners in this grand class, it is needless to say, were most superior, but when so well known a breeder and judge as Mr. W. Barrs, who officiated as judge, says, "They are the best pen I have seen for years," no further comment is necessary to disclose their great merit, and Mr. R. P. Cooper, their owner and breeder, fully deserves the special distinction this pen gained, being first in so grand a class; the fourth pen of which also came from Mr. Cooper's flock. Second honors went to Sir P. A. Muntz, and third honors to Mr. P. L. Mills. Mr. Cooper again went to the fore, with the pen of five ram lambs; Mr. John Harding being a close second, and Mr. A. Tanner r. n. In the ewe lamb class, a specially fine pen from Mr. T. S. Minton secured first honors; Mr. E. Nock's excellently-woolled pen being second.



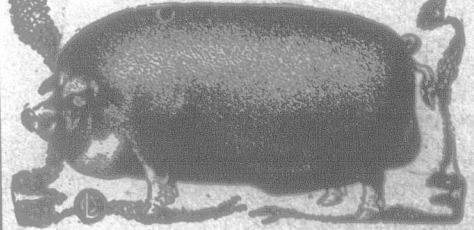
**MORE**

than feed is required to develop the perfect hog. Highest results presume perfect health from birth to slaughter. Get at once to the root of the matter. Insure perfect health to your herd by creating absolutely sanitary conditions. The way lies through the use of

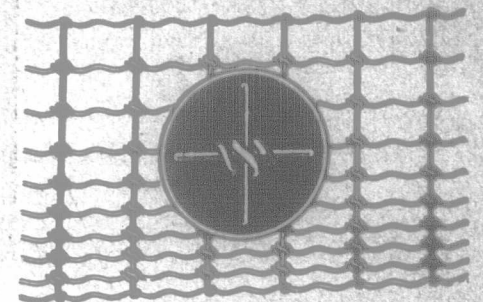
**Zenoleum**

This standard remedy of the stockman destroys the disease germ, prevents cholera, purges the stomach and relieves all intestinal worms, kills lice, cures mange and gives a clean, healthy skin, a healthy vigorous system. Don't wait until cholera strikes—you may lose your all. **ZENOLEUM** insures the hog's health.

"The Great Coal Tar Carbolic Disinfectant Pig" Sample gallon of Zenoleum by express, prepaid, \$1.50; five gallons, freight prepaid, \$6.25. Two Zenoleum hand books, "Veterinary Adviser" and "Piggy's Troubles" are full of value for stockmen. Ask for them. **ZENNER DISINFECTANT CO.** 113 State St., Detroit, Mich.



**STRONG - DURABLE**



**Ideal Fencing**

Large (No. 9) hard steel wire is used throughout. The lock makes a joint that cannot be moved. Ample provision is made for contraction and expansion. Absolutely the best and most durable barrier against any kind of stock. Write for Catalogue of FENCING and GATES showing styles for every purpose.

**The McGregor-Banwell Fence Company, Limited**  
 Walkerville, Ontario.

**WANTED: AGENTS** to sell for "Canada's Greatest Nurseries." Bigger and better selection of varieties and specialties than ever. Liberal terms; pay weekly. Exclusive territory. Outfit free. Send 25 ct. for our pocket Microscope. Everyone should have one to examine plants and trees for insects. **STONE & WELLINGTON, Toronto**

**HAY FEVER** Prompt relief. Cause removed. Symptoms never return. A complete and permanent constitutional CURE. BOOK 57¢ FREE. Write at once for it, to **P. HAROLD HAYES, BUFFALO, N. Y.**

**ADVOCATE ADVTs. PAY.**

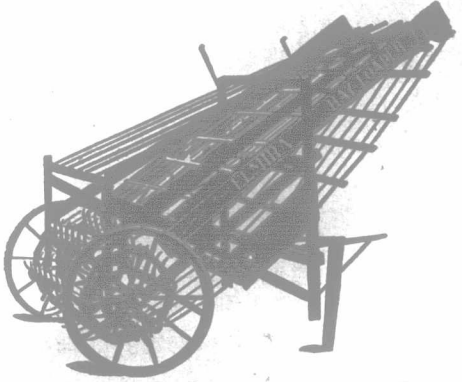
**ELMIRA HAY-MAKING MACHINERY.**



**THE SIDE-DELIVERY HAY RAKE and HAY LOADER** are the Greatest Time and Labor-saving Implements of the day. They will repay for their cost in a short time by curing and saving the hay properly, and in saving of extra labor.

Substantially built. Will last a lifetime. Write for circulars, prices and terms.

**THE ELMIRA AGRICULTURAL WORKS CO., LTD., ELMIRA, ONTARIO.**



**FARMING PAYS IN NEW ONTARIO.**

Write for descriptive pamphlet and maps

**ALGOMA, THUNDER BAY, RAINY RIVER, NIPISSING, TEMISKAMING,**

to

**HON. E. J. DAVIS,**  
 Commissioner of Crown Lands, TORONTO

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ADVERTISE IN THE ADVOCATE.

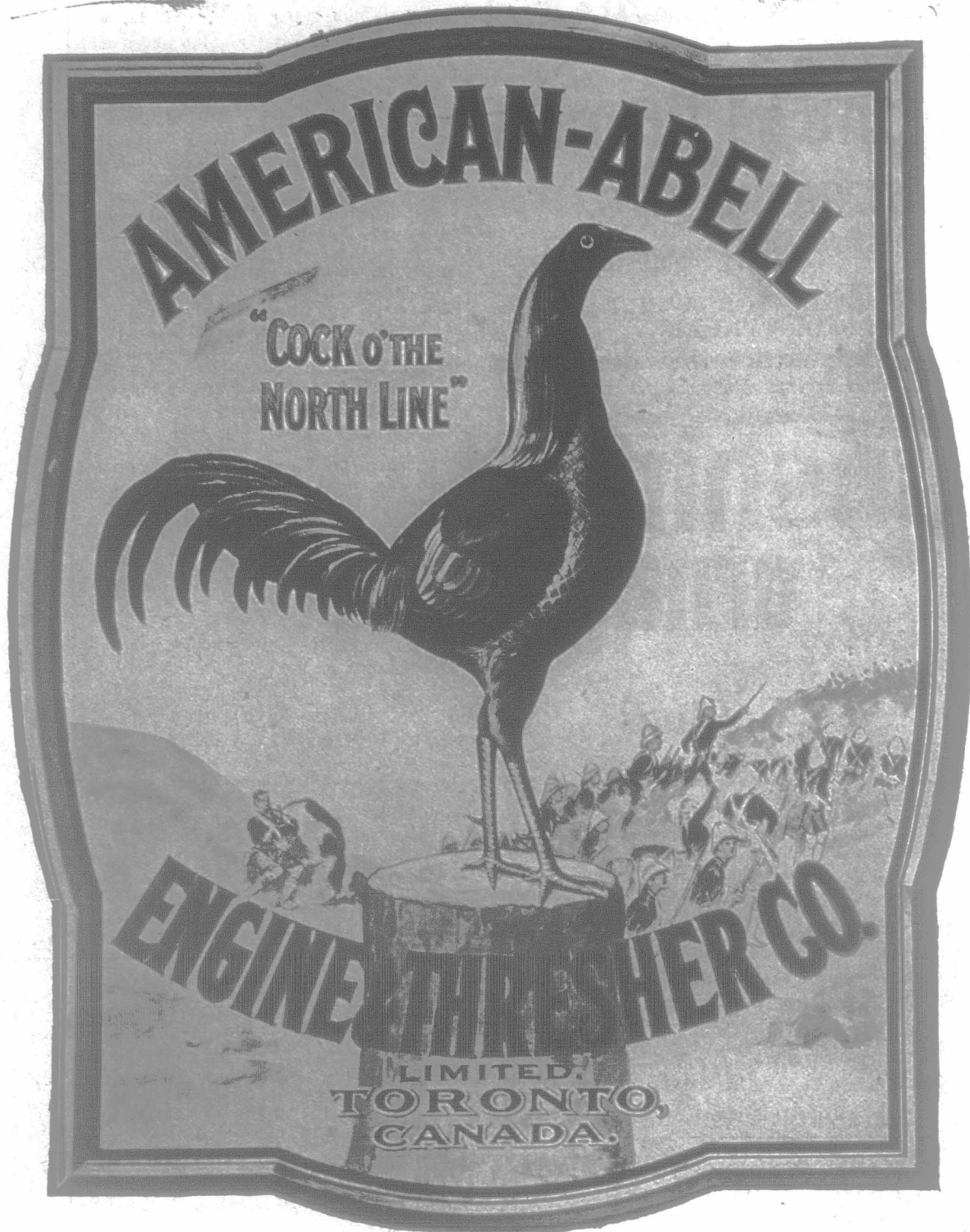


# American-Abell E. & T. Co., Limited

TORONTO, CANADA

Send for  
Supple-  
mentary  
Folder.

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All  
Infor-  
mation  
Cheerfully  
Furnished



Proof of  
the  
Quality of  
these  
Machines  
is the  
Great  
Demand  
there is  
for  
them

OUR REGISTERED TRADE-MARK

## Royal Manila Binder Twine is the Best

MANUFACTURED BY  
**CANADIAN CORDAGE & MANUFACTURING CO.**  
LIMITED  
Peterborough,  
Ontario.

Our Prices are lower and quality  
higher than any other.  
Look for our announcement of Prices  
in next week's issue.

Made in  
Canada



### DO YOU KNOW THAT **ARBUN** IS THE MOST PROFITABLE INVESTMENT TO-DAY?

It will keep the barns and stables sweet  
in the hottest weather. It will maintain  
the horses and live stock in healthy con-  
dition, because it arrests and destroys all  
germs of disease. And in addition to this,  
it will pay for itself three times over.  
Invaluable in cheese factories and cream-  
eries, keeping them free from taint and  
noxious germs. Odorless and non-  
poisonous. Made in Canada by Expert  
British Chemists.

**CAMPBELL ARNOTT & CO.**  
GENERAL SALES AGENTS  
114 VICTORIA STREET, TORONTO.

**Bargains for  
Threshermen.** Here are some  
sample prices:  
Barnes or Myers  
Tank Pumps, \$7  
each; best 2-inch  
wire-lined suction hose, 35c. per foot; 3-inch  
four-tone chime whistle, \$6.50; Ham head-  
light, \$9.50; boiler tubes, 2-inch, 14c. per foot,  
and 2 1/2-inch size, 15c. per foot; cylinder oil,  
made from Pennsylvania stock, guaran-  
teed 650 fire test, 4-gallon jacketed can,  
\$2.50; 8-gallon jacketed can, \$4.50; half-  
barrel (25 gallons), \$10.50; barrel (50 gallons),  
\$18.00. Books (postpaid): Young Engineer's  
Guide, \$1.00; Rough and Tumble Engineering,  
\$1.00; Farm Engines and How to Run Them,  
\$1.00; Power Catechism, \$2.00. Our catalogue,  
giving net prices on all kinds of engineer  
supplies, will be sent on application.  
**Windsor Supply Co., Windsor, Ont.**

**FERRO NERVO** A positive Care for all  
The French Nerve Tonic Nervous Disorders, Ir-  
respective of Cause, Duration or Condition, such  
as Nervous Prostration, Palpitation of the Heart,  
Sleeplessness, Mental Despondency, Impur-  
ished Blood and all diseases arising from a De-  
ranged or Exhausted Condition of the Vital  
Forces. Price \$1 per box, or 6 boxes \$5. From  
your druggist or by mail. The Royal Chemical  
Co., Windsor, Ontario, Dept. F. A.

**Canadian Dairying,**  
BY PROFESSOR HENRY H. DEAN,  
of the Ontario Agricultural College. A thoroughly  
practical book, illustrated; price, \$1.00, postpaid.  
William Briggs, 29-33 Richmond St. West,  
Toronto.

Advertise in the Advocate

**CIDER MAKERS' MACHINERY**  
Best and cheapest.  
Send for catalogue.  
**DOOMER & BOSCHERT  
PRESS CO.,**  
368 West Water St.,  
SYRACUSE, N. Y.

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# The Farmer's Advocate

"PERSEVERE AND SUCCEED." and Home Magazine. ESTABLISHED 1866.

VOL. XXXIX.

LONDON, ONT., AND WINNIPEG, MAN., JUNE 23, 1904.

No. 613

## EDITORIAL.

### Our Horse Supply.

The active demand for Canadian horses for the South African war, and for the export trade since its close, together with the requirement of horses for the supply of the thousands of settlers taking up land in New Ontario and the Northwest, has had the effect of reducing the available supply for sale to a lower mark than has been the case in many years. In consequence of these drafts from the stock in the older Provinces, prices have advanced to a point where it is difficult to buy a fairly good horse for any reasonable consideration. The financial stringency of ten years ago, and the slack demand for horses at that period, when only the best were salable at any decent price, led many farmers to sell such as they could and to be content to keep what they could not sell. The result was that breeding was for several years largely neglected, and many of the best mares were sold, for the reason that the best only were in demand, and the average prices being paid afforded no encouragement to horse-raising. But a reaction came sooner than was anticipated, and when the stronger demand and upward tendency of prices set in it came so sharply that owners were again tempted to sell those that would bring the most money. The consequence of these combined influences has been a marked scarcity of good horses in the country, and an absence of the usual supply of young stock to grow up to a serviceable and readily salable age. And since farmers have again turned their attention to breeding colts, the supply of good producing mares is found so greatly reduced as compared with the conditions of a decade ago that the country is not in a position to renew the stock nearly equal in size and quality to what it formerly was. There is a real need of more good breeding mares in the country, and breeders will do well to hold on to such good ones as they have, while those who have not suitable mares to breed from may do well to invest in some of the good heavy draft mares being imported, and which can be bought at prices not out of proportion to the value of first-class geldings when placed on the market at a serviceable age; while young stallions and fillies bred from such mares will doubtless bring prices that will give excellent returns for the original outlay. While good prices are going for carriage and saddle horses of desirable type, and those whose fancy runs in this direction may profitably raise those classes, there is no doubt that for the general farmer there is surer profit in breeding and raising heavy drafters, which are always in demand. In these classes there are fewer misfits, and a horse of this class unsalable from some minor unsoundness or other disqualification may prove quite as useful for farm work as the best. The proposed changes in the Canadian customs tariff prohibiting the importation of stallions and mares of less value than fifty dollars and fixing the minimum valuation of horses on which duties must be paid at fifty dollars, is a step in the right direction, and one which will, doubtless, meet with the approval of the people of this country generally, as it will have the effect of checking the importation of scrub stock, and will encourage the breeding and raising of a better class of horses in Canada. There is every reason to believe that horse-breeding will prove a paying and profitable branch of the farmer's operations for many years to come, if good sound judgment is used in the selection

and mating of suitable sires and dams, thereby producing animals of the most desirable class and quality, and Eastern Canada may readily regain its good name as a breeding-ground for the supply of the export trade, not only with Great Britain, but also with the United States, as in former years, when this was our best market for heavy drafters and for the best class of carriage horses.

### Seed Grain Growing.

The permanent organization at Ottawa, on June 15th and 16th, of a seed-growers' association for Canada is the outcome of the seed-selection competition inaugurated a few years ago through the liberality of Sir Wm. C. Macdonald, and under the general direction of Dr. Jas. W. Robertson, the Agricultural Commissioner. There is a need and opportunity in every agricultural locality in Canada for a few farmers to make a specialty of growing high-class seed in quantity for the purpose of seed, as distinguished from grain for stock feed or human food. All farms and all kinds and conditions of soil are not well adapted to the production of seed of superior quality of all kinds of crops. Grain, and other seeds, for seed purposes should be produced on lands that are free from noxious weeds and capable of producing those crops at their best in quality and in yield per plant.

In all kinds of farm crops the yield per acre may be materially increased, and the quality substantially improved by the use of seed which has been graded up by careful growing and systematic, intelligent selection, continued from year to year. The qualities known as vigor of growth and productiveness in individual plants are transmitted through the seeds to the succeeding crops quite as surely as any desirable characteristics are transmitted to animals from their ancestors.

Experience has shown that there is a fair profit to all growers of high-class seeds who manage that special branch of farming with care and intelligence. Other farmers seek from them the supplies of seed for their general farm crops. The production and general use of seed of superior quality for farm crops may be encouraged and assisted by organized effort, under intelligent direction. The purpose of the Ottawa gathering is that associations of farmers making a specialty of growing grain and other crops for seed purposes on well-kept and highly-conditioned farms be organized as a means of improving their seed and of educating buyers and farmers generally in the value of high-class registered seed.

Hon. J. W. Longley, Attorney-General of Nova Scotia, recently said it would be the greatest blessing "that could be conferred on our public life if, in every one of the 213 constituencies of Canada, there were a hundred men who did not care a button about party, and voted as they thought was right and proper in the interests of the country. Some of them in public life would get hurt, and it would not always work right for the machine, but it would influence those high in the councils of the nation to pursue a course that would command the respect of the best and truest elements in the community."

### An Economist.

I could not afford to lose a single copy of your valuable paper, as the information in one paper often saves the expenditure of a sum equal to the cost of your weekly paper for a year.

Huron, Ont.

GEO. TAPHAM.

### The Discontented Farmer.

Every one is familiar with the farmer who is dissatisfied with his lot, and constantly excusing his failures or unprogressive methods by the statement that he was not "cut out" for a farmer. That there are men living on farms who are not naturally qualified to make good farmers cannot be denied, but that lack of natural endowments should be so generally offered as an apology for unprogressiveness, due largely to lack of enthusiasm and a knowledge of the principles of farming, is scarcely excusable. The man who is compelled by force of circumstances to continue farming, or any other vocation, against his natural inclinations, or who is physically or mentally unfit for the work of managing a farm, is deserving of commiseration. But there are a large class who do not make the success they should of their business, simply because they will not avail themselves of their opportunities, or are concerned with almost every other affair in the country and out of it, to the exclusion of their first duties. Examples are numerous of men who consider themselves capable of advising the Government or the judiciary what should be done, or who are constantly concerned about the roads and ditches in every quarter of their township, while at the same time their own farms may be soaked with surplus water, overrun with weeds, or so mismanaged that their fertility is practically exhausted. Others, again, imagine themselves victims of circumstances, that they have not been privileged to follow one of the so-called "learned professions," of which they may have a sprinkling of knowledge, as if in the profession of agriculture there were not scope for the exercise of all professional and business qualifications. Few farm conditions are more unsatisfactory than that of struggling on from year to year, hoping that some economic upheaval may land one high and dry on the road to success by some other route than that of the application of brain and brawn to the problems of the farm. Some men are considered fortunate in having a farm left to them, or becoming possessed of a farm at comparatively little outlay, and, therefore, seem to have advantages quite beyond those of the majority, and though careful and industrious, fail to make a success of their business; while others with fewer advantages, but more self-reliance and faith in their own ability, and more enthusiasm in the pursuit of their avocation, succeed beyond the expectations of their neighbors and make substantial and steady progress.

There is generally a remedy for their unfortunate condition within the reach of those who are not progressing. The first thing to be done is to get into a proper frame of mind. One must recognize his privileges and possibilities, and the potentialities of his farm. He should spend less time over newspapers, however good they may be, and devote more time to the reading of the best farm journals and other reliable agricultural literature, and the study of the conditions existing on his own farm. He must put enthusiasm into his work, and display a confidence in himself, his farm and the future. And to make this easier, he must live well. Many farmers are unsuccessful because they are constantly in the blues, due to the exercise of false economy in the matter of living. Then, the farmer who is making for success should have an object in view, and doggedly follow it. He should plan, scheme and study how to produce the largest possible crops, how to raise the best stock, the largest milk-producing cows, and how to secure the maximum returns



# THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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## Cleanliness is Profitable.

Each year one naturally wishes to do something in advance of previous years, and one of the small things about the farm that we should like to see all farmers adopt is the practice of thoroughly cleaning the stables, pens and henhouse, and of whitewashing the insides. It is not simply for the sake of the improved appearance that we advocate this practice, but because it destroys lice, germs of disease, and germs injurious to dairy products. First sweep down the walls, scraping off all dirt, clean out the mangers, and then with a spray-pump give the ceiling, walls and floor a good coat or two of well-prepared whitewash.

## Interested and Instructed.

Since I have had a personal interest in farm management I have been an interested and instructed reader of all departments of your paper, and I may say that through the influence of certain articles published a few years ago, I determined to establish a herd of pure-bred Short-horns, and am much pleased with the venture. My wife is also a reader of the Home Department, and is much pleased with the articles and recipes that are published from time to time. I intend to be a subscriber to your valuable paper as long as I can raise the "necessary," and we both wish your success in your new venture of a weekly publication.

JAS. L. F. SPROULE,  
Frontenac Co., Ont.

## HORSES.

### The Morgan Horse.

A reader asks for a short history of the Morgan horse, and to state if any are now raised in Canada. To understand the exact status of the Morgan horse one must be cognizant of the origin of the light horses of America. When the history of the horses of this continent began to be written about 1788, there were what were called native stock, owned by farmers and others. This stock, no doubt, originated from importations of horses from different parts of Europe, but climatic conditions and the nature of the work required of horses, all tended to the survival of a type particularly suited for American conditions. Horses of this type were active, clean-lined, strong and hardy, exactly suited for the work of pioneering. The heavy drafters were not required in those days, as oxen did most of the draft work, the fancy driver had no place in the pioneering days, and the roads and tracks were not sufficiently improved for the development of the trotter or the exercising of the fast runner. With the increasing of wealth and greater settlement, however, there arose a demand for a type of horse for the new conditions. In those days in this new land, towns and settlements were a considerable distance apart, and travelling by horse was the fastest method of transportation, but the roads at times were so soft and the distances so great that the English race-horse could not maintain his running pace sufficiently long, so a good-gaited trotting horse came most into demand. Naturally, then, any infusion of new blood would be sought from a breed that could trot fairly well and was prepotent. The most successful of such selections was that of Messenger, an English Thoroughbred, who was a particularly good trotter. This horse was imported in 1788 to Pennsylvania, and served in that and neighboring States for twenty years, founding a basis for the best trotting horses in the world. During the life of Messenger, many other Thoroughbreds, both stallions and mares, were imported, and their blood lines crossed in laying the foundation of the American trotter. In other parts of the country, from the St. Lawrence and Upper Canada all down the Atlantic Coast, similar lines of breeding to that described above were being followed, but the Thoroughbred was not always the leading figure. It was from one of the many good horses produced by the early breeders, either from imported or selected stallions, that the Morgan horses are derived. Justin Morgan, the founder of this family, for they are not a distinct breed, but merely a branch of a large family of similar type, was foaled in 1793 in Vermont State, and did stud serve until 1821. His ancestors were never positively known, although it is pretty well established that the blood of the Thoroughbred predominated in his veins. From Justin Morgan several other strains of trotting horses sprang, such as the Morrills, Fearnoughts, Ethan Allens, Daniel Lamberts, Knoxes, Golddusts, and one of the strains of Black Hawk frequently called Black Hawk Morgan, to distinguish them from the descendants of Black Hawk by Andrew Jackson.

At one time, when the descendants of Justin Morgan possessed considerable of the old horse's blood, this family was highly prized, but with the indiscriminate use and careless neglect of this blood, its influence naturally became less pronounced. The foolish fad of placing speed above all other qualities in the trotting horse also tended to detract from the esteem in which the Morgans were held. At the present time, it is doubtful if there are any horses in which the blood of the old Morgans is sufficiently concentrated to make them valuable as breeding stock, although it is no uncommon occurrence to meet with a horse being travelled as a Morgan and doing considerable business on the strength of the enviable reputation gained by the first members of this well-remembered strain. In Canada, it is one of the most lamentable features of our stock-breeding enterprises that the best of our road-horses have not been selected and bred with the object of retaining the stamina, grace and beauty of form possessed by some of the progeny of the early matings of the Thoroughbred with the native or Canadian mares. Had breeders been sufficiently alive to the importance of maintaining such light horses as were quite common twenty-five to fifty years ago, they would not have left the task of establishing a pure breed with desirable characteristics to the shifting ideas of the patrons of the trotting track, but would have conducted breeding and registration in Canada systematically, with the result that to-day, instead of so many of the nondescripts which pass as Standard-breds, we would have had a breed of horses superior to any for stamina, style and usefulness. For the present, we know of no more laudable enterprise in which the admirers of light horses could engage than the resuscitating of the characteristics in our trotting stock of such well-known and admirable strains as the Royal Georges, Morgans, and others.

### Guelph Horse Show.

The second annual horse show held at Guelph, under the management of President Lockwood, Vice-Presidents Reed, V.S., and J. M. Duff, Secretary C. L. Nelles and Asst. Secretary Dr. Dryden, with a zealous board of directors, proved to be the event of the season for the citizens of Guelph and surrounding counties. Thursday, June 9th, the opening day, being wet, gave the show a setback in attendance, and the rain of the two previous days kept several exhibits away, but notwithstanding these obstacles, the association is to be congratulated on having a very successful show, much larger in entries and attendance than that of last year. Many of the best horses that were at the Toronto and Galt shows were present. The saddle, hunter, light carriage, roadster, agricultural and draft classes were well filled, some very fine animals being brought forward.

The principal exhibitors were: Kidd Bros., Listowel; O. Sorby, Guelph; Miss K. L. Wilks, Galt; Mrs. F. M. McCoy, Toronto Junction; Geo. Pepper & Co., Boston; J. D. McGibbon, Milton; A. Aitchison, Guelph; Geo. Moore, Waterloo; Donovan & Robins, Seaforth; J. G. Wilson, Paris; Geo. Tilt, Blair; and others.

In the carriage class, 15.3 or over, Pepper & Co. won first, with Indian, a brown gelding; Mrs. F. M. McCoy second, with Flyer; G. F. Smith third, with Jubilee King.

In the class under 15.3, Pepper & Co. landed the first three prizes, with Creighton, Wiry Jim, and Little Creighton; the latter, although a very showy, intelligent horse, is, we think, a trifle under size for this class. E. Ducreaux came in fourth, with a very good one.

In carriage pairs, 15.3 or over, there were nine entries, only five of which were on exhibition. Mrs. McCoy, Pepper & Co., and G. F. Smith were the lucky ones, in the order named. In carriage pairs under 15.3, Pepper & Co. won the first and second, and R. Cunningham, Guelph, third.

The younger carriage classes were not very strong, but several good individuals came forward.

In the roadster class, Miss Wilks won the best of the prizes, but in the class for single roadsters, 15.2 and under, the judges divided on Miss Wilks' Lady Creceus, chestnut, and McGibbon's Zella for first place. Mr. Jos. Lovell, of Guelph, being called in as referee, gave it to Zella, a rather unpopular decision. In pairs under 15.2, Mr. J. D. McGibbon did not arrive in time, or else he would have figured in the winnings.

Saddlers and Hunters.—In this class Pepper & Co. had a very fine string of horses out, and won the best in sight. Kidd Bros., of Listowel, also had some very good ones. G. F. Smith, of Guelph, and Z. A. Hall, Preston, showed good individuals.

In the jumping classes, Pepper & Co. won about everything in the high jump; two of their horses cleared 7 ft. 2 and 7 ft. 6, respectively, on very soft ground.

In heavy drafts, Guelph and the surrounding country is noted for its good ones. In pairs, O. Sorby won first with Lillie Charming and Miss Charming, a team full of substance. A. Aitchison was a close second, with Royal Belle and Royal Princess, a nicely matched team, that has won first many times, but were not quite so large as their competitors. The third prize team, while not quite so well matched as the others, were looked upon by many as the real draft team of the show. They were a big, strong pair, shown by Donovan & Robins, Seaforth. Geo. Moore, Waterloo; D. McKinnon & Sons, Conningsby; I. E. G. Christ, Aberfoyle, also had very creditable exhibits in this class. In the single draft class, the same horses (as in pairs) competed. Sorby again won first, with Aitchison second and third. Mr. Sorby also won the championship for best heavy horse, with Miss Charming.

The agricultural class, or light draft, which would better define this section, was well filled with some really good agricultural horses, but mostly with light drafts, which generally get the preference from the hands of the judge. In pairs, W. W. Young, Binkham; R. Dickieson & Son, Guelph, and R. Cochrane, of Ayr, won in the order named. Some good ones were also shown in the colt classes.

The sensation of the show was the five-in-hand, owned by Pepper & Co., and driven by Peter Roche, an exhibition that, it is said, has never been performed in Great Britain or America before without a rider on the lead horse. On Saturday evening G. Pepper & Co. made a display of tandem driving, three single horses in a string. Indian was the wheel horse, Creighton in the center, with Little Creighton as leader, and a bonny leader he is. Mrs. F. M. McCoy also gave a free exhibition in tandem driving.

The judges were J. M. Gardhouse, Weston, Ont., heavy drafts; W. S. Spark, Ottawa, saddlers and hunters; A. R. Stevens, Cleveland, Ohio, carriage and roadsters. The citizens' band furnished music for the occasion.

The attendance the last two days was very good, considering the backward conditions of work on the farm, owing to so much rain of late, yet we would urge upon both the city and country people the necessity of attending a show of this kind; there is nothing brought forward of a doubtful nature. What is more interesting to us than the intelligence of the horse, brought out and cultivated by the skill of man? We bespeak for the management of this show the confidence of the citizens of Guelph, as well as increased patronage from both city and country.

The championships were won by: Heavy drafts, O.



Sorby's Lady Charming; harness, Pepper & Co.'s Creighton; combination, saddle and hunter, Pepper & Co.'s Daisy Dean.

**Provide for the Colt.**

During the first two months of the colt's life there is generally sufficient grass to supply any extra feed he may require other than the dam's milk, but with the hot days of August come dry pastures, lessened milk supply, increasing appetites, and possibly work for the dam, so that the foal is liable to lose some of the flesh he has laid on earlier in the season, unless some provision is made for his growing needs. For the purpose of keeping colts in good flesh, there is nothing better than fine-ground oats. Other feeds; such as ground corn middlings, etc., may produce more fat, but oats are more easily digested and are better for building up bone and muscle. When the colt is young is the time to teach him to eat. A very few lessons are sufficient. Prepare a box in the corner of the pasture, and in it feed both mare and foal a few times, until the youngster comes to relish his meal, then build a pen about the feed box to keep the mare away, but with a small gap to admit the foal. Keep a supply of ground oats there for him, and he will show the effects of liberal feeding. A lump of rock salt near the pen will be sufficient attraction for the dam for a few hours each day, and during this time the colt will be improving his time. With such treatment, the weaning time will never affect the colt in the least, but his growth will be continuous throughout the whole autumn.

**STOCK**

**Calf-rearing in Cheesemaking Districts.**

Whatever may be the relative advantage of rearing calves in the spring or in the fall, the fact remains that, in many cheesemaking districts especially, most of the calves are dropped in March and April. The advantages claimed for the practice are that the calves may be given a good start on whole milk before the season's operations in cheesemaking are commenced, and that the cows will be at the heaviest production at the most profitable period.\*

The aim is a laudable one. In too many cases, however, are not the first well-directed efforts in calf-rearing lost through gross lack of attention later on? Many excuses are offered. Lack of time is a popular one, and during this dearth of hired help very admissible, but is it not true that farmers often overlook the fact that their future success as milk producers rests to a great extent with the care of the dairy cow during the first twelve months of her existence? We cannot expect to make strong, healthy, heavy milkers from calves that have been stunted.

The first mistake is usually that of cutting off the milk supply too abruptly. Where the milk is sent to creameries, or home dairying is practiced, the evil may be largely overcome by changing gradually from whole milk to skim milk. Where the milk is sent to the cheese factory, the case is different. When operations commence in the spring, the milk supply for the calves is cut off completely, and this is where many dairymen make a mistake. In their desire to send all the

milk possible to the factory, they deprive the calves, when they are two to six weeks old, of their milk ration without making sufficient provision for a substitute. The youngsters have not learned to eat well enough to subsist on dry feed, and the result is they receive a check from which they never recover. It surely is a mistaken policy to follow such a practice. The result is an inevitable deterioration in the constitution and productiveness of the future dairy herd.

The feeding of whole milk is an expensive process, and it is often hard to know when it should be discontinued, so that the calf will not be raised at too great an expense nor yet stunted in its growth. The milk supply, however, should not be cut off entirely until the calf has learned to eat coarser food in sufficient quantities to supply the needs of the growing body. With a four weeks feeding of whole milk, and gradually diminishing the quantity fed at the end of that time, the calf may be reared in a condition consistent with economy and good strong development.

Shorts and linseed cake seem to stand unrivalled as feed for young calves. If the calf's nose is daubed with a mixture of shorts and a small quantity of the meal every time it is fed, and a little left accessible to the animal at all times, he will soon learn to eat it. The trough from which the grain is fed should always be clean and the supply fresh. After the calf is two or three months old oat chop may be used as part of the grain ration. Clean, sweet clover hay should also be provided.

To obtain the best results the calves should not be turned out through the day during the summer. Cool, dry quarters should be provided, and the calves should not be subjected to the flies, heat and early summer rain. Exercise may be provided by turning into a yard or paddock during the night. The practice requires a little more work and attention, but the improvement in the growth of the animal, and, ultimately, the returns in the milk pail, will repay any extra labor involved.

It costs no more to feed a good calf than it does to feed a poor one, neither is it more expensive to rear a well-bred calf than a nondescript, and yet the truth is that there are more of that latter than any other kind in many districts. Farmers seem to think that so long as a cow is brought to lactation that everything to be desired has been accomplished. Sometimes Shorthorn, Ayrshire and Holstein bulls are brought into a neighborhood in rotation, according to the whim or liking of individual breeders, and these are used indiscriminately. Occasionally, a cross with a "scrub" is introduced. Mongrel cows are the result, while with the same outlay and with a well-defined system in mind, each farmer might be caring for a uniform herd of cows of practically pure breeding. Let the farmer choose the breed that he thinks best adapted to his own conditions, and then use the best sires he can afford. This is not a plea for registered-pedigree stock, though that is desirable, but it is a plea for the substitution of the present dairy cow of many farms with an animal of high excellence, the result of intelligent breeding, weeding and feeding.

Our cheesemaking industry is an important one. A good deal of effort is necessary if we are to retain our reputation for a high-class article. A careful observance of the market requirements will enable us to do so, and intelligence in the care and selection of our stock will enable us to take advantage of the premium prices to the fullest extent. EX.

**Age of Breeding Sows.**

In a letter to the London Live-stock Journal, Mr. Sanders Spencer, who has had long and varied experience in pig breeding and management, takes exception to the following paragraph, in a letter appearing in a recent issue of that paper:

"For the purpose of breeding stock that is ultimately to take a place in the herd, I quite believe that fully-matured animals should be used; but, as a young sow's first litter is hardly ever destined for any purpose other than the butcher's block, this is no argument against breeding sows early."

Mr. Spencer writes: "I have for nearly half a century been trying to learn a little about pig-breeding, and my experience leads me to believe that the produce of yelts are equally as good for breeding and exhibition purposes as the produce of fully-matured boars or sows, or both. I could give scores of instances in proof of my belief. I will give one. At the Royal Show at Carlisle, I successfully showed a Middle White boar under six months. Early in September, when he was about eight months old, I had him mated with a young sow. The produce, ten pigs, arrived on January 1st following. I showed a pen of three of the young sows at the 1903 Royal Show, where they each won first prize in their class. The best young boar of the litter I reserved, and have been using; the others were sold at high prices. I also reserved the best of the young sows. She is being prepared for the coming Royal Show, and is, in my opinion, one of the very best Middle White sows I ever bred. Further, in proof that early use did not affect the Carlisle Royal winner, now named Holywell Middleton, I may state that I showed him at the Bath and West of England Show at Swansea, where he easily won first prize in his class, and the gold medal as best of his breed.

The writer of the letter makes a very good point when writing of the desirability of attention being paid to the nursing capabilities of the sow: the general neglect of this most important quality has done more than all else to bring into bad repute some herds of pure-bred pigs. As a rule, it will be found that the best milking sow is also the most prolific and the best mother. I do not go quite so far as to assert that late mating of the young sow will necessarily affect the milking qualities. Provided a young sow's parents have for generations been bred from good milkers, she is almost certain to possess the same valuable qualities whether mated early or late in life, nor does showing affect these hereditary qualities if the animal is judiciously trained."

**A Hardware Merchant's Decision.**

Though not now farming, having gone into the hardware business, we realize that we must still continue to take the "Farmer's Advocate and Home Magazine." J. W. FLEMING & SON. Kent Co., Ont.

Several readers who have lately sent in questions to be answered in the Farmer's Advocate forgot to comply with our rule which requires the full name and P. O. address to be given in every instance. We can pay no attention to anonymous communications or enquiries. Please read and observe the rules of the "Questions and Answers" Department.



The Bovines Line Up—Stock Parade, Edmonton Exhibition, July 2nd, 1903.



**The Illinois Cattle-feeding Experiment.**

The Illinois Experiment Station has just completed an exhaustive experiment in cattle-feeding. In all 136 steers were fed, from November 28th to June 1st.

When the records of the experiment are finally published and interpreted in bulletin form, the Station will include in its estimation of the various rations not only what the rations have done in the way of producing gain and marketable finish, and the quality of the finished product, but also the cost of securing these results, including cost of feed and the necessarily differing costs of preparing the various rations for feeding, and also the differences in labor involved in feeding the several rations after they are prepared. The latter differences are by no means as wide as are the former ones, notwithstanding the fact that different rations have been fed to ten different lots of steers.

The cattle were high-grade Shorthorns. Some of them were a little large, and of the growthy type, but withal smooth, well finished, and of good weights. Professor Mumford is a strong advocate of getting cattle on feed slowly, and of never feeding an excessively heavy grain ration, although Canadian feeders would consider the amounts of grain fed in this experiment quite heavy feeding. He believes that this system of feeding is attended with more economical gains and a better distribution of fat throughout the carcass, both of which factors it must be conceded are very important, because the cheaper gains affect vitally the feeders' profits, and the smoothness or even distribution of fat not only helps the feeder to get a better price for his cattle, but also this better distribution of fat actually adds to the value of the carcass from the butchers' viewpoint.

The cattle were purchased on the Chicago market, but were not placed in the feed lots immediately upon their arrival at the experimental cattle-feeding plant, but were kept for some time in the feed lots to accustom them to their new surroundings, and submit them to a period of preliminary feeding, and, furthermore, to give them an opportunity to "fill." It was not the purpose of the author of the experiment to permit the "fill" to figure in the average daily gains of the various lots. The gains reported, therefore, are by no means as large as they would have been if the "fill" were averaged in.

The financial aspect of this fact can be appreciated when we note the fact that while the steers cost an average of \$4.654 per cwt. laid down in the feed lots, by securing the "fill" and the apparent large gains at the start for food consumed, the cattle cost only \$4.531 per cwt. at the time the experiment proper began.

The following rations were fed to eleven different lots of steers:

Lot.	Number of Steers.	RATION FED.	Lbs. beef made per bush. corn.	Lbs. meat or beef and pork made per bush. of corn.
I.....	10	Silage, corn meal, gluten meal, oil meal, and clover hay.....	8.25	8.32
II.....	15	Ear corn, gluten meal, oil meal and clover hay.....	8.03	9.11
III.....	15	Ear corn and clover hay.....	6.91	8.15
IV.....	15	Corn meal, gluten meal, oil meal, and clover hay.....	8.02	8.27
V.....	15	Corn meal, gluten meal, oil meal, clover hay, hay chaffed and mingled with the grain.....	8.03	8.18
VI.....	15	Corn-and-cob meal, gluten meal, oil meal, clover hay.....	8.01	8.17
VII.....	15	Corn-and-cob meal, gluten meal, oil meal and clover hay, hay chaffed and mingled with the grain.....	8.38	8.65
VIII.....	10	Shock corn, ear corn, according to common practice, and clover hay; oil meal being fed during the latter part of feeding period.....	6.65	7.92
IX.....	10	Shelled corn, oil meal and clover hay (fed in ordinary dirt or mud lot).....	6.99	8.65
X.....	10	Shelled corn, gluten meal, oil meal and clover hay (fed in paved lot in comparison with Lot IX.).....	6.76	8.83
XI.....	6	Same as Lot VII., but fed in self-feeder; afterwards discarded.		

A sufficient number of pigs to prevent waste followed each lot. The number for each lot was as follows: Lot I., 1 pig; Lot II., 8; Lot III., 8; Lot IV., 4; Lot V., 4; Lot VI., 4; Lot VII., 4; Lot VIII., 6; Lot IX., 7; and Lot X., 7.

Fully six weeks were used in getting the steers on full feed, the amount of corn fed at the beginning being about seven pounds, and hay fifteen pounds. At the end of the experiment the steers were getting approxi-

mately 16.4 pounds corn and four pounds hay per 1,000 pounds live weight. Where gluten meal or oil meal was used in the ration it was fed at the rate of three pounds per steer per day. Following is the total number of pounds of beef, pork and meat produced, on the basis of 15 steers in each lot:

Lot	Pounds beef.	Pounds pork.	Pounds meat.
I.....	6,531	55	6,586
II.....	6,250	840	7,090
III.....	5,589	1,000	6,589
IV.....	6,290	198	6,488
V.....	6,327	120	6,447
VI.....	6,240	128	6,368
VII.....	6,693	215	6,908
VIII.....	5,655	1,060	6,735
IX.....	5,448	1,298	6,746
X.....	5,287	1,618	6,899

From the foregoing table it will be seen that the results of this experiment indicate that if a feeder wished to produce the largest amount of beef possible from a given amount of corn it could be done by feeding the corn in the form of corn-and-cob meal. Corn fed as silage and supplemented with corn meal seems to be the next most efficient for beef production, but when it comes to the factor of pork production, the pigs seem to recover more from the droppings of the corn-and-cob meal fed steers than from the silage fed steers.

After three years of careful experimentation with silage as a factor in beef production, Professor Mumford firmly believes that there is less in the droppings of silage fed steers that can be recovered by the pigs, than from any other system of feeding with which he is familiar. It will also be noted that the ordinary method of fattening cattle—that is, where shock corn followed with ear corn, and the use of oil meal for the last six weeks, with clover hay fed throughout the experiment—is least efficient for beef production. However, the cattle fed by this method were but little behind the ones getting their corn in the form of shelled corn, as also might be said of the steers getting ear corn without its being supplemented with oil meal. The ration that appeared to be most efficient for meat production—that is, beef and pork combined—was that of ear corn and clover hay when supplemented by oil meal and gluten meal. This is a most important point, for the feeding of ear corn is attended with about the least labor expended upon any of the lot, save where shock corn was fed. This result further indicates that while the feeding of ear corn does not produce the maximum amount of beef, the part of the ration that is not utilized in beef production is left in a form which can be recovered from the droppings by the pigs. By comparing this result in meat production with that of any of the meal-fed steers, it would indicate that instead of the feeding of ear corn being a wasteful practice it is a most economical one.

One of the practical objections that might be raised to the use of corn meal or corn-and-cob meal, is that not much of this feed can be prepared in advance of the time it is to be used, as it requires much care to keep it from heating. This is true even when these meals are mixed with chaffed hay. The advantage of feeding a meal ration is that the pig can be practically eliminated from use or consideration.

The basis of determining the amount of corn to be fed in this test other than the appetites of the steers was ear corn. That is, the amounts of shelled corn, meal, etc., fed were kept as nearly uniform as possible on the basis of ear corn.

The question of the bearing of the amount of the labor involved in the various systems of feeding corn and clover hay will be fully worked out and discussed in the forthcoming bulletin. It will then be known whether from a practical standpoint it paid in this test to expend much or little labor in preparing the feed for the steers.

The average daily gain per steer for all the lots by four weeks periods was as follows: First period of four weeks, 1.58 lbs.; second period, 2.85 lbs.; third period, 1.96 lbs.; fourth period, 1.82 lbs.; fifth period, 2.22 lbs.; sixth period, 2.33 lbs.; and seventh period, 2.91 lbs. Thus it will be seen that the steers were making their best gains during the last period, and this was not due to heavier feeding during this period, because during the third, fourth and fifth periods the cattle were fed a heavier ration per 1,000 lbs. live weight than during the seventh period, and the daily gains during those three periods were considerably less.

Number bushels corn, roughage and nitrogenous concentrate consumed by each lot:

The appended table gives the number of steers in each lot, their average weight at Champaign, Ill., on June 1st, and at Chicago on June 2nd, the average shrink per steer, and the prices at which they sold:

Lot	No. of steers	Average weight at Champaign, June 1, '04.	Average weight at Chicago, June 2, '04.	Average shrink per steer.	Selling price.
I.....	10	1,466.00	1,424	4.20	\$6.10
II.....	15	1,489.33	1,444	3.02	6.20
III.....	15	1,401.00	1,355	3.06	6.00
IV.....	15	1,449.66	1,416	2.24	6.10
V.....	15	1,475.66	1,438	2.51	6.10
VI.....	15	1,451.66	1,424	1.84	6.10
VII.....	15	1,462.66	1,425	2.51	6.20
VIII.....	10	1,434.00	1,396	3.08	6.00
IX.....	10	1,424.00	1,382	4.20	5.95
X.....	10	1,414.50	1,362	2.25	6.05

**Our Scottish Letter.**

The month of June has opened in an ideal fashion. It is long since such truly pleasant summer weather was experienced here as we have known during the past three days. Bright sunshine and an almost unclouded sky are such rare visitants here that we scarcely understand what is wrong when they come our way. The farmer's heart rejoices, and the flockmaster mourns that such rare good fortune did not come his way much sooner. The shortage in lambs is this year so serious that only phenomenal autumn prices can redeem the situation for that class. The persistent cold, damp weather prevailing in May was also disastrous to the grower of cereals. The grubworm was very active, and the braird was most unequal. Now that heat has come after heavy moisture, growth will be rapid, and we look for a continuance of the delightful weather experienced these days past.

One of the most pleasing functions is the annual show of the Renfrewshire Agricultural Society, held on the first Thursday of June at Paisley. This year the event was unusually successful. Country gentlemen and their families attend in large numbers, and the atmosphere is delightfully bucolic. The exhibition of stock was this year a good average, but it cannot be gainsaid that it has sometimes been better. The Ayrshires were of a good useful dairy type, and the champion, owned by Mr. Wm. Rodger, of Crook, Mearns, is a capital specimen, with teats, vessel and style. She is the sort of Ayrshire fancied by Canadians. Clydesdales were meritorious, the female championship going to Sir John Stirling Maxwell's yearling filly, Minnehaha, which took similar honors at Ayr, and the male championship to Mr. Wm. Taylor's Sir Randolph 12372, a magnificent big two-year-old colt, got by Moncreiffe Marquis 9953. When on Clydesdale matters, I may mention that Mr. Tom Graham, Claremont, Ont., called a week ago with a shipment of 50 Clydesdale fillies. They were an uncommonly good lot, and had all been personally selected from the breeder's hands. A large proportion of them were granddaughters of the famous Baron's Pride, and altogether they make the finest shipment of this class which has left these shores for at least twenty years. I understand Mr. Graham intends to sell them by auction at an early date, and feel confident Canadians will buy them readily. They are worth buying.

Mr. Robert Beith, Bowmanville, sailed at the same time with a good selection of Hackneys. He has scoured the country to secure the right class of animal, and has succeeded in getting horses of a good type. The Gowanbank sale of ponies and Hackney driving horses was held not long ago. The demand was not very animated, but the final results were not so very disappointing. Fifteen ponies made an average of £48 7s. 5d., and eleven harness horses sold for the high average of £34 9s. 7d. Generally, it must be allowed that the demand for horses of this class in Scotland is limited. The Clydesdale is a universal favorite, but only a very limited number of horse fanciers care much about Hackneys. An important movement has been begun in England in connection with light horses. It is notorious that the average British farmer has never found the breeding of such a profitable investment. The Hunter Improvement Society has taken up the matter, and appointed a committee to consider whether anything could be done to improve matters. One subject of inquiry is, whether the present Thoroughbred sire is best adapted for improving the breed? This is a question worth looking into. The greatest "screw" on earth is a second-class Thoroughbred. He is fit for nothing, yet he can propagate his species. The tendencies of most inquiries is toward the pious opinion that Government should do something to improve matters; but when we get down to details there is strong indisposition to interfere with the liberty of the subject. Your average Briton is a gentleman who prefers to breed as a freeman from an inveterate "weed" rather than use a first-class sire under Government patronage. It is a horsey application of the principle laid down by Bishop Magee, that he would rather see England free than sober. Your average Briton applauds his sentiment. It sounds well, and must be upheld. But in order to its vindication, Great Britain bears the reproach of being the most drunken nation in Europe, and the light-footed horses bred in this country are, many of them, weeds of an unpardonable type. Still we muddle through somehow, and that satisfies us for the time.

Business is fairly booming in the Shorthorn world. The great gathering of the year—at the Royal—will soon be on, and everybody is wondering how it will fare with the Royal show-yard this season. The show of Shorthorns will, at any rate, be well worth going to see, and the trade will be booming. A very large number have been shipped during the past few months. The purchasing countries have been found in all quarters of the globe, and certainly there is no evidence of decay in the popularity of this great breed. An old herd, that of Legars, Kelso, has recently been dispersed, consequent on a dissolution of partnership. Forty-one head of well-bred Shorthorns made an average of £32 15s. 7d. each, quite a satisfactory figure for one of the ordinary pedigree herds of the country. One of the most celebrated Highland folds has also recently been dispersed—that of Ureafort, in Argyshire. Eighty head of the shaggy mountaineers sold for an average of £16 19s. 4d. The health-bill of cattle in this country is quite satisfactory. Pleuro-pneumonia has been unknown since 1898. Foot-and-mouth disease was unknown in 1908. Anthrax, a perplexing and fatal disease, is, unhappily, on the increase, but taken all



over, it is comparatively unknown. The difficulty with anthrax lies in its diagnosis. It is a disease passing the comprehension of ordinary mortals. The only advice the experts of the Board of Agriculture can give regarding it is that in every case of sudden disease among cattle, anthrax should be suspected. Veterinary surgeons cannot diagnose the disease until they have examined the blood. A farmer cannot do this, and he is liable to a heavy penalty if he sends a carcass to the public market which on examination proves to have been affected with the disease. He is thus in a tight corner, and many a decent, respectable man has been convicted of sending a diseased carcass who had no thought of wrongdoing.

Agricultural education grows in favor here. The N. D. A., or National Diploma in Agriculture, examinations attract a large number of students, and the work done by them is yearly of an increasingly valuable nature. The examinations are held annually at Leeds. They are controlled by a joint board, nominated by the two National Societies of England and Scotland. There is no restriction on the lines of education followed by the students, and competitors can enter from all quarters. All the agricultural colleges are shaping their courses of instruction along the lines of the N. D. A. examinations, and this makes for uniformity in our now numerous agricultural colleges. The work is of a high order, and the standard set for the diploma that which only students of approved merit and sound education can hope to attain to. That the farmer of the future must be well educated goes without saying, and the high level set by the N. D. A. ensures a high standard of merit in all the colleges and schools. The examinations of 1904 have been by far the most successful of the series which was only begun in 1899. Alike in respect of numbers and the quality of the work done, the reports are highly favorable.

When Dr. Koch threw his bombshell three years ago, everyone set himself to discover whether the learned gentleman was talking sense or the reverse. The British Government appointed a Royal Commission, to investigate the subject of tuberculosis, and especially to examine Dr. Koch's statement that the disease in the bovine and in the human subject is not identical. The commission has been at work for a long time, and has now issued an interim report. Its findings are fatal to Dr. Koch's positions. They are not based on opinions, but on experiment. Cattle have been dosed with tuberculous matter from the human subject; the result has been the infection of the cattle. Tuberculous matter from these cattle has been given to guinea pigs; the result has been the infection of these innocent sufferers in the cause of humanity. Tuberculous matter from these has again been given to cattle; the result, the infection of these cattle. The investigators have been unable to find any reason for believing that there is any distinction between tuberculosis in man and in the lower animals. At any rate, safety lies in adopting this view. Immense danger may lurk in adopting its opposite.

"SCOTLAND YET."

**One Article Worth 25 Years' Subscription.**

To the Editor "Farmer's Advocate":

Sir,—It gives me great pleasure to send you the following:

Early in April we had a valuable farm mare foaled in. When the colt was two weeks old it showed lameness, as though the mare had trod on it, but as the lameness was followed by general debility, we began to look for another cause. We were fortunate in having your issue of April 6th, with an article by your excellent contributor, "Whip," on "Navel Ill." As the symptoms described tallied exactly with the colt's trouble, we without delay adopted the remedy he prescribed, and although the attack was a severe one, both knees, both hocks and each stifle joint being badly affected and swollen, by following to the letter Whip's direction, and persevering with it, the trouble gradually disappeared, the colt being able after about two weeks' sickness to get up by himself, and now, saving a slight stiffness, which is getting better daily, he seems quite himself again. As the sire was also a well-bred horse, we should have regarded the loss of the colt as equal at the lowest to \$30 or \$40. As we, beyond doubt, should have lost it without the information gained from your paper, we regard the value of that information as equal to at least twenty-five years' subscription.

Wishing you every success with your valuable publication,

GEO. LANGLEY.

Rosthern, Saskatchewan.

**One of the Family.**

I am so pleased with your paper that it is like a man losing one out of his family to be without it, for there is anything and everything that a man or woman wants to know, from a mosquito to an elephant. The farmer that does not read it is not a stayer; he is merely a visitor.

WM. LEAHY.

Peterboro, Ont.

M. Metchnikoff, a member of the Pasteur Institute, at Paris, has advanced the theory that senility is due to the ravages of a microbe, which, he claims, he has been successful in isolating.

**FARM.**

**Thinning Sugar Beets.**

The success of the sugar-beet crop depends very largely upon proper and timely blocking and thinning. If this work is properly done, and at the right time, it will not be found exceedingly troublesome, and can be done with comparative rapidity. If neglected, the work increases at the rate of about thirty per cent. per week, compound interest, while the crop prospects decrease at about the same rate.

Beets should be thinned when the majority of them show four leaves, while the root is yet a mere thread; as soon as you are sure they are all up, in fact. Now is the time; do not hesitate or delay. You would not think of allowing your clover or wheat to stand three weeks after it is fit to cut, and should not allow yourself to pursue a different policy with this more valuable crop. Do not become impatient with your sugar beets because they require care at the proper time. They are not half so particular in that respect as hay or grain, and will pay you four times as well for your attention. And the crop that can be handled now at a cost in labor of from \$5 to \$6 per acre, with a yield of from \$70 or \$80 worth of beets, will, if neglected for three or four weeks, cost \$10 to \$12 to thin, with a yield of \$30 to \$40 per acre. Two persons can easily

mense possibilities. Don't be afraid to take hold of it; it is as easy to handle as the pitchfork, and will make you rich a good deal faster. Stand astride one row while blocking the next. At first you will have to watch where you are putting your feet; they will take care of themselves after a while. Don't walk backwards, but face the way you are working. Now grasp the hoe with your hands far apart on the handle. Get your eye on the beet you intend to leave—keep it there. Make one single stroke close to your plant. Now make the very next stroke close to the other side of the same plant. Then, and not till then, select the next beet to leave. Strike one single stroke close to that plant. Sometimes it will so happen that while you are working at number one, your hoe will cut close to number two; if so, you can save a stroke, but if not absolutely close, remember that what you don't do with the hoe the thinner will do with his fingers, and, in dirty ground especially, you must block very close to the plant. Now plant the very next stroke close to the other side of number two. Now select number three, and repeat. Follow this rule absolutely. Make the blocks extremely small. In many places there will be only one beet left. Always stand so that your hoe cuts square across the row. Don't chop, but draw the hoe with a firm, decided, quick movement towards you. Cut deep enough to CUT OFF ALL BEETS AND WEEDS BELOW THE CROWN, or they will grow up again. Do not be afraid if the beets topple over, and do not waste time propping them up with earth; they will straighten up in a day or two. Cut out the whole width of the hoe with each stroke. You will feel tempted to dibble with the corner sometimes—don't do it. Remember that if the beets stand from six to ten inches apart they are all right.

The person thinning should get down on both knees astride the row, and use both hands. Do not pick out the beets and weeds to be removed one at a time, but, holding the earth about the beet to be left with the thumb and forefinger of the left hand, remove all the other beets and weeds in the bunch with one movement of the right hand. It will not do at all to merely pull off the leaves; the roots must come up, or the plants will grow again. And you absolutely must not leave more than one beet in a place. You should be able to keep up to the blocker if he has done his work well, and if he has not, you must insist on his doing so. You are expected to keep up to him, and he must give you a chance. Do not stop to prop up the plants that have fallen over; they are all right.

Sugar beets should be cultivated at least once before thinning, and a couple of days after thinning the cultivator should again be brought into use, and at frequent intervals afterward, until the tops are too large to admit of walking between the rows. On reasonably clean land that has been well prepared beforehand, no hoeing will be required after the beets are blocked and thinned.

E. E. DADSON,

Agriculturist Wallaceburg Sugar Co., Ltd.

**Haying.**

When the weather is favorable, it does not require much ingenuity to manage a crop of hay. All that is required then is to so arrange details that a very large amount may not be in the swath or cock, or ready to haul in at once, but, rather, to have a succession of the different stages of haying. It does not do to cut a few acres, then let the mower stand until the land has been cleared, then cut another strip. Such a plan would be too wasteful of time, unless there is only a small area to be taken care of, and the weather very catchy.

In poor haymaking weather, the plans of the day may require frequent changes, and one must be constantly on guard against having a large amount of hay in the swath. In such weather, the ground being damp and constantly giving off moisture, the hay should not be left long in one place, but should be frequently stirred or turned. Stirring hay has a great deal more to do with rapid haymaking than most of us are aware of.

Many, no doubt, will this year try the method of green-curing of clover, so frequently discussed in the "Farmer's Advocate" and at Institute meetings. The advantages of the system are quite apparent, but as the practice is not always followed by successful results, according to all reports, we would recommend the novice to not experiment on too large a scale until he has attained considerable efficiency in handling clover in this way. The successful advocates of this system caution against handling the clover when there is the least particle of extraneous moisture present, to spread each load around in the mow, and to tramp it solid. All this seems simple enough, and no doubt has proved satisfactory with many. On the other hand, reports are not wanting of those who handled their clover in the manner described by those who claim to have been successful with green curing, yet with results the



Lawrence A. Walch.

Manager Cooper-Walch Land Co., Winnipeg, Man.

block and thin half an acre in a day at the proper time, and when that is finished you have the satisfaction of knowing that all the tedious work is done, that the balance of the work on your sugar beets will be no more than the labor on any ordinary farm crop, and the cash returns will be from three to five times as great.

In blocking, use an ordinary hoe, six or seven inches wide. If it is your first year with sugar beets you will be tempted to buy one of the many kinds of hoe, double or single, that are advertised as being specially designed for this work. Nearly every old beet-grower has a variety of them stored away in his tool shed as mementos of early experience, but he is using the common six-inch hoe in his beet field. The hoe should be kept very sharp all the time, with the corners kept perfectly square, and should not strike the ground too flat, but should draw a little of the surface earth out of the row, so that the operator can see just what he is doing at each stroke, and so that the person thinning can see at a glance which beets are cut off and which are left standing. If the hoe strikes the ground too flat, you can bend the blade backward by taking hold of the shank with a monkey-wrench.

There is a knack in blocking with a hoe, just as there is in chopping a tree down with an axe. It is easily learned, but you must start right. The hoe is a very simple tool, but it has im-



DAIRY.

most discouraging. In most such cases we suspect the presence of outside moisture owing to the hay being handled too late in the evening, or that the clover was not well stored in the mow. One thing certain is that if the method of green-curing of clover has been made a success by some, it can be made equally successful by others if only the proper conditions can be secured.

The continued scarcity of labor naturally calls into requisition all the modern haymaking machinery, such as the tedder, side delivery rake, loader, hay fork, etc., all of which must be paid for. On the average farm the cost of machinery is no small proportion of the income of the farm, and any plan of co-operation whereby a set of implements could be made to do duty on two or more farms would be a long step in the direction of more economic production.

**Problems of the Soil.—IX.: Principles of Crop Rotation.**

One of the most useful means of keeping up the fertility of the soil, producing the maximum yield of crops, keeping down weeds, and reducing and systematizing the work of the farm, is the systematic and scientific rotation of crops. This principle has long been proven in older agricultural countries, and practiced with most excellent results, and many excellent systems, suited to the needs of different soils and different methods of farming, have been worked out. The subject, then, of rotation of crops, is by no means a new one, but in Ontario, with all our advances agriculturally, this subject is but little understood, the greater number of our farmers having but hazy and indefinite notions of it. While most of us have heard and used the term "rotation of crops," very few of us have any correct conception of the principles underlying it. Most of us seem to think that rotation of crops simply means that we should lay down a rule that no crop should be followed by a second crop of the same plant. This is good, so far as it goes, but we may follow this rule carefully, and yet in our practice be very far from the true principles of rotation. It is the intention in this article, and in one or two that will follow it, not to lay down any hard and fast rules for the rotation of crops, but to explain the underlying principles of rotation, so that each man, understanding these principles, may form his own rotation to suit his own particular needs. We believe that, understanding the principles, each man can form a rotation to suit his own particular needs better than any other man can do it for him.

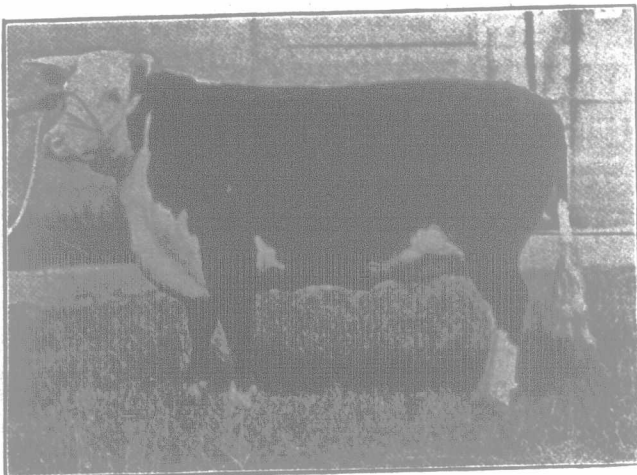
Rotation of crops is made possible by the fact that all plants are not alike in their manner of growth and their way of feeding. Were all plants alike, it would not be possible to secure any advantage by systematically arranging the order in which they should follow one another on the land. In that case our farms would probably be arranged so that each field could be kept permanently in one kind of crop. But all plants are not alike. We have plants with long and short periods of growth, with erect and with spreading foliage, of vigorous and of delicate growth, and, most important of all, of different requirements in the matter of food. While the other differences in plants are important, and have much to do with some aspects of rotations, as we shall explain later, the last difference, that of food requirements, is the one which is really at the root of all rotations. Since plants differ in this respect, and since food is continually being set free in the earth, as we have pointed out in previous articles, we may, by so arranging our crops that those which are heavy feeders on certain elements of fertility shall be followed by those which are light feeders on the same elements, secure the greatest possible amount of the particular food required by each plant at the time when the soil is supporting and feeding that plant. In this manner we may, without adding anything directly to the soil, increase its fertility, because each crop is preceded by one that leaves the land in the best condition for it. The whole science of rotation lies in this arranging of crops so that all through the course each crop will find the land prepared for it by the preceding crop, and will prepare the land for the crop that follows. In order to properly understand rotation of crops, we must first understand the differences in their food requirements.

Our ordinary farm crops may be divided, for the sake of simplicity, into three classes: (1) The cereal class; (2) the legumes, and (3) hoed crops. The first class includes the common grains, wheat, oats, barley and rye, and the true grasses. This class has much in common, and in general has the effect of reducing the fertility of the soil by its growth, particularly in the matter of nitrogen. The second class, the legumes, includes all plants of the pea and clover family. These plants are heavy feeders on the mineral matters in the soil, but have the peculiar characteristic of taking their nitrogen from the air, rather than from the soil, under favorable conditions. Thus they become an important source of fertility in this regard, and, besides, supplying themselves in this manner with all the nitrogen they require, actually leave large quantities of this element in the soil for the use of other plants. The hoed crops, generally speaking, are heavy feeders, and take much from the soil, but because the land can be cultivated during their growth, and because manure is applied to them, they have a very improving effect on the soil. These are, briefly, the chief peculiarities of the three great classes of farm crops, which we hope to

explain at greater length later on. We see at once that much can be done in arranging these crops to secure the greatest advantage. Since plants of the cereal class require a good supply of nitrogen in the soil, it follows that we must not grow a succession of these crops on the same land, or the supply of this element will run out. Since the legumes are heavy feeders on potash and phosphoric acid in the soil, a succession of these crops would impoverish the land in these mineral foods, while to secure the greatest advantages from the hoed crop, it must be brought in where it will do the most good in freeing the land of weeds and improving its tilth. The proper arrangement of these three classes of crops constitutes the problem of rotation for the Ontario farmer. The advantages to be gained by a proper and systematic rotation are very apparent, both in the matter of soil fertility and in the control of weeds and the lessening of labor, and in these days of small margins of profit and decreasing fertility, no farmer can be said to thoroughly understand his business who has not given this subject some intelligent thought.

**Green Curing of Clover a Success.**

To the Editor "Farmer's Advocate":  
I have had two successful seasons of curing clover hay quickly on Mr. Glendinning's system, which I tried to follow closely. My mow, not battened, is 18 ft. by 40 ft., over the cattle, with only single boards covering. First allow the hay to stand till all the dew or rain is off, and if after a rain, let it dry up well, say one day of wind and sun; then start to cut, say at ten o'clock, and slash it down till you think you have enough cut to keep all busy coking before any dew begins to fall, which, I think, should be done a little while before sunset. In starting to cok, I rake up enough for one row of cocks around outside, then put it up in smallish cocks, which is not hard to do, as it will stay where you put it, and continue so till all is up. The next day, as soon as dew is well off, split the cocks about twice to the wind and sun, then start and draw it in; mow away every bundle evenly over the



Hereford Heifer, Empress.

First at the Bath and West Show, Swansea, Eng., 1904. The property of His Majesty the King.

mow, and tramp every load solid, which won't take long. Manage so as to have all you have cut in and unloaded before the sun is down. Both seasons the hay has come out fine, and can be fed to all classes of stock, even to an old horse with the heaves without any injury. When the clover hay is all saved, just let it rest till you get your timothy to put on top if you wish to.

Ontario Co., Ont.

**Mustard Spraying.**

In the reports of the West of Scotland Agricultural College on experiments in 1901-1903 in spraying charlock, or wild mustard, with copper sulphate (bluestone), and its effect on the grain crops, Prof. Wright's tables are very instructive. The yield of dressed grain per acre from the unsprayed plot was 23.20 centals, the weight per bushel of dressed grain 41½ lbs., the yield of light grain per acre 120 lbs., and the yield of straw per acre 36½ cwt. The corresponding figures for Plot 3, which was twice sprayed with a three-per-cent. solution of sulphate of copper, are: 37.20 centals dressed grain, 42 lbs. per bushel, 280 lbs. light grain, and 50 cwt. straw. The conclusion is that the practice of spraying is a sound agricultural operation resulting in a clear profit.

**Sanfoin and Bokhara.**

To the Editor "Farmer's Advocate":  
Sir,—In a late issue I see notes from an Ottawa correspondent, who speaks of "Sanfoin, popularly known as bokhara." Sanfoin does not resemble bokhara in any way. Sanfoin resembles lucerne more than any other clover. The question was asked, what plants are most suitable for honey at different times of the season? The answer was, sanfoin, white Dutch clover, alsike clover, bokhara or sweet clover.

Central Experimental Farm. JOHN FIXTER.

**The Quality of Milk as Affected by the Milking.**

The frequency of milking certainly influences the percentage of fat in the milk, says a writer in the Ayrshire Post. By milking three times instead of twice in a day we obtain more or richer milk. A great many experiments in this direction might be quoted, but possibly one instance may be sufficient, in which a cow that was milked twice yielded milk of which 25 lbs., or about 2½ gallons, were required to make a pound of butter, but when, a few days later, she was milked three times a day, she yielded milk of which only 21 lbs. were required to make one pound of butter. As showing how the frequency of milking affects the richness of milk, when this same cow was milked three times daily, it was noticed that the morning's milk was poorer than that from the other two milkings, because a longer interval elapsed between the evening's and morning's milking than between the other two. But while this and many other experiments which have been carried out in regard to this matter evidently point to the same conclusions, still we think the majority of these experiments have been conducted for too short a period to definitely determine the point at issue. Milking three times instead of twice a day may for a few weeks increase the quantity and quality of the milk, but it is not altogether unlikely that when the cow becomes accustomed to the new order of things she will return to her normal milk yield, both as regards quantity and quality.

The manner in which the milking is carried out has a greater influence on the quality and quantity of milk than some people imagine. If the milking is done slowly or in a slipshod sort of fashion, the milk is less rich than when expedition is used. In one instance, which came under our notice, a cow was milked for several days by a quick milker, then by a slow milker, and then again by the quick milker. The result was that when the cow was milked by the slow milker, the amount of fat was decreased by no less than 11 per cent. It is well known, of course, that the milk obtained towards the close of the process is richer than that which is obtained at the beginning. The following figures will show the extremes between the first and last drawn milk of the same milking: First milk, 9.62 per cent. of solids, of which 1.2 was fat; last milk, 19.07 of solids, of which 11.02 was fat. Although the extremes are not always so remarkable, the difference between the two portions is considerable.—[Dairy World.]

**A Tribute to Milk.**

Sir J. Crichton-Browne, a recognized English authority, at the annual meeting of the Sanitary Inspectors' Association, delivered an important address on the subject of the national milk supply.

After dwelling at some length upon the importance of maternal nursing, and upon the increased infantile mortality always associated with the abandonment of the natural duty in this respect, Sir James declared it to be in the nature of the substitutes offered for mother's milk that the danger to the infant mainly resides. The patent infants' foods and condensed milks which are so portentously puffed need only be mentioned to be condemned. Thousands of infants have died of them; thousands are being maimed for life by their deficiencies. Of the milk foods, which are generally prepared from milk condensed, sweetened, and then evaporated to dryness, with the addition of flour of one kind or another, partly converted into dextrine, some show an excess of carbohydrates, largely consisting of starch, which is quite unsuitable for a child under nine months old; others are overloaded with sugar or fat, and all have objectionable features. Of the condensed milks, some are made from skimmed milk, and are, therefore, destitute of elements essential to infant nutrition, others are made from whole milk, but are so sweetened that fat and albuminoids are reduced below their proper proportions, and all of them deviate more or less from what a perfect infant food ought to be. The great recommendation of the proprietary foods is that they give little trouble. You open a tin, add a little water, and they are ready for use; no tiresome precautions are called for. But even indolent mothers would hesitate to trust to them if they knew that the pleasing plumpness they produce is a hollow mockery, and that their exclusive use often leads to anæmia, rickets, and scurvy, and undermines the power of resistance to infectious disease. Sir James then passed on to consider the general question of child-feeding in relation to national education, and also maintained that adults are more interested in good and cheap milk than is commonly supposed. In certain kinds of sickness—typhoid fever, for example—life may depend upon it; and it may not only postpone the final issue in certain kinds of senile decay, but may contribute to stability and vigor in maturity. Adults amongst us ought to drink more milk than they do. It gives softness to tea, body to coffee, and is in itself a most soothing and restorative beverage. "I think," continued Sir James, "that I could point to



friends of my own who would be better in health and intellect and purse and temper if they would substitute a quart of milk at 3d., or even of skimmed milk at a farthing, for the bottle of champagne at 12s. or 15s., which they absorb daily." In view of the possible, and eminently desirable, increase of demand for milk which would follow from a proper appreciation of its value, the question of supply would soon assume a position of primary importance. Sir James is totally opposed to importation, on the ground that no proper supervision could be exercised over the trade. His hope is that the importation will be peremptorily stopped, and that Continental milk will be regarded as an undesirable alien, and permanently excluded from our shores.

**GARDEN AND ORCHARD.**

**The Canadian Fruit Crop.**

The fruit crop reports received at the Fruit Division, Ottawa, from May 15th to date, do not indicate any marked changes in the general prospect. The amount of bloom is now pretty well known, except in Prince Edward Island, where the season is usually late. Growers in Ontario and Quebec are beginning to fear that the heavy rainfall will interfere with the setting of fruit, and that the abundance of bloom will go for naught. The rain also prevents spraying, and provides conditions favorable to the development of fungous diseases, so that large crops of good fruit are by no means assured as yet.

**APPLES.**

In Western and Central Ontario, Nova Scotia and British Columbia, where the apple is largely grown, the trees have had a profusion of bloom, and early, medium and late varieties all promise a good to full crop. The prospect was never better in the famous Annapolis Valley. The Fameuse, which is the leading market variety in Eastern Ontario and Quebec, is likely to give a heavy crop. Baldwins and Spies seem to have suffered more than any other standard varieties from the severe winter.

**PEARS.**

Both early and late pears have an abundance of bloom in the Ontario fruit belt, but prospects are only medium in the other pear-growing districts of Ontario. Nova Scotia growers are looking forward to heavy crops of both early and late varieties, while the reports from British Columbia and Prince Edward Island are satisfactory.

**PLUMS AND PEACHES.**

Reports indicate a medium crop of plums in the Niagara and Essex districts, and a light yield in the rest of Ontario, except for Japan and native varieties. Nova Scotia has excellent prospects for a full crop, while the other Provinces send reports of medium yields. The majority of the growers say that peaches are a total failure, but occasional orchards will give a light crop.

**OTHER FRUITS.**

A medium yield is all that growers seem to anticipate in the chief grape-growing sections. Strawberries appear to promise an average crop in all districts except the fruit belt of Ontario, where many plantations winter-killed badly, and the yield will be light. Raspberries are excellent in Nova Scotia, New Brunswick and British Columbia, while other Provinces expect an average yield. Cherries are good in the southern part of Ontario, but irregular in the remainder and in Quebec. In Nova Scotia, New Brunswick and British Columbia the prospects are very good. The recent reports indicate a medium to full crop of both red and black currants, in all sections of the country.

**Orchards Running to Wood.**

The question has been asked by a reader: "What treatment should be given to an orchard that is running to wood; limbs beginning to interlace, but not bearing? Has been in grass for three or four years; land rich."

The answer given by an expert orchardist is as follows:

In the first place, you have committed the common error of planting too close. It would pay to cut out some of them by cutting out alternately, as shown in the diagram, cutting out a tree at each cross mark:



If you think this rather heroic treatment, and choose to leave them crowded, give them a thorough pruning right now, before the end of the month. Cut no large limbs, but thin out the small brush. Use a good stepladder, and go around the outside of the tree, and do most of the pruning from there. Be careful about climbing in the tree at this time of year, when the bark is loose. When necessary to go into the tree, wear rubbers or moccasins, so as not to injure the bark. This summer pruning is indicated in this case whether you cut out alternate trees or not. It is important.

Then break up the sod and cultivate the soil into a good state of tilth, plowing shallow, as the feeding roots will be near the surface.

**The Plum Stock for Peach Trees.**

The present year has proved to be a most disappointing one to the peach-growers of Southern Ontario. During the almost phenomenal cold of last winter, as was expected, the orchards suffered, and, as a consequence, there are bleak and lonely gaps where should be rows of trees laden with promise of fruition. Now, as such seasons are liable to recur, is there any feasible means of preventing such devastation as that of last winter? Clearly, as you cannot prevent such seasons recurring, the only other means left is that of procuring a hardier stock—one that will not succumb in a severe winter.

Two at least are used successfully in Europe, viz., the almond and the plum stock. The wild almond is a hardier stock than the peach; budding or grafting on it gives a very dwarf tree, that may be grown in pots or tubs, and produces fruit equal to the best grown. The common double-flowering almond is an almost completely hardy shrub, that I have grown for many years out of doors in the Province of Quebec. I would not recommend it, however, for plantations outside; the plum stock is better, the tree worked on it is hardier, and makes a fairly large tree, that is fully as productive as when on the peach stock. These remarks refer to the European plum stock. There is a better one, however, in the wild plum of the middle Western States of the American Union—the *Prunus Americana*. It is of large, free growth, and would probably have but little dwarfing effect, and it has no superior as a stock to work upon; besides, it possesses such a degree of hardiness as will ensure its surviving even severer seasons than that of last winter. It stood the test in the Province of Quebec in the very coldest districts, where every European plum perished.

This stock is well worthy of a trial. Any one desiring to test it, might induce American nurserymen who may have abundance of it, to bud peaches of desirable varieties upon it this summer, for delivery next fall.

Let fruit-growers take heart; there is little doubt that this important industry may be perpetuated by this means. It was by similar means that the vine-growers and wine-makers of France overcame what seemed to be the irretrievable ruin of their industry, namely, by the introduction of the American wild grapevine as a stock on which to graft their fine wine-grapes, and which perfectly withstood the ravages of the phylloxera that threatened to destroy their vines.

Argenteuil, P.Q.

ROBT. HAMILTON.

apart, either system will do, but about ten or twelve good canes to a yard in length is quite thick enough. The new canes that are allowed to grow for next year's fruiting should be pinched off at the tips when about three feet high. This causes the cane to grow more stout, and it will throw out laterals or side branches. On good soil these branches will grow out pretty long, and should be shortened in the following spring. Some varieties of raspberries, such as the Cuthbert, will kill back in the tips in severe winters. Where this occurs they should be cut back to the sound wood, or if the injured cane is left as it is, the fruit will be small and imperfect near the injured wood. Blackberries should be managed in the same way, and the laterals well shortened in to facilitate the picking of the fruit.

Late in the fall a dressing of finely-rotted manure and hardwood ashes should be applied to the rows. It is these little details that count in growing fruit successfully, and do not require very much time on a small plantation. It means the difference between success and failure.

**A Small Barn Plan.**

A reader asks for the plan of a small barn to accommodate three horses, three or four cows, and carriages and store room for the implements required to cultivate thirty or forty acres of orchard. The plan given here is not specially designed for the purpose, but with a little modification could be made to suit admirably. The drive shed, horse stable, and one half of the cow stable, we think, are in their proper places. Then the other half of the cow stable could be used for storing implements. The plan here given is of a basement stable, but if that were not wanted the root-house under the approach would have to be omitted. The dimensions of this barn are 30x72. The frame is of heavy timber, but the modern plan of using studding would be cheaper, and just as resistant to winds.

**Small-Fruit Culture.**

A Quebec reader asks for information on the following points:

Last spring (1903) I bought red, black and white currants, two varieties of gooseberries, also raspberries and blackberries. The currants were two-year-old-roots, and I expected some fruit from them this year, but, from nine bushes, I shall have hardly a quart. Should they not have borne better?

But what I most want advice about is pruning. I have done nothing to them, being so perplexed by the contradictory advice of friends, and, in despair, I turn to you for help. Shall I trim currants to one main stalk, letting them branch above like a tree, or shall I allow three or four shoots to grow from the root? Writers in papers say to prune extensively, but they do not say what to prune or when. Shall I cut out the old wood, or new shoots?

What fertilizing ingredients do hardwood ashes contain, and are they good for small fruits, especially strawberries.

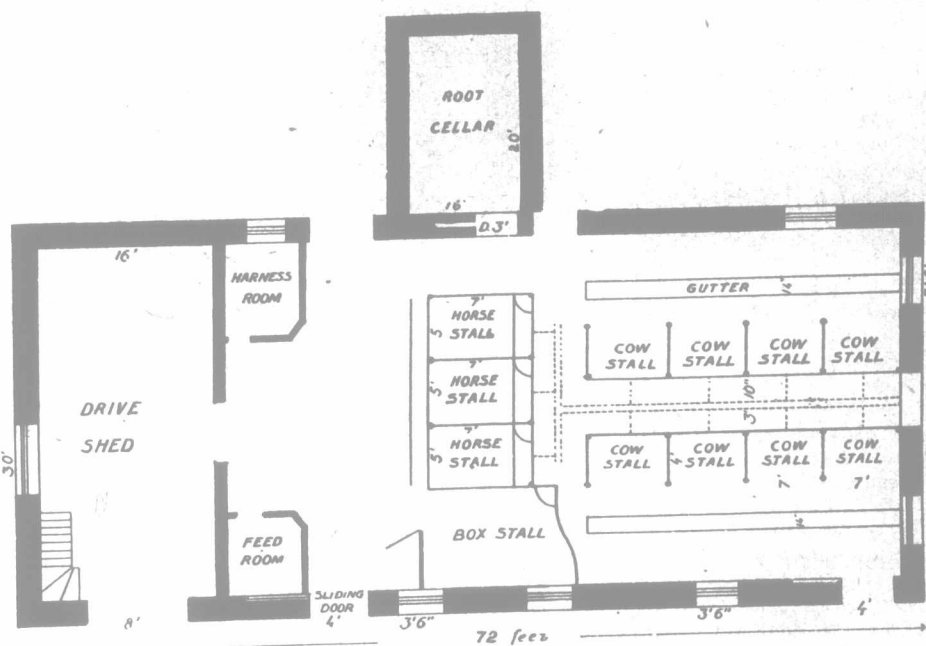
Is the strawberry, "Howard 41," a pistillate or a perfect variety?

Which variety of gooseberry bears the largest fruit, Downing or Industry?

Ans.—You could not expect to get very much fruit from your currant and gooseberry bushes the first year after planting. If well cared for, they will soon bear well, no doubt. As to pruning, the form of bush is largely a matter of taste or choice. Some prefer the tree form, and some the other. The pruning is a simple matter. The wood should be renewed by cutting out the old bearing branches after they have borne about three crops, and training up new canes to take their place. The best fruit is produced on one-year-old wood. Prune out the weak canes, and leave some of the strongest. Some practice cutting back nearly half of the new growth, but the tops must not be allowed to become too dense. Keep the tops sufficiently open to let in the air and sunshine. Pruning may be done in the fall or early in spring.

Wood ashes contain potash and phosphoric acid, two very important elements in the growth of fruit. Their use is indicated particularly on light soils. They are a splendid fertilizer for all kinds of fruits.

Howard's 41 is a pistillate variety. The Industry gooseberry bears larger berries



Suggested Barn Plan for Fruit Farm.

**Care of the Fruit Garden.**

Farmers and others who grow a few small fruits for their own use, seem in many cases to be either careless or ignorant as to the care and cultivation of them after planting. They seem to think that, like a potato or root crop, there is nothing necessary to be done after planting but to hoe them once or twice, and this accounts for the frequent failures of the fruit garden.

Strawberries should have the blossoms clipped off the first year, to give them a chance to multiply and make plants for a good row for the next year's crop. These rows should be at least 42 inches from center to center, and the plants should not be allowed to spread more than seven or eight inches each way. This will make the matted rows about fourteen to sixteen inches wide, and leave plenty of space between for the scuffer. The width of the rows can be regulated mostly by the width at which the scuffer is set. The second year they should be scuffed and cleaned quite early, and if the season is dry, the fruit can be increased, and the fruiting prolonged by filling the space between the rows after cleaning with some litter, such as old half-rotted pea straw, that will hold the moisture and prevent evaporation. Moisture and fertility are the important factors in growing strawberries.

Raspberries are usually crowded too close together, and it is a great mistake. The rows should be seven feet apart, and if the rows are allowed to fill up so as to form a continuous row instead of hills three feet



than Downing, but it is subject to mildew. The Downing will give better satisfaction.

For advice on the care of other varieties of small fruits, see article in this issue on care of the fruit garden.

## POULTRY.

### Scratchings.

A large roaster means a plump, firm-fleshed chicken, four to five pounds in weight.

The damp, dark, dirty henhouse is like a mine without a vein—there is no profit in sight.

The best dressed poultry are got from pure-breds, pure-bred crosses or graded-up stock.

Sunlight is essential to successful chicken-raising; darkness and dampness reduce the profits.

Eggs should be marketed about every three days, as they absorb odors, and should be kept in clean places until marketed.

As many of the small chicken parasites breathe through holes in their sides, a good dust bath aids in choking them to death.

Plant some sunflowers near the poultry-yards. Such make good shade, and the seeds are a useful condiment for winter feeding.

The production of a maximum number of good-keeping eggs is not assisted by the presence of the male. He is as much out of place as a man at a house-cleaning.

The following is a good prescription to use for a poultry-house cleaning: Take forty to sixty pounds of good stone lime (air-slacked will not do), and place it in enough hot water to keep the lime five inches below the surface, stirring briskly until slacked. Add two and a half pounds of sulphate of zinc and five pounds of common salt. This will cause the wash to harden, and prevent it from cracking. Add to all, and mix well, one quart of crude carbolic acid. Thoroughly spray all walls, ceilings, roost platforms, nests, etc. The spray-pump does better work than the brush, but do not postpone the job because you have a brush and no pump.

### Shade for Chicks.

We may have hot days and nights before the end of June. Have you provided shade for the growing chicks, or must they swelter beneath the sun's rays and have their growth retarded thereby? They tell us to "make hay while the sun shines." The same sun that makes hay fine may cause bowel trouble, or worse, in your chicks, if they are exposed continually to its rays. Some sunshine they must have; too much is fatal.

There is no shade so good for poultry, old and young, as the natural shade from trees, bushes and vines. Where this cannot be had, artificial shelter of some kind must be provided. This is often accomplished by stretching canvas or growing sunflowers or small patches of corn. Slat frames may be built and covered with branches cut from trees. All these little conveniences must be looked after for the comfort of the growing chicks, if we hope to have them mature, as they should, to be ready for egg producers next winter. If these necessities are neglected, their absence will retard the growth and maturity of the chicks. C. G.

### Remedy for Sick Turkeys.

Last season, while experimenting with ailing fowls, I discovered that spirits of turpentine is the best remedy by far that I have ever used or ever heard of being used for sick turkeys. The drug must be used sparingly, for it is a strong medicine, and young turkeys are very delicate. Sometimes a little one will tumble over after a dose has been given and seem to be dying, but leave him alone; he will get over the bad effect after a little while and jump up and run away to find his mates. The next time he is seen a great improvement will be noticed. When a number of turkeys in one flock begin to look droopy, the most convenient way to administer the turpentine is to mix a little with the feed. Place before them, when they are hungry, about ten drops to half a pint of feed; but experience quickly teaches the practitioner how to use it in the best way. If too much is used in the feed, they will refuse it. It is sometimes necessary to catch the turkey and drop a little of the medicine down his throat—one drop for very small birds, and two, three or four for larger ones. It is good for them from a few days old to half grown. It is a particularly fine remedy for the bowel trouble that carries off so many young turkeys every year. If intelligently used this remedy will doubtless prove a great blessing to all who are struggling with the problem of how to save the lives of young turkeys.—C. Boyden, in Southern Planter.

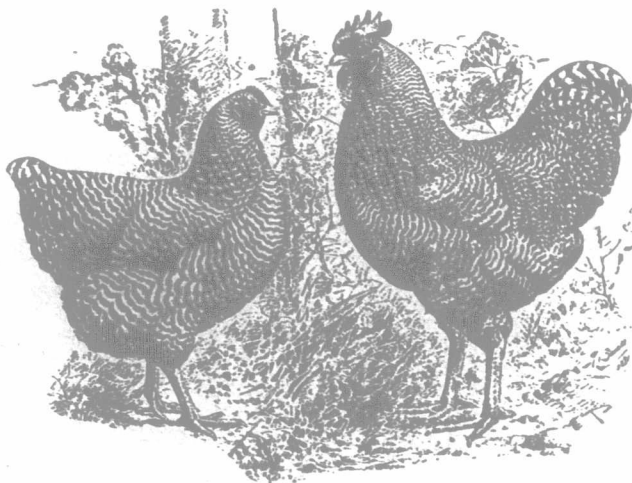
### The Egg Business.

For all farmers a most profitable branch of the poultry business is the production of eggs during the winter, says Mr. F. C. Hare, chief of the Poultry Division, Ottawa. Every winter there is a great demand for new-laid eggs. The supply is always limited, and high prices are paid. In the large cities, strictly-fresh eggs sold readily during the past winter at from forty to sixty cents per dozen. Some farmers are so situated that they can maintain a city trade in fresh eggs throughout the year. A premium of several cents per dozen can usually be obtained for new-laid eggs shipped weekly to the city merchant.

There is a growing preference on the home markets for brown-shelled eggs. The shells of the eggs should be wiped clean if necessary, and the eggs graded in size. For shipment to the merchant they should be packed in cases holding twelve dozen or thirty dozen each. Eggs to be palatable should be eaten in a strictly fresh condition, therefore they should reach the consumer without unnecessary delay. This requires: (1) that the eggs be collected regularly every day, and stored in a cool room (temperature forty to fifty degrees F.) until a sufficient number are on hand to deliver to a dealer; (2) that the dealer forward the eggs to the merchant at least once a week, and (3) that the merchant protect the eggs from deterioration while in his possession.

As a general rule, pullets hatched in May or early June will prove most profitable for winter laying. Farmers who expect to make a specialty of high-priced new-laid eggs next winter should at the present time be selecting suitable pullets. The cockerels should be sold in the early fall. Unless they are housed in the fields and require little attention or extra feed, the most profitable age for marketing is four months. After that age the cost of feed per pound of gain in live weight rapidly increases.

The pullets should be comfortably and per-



Barred Rocks—A Good Utility Pair.

manently housed in the fall; transferring mature pullets to a strange pen defers egg production. Early winter laying demands liberal feeding, which includes, in addition to the grain, waste meat or animal food, and vegetable food. From two flocks of Barred Plymouth Rock pullets that were liberally fed from birth for early maturity at the Bondville, Que., Illustration Station, eggs were gathered daily after the pullets were four months and one week old. Experiments at the Utah Experiment Station showed that the profit from young hens or pullets was about five times greater than that from hens three or four years old. Not only did the old hens lay considerably fewer eggs, but the eggs were worth less per dozen. This is accounted for by the fact that the pullets laid a larger proportion of their eggs in winter, when the price was good.

When the pullets are forced for winter egg production, there should be kept, in addition, another breeding pen of selected fowls from which to rear the chicks. A hen or pullet that commences to lay in the spring will at that time produce stronger-germ eggs for hatching than will another that has had her vitality impaired by winter laying.

The farmer should select from the flock of pullets ten or twelve of the best winter layers, placing a regular leg-band or a piece of wire around the leg of each. The next winter these pullets (then yearling hens) should be separated from the laying hens, and kept in good health and medium flesh, but not fed for winter laying. In February or March, they should be mated with a suitable cockerel, and their rations increased so as to bring them into laying at the time when their eggs are required for hatching. Such a process of selection would soon produce a particularly fine strain of winter layers.

The export trade carries off the surplus eggs produced during the summer months when prices are low, but has little or no effect on the price of new-laid eggs in winter. Efforts to increase our export trade in eggs need not, therefore, alarm consumers in cities or towns. Eggs that

are placed in cold storage from April till July are shipped to Great Britain for the September and October trade. Those that go into cold storage in the fall are exported during the winter months. All these are sold in Britain as "Canadian fresh eggs."

## APIARY.

### After-Swarming.

When a colony of bees swarms it sends out with the swarm its queen. This leaves the hive queenless, but provision has been previously made for such condition by the building of queen cells, from which young virgin queens will begin to hatch in eight or ten days. At that time, if the bees have not lost the swarming impulse, the first queen to hatch will come out with the second or after-swarm. Probably, next day, a third swarm will come, and so on. As the bulk of the bees go with the first swarm, each succeeding swarm is smaller than the one before, so that it is inadvisable to allow more than one, or two, at the very outside.

To prevent after-swarming, the first swarm should be hived on the old stand, setting the parent hive on a stand immediately behind it. The bees flying out from the parent hive that day will find their way into the swarm. Give the parent hive an extracting super filled with empty combs at once, to keep the bees cool and persuade them to give up the idea of swarming again. In five or six days, quite a bit of the brood will have hatched, adding to the strength of the parent colony, and the queens will be nearly ready to hatch. Now move the parent hive to a new stand in a different part of the yard in the middle of the day when the bees are flying freely. The flying bees coming back to the old location behind the swarm will soon find their way round into the swarm. In this way, the parent colony is again reduced in strength, and, in most cases, will give up the idea of swarming again.

MORLEY PETTIT.

## EVENTS OF THE WORLD.

A despatch from Constantinople states that owing to an irade recently issued by the Sultan, wholesale massacres and destruction of much property have taken place in Armenia. It is stated that two days were devoted to the massacre, during which thirty-seven villages were destroyed, and two thousand of the inhabitants put to death. Massacres are feared in other places, and the people are panicstricken.

A recent despatch from Tangier states that a well-organized plot to depose the Sultan of Morocco exists throughout the Empire, supporters of the movement being found among the highest in authority in both church and state. Although the revolution was in progress before the signing of the Anglo-French Treaty, it has been precipitated by the agreement, under which it is claimed by Moroccans the Sultan has virtually sold his country to France.

On June 15th, one of the most terrible catastrophes ever known in the history of New York City occurred near Hell Gate, in the East River, just off 125th street. By the burning of the excursion steamer Slocum, having on board the annual Sunday School excursion of St. Mark's German Lutheran church, five hundred people, most of whom were children, perished. More than two thousand were on board, some of the saved escaping by swimming, others being rescued by the hundreds of small boats which immediately put out to the doomed vessel. Of those who perished, many who had jumped overboard were carried off by the current; others were burned to death, or crushed by the collapse of the heavy upper deck, which fell soon after the fire began. The Slocum was finally beached, in the shallow water some distance from shore, but afterwards burned to the water's edge.

The desultory skirmishing which has been going on on the Liaotung Peninsula has again culminated in a sweeping victory for the Japanese. On June 15th a desperate encounter occurred at Telissu, near Vafangow, 35 miles north of Port Arthur, between General Oku's army and a division of Kouropatkin's, which had been sent out in command of General Stakeburg. The Japanese lost heavily, 1,000 in all, killed and wounded, but were successful in driving the Russians from their position, after capturing 300 prisoners and 14 guns. The Russians, during two days' fighting, lost 850 men killed and wounded. The retreating Russians, whose official notice states that they "retired under pressure of superior numbers," withdrew to Wafangan, where, it is stated, they are now in a precarious position, being sandwiched in between two Japanese armies, one under General Nodzu, the other a part of General Kuroki's force. Military critics censure General Kouropatkin severely for having despatched General Stakeburg on a hopeless errand. However that may be, the immediate effect of the battle of Telissu will probably be to put an end to the Russian hope of relieving Port Arthur. At sea the Russians have scored some success, the Vladivostok squadron, under Admiral Skrydloff, having



sunk a Japanese transport and injured another. At present the whereabouts of the squadron is not known, and there are many surmises as to whether it will attempt to effect a junction with the Port Arthur fleet. Recent reports say the Japanese have captured some of the outer forts of Port Arthur.

NOTES AND NEWS.

The crew that will represent the Winnipeg rowing club at the Royal Henley regatta left for England on June 14th.

John Elijah Dowle, disgusted with his reception in London, where he was refused admittance by all the hotels, has gone to France.

London.—King Edward has conferred upon Mme. Melba the decoration for science, art and music. She is the first woman upon whom it has been bestowed.

If starting to breed pure-bred poultry, you will find it an advantage to have a copy of the Standard. A new edition is about to be issued, well illustrated with representations of typical birds. Wait for it, it will be out shortly.

Winnipeg.—The contract has been let to Robert Fairbairn, of Essex, Ont., to erect three hundred miles of wire fence along the Canadian Northern Railway system. This is the biggest contract of the kind ever let in the West.

Gen. Cronje, of South African fame, who is at present in the Boer camp at the St. Louis Fair, is to marry Mrs. Steetzel, the widow of one of his war companions, who is also at the Fair. General Cronje is sixty-eight years old.

Mr. Brodeur, the Minister of Inland Revenue, has received a cablegram, informing him that the bill making the metric system obligatory in England has been adopted by the House of Lords. The adoption of the system in Canada, it is thought, will be only a matter of a few years.

Dr. Edward F. Wells, of Chicago, in a recent address delivered at a meeting of the American Medical Association, stated that pneumonia is a virulently communicable disease, and that its prevalence is alarmingly on the increase. He recommended that patients should hold moistened cloths before the face and nose when sneezing and coughing, in order to prevent, as far as possible, the distribution of the microbes.

The new steamer Turbinia, which is the first turbine vessel that ever sailed in St. Lawrence waters, and the first mercantile turbine to cross the Atlantic, arrived at North Sydney on June 11th, having crossed from the Tyne in six days. During part of the voyage the Turbinia encountered very stormy weather, and her owners are delighted with the seaworthy manner in which she weathered it. She is destined to run on the Toronto-Hamilton route, and will begin the service immediately.

The difference between the Government and Lord Dundonald, which has been causing so much comment in military and political circles recently, has resulted in His Lordship being relieved of his position as General Officer Commanding the forces in Canada. Lord Aylmer, Adjutant-General, will assume the office, pending further arrangements, which may result in the substitution in the place of the General Officer Commanding of a Military Council, with an Imperial officer as Inspector-General.

New York.—The Board of Directors of the Lake Superior Corporation have elected a very strong Executive Committee, as follows: President, C. D. Warren, Toronto; Vice-President, Chas. E. Orvis, New York; Vice-President, Thomas J. Drummond, Montreal; John T. Terry, New York; J. Tatnall Lea, Philadelphia; Francis B. Reeves, Philadelphia. In the reorganization of the company, which, President Warren states, will start with a capital of \$4,000,000, Mr. F. H. Clergue figures as one of the Board of Directors.

The many Canadians who were delighted with the playing of Kubelik, the famous violinist, during his tour through Canada, will be somewhat amused at the result of the suit which he recently engaged in against Dr. Gehrman, the music critic of the Frankfurter Zeitung, because of the fact that Dr. Gehrman had referred to him as a "stupid-looking man, of superfluous, effeminate appearance," referring to his playing also in terms less complimentary than those to which Kubelik has been used. By the verdict of the court at Frankfurt-on-the-Main, the case was dismissed, and Kubelik obliged to pay all the costs.

As a result of the dissatisfaction which has existed among the members of the British National Rifle Association over the manner in which the Palma Trophy was won by the American National Rifle Association at Bisley last September, the latter has decided to return the trophy to the British Association. The dispute in question arose from the fact that the rifles used by the Americans at the contest was slightly different from that in use in the regular American army. The incident was productive of considerable feeling on both sides of the water, and it is hoped that the result will have the desired effect upon a certain class of the Americans who in the past have exercised an unsavory influence in international competitions.

Canadian Seed-growers' Convention.

The meeting for the organization of the Canadian Seed-growers' Association was held in the Imperial Building, Ottawa, on June 15th and 16th, Prof. Jas. W. Robertson, Agricultural Commissioner, in the chair; Mr. G. H. Clark, Chief of the Seed Division, Department of Agriculture, Secretary. The object of this Association as set forth in the preamble of the constitution is to encourage the general use of improved seed, with a view of improving the yield and quality of the field crops of Canada. This movement is an outgrowth of the Macdonald-Robertson Seed-growers' Association, which had its origin in this prize competition throughout Canada, in selecting the best heads of grain out of plots, sowing the grain from these, and, in turn, selecting the heads from these again, and so on. In demonstrating this idea, Prof. Robertson had the liberal aid of Sir William Macdonald, of Montreal. The competitions were conducted in all parts of Canada, and, in order to take advantage of the work so initiated, and to systematize the growing of high-class, clean seed by a number of persons in every locality, the meeting in Ottawa was called. The idea was expressed that in time ten farms on an average in every county, or electoral district, might make a specialty of such work. Not only would these persons derive the advantage of a very much better price for their crop sold for seed, but their own crops would be greatly increased and improved. Among others present were: Geo. H. Greig, Winnipeg, Man.; Jno. Mooney, Valley River, Man.; G. A. Putnam, Supt. Farmers' Institutes, Toronto; C. A. Zavitz, Experimentalist, and Prof. R. Harcourt, Chemist, Ontario Agricultural College,

spent in Canada to greater advantage, and the result was the growing of larger and more vigorous crops. The Association now proposed was not designed to engage in plant-breeding by crossing, nor yet to be exclusive, and say that such other lines of work were not useful. He congratulated Mr. Clarke, the Chief of the Division, upon the success which was attending his efforts and said the Government was willing to aid the movement now undertaken by furnishing funds. Three partners, then, were represented in this educational movement for the advantage of agriculture—the Government, the Association and the general farmer, working together with good will. (Applause.)

Mr. Clark submitted a detailed report of the work of the Macdonald-Robertson Seed-growers' Association, in which a large number of persons had completed the three years competition work. It was now proposed to divide Canada into four great districts—(1) Manitoba and the West to B. C.; (2) Ontario, (3) Quebec, and (4) the Maritime Provinces—in each of which there will be an inspector or superintendent, to oversee the work of the members engaged in growing seed, and otherwise promote the objects of the association. Mr. James Murray, B.S.A., who has been doing very efficient work in the Department of Agriculture, has been designated to take oversight of the work as it will be developed in Manitoba and the N.-W. T. Mr. Leonard Newman, B.S.A., continues similar work in the Province of Ontario, where he was engaged last year. Mr. Joseph Cote, another well qualified man, will superintend the work in Quebec, and a fourth will be appointed for the Maritime Provinces.

CONSTITUTION AND RULES.

The constitution adopted defines the objects of the association as follows:

To advocate the interests of seed-growers and other farmers, by—

- (a) Making regulations respecting the growing, selecting and preserving of seeds of various kinds of farm crops for the guidance of its members.
- (b) Causing records to be kept of the history of seeds produced by members.
- (c) Fixing standards for seeds that may be eligible for registration.
- (d) Publishing information as to standards.
- (e) Issuing certificates of registration to members, by which hand-selected seed or the product therefrom may be known from other seed.
- (f) Such other means as may be expedient from time to time.

Provision is made for the organization of branch associations in counties or districts to assist in carrying on the work of the organization.

Kinds of Crops.—This association shall cause records to be kept of seed of wheat, oats, barley, maize, flax, millet, peas and beans; also seed potatoes, and such other crops as may be decided upon by the association, that may be grown by operating members.

Plots are to be grown under prescribed conditions, and each operating member must be a producer of improved seed, each year conducting a hand-selected seed plot, consisting of not less than one-quarter of an acre of land.

The Selecting of Seed.—By the term "hand-selected seed plot of the first year," is meant a piece of land bearing a crop produced direct from seed obtained by selection by hand, of the heads, ears, pods or tubers from plants appearing relatively vigorous and productive for the variety.

(b) By the term "hand-selected seed plot of the second year," is meant a piece of land bearing a crop produced direct from seed obtained from selection by hand, of the heads, ears, pods or tubers from plants appearing relatively vigorous and productive for the variety, on a hand-selected seed plot of the first year.

(c) By the term "hand-selected seed plot of the third year," is meant a piece of land bearing a crop produced direct from seed obtained by selection by hand, of the heads, ears, pods or tubers from plants appearing relatively vigorous and productive for the variety, on a hand-selected seed plot of the second year.

It is permissible to select heads in sufficient quantity to sow a hand-selected seed plot or plots of a total area not greater than four times the size of the plot from which the heads were selected.

Registration.—Following out the foregoing, provision is made for the registry and issue of certificates of three classes of seed: 1st, "hand-selected registered seed," on a plot of at least the third year; 2nd, "improved registered seed," from a crop produced from hand-selected, registered seed; and, 3rd, "general crop registered seed," obtained from a crop produced from improved registered seed, and suitable for use for the general field crop of the farm. The crop from this latter will not be eligible for registration, because not grown directly from a hand-selected seed plot, which is to be grown continuously as the sources of seed.

The members are to keep records of their operations. It is a voluntary organization, and there will be no fees. Beginning with the membership of the Macdonald-Robertson Seed-growers' Association as a basis, persons resident in Canada choosing to make seed-growing a special branch of their farming operations are eligible for membership by election, and there is also provision for honorary membership by persons interested in agriculture. An act of incorporation is to be secured.

The Minister of Agriculture will designate the President; the Chief of the Seed Division will be Secretary-Treasurer, and there will be three Vice-Presidents and



"Charge all the Traffic will Bear."

Guelph; Walter Simpson, Bay View, P. E. I.; S. Waugh, North Bedque, P. E. I.; G. A. Gigault, Deputy Minister of Agriculture, Quebec; Donald Innis, Tobique River, N. B.; W. L. Davidson, Bethel, P. Q.; Lockie Wilson, Alexandria, Ont.; J. H. Smith, Langbank, Ont.; J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa; W. Thompson, London, Ont.; F. L. Fuller, School of Agriculture, Truro, N. S.; Leon Gerin, Coaticook, P. Q.; W. L. Smith and J. W. Wheaton, Toronto, Ont.; A. P. Ketchen, W. A. Clemons, Jas. Murray, J. C. Cote, and L. H. Newman, Ottawa.

A great deal of time was devoted to perfecting the constitution and rules under which the organization will carry on its work. In the main, it will be directed by the Chief of the Seed Division of the Department of Agriculture and the Commissioner of Agriculture, advised by a Board of Directors, and more directly by a small executive committee, chosen by the latter.

GENERAL PRINCIPLES.

Prof. Robertson directed attention to the fundamental principles of plant life and growth—individual power and environment—in accordance with which seed must be produced. The plant grows by taking in, by absorbing and by assimilating. Primarily, the quality and perfection of the plant depends upon the character of the seed and the protoplasm. Characteristics of seeds include the sex power, constituents, such as protein and starch, and the essential oils to preserve. Man grows a plant with the power, under certain conditions, to produce what he wants. To illustrate, he said, by careful and continuous selection of seed, and careful growing, the percentage of sugar in beets in France had been raised from nine to fifteen per cent., and the yield nearly doubled. The Sir Wm. Macdonald seed-growing competition was an effort in that direction, and never had \$10,000 been



ten directors elected by the members at the annual meeting, who in turn have power to add five directors to their number, and five directors to be named by the President.

The president, secretary-treasurer and five directors to be chosen by the board of directors constitute an executive council, empowered to transact business between general meetings. The association year begins on July 1st.

The officers chosen were as follows:  
 President—Prof. Jas. W. Robertson, Agricultural Commissioner.

Vice-Presidents—(Deferred.)  
 Sec.-Treas.—Mr. G. H. Clarke.  
 Directors elected by Association—Thos. A. Peters, Fredericton, N.B.; Walter Simpson, Bay View, P. E. I.; G. A. Gigault, Quebec, Que.; C. A. Zavitz, O. A. C., Guelph, Ont.; Prof. C. C. James, Toronto, Ont.; J. H. Smith, Langbank, Ont.; Geo. Harcourt, Regina, N.-W. T.; John Mooney, Valley River, Man.; J. H. Grisdale, Ottawa, Ont.; W. L. Davidson, Bethel, Que.

Directors chosen by the foregoing—F. L. Fuller, Truro, N.S.; Dr. W. Grignon, St. Adele, Que.; J. W. Wheaton, Toronto; Wm. Thompson, London; W. L. Smith, Toronto.

Directors named by the President—S. A. Bedford, Supt. Experimental Farm, Brandon; G. Batho, Winnipeg; T. W. Drysdale, Allan's Corners, Quebec; J. R. Anderson, Victoria, B.C.; and W. D. Albright, Sussex, N. B.

Executive Committee—J. H. Grisdale, Ottawa; C. A. Zavitz, Guelph; G. A. Gigault, Quebec; C. C. James, Toronto; and W. L. Davidson, Bethel, Que.

Meeting adjourned at the call of the President.

**News Notes from Ottawa.**

Mr. W. D. Scott, Dominion Superintendent of Immigration, in his evidence before the Agriculture and Colonization Committee of the House of Commons, on June 14th, said that agents in Great Britain and the continental countries found difficulty in securing persons willing to become farm laborers in Ontario and Quebec. He explained that the foreigners preferred the more adventurous life in the Northwest. The committee were unanimously of the opinion that the most important duty of the Immigration Department was to bring an element into the country that would make it easier for the farmers of older Canada to procure laborers. The Immigration Superintendent stated that the unsteady character of farm work was responsible for much of the aversion strangers had for becoming farm laborers. During four or five months of the year, he pointed out, they had to go elsewhere, and they seldom returned. Dealing with the cost of immigration, Mr. Scott said the Government, in the continental countries, paid one pound each for immigrants; in the British Isles, one pound for males and half a pound for females, and in the United States, three dollars for male adults, two dollars for female adults, and one dollar each for children. The tour of the nine British editors at the expense of the government, last year, gave such good results, Mr. Scott said, it was the intention to bring two hundred newspaper men from Indiana this year under similar arrangements. The Government pay expenses, including railway fare, the compensation being descriptions of the trips, published afterwards in the journals, which have beneficial advertising effects. The Superintendent of Immigration expressed himself opposed to "colonizing," even among British subjects. He said the Barr colony had not been a success where those people settled together. They cultivated no more than three acres for each family. East of Battleford some of the scattered ones were prospering. Last winter the Government took care of eight families of the Barr settlement who became destitute.

In the past year, Mr. Scott said, special attention was given to reception and location of immigrants.

The Canadian Government has been requested to take part in the American Exposition in Portland, Oregon, next year. This is an exhibition to commemorate the annexation of the Northwest territory of the United States one hundred years ago. Col. Henry E. Dosch, commissioner general of the exhibition, has been in Ottawa for several days conferring with the Government, and has interviewed the Prime Minister, Mr. Fisher and Mr. Sifton. The Minister of Agriculture told Col. Dosch that on account of the four or five other exhibitions in which Canada was taking part, there was not now a large sum available for exhibition purposes, but that he would look into the proposal. Col. Dosch represented to the Government that it would afford a good opportunity for attracting immigration. On this account Mr. Sifton will look into the matter in conjunction with Mr. Fisher. The sum of \$50,000 is mentioned as sufficient to make a fair display of Canadian products.

Mr. William Hutchison, Canadian Exhibition Commissioner at St. Louis, is paying a long visit to Ottawa. He left the fair grounds as soon as the enterprise got well under way, and is now arranging important details about the fair with the Minister of Agriculture. He says the prospects are bright for a creditable display of Canadian live stock by private exhibitors.

**D. C. Flatt & Son's Yorkshire Sale.**

The auction sale, on June 15th, at Hamilton, Ont., of 80 head of Large Yorkshire sows and boars, recently imported by Messrs. D. C. Flatt & Son, of Millgrove, Ont., proved quite as successful as was expected, the average on the whole lot figuring out at \$88 a head. The highest price, \$380, was reached in the case of two of the sows, both of which magnificent animals, the yearling Dalmeny Duchess 49th, and the aged sow, Bottesford Satisfaction 5th, fell to the bids of Mr. T. H. Canfield, of Lake Park, Minnesota, who was the largest buyer, his purpose being to make an extensive exhibit of Yorkshires at the St. Louis Exposition, his herd being now under the capable management of a former Canadian breeder, Mr. Norman M. Blain, late of St. George, Ont. The highest priced boar, the 14-months' Summer Hill Dalmeny Clipper—14838—bred by the Earl of Roseberry, was also, after a spirited contest, captured by Mr. Canfield at \$290. Canadians did plucky bidding throughout the sale, securing a fair share of the best, Mr. Richard Gibson, Delaware, Ont., landing the beautiful yearling sow, Walton Nell 14th, at \$155; Mr. J. R. Richardson, Lowville, the yearling Dalmeny Cotgrave Duchess 2nd, at \$145; Mr. John Hill, Wellesley, Dalmeny Duchess 45th, at \$140; Messrs. James Wilson & Son, Fergus, Dalmeny Duchess 50th, at \$120; and Mr. Wm. English, Petrolia, the fine yearling boar, Worsley Duke 5th, at \$120. The quality of the stock, especially of the females, won the unqualified admiration of the company present, who were delighted with the remarkable uniformity of excellence in type throughout the long list, and the Messrs. Flatt were heartily congratulated on their enterprise in bringing into the country such high-class stock. The boars, as is usual, were not as uniformly good as the sows, their restless dispositions pulling down their condition in the process of shipping, and some of these were sold at very unsatisfactory prices, greatly reducing the average, while among the young sows also there were many excellent bargains for the buyers. It was an opportunity such as has not previously been offered, of securing high-class, young imported stock, and most of the sows nearly due to farrow, at prices at which any farmer could afford to invest; and it was an opportunity such as will not likely occur again, as many of the animals were sold for much less than the original cost, to say nothing of the added expenses of importation. Messrs. Flatt, however, made no complaint, accepting the situation cheerfully, since the average of their last year's sale and this taken together must have been very satisfactory, and the country stands to gain by their spirit of enterprise and patriotism. The sale was admirably conducted by Mrs. Thos. Ingram and Mr. S. Frank Smith, the auctioneers, as well as by the vendors. We append the list of sales of \$50 and upwards:

No.		
20—Sow,	T. H. Canfield, Lake Park, Minn.	\$380
73—Sow,	T. H. Canfield	380
77—Sow,	R. Gibson, Delaware	155
70—Boar,	T. H. Canfield	290
28—Sow,	J. R. Richardson, Lowville	145
9—Boar,	T. H. Canfield	200
55—Boar,	Wm. English, Petrolia	120
60—Sow,	T. H. Canfield	300
21—Sow,	Jas. Wilson & Sons, Fergus	120
25—Sow,	T. H. Canfield	250
71—Sow,	John Hill, Wellesley	140
26—Sow,	T. H. Canfield	180
1—Boar,	R. G. Martin, Marysville	100
15—Sow,	Geo. Amos, Moffat	100
18—Sow,	E. G. Willard, Hamilton	100
80—Sow,	Wm. English	90
81—Sow,	R. Gibson	65
79—Sow,	E. S. Willard	85
32—Sow,	J. Redmond, Bellwood	85
22—Sow,	John Hill	90
27—Sow,	Henry Jennings, Tottenham	75
23—Sow,	T. H. Canfield	80
24—Sow,	J. E. Brethour, Burford	70
16—Sow,	J. E. Brethour	95
14—Sow,	T. H. Canfield	80
34—Sow,	J. E. Brethour	75
67—Sow,	E. G. Willard	70
61—Sow,	T. H. Canfield	75
4—Sow,	W. G. Pettit & Son, Freeman	70
8—Sow,	Henry Jennings	65
7—Sow,	W. A. Martin, Corbyville	70
6—Sow,	John Drummond, Flamboro	55
29—Sow,	O. Vansickle, Trinity	55
30—Sow,	W. G. Pettit & Son	60
31—Sow,	John Redmond	60
33—Sow,	Henry Jennings	60
39—Sow,	J. F. Richardson	60
40—Sow,	Robert Flatt, Millgrove	60
41—Sow,	Jas. Reid, Glen Williams	65
36—Sow,	J. E. Brethour	55
35—Sow,	Wm. Flintoff, Clappison	50
70—Sow,	Wm. English	65
75—Sow,	R. Gibson	60
66—Sow,	W. J. Mitton	60
62—Sow,	J. F. Richardson	60
65—Sow,	Geo. Amos	55
53—Sow,	J. F. Richardson	75
42—Sow,	H. J. Davis, Woodstock	60
43—Boar,	T. H. Canfield	65
44—Sow,	T. H. Canfield	60
45—Sow,	Geo. Amos	55
46—Sow,	F. R. Shore, White Oak	55
48—Sow,	A. E. Smith, Millgrove	75
49—Sow,	T. H. Canfield	75

52—Sow,	John Hall, Strabane	\$ 50
50—Boar,	W. J. Mitton	55
51—Sow,	John Nicholson, Flamboro	65
54—Sow,	Henry Jennings	65
57—Sow,	John Redmond	50

**Toronto Exhibition.**

The prize-list of the Canadian National Exhibition, which is the new name appropriated by the Toronto Fair, will be out in a few days. Every department has been carefully revised, and the rules and regulations thoroughly reconsidered, with the result that all the clauses will mean exactly what they say. The management are determined to insist upon every condition being fulfilled, and entries received after the date set for closing will be returned. In previous years there has been great laxity in this respect, but there will be none this year. The exhibition will be open to the public from 9 a.m. Monday, August 29th, to 10 p.m. Saturday, September 10th, excluding Sunday. Entries close for live stock, dairy products, ladies' work, fine arts, natural history, on Monday, August 8th; for grain, field roots, garden vegetables, horticultural products and flowers, on Saturday, August 13th; for poultry and pet stock, on Saturday, August 20th; and for dogs, Monday, August 15th. Rule 41 is of some importance, and provides that in the horse, cattle, sheep, pig and poultry classes the entry must in every instance be made in the name of the bona fide owner or duly authorized agent, and unless this rule be observed no premium will be awarded, or if awarded, will be withheld. If any person shall exhibit any animal or bird of which he is not the bona fide owner or duly authorized agent, he will forfeit any premium which may be awarded him, and be precluded from exhibiting in future. Exhibits of live stock and agricultural products generally sent by freight, will be returned free. The buildings will all be overhauled, disinfected and cleaned. A new administration building and a new art gallery are in course of erection. An extra large exhibit of agricultural implements is anticipated this year, in consequence of correspondence already exchanged. The agricultural building is fitted throughout with shafting, so that exhibitors can show their machines in motion. The usual special classes will be given in the live stock and agricultural classes for judging. A specially interesting feature will be fruit-packing demonstrations, by experts from the Dominion Experimental Farms. All through the poultry and pet stock department a third prize has been added, increasing the aggregate amount given by some \$400. A special provision is that general-purpose horses must be exhibited by persons engaged in agricultural pursuits. The description adopted of the general-purpose horse is that he is a horse suitable either for the wagon, carriage, buggy, saddle or plow. In the general-purpose classes docked horses are not eligible. Prize-lists can be had on application to J. O. Orr, 70 King St. East, Toronto.

**Death of Mr. W. S. Marr.**

Our British exchanges announce with deep regret the sudden death from heart failure, on Tuesday, June 7th, of Mr. W. S. Marr, Uppermill, Airedenshire. His death removes one of the very foremost breeders of Shorthorns in Great Britain, or in any other country. The Uppermill herd, which was established by his father, and carried on by him successfully for many years, has a reputation which is not bounded by oceans, and for some years the annual sale of bull calves conducted jointly by Mr. Duthie and the deceased gentleman has been one of the great events of the Shorthorn year. The Uppermill families—the Missies, the Princess Royals, the Roan Ladies, the Marigolds, and the Alexandrinas—are about as well known in America as they are in Britain. In 1901, one of the Missie females, direct from the herd, realized the great price of \$6,000 at public sale in Chicago, being purchased by Senator Edwards, of Rockland, Ontario, and the strain has a very high reputation for all that goes to make up excellence in breeding. Only the other day, a bull bred by Mr. Marr was sold at Buenos Ayres for \$11,000. Mr. Marr was in the prime of life, being only forty-two years of age, a fact which will intensify the regret with which the news of his death will be received by Shorthorn breeders the world over.

**Red-clover Midge.**

In West York the heads of red clover are filled with midge, so that only an occasional petal will bloom. Farmers wishing to get red clover seed this autumn should cut their meadows now while the midge is in the embryo state. By doing so myriads will be destroyed and the clover hay will be more nutritious than if cut later. I would suggest that the mowing machine be set to cut two or three inches high. This will hasten the growth of the second crop of clover, so that it will bloom before the second brood of midge make their appearance. WILLIAM RENNIE. Fairbank, Ont.



Holstein-Friesian Ass'n Annual Meeting.

The nineteenth annual meeting of the Holstein-Friesian Association of America was held at Syracuse, N. Y., on June 1st, President Henry Stevens, of Lacona, N. Y., in the chair. There were present about 200 members. The proposition to increase the fee for registry on imported cattle was passed, and the fee is now \$25 each. The fees for registry of bulls were reduced as follows: Non-members, \$4, and if over one year, \$8; members, \$2, and if over one year, \$4. The amendment relating to the description of color markings was passed, and at a near date all certificates of registry will bear diagrams of the color markings instead of word descriptions as formerly. It was voted to discontinue the use of equivalent calculations of commercial butter in the official test work; also to express weights in pounds and decimals of pounds. A system of records involving tests for butter-fat for eight months was provided for, in place of semi-official yearly butter-fat records, as proposed in the call. The election of officers resulted as follows: President, A. A. Cortelyou, Neshanic, N. J.; First Vice-President, W. A. Matteson, Utica, N. Y.; Secretary and Editor, F. L. Houghton, Brattleboro, Vt.; Treasurer, W. R. Smith, Syracuse, N. Y.; Supt. of Advanced Registry, S. Hoxie, Yorkville, N. Y.

MARKETS.

Last week saw quite a variation in Toronto livestock market prices. Early in the week cattle of all kinds were wanted, and prices were high, consequently there was a rush at the end of the week, with the natural result that everything was easier, the poorer quality stuff suffering a considerable decline. Hogs have experienced no change. Grain markets are quiet.

LIVE STOCK, Toronto Market.

Exporters.—Choice, well-finished, heavy exporters, \$5.40 to \$5.70 per cwt.; medium at \$5.00 to \$5.35. Export bulls.—Choice export bulls, \$4.25 to \$4.50, medium at \$3.75 to \$4.00. Export cows.—Prices ranged from \$4.25 to \$4.50 per cwt.

Butchers'.—Choice picked lots of butchers', equal in quality to best exporters, 1,100 to 1,200 pounds each, \$5.25 to \$5.45; loads of good, \$4.65 to \$5; medium, at \$4.35 to \$4.60; common, \$3.75 to \$4.00; rough and inferior, \$3.00 to \$3.50 per cwt.

Feeders.—Short-keep feeders, 1,100 to 1,200 lbs. each, \$5 to \$5.25; those weighing from 950 to 1,050, of good quality, \$4.25 to \$4.50 per cwt.

Stockers.—Choice yearling calves, \$3.80 to \$4.10; poorer grades and off-colors, \$3.25 to \$3.75, according to quality.

Milch cows.—Milch cows and springers, from \$30 to \$35 each.

Sheep.—Export ewes, \$4 to \$4.25; export bucks, \$3 to \$3.50. Spring lambs.—Prices range from \$2.50 to \$5 each.

Hogs.—Prices for straight loads, fed and watered, \$5.10 per cwt.; and \$4.85 for lights and fats.

GRAIN AND PRODUCE.

Toronto Wholesale Prices.

Wheat—89c. to 90c. for No. 2 red and white, west and east; goose, 75c. for No. 2 east; spring, 85c. for No. 2 east. Manitoba wheat is easier at 92c. for No. 1 hard, 91c. for No. 1 northern, 88c. for No. 2 northern, and 85c. for No. 3 northern, at Georgian Bay ports, and 6c. more grinding in transit. Flour—Cars of 90 per cent. patents are quoted at \$3.65 to \$3.70 in buyers' bags, middle freights; choice, 15c. to 20c. higher. Manitoba flour is steady at \$4.80 for cars of Hungarian patents, \$4.50 for second patents,

and \$4.40 for strong bakers', in car lots, bags included, on the track, Toronto.

Millfeed—\$16.50 to \$17 for cars of shorts, and \$15 for bran in bulk west or east. Manitoba millfeed, \$19 for cars of shorts and \$18 for bran, sacks included, Toronto freights.

Barley—42c. for No. 2, 40c. for No. 3 extra, and 38c. for No. 3 west or east.

Buckwheat—45c. for No. 2.

Rye—57c. to 58c. for No. 2.

Corn—45c. for Canadian; American, 58c. for No. 2 yellow, 57c. for No. 3 yellow, and 56c. for No. 3 mixed, in car lots, on track, Toronto.

Oats—No. 1 white, 32c. east, and No. 2 white, 31c. east.

Peas—61c. to 62c. for No. 2 west or east, and milling peas are worth 8c. more.

Potatoes—Continue firm in tone. Quotations are, 85c. to 90c. for cars on track, and 95c. to \$1 for out of store stocks.

Baled Hay—There is plenty offering, and the demand is still quiet. Car lots on track here are quoted at \$8.50 to \$9 per ton.

Baled Straw—Is offering freely, and the market is easy in tone at \$5 to \$5.50 per ton for car lots on track here.

Butter—The situation is unchanged, and the receipts of all lines are still large. The demand continues active for good quality stock. Creamery prints, 17c. to 18c.; dairy pound rolls, good to choice, 11c. to 13c.; dairy, large rolls, 11c. to 12c.; dairy, poor to medium, 9c. to 10c.

Cheese—Is steady and the market here is quoted unchanged at 9c. for new large and 9c. for new twins. The little old large left on the market is selling at 10c. to 10c.

Eggs—15c. to 15c.; seconds are steady at 12c. and 12c.

Retail Prices, Toronto Street Market.

Table with 2 columns: Item and Price. Items include Wheat, white; Wheat, goose; Wheat, spring; Oats; Barley; Rye; Peas; Hay, No. 1 timothy; Straw, sheaf; Dressed hogs; Butter; Eggs, new laid; Fall chickens, pair; Spring chickens, per lb.; Spring chickens, per pair; Old hens; Spring ducks, per pound; Apples, per barrel; Potatoes, per bag.

Montreal Wholesale Prices.

Oats—No. 2, 37c. for car lots; No. 3 Peterboro, 35c. Barley—Market quiet at 50c. to 51c. for No. 2, and 49c. to 49c. for No. 3 extra afloat. Corn—54c. to 54c. afloat for No. 2 Chicago mixed; car lots are quoted at 62c. to 63c. Peas—71c. to 72c. afloat. Butter—Choice fresh creamery, 17c.; fine to finest, 16c. to 17c.; good, 16c. to 16c. Cheese—Finest, 8c., with some holders refusing to part with that class of goods at under 8c. Quebec goods are quoted at 8c. to 8c., and Eastern at 8c. Live Hogs—The market is steady, with sales at \$5.50 per cwt. Abattoir fresh-killed hogs, \$7.25 to \$7.50 per cwt.

Montreal Markets.

Montreal.—Good medium cattle, \$5 to \$5.50; calves, \$2 to \$8 each. Shipping sheep are 4c. per pound, and the others 3c. to 3c. a pound. Lambs, \$2.50 to \$4.50 each. Good lots of fat hogs, 5c. per pound; store hogs, \$7 to \$10 each; small pigs, \$1.25 to \$2.50 each.

Cheese Markets.

Stirling, June 15.—1,200 cheese boarded; sales at 8c. and 8 1-16c.

Picton, June 15.—2,250 boxes, all colored; highest bid, 8 3-16c.; 1,035 sold.

Peterboro', June 15.—2,741 cheese boarded, 2,447 June and 299 May make; 1,509 boxes sold at 8 1-16c. and 8 3-16c.

Woodstock, June 15.—3,500 boxes offered; 200 boxes sold at 8c.; no other sales made.

Campbellford, June 14.—1,625 cheese registered; 1,185 sold at 8 3-16c.; balance unsold; 8c. refused.

Brockville, June 16.—3,785 boxes registered; eight cents bid; none sold on board.

Madoc, June 16.—1,200 cheese boarded; sold 235, at 8 1-16c.; balance unsold.

Tweed, June 16.—720 cheese boarded; sales, 100 at 8c., 240 at 8 1-16c.

Kingston, June 16.—1,880 boxes boarded, of which 1,100 were colored, 780 white. Highest bid, 8 1-16c. One hundred and sixty-five were sold.

Winchester, June 16.—456 colored and 1,233 white registered; 8c. was offered; none sold on board.

Vankleek Hill, June 16.—1,387 white and 234 colored cheese boarded; 121 boxes withdrawn, too green for sale; 8c. bid, all sold at this figure.

Napanee, June 17.—To-day's cheese board offerings, 2,549 boxes; 1,369 white and 1,180 colored. Sales, 650 white and 660 colored at 8c.; balance sold on curb at the same price.

Perth, June 17.—2,720 cheese on market; all sold, ruling price 8c.

Brantford, June 17.—1,733 boxes cheese were offered, and 862 sold at 8c. to 8c.

Farnham, P.Q., June 17.—708 boxes of white cheese and 12 boxes of butter offered to-day; butter sold for 17c. and cheese at 8c.

Ottawa, June 17.—2,309 boxes boarded to-day; 1,436 white and 873 colored; 8c. was bid for white and 8c. for colored; all were sold except 667 white and 245 colored.

Iroquois, June 17.—1,262 colored and 60 white cheese were boarded; 7c. was bid on the board; majority sold on curb at 8c.

Kemptville, June 17.—2,139 cheese offered; all but a few lots sold at 8c.

London, June 18.—3,768 boxes boarded, colored; 9c. was figure paid for 55 boxes of Stilton; 8c. offered for others.

Wool Market.

Toronto.—The market is unchanged. The arrivals of new clip washed continue light, on account of the cool weather. Unwashed is coming in fairly well. Quotations are as follows: Washed, 17c.; rejections, 13c.; unwashed, 10c. to 11c.

Buffalo Markets.

East Buffalo.—Cattle—Prime steers, \$5.85 to \$6.20; shipping, \$5.25 to \$5.95; butchers', \$4.75 to \$5.60. Veals—\$4.25 to \$5.50. Hogs—Heavy, \$5.25 to \$5.80; mixed, \$5.80 to \$5.32; Yorkers, \$5.25 to \$5.85. Sheep and Lambs—Lambs, \$4.50 to \$7; yearlings, \$6.25 to \$6.50; wethers, \$5.25 to \$5.80; ewes, \$4.25 to \$4.50; sheep mixed, \$2.50 to \$5.

Chicago Markets.

Chicago.—Cattle—Good to prime steers, \$5.75 to \$6.65; poor to medium, \$4.50 to \$5.65; stockers and feeders, \$3 to \$4.75; Texas-fed steers, \$5 to \$5.60. Hogs—Mixed and butchers', \$4.85 to \$5.10; good to choice heavy, \$5 to \$5.75; light, \$4.80 to \$5.05. Sheep—Good to choice wethers, \$4.75 to \$5.25; native lambs, \$5 to \$6.50; spring lambs, \$5 to \$7.65.

British Cattle Markets.

London.—Canadian cattle are steady at 10c. to 12c. per pound; refrigerator beef, 10c. to 12c. per pound. Sheep steady, 12c. to 14c. per pound; yearlings, 15c.

ILLUSTRATIONS.

List of illustrations including: The Bovine Line Up—Stock Parade, Edmonton Exhibition, July 2nd, 1903; Lawrence A. Walch; Hereford Heifer, Empress; Suggested Barn Plan for Fruit Farm; Barred Rocks—A Good Utility Pair; "Charge all the Traffic will Bear"; EDITORIAL: Our Horse Supply; Seed Grain Growing; An Economist; The Discontented Farmer; Cleanliness is Profitable; Interested and Instructed; HORSES: The Morgan Horse; Guelph Horse Show; Provide for the Cold.

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"Now June is here  
With sunshine clear,  
And roses blooming everywhere;  
The world's in rhyme  
With summer time,  
And every day in June is rare."

### Tirzah's Chimney.

By Clara Parker.

Five years before when Solomon Green had asked Tirzah Hitchcock to become the second Mrs. Green she had tartly refused the honor. "I ain't much of a beauty," she had told him, "but no warmed over affection for me, thank you, Solomon Green."

Solomon had reasoned all in vain. "Why, Tirzah," he pleaded, "it ain't no ways nateral for wimmen to live alone. Every mornin' your climbly is the best thing I look at, an' if I wasn't to see the smoke a comin' out of it, I'd be scared to death thinkin' you was robbed, or killed or sunthin'."

"What's the use in us keepin' up two houses when one would do jest as well?"

Since that time the two had hardly exchanged a dozen words. Solomon had not married, neither had Tirzah, and now, on the night before her fortieth birthday, she sat looking around her orderly little home with the most desolate feeling at her heart she had known for years.

To-morrow would be her birthday. Mechanically she had gone through a few preparations for that rather dubious festival. The smallest hen from her flock was curled up ready for roasting inside the same pan in which her hens had been roasted for the last fifteen years. A green apple pie sat on the pantry shelf beside a sour cream spice cake, while a plate of mealy tarts were waiting patiently the filling of grape jelly to be theirs on the morrow.

Never before, at that season of the year, had Tirzah's hens been laying so well.

Her cow had never been known to give so large a yield of milk. There were three new kittens in the basket behind the kitchen stove, and her canary bird was the loudest singer in all the village. But for all this Tirzah was not satisfied.

She had heard that day that the widowed cousin who usually kept house for Solomon Green had unexpectedly married.

Of course, this was nothing to Tirzah, but still—here she sniffed two or three times and then, without a particle of explanation to the astonished cat, who had come forth demanding her allowance of milk, sat down in her cane-seated rocker and burst out crying.

For five minutes she cried and then she dropped her apron and looked guiltily about.

A thought had just intruded itself upon her which she considered in the light of a secret crime. Over and over again, despite herself, she rehearsed Solomon's proposal; each word as it had been spoken until, suddenly, like the handwriting upon the wall, there stood forth these words: "Every morning your climbly is the first thing I look at—"

Had he meant it? Did he still turn his eyes with the coming of the morning light, down the little hill which lay between them? Did her lonely chimney still claim his thoughtful care?

Five minutes later the dark plot was formed and Miss Tirzah was hurrying about her preparations for the night with cheeks that burned with fires she had thought, long since, gone out forever.

The following morning more astonished creatures there could not be than were

the kittens, cat, cow, hens and canary of Miss Tirzah Hitchcock. Something, certainly, had gone wrong.

Six o'clock came and the stable door was not opened by the brisk mistress. Half-past six, and still no fire in the kitchen stove. Seven o'clock and no breakfast yet for the mistress and her indignant dependents.

Loud and angry rose the protest of Brindle from her snug stall, while the old cat and canary did their best to stir things up inside.

Meanwhile, hidden by the parlor curtains, crouched Miss Tirzah wrapped in a huge red-and-green shawl, her heart fluttering between shame and dread, while her eyes watched with fevered anxiety the house just up the hill.

Oh! how pitifully foolish now, looked her deep-laid scheme when faced in the broad light of day.

Of course he had forgotten, years ago, to watch her chimney. What was it to him now, whether she had a fire or not? She would go this very minute and build it. She—

Why, what was that? Someone was coming out of Solomon's front door. Someone—why, it was Solomon himself, creeping forth as if he had just been engaged in stealing his own spoons and was now making off with them to a place of hiding.

Where was he going?

The heart of Tirzah stood still for one long and nerve-destroying second, then it went on again with such a hammering and commotion beneath the red-and-green shawl that a less plucky woman would have fed for the camphor bottle on the instant.

Solomon was coming down the hill straight toward her tiny home. Coming, it is true, not as the conquerors come with bold and martial tread, but after a timid, slinky fashion of a man who has had his last timid advances in that direction scorned.

When it was certain past all shadow of a doubt that he was coming into the house, Tirzah, the crafty creature, betook herself to the cane-seated rocker, where, wrapped to the chin in the big shawl, she waited with palpitating heart for the timid knock which at length sounded on her door.

"Come in," she then called feebly, at which the door was opened cautiously, inch by inch, until the entire figure of the middle-aged lover was disclosed to view.

At the sight of Tirzah, bundled up and in the arm-chair, all of his hesitation vanished.

"Why, Tirzah, are you took sick?" came in the loud, cheery voice which had not sounded in the room for five years past. "An' it's cold enough in here to freeze the hair off a dog's back. Let me fix you a fire."

In a few moments a cheerful fire was roaring up the chimney. To be sure, there were more chips on the floor than Miss Tirzah would have scattered in a twelve-month and the cat was spitting out her indignation in a remote corner, over an injury done her sleek tail by the heavy boot of Miss Tirzah's new fireman.

Tirzah, however, noticed neither the chips nor the anger of her cat. Not redder than her cheeks was the blazing fire, for Solomon had taken courage and was sitting beside her, inquiring kindly when she "was took" and if he shouldn't go and "fetch the doctor?"

"You see, Tirzah," he said with a guilty laugh, "I allers look at your climbly the first thing in the mornin'—I've kinder got into the habit. I know you don't like it, but—eh—why, Tirzah, woman, whatever ails ye?"

"Solomon," cried Tirzah, and she al-

most screamed it in her excitement, "I—I do like it. I—oh, Solomon—I didn't build a fire a purpose."

And Solomon—

He rose then and there and kissed her!

—[The Housekeeper.

### Travelling Notes—Naples.

By Eleanor.

This week I am to take Mollie's place and recount a few of our adventures at Naples. Hearing of an excursion that would just suit our purses and inclinations, we hurriedly made up our minds to a three days' visit to the neighborhood of Vesuvius. The only disadvantage was the night travelling on the outward journey, but as we had a comfortable first-class carriage all the way to ourselves we did not fare badly in the matter of sleep. Our arrival before daybreak on Sunday morning

might be considered an awkward matter to many, but to us it only added fresh interest, for we certainly saw a side of Italian city life that we otherwise never would have seen. True, there were no cabs at the station at that hour, and all the houses were in darkness. Our only resort until daylight came was the restaurant, which, fortunately, was open, and we made a hearty meal before setting out. Day having made its appearance, and with it the cabs, we took one of the latter, and were soon rattling over the cobblestoned streets. Our drive we are not likely to forget. Seated in a small four-wheeled carriage, not unlike a baby Victoria, with the driver perched up high in front, and drawn by a stout little pony, we dashed along at a rate that imperilled our lives all the way. We only just escaped a collision with an electric train, and from that time we held our breath in suspense as to what might happen. For miles we drove through dirty, busy streets, teeming with life of a different nature from anything we had hitherto seen. Herds of goats and cows, with their calves roped to their horns, and all provided with jingling bells, were being driven everywhere up to the house doors of the leading thoroughfares. Here and there we would see them being milked into small jugs or glasses. It is said that the goats are driven upstairs to the different landings that the customers may see that the milk is not being watered, and, even then, if they are not watchful the unscrupulous milkman puts the water in first. Butchers' shops abounded everywhere, with the poorest looking meat. In many places we saw the joints being cut up to resemble what looked more like cats' meat than that for human consumption. At the end of half an hour, after much climbing of hills, we stopped at our pension. It was full, but another place lower down the hill was recommended. A descent followed. From this point we had a beautiful view of the Bay of Naples, with the Island of Capri in the distance. From the vegetation around us, the orange, lemon and eucalyptus trees, I might easily have imagined myself in Australia. In-

deed, I have frequently been struck with the great similarity of the two countries. With us the olive grows abundantly in our Adelaide plains, likewise the loquat, orange, lemon and the native "gum," and the distant hills here have the same blue, almost purple, shades as ours. Again, the warm, beautiful sunshine is another link. At the pension we managed to secure rooms, and dismissed the cabman, though, as usual, he had a grievance over the payment, and he was well paid. Travelers who have had experience with Italian cabmen tells us we should know the exact fare per hour, or mile, as the case may be, and give a penny or two extra, then the driver is delighted; if he is well paid, he invariably grumbles for more. After refreshing ourselves with a good wash, and half an hour's rest, we took the electric train into the city. The tramway wound round the hillside, from which height we had glorious views at every curve of the route.

### OUR FIRST VIEW OF VESUVIUS.

The sun came out warmly and lit up the lovely blue of the Mediterranean sweeping round in a graceful bay at the foot of the old-world mountain. Its top was visible, and beautiful white curls of smoke issued from its crater. Later in the day it became enveloped in a cloud of its own making, and we never had one glimpse of it by night, though we were told no lurid red of lava was visible at this time. Life was even more busy in the streets now. It might have been any other day of the week than Sunday. Washing is always an evidence in Italian cities—clothes of various hues and shapes are never lacking—hanging from the windows of the dwelling houses, but we have never seen so much of it as we did in Naples this Sunday. Women were at their tubs on the sidewalks, clothes ropes were even hung up along the streets, and all kinds of articles fluttered at their will in the breeze. Donkeys whose paniers were loaded with vegetables made their way from market. The cabman were calling after—nay, almost persecuting—pedestrians for their patronage. And such loads as these little ponies have to drag! They are shockingly treated, being goaded and whipped all the time by their inconsiderate drivers.

ELEANOR.

(To be continued.)

### Undismayed.

He goes to his task with a song and a smile,  
He never says "may be" and "after a while."

The fellow that's willing to work,  
But he lives in the sunshine that gladdens to-day,  
And he lightens each load by his good-natured way—  
The fellow that's willing to work.

He isn't afraid of the trusts that expand,  
He doesn't look forward to woe in the land.

The fellow that's willing to work,  
For he knows that the earth will give food, drink and air,  
And there's always enough and a little to spare,  
The fellow that's willing to work.



Domestic Economy.

CREAM PIE.

Make a bottom crust in a deep pie tin, put in a number of holes with a fork, and bake in a quick oven. This may be baked a day or two before using if more convenient. An hour or two before you wish to use the pie, take one pint of moderately thick cream, place it on ice or in a very cold place. A short time before dinner beat it very stiff with an egg beater; stir in it two tablespoonfuls of sugar, and a scant teaspoonful of vanilla or a tablespoonful of sherry, as preferred. Fill the crust with the cream and serve.

CREAM RHUBARB PIE.

To one cup of finely-chopped rhubarb add a cup of sugar and grated rind of orange or lemon. Put a tablespoonful of cornstarch in a cup, moisten with a tablespoonful of cold water and pour in enough boiling water to fill the cup full; add this to the rhubarb. Beat light the yolks of three eggs and add to the mixture and pour into a pie dish lined with good crust. Bake without top crust. When cold cover with a meringue made with the whites of the eggs and half a cup of powdered sugar. Brown delicately in the oven. Serve cold.

RHUBARB CHARLOTTE.

Butter a baking dish well and cover the bottom with bread crumbs to the depth of an inch; then add a layer of rhubarb that has been chopped fine or sliced very thin. Cover well with sugar, then add another layer of bread crumbs, dot this layer with bits of butter, add another layer of rhubarb, sugar and crumbs, and so continue until the dish is full; have the top layer of crumbs covered with bits of butter. Bake slowly—covered at first—for an hour.

TAPIOCA CREAM.

Soak over night two tablespoons tapioca in enough milk to cover. Bring one quart milk to boiling point. Beat well together three eggs, half a cup of sugar and one teaspoon vanilla for flavoring, stir into the boiling milk, add the tapioca, let boil once, and take off the fire. Serve cold. The whites of the eggs may be kept out to spread over the top, if preferred. In this case, they should be whisked stiff with three tablespoons fine sugar. Tapioca cream is delicious served with sliced pineapples, bananas, or oranges. With fresh berries it also combines delightfully. When used in this way, it is nicest placed in alternate layers with the fruit, and the fruit should be lightly sprinkled with sugar.

Her Mother's Voice.

"Imprinted scenes of love gone by" hold the father as by a spell, when the daughter, in the very tones of her young mother's voice, sings one of the old, old songs he loves so well. By the rapt expression upon his face, by its far-away look, and by his attitude of intense attention, we know that he is living over again a scene of his own happy past. Just now he is the young lover turning over the pages for the sweetheart of his youth, and if the young couple should have any very especial request to make, they could choose no better moment to prefer it than now, when the dream ended, the past merges into the present, and the father's blessing is asked in the sweet tones of the young mother's voice.

H. A. B.

The coffee was weak, the toast burned to a cinder, and the ham as hard as leather—or at least he said so. His wife's long patience gave way.

"John Henry," said she, "I've tried faithfully to cook for you for twelve long years. No one in the town has better cooked food, yet you are always finding fault. Why can't you praise me once in awhile? I'd like to know that!"

He looked up in astonishment. "Well, if you ain't the most unreasonable woman I ever saw!" he ejaculated. "Why, many and many is the time I've sat down to a meal and never said a word about it! Anybody would know there wasn't any fault to be found, or I'd a' found it. And yet you want a better compliment than that! That's just like a woman: she can't tell a compliment when she gets one!"



"I Know Whom I Have Believed."

"I want—am made for—and must have a God, Ere I can be aught, do aught; no mere Name Want, but the True Thing, with what proves Its truth, To Wit, a relation from that Thing to me Touching from head to foot: which Touch I feel, And with it take the rest, this Life of ours!"

How many there are 'who could echo these words of Browning. They, too, "must have a God." How many say to-day, as the Jews said long ago: "How long dost Thou make us to doubt? If Thou be the Christ, tell us plainly." They want physical proof that Jesus is alive. Like St. Thomas, they think they must see and feel Him before they can be quite sure, before they can say with St. Paul: "I know Whom I have believed." People who do not know Christ, of course, think that he who profess to know Him are either hypocrites of half-crazy enthusiasts. They say, "Bring your proofs of His existence, and we, too, will believe." And He has convinced us that He is still alive "by many infallible proofs," as He did His friends in the first century. Millions of clear-headed men have been able to declare, without a shadow of doubt: "I know Whom I have believed," and they did not sacrifice all reason and common sense either, although it was not by reason they found Christ. Now, I am not going to attempt to convince doubters by bringing up an array of Christian evidences. There are plenty to be had, gathered together in handy form by many wise and up-to-date writers, but it is hard to find Christ through them. It may be possible; I don't know, but I think they are chiefly useful to show reason that it may safely follow

where faith has already led the way. We don't wait to understand the science of electricity before we make use of its advantages. We accept as facts the apparently impossible things it can perform, such as the lighting of a room by the turning of a button, moving heavy cars and machinery with its invisible force, speaking with a human voice as in a phonograph, etc. Afterwards, we may, if we like, try to understand how these marvels are done.

Our Lord "showed Himself alive after His passion by many infallible proofs," but He only showed Himself to friends, offering no proof to Caiaphas or Pilate. It is the same to-day. We cannot show our proofs, but they are quite convincing to us, and they are, not the proofs generally called "evidences of Christianity," either. The rich man in the parable wanted to send proof of the after-life to his brothers who were still in this world. He said, as many might say now, "If one went unto them from the dead, they will repent." But his request was refused, for it would have been useless to grant it. Why? Because it has always been true that "if they hear not Moses and the prophets, neither will they be persuaded, though one rose from the dead." As if to show the truth of these words, our Lord did raise another Lazarus from the dead. His death and burial were well known to crowds of people, and his resurrection was public and unmistakable—not done in a darkened room, but in open daylight. What was the result? His enemies showed so little sign of repentance that they at once began to plan how they might put Lazarus to death again, because his death helped the cause of the hated "Nazarene."

I think the people of this age ought to know better than to say a thing is impossible, and that no one else can feel perfectly certain of it because they themselves are ignorant. That is about as sensible as the woman who quarreled with her husband because he said water could be made solid. They lived in

the tropics, and he, for the first time, had been shown a lump of ice. When he told his wife, she said she would not live with such a liar, so left him. But that only showed her ignorance, and did not make his statement untrue. A thing may be contrary to our experience, and yet a fact all the same. Suppose that a man who had been accustomed to modern inventions could go back a hundred years or so. He would probably be looked upon as crazy if he declared that without raising one's voice it was possible to talk to a person fifty miles away, and also possible to send a message across the ocean in a few minutes. But could all the ridicule he received for believing in a seeming impossibility shake his belief in these facts? He would "know" they were true, though probably he might not be able to prove his statements so as to convince anybody else. So it is with Christians; they "know" that their Redeemer liveth, and their reasons for this knowledge are founded on experience, and are perfectly comprehensible to other Christians, but incomprehensible to unbelievers. St. Paul's words are still true: "The natural man receiveth not the things of the Spirit of God, for they are foolishness unto him, neither can he know them, because they are spiritually discerned."

But our Lord will not willingly leave anyone in the darkness of doubt or unbelief. He still, as on that first Easter Day, offers unmistakable "proofs" to His friends. He has promised that any man who is willing to do His will shall "know." Are you willing to obey Him, even to the death, are you eager to know the truth? Then prove that you want to find Him by a real search. Study the Bible, and read other books which tell you about Him. Go to church regularly. Perhaps you think that won't do you much good, if you are doubtful about the truths taught there, but I think you will make a great mistake if you are careless about this. St. Thomas may not really have been more skeptical than the other disciples, for when the women said that the Lord was risen, their words seemed only "idle tales" to them all. He remained longer in doubt than the rest, and for this reason only—as far as we can see—because he was absent from the Christian service on that Sunday. The other Disciples went to church, as we might say, and they saw and believed. The



(W. Q. Orchardson, R. A.)

"Her Mother's Voice."

(Original in National Gallery British Art.)



next Sunday St. Thomas also went to church, and he saw and believed. Suppose he had stayed away because he did not believe the story of the Resurrection, would his doubts have been satisfied then? Then our Lord has promised to manifest Himself to those who show their love by obedience. Are you trying that plan of finding Him? St. John uses very plain language in speaking of those who profess to know God, and yet disobey Him: "He that saith, I know Him, and keepeth not His commandments, is a liar." He also says that we must love others, not only in word, but in "deed," and then we "know that we are of the truth." Are you trying that plan of finding Him?

"What! if thy way to faith in God Should lie through faith in Man!"

There is a great deal of talk in these days about "The Unknowable God," and men excuse their ignorance, and take no pains to cure it, saying that if there is a God He is too great and awful to be understood by human intelligence—and so He is. Theology is the grandest of all sciences, and there is no limit to it. It seems to me that the thought of immortality would be insupportable if we stopped short in our growth and knew everything there was to know as soon as we left earth behind us. God is infinite, and we must go on learning to know Him better through all eternity, and yet never know Him fully. Is not that a grand thought? "Who only hath immortality, dwelling in the light which no man can approach unto; Whom no man hath seen, nor can see."

If you cannot already say truly: "I know Whom I have believed"—know Him as a personal friend, although you only know in part—I beg you to go on seeking, and never give up until you find Him.

God will not work miracles to force belief on the minds of those who do not wish or intend to obey Him. He does not wish to put them into the awful position of the devils who, as St. James says, "believe and tremble," and go on hardening themselves in wickedness—sinning against knowledge. Herod was very glad to see Jesus because he was curious to see a miracle done by Him, but his curiosity was not gratified—the divine prisoner even refused to speak to him. It is the same to-day. God hides Himself in thick darkness from men who seek Him only out of vulgar curiosity, but those who, as Solomon says, seek as for silver or hid treasures, will, sooner or later, "find the knowledge of God."

"God is not dumb, that He should speak no more!  
If thou hast wanderings in the wilderness  
And find'st not Sinai, 'tis thy soul is poor!  
There towers the Mountain of the Voice no less,  
Which whose seeks shall find, but he who bends  
Intent on Manna still and mortal ends,  
Sees it not, neither hears its thundered lore!"

HOPE.

### A Day in June.

By James Russell Lowell.

And what is so rare as a day in June?  
Then, if ever, come perfect days;  
Then heaven tries the earth if it be in tune.

And over it softly her warm ear lays;  
Whether we look or whether we listen,  
We hear life murmur or see it glisten;  
Every clod feels a stir of might,  
An instinct within it, that reaches and towers

And, grasping blindly above it for light,  
Climbs to a soul in grass and flowers;  
The flush of life may well be seen  
Thrilling back over hills and valleys;  
The cowslip startles in meadows green,  
The buttercup catches the sun in its chalice,  
And there's never a leaf or a blade too mean  
To be some happy creature's palace.



### How We Celebrated Empire Day.

#### PRIZE ESSAY.—CLASS II.

Two or three weeks before Empire Day, the teacher suggested that we should get up a picnic to celebrate Empire Day. We all thought that it would be a good plan, so we began at once to make preparations. Our teacher went to the owners of the land around the lake to see if we could have the grounds for Empire Day. We (the school children) got ready songs and recitations suitable for that day. We were all anxious for the day to come. In the morning the teacher and ourselves went to the lake to get tables, benches and such things fixed. After all the work was finished, we got ourselves in shape for the picnic. About half-past one the crowd began to gather. There being two large swings there, some had a swing, while others went for boat rides. They were enjoying themselves as best they could until about three o'clock or after. The programme began then. We had songs and recitations suitable for Empire Day, and speeches from some of the men on loyalty to our country. The last and best thing on the programme was a march. One of the organists of the church played the piano, while all the children formed in pairs and marched, singing "The Maple Leaf Forever"; as they marched, some of the children (one in every pair) held flags in their hands, and while the chorus was being sung, they would wave them. After they had finished the march, one of the boys called out, "Three cheers for the Red, White and Blue"! It was then near teatime, so some of the young ladies went into the hall and got tea ready. We had a hearty meal. After that we all joined in playing some of the most common games. Before we left, we sang "God Save the King," thus ending the Empire Day.

MABEL GIFFEN (aged 12).  
Mayfield, Ontario.

#### Empire Day.

#### PRIZE ESSAY.—CLASS II.

Since our late Queen Victoria has been laid in her royal grave, we call the 24th of May "Empire Day." This day will stand as a memorial of our Queen forever.

As May is coming, with its flowers and foliage, it is time to think of planning how to spend Empire Day; I was intending to have a jolly day, as it is a patriotic holiday.

My sister Margaret and I always trim the veranda with bunting and flags, then hang up Chinese lanterns. Some of our city friends are always present on Empire Day. In our village, we always celebrate the great day widely known as the noble Queen Victoria's birthday.

In the morning, we go to the village, where we have races—there are races for girls, boys and old men—and different kinds of jumping. Then my friends and I go home and get our dinner. After dinner we went to the ball grounds to watch the ball match between Glanford Station and Mount Hope; Mount Hope was winner of the day. As soon as the game was over, we went to the village and bought fireworks, consisting of rockets, pinwheels, and bunches of fire-crackers.

When we reached home, we talked about our beloved Queen, and by that time tea was ready. The dining-room was decorated with flags and red, white and blue bunting. The table was under a canopy of wild flowers; they seemed more like nature than the grand hot-house roses.

After tea was over, we went out on the decorated veranda and talked till nearly dark. Then there was a hustle and excitement to get our fireworks ready for the great celebration of Empire Evening.

We all went out on the large grassy lawn and formed a circle. In the middle of the circle was the fire man, who lit the fireworks. Then we thought it time to go in and have some music: Margaret played the piano, and my city cousin, Althea, played the violin; my other cousin, Hugh, played the mouthorgan. We danced around the Maypole. After

this we went out and played hide-and-go-seek, and yard-in and yard-out. After getting tired of these games, we went back to the fireworks. Soon as we shot off the final cannon, we all sang, "The Maple Leaf Forever." Then retired and went to sleep to dream of the jolly time we had on Empire Day.

GLADYS C. WEBBER (aged 12 years).  
Glanford P. O., Ontario, Canada.

#### Empire Day on a Farm.

#### PRIZE ESSAY.—CLASS III.

"Mamma, how shall we spend Empire Day this year?" asked a bright little girl, of nine years. "You know our cousins, Horace and Elsie, are coming to spend the day with us, and I want to make it as pleasant as possible." "Yes, Eva, I know, and I will be thinking about it this afternoon; now I will make the candy for to-morrow," her mother replied.

Early next morning the guests arrived full of fun. "Oh, I'm so glad you came early," cried Eva, as her cousins jumped down from the carriage. "What shall we play?" "Hide-and-seek," exclaimed Elsie. "Oh, yes, do play that!" came in chorus from the others. When they were tired of this, Eva led them into the house to see her play-room. After admiring it, they all went and got ready for dinner. After dinner, they went to the wild grapevines and had a jolly romp. This was followed by a game of "tag" in the big barn. Then came tea at five o'clock. After tea everybody rested till dark. Then came the best of all, papa came out with a great surprise. All of a sudden, he lit a large piece of fireworks, and there was a beautiful picture of the Queen in all colors. This was followed by a lot of such pictures, among which were the Queen, the King, and Queen Victoria. After the fireworks had all been lit, they went into the house, and Eva's father told them why they celebrated the 24th of May was in honor of their beloved Queen Victoria, during whose reign the Empire of India had been added to the Crown, this making her both Queen and Empress, and her personal interest in the welfare of her people; that the day which has been observed for so many years as her birthday was preserved a national holiday by making it Empire Day.

Then they all joined in singing "The Maple Leaf Forever," and "God Save Our King." At nine o'clock, Uncle Will came to take Horace and Elsie home, so this ended one of the joyful Empire Days on a farm.

MYRTLE AWREY (aged 10 years).  
Hamilton, Ont.

#### Unknown Children.

I meet them in the country lane,  
In village shops and city street,  
With cheeks all glowing in the rain,  
Or voices gladdening in the sleet,  
Or eyes enraptured with the snow—  
The children I should like to know.

How fair creation is to them!  
Unweighted by the cloak of years,  
They dance upon the lustrous hem,  
And lose in rainbows all their tears.  
How easily the hearts o'erflow  
Of children we should like to know!

Their sleep is deeper than our peace,  
Their waking gladder than our dreams;  
Their guardian angels never cease  
To speak to them in winds and streams.  
The days are lifetimes, sweet and slow,  
To children we should like to know.

Oh little heart above this page,  
The road is long, the road is hard;  
But do not thou obscure in age  
That early sky so thickly starred.  
Keep sweet the faith of long ago,  
Dear child, whom I shall never know.  
—Ethelwyn Wetherald.

"I wonder why people like to wear squeaky shoes to church?" said the nervous boarder.

"Perhaps," said Asbury Peppers, "they do so to call the pastor's attention to their soles."



### The Morning After

a heavy and rich meal will be unattended by discomfort or sickness if, before going to bed, you will take

## Beecham's Pills

Sold Everywhere. In boxes 25 cents.



### PIMPLES

### AND BLACK-HEADS

CURED AT YOUR HOME.

With our scientific home treatments, specially prepared for such troubles, we can positively cure red nose, red face, enlarged pores and blotchy, pimply, ugly skin, no matter what the cause, and restore to the complexion a healthy, rosy glow. Consultation is free, and you are cordially invited to investigate the means by which you can be speedily, thoroughly and permanently cured. Superfluous hair, moles, etc., permanently eradicated by our method of Electrolysis. Satisfaction guaranteed. Send 10c. for book and sample of cream.

GRAHAM DERMATOLOGICAL INSTITUTE,  
Dept. F. 503 Church Street, Toronto.  
Tel. N. 1666 Estab. 1892.

## British Columbia Farms

We have for sale a very large and complete list of selected dairy farms, orchards, poultry ranches and suburban homes, in the valley of the celebrated Lower Fraser and adjacent islands on the Coast. All in the neighborhood of Vancouver. Send for our pamphlet giving weather statistics and market prices of 27 different kinds of farm produce.

The Settlers' Association,  
322 Gambie St.,  
P. O. Box 329, Vancouver, B.C.

### WEDDING INVITATIONS ANNOUNCEMENTS AT HOME CARDS VISITING CARDS

All the latest specialties and up-to-date styles. Write us.

THE LONDON PTG. & LITHO. CO.  
London, Ontario.




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



# Sharple's Tubular Separators

**A BOON TO FARMERS' WIVES**



Why not save half the standing-lifting-washing? Make your dairy work twice as easy—twice as profitable. Our friends call the Tubular Cream Separator the "Easy Way." Try it. Catalogue J 193 describes it.

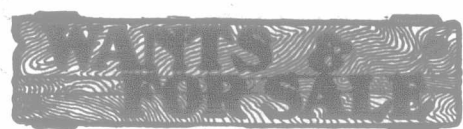
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## POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

POULTRY, cat, dog and bird supplies. Large catalogue free. Morgan's Incubator Works, London, Ont.

**A. E. SHERRINGTON**  
WALKERTON, ONT.  
Importer and breeder of **BARRED P. ROCKS** exclusively. Eggs, \$1.00 and \$1.50 per setting of 12.



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

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

WANTED—Salesmen for Auto-spray—best compressed-air hand sprayer made. Splendid seller. Liberal terms. Cavers Bros., Galt, Ont.

## \$19,000 BUYS 180 ACRES

Rich clay loam, stock, machinery and 30 cows, two teams horses, and a good wholesale milk route in Toronto. Good buildings and fences. 100 acres working land; balance pasture and valuable bush. Creek runs through pasture. Farm is

**3 MILES FROM TORONTO**

John Taylor, Todmorden, Ont.

**CLAYFIELD STOCK FARM**  
Clydesdales,  
Shorthorns and  
Cotswold Sheep

for sale. For prices and description write to  
J. C. ROSS, Jarvis, Ont.



Dear Friends,—

During the hot weather, how to keep cool becomes a pertinent question, and rightly so, since no one can think or work properly when wilted and listless by reason of the extreme heat. Possibly not everyone realizes how much the comfort of the body depends upon the food one eats, and yet the least bit of reasoning would suffice to show that this is so, and that the Eskimo does not hold to his fat and blubber, nor the inhabitant of the Indies to his fruit and fish, because of mere whim, but because such food is a necessity to him in those conditions under which he has been placed. And yet, in our variable climate, in which we have semi-tropical weather during one part of the year and sub-arctic during another, some people go on eating very much the same kind of food all the year round.

Now, can we not take our cue for the hot weather from the inhabitants of the sunny south? True, we have not his guava, his custard-apple, bread-fruit and pomegranate, and possibly we might not care for his hoe-cake and corn-pone, but we have his green vegetables, his rice and his wheaten flower, and instead of his luscious tropical fruits we have our own more delectable than they—our apples, peaches, cherries, and, best of all, the delicious strawberry, of which Burroughs says: "The singing of birds is in it, and the health and frolic of lusty nature. . . . When I was a lad and went afield with my hoe or with the cows during the strawberry season, I was sure to return at meal-time with a lining of berries in the top of my hat. They were my daily food, and I could taste the liquid, gurgling notes of the bobolink in every spoonful of them; and, at this day, to make a supper off a bowl of milk, with bread and strawberries—plenty of strawberries—well, is as near to being a boy again as I ever expect to come."

Then, the southerner has no monopoly over the whole of his fruits. Were we Burroughs, the banana might bring close to us the tangled splendors of strange tropical lands, the orange might give us a glint of parrakeets flashing through the perfumed shade of the groves of Florida, or with the pineapple might flash upon us visions of Spanish moss, "Imbowed vaults of pillar'd palm," and all the rest of it. Being but ordinary mortals, however, we are much more likely to think of tarantulas. Nevertheless, we can enjoy the oranges, and bananas, and pineapples. But, to come back, the more substantial food which should accompany this fruit diet during the hot weather should consist of the carbohydrates, or starch and sugar element, bread, rice, potatoes, etc., and the various vegetables, of which it has been said that if one would only eat enough vegetables of the various kinds one would seldom need to pay a druggist's bill. During the hot weather, the amount of fat eaten should be reduced to a minimum. The fats are the great heat-producers, hence all fat meats, suet puddings, lard pastry, and the like, should be religiously avoided until the cool weather begins to call for the use of such warmth-manufacturing foods. Above all things, during the summer, large quantities of water should be drunk. The greater the heat, the greater the evaporation, this loss being supplied by drinking more fresh water. It has been estimated that, for an active

person, three quarts per day is not too much during the summer months.

At this season it goes without saying that clothing should be loose and cool, and as light in weight as possible. Possibly the most uncomfortable article of summer clothing is the corset. There are now to be had, however, very comfortable open-work girdle corsets, to which the long, close, old-fashioned kind should give way as speedily as possible.

Last of all, perhaps the greatest aid in keeping cool may be found in staying out of doors at every opportunity. If there are trees in your back yard make use of them. Hull your strawberries and peel your potatoes under them, take your sewing there, and enjoy to the full the summer while you have it. If you have no trees near, possibly you have a back veranda or stoop. Put a table on it, and chairs, and a paper-rack. If it has vines about it, and there are a few flowers in your back yard, you will find that the whole family will be attracted to it, that they will practically live on it during the warm days, and will enjoy and be benefited by the fresh air and the long vista of green country beauty. Moreover, you will be surprised to find how this living out of doors will simplify your work. The "moss" will be largely kept out of the house. You will have less sweeping, dusting and setting things to rights to do, and, consequently, more time in which to rest and keep cool.

DAME DURDEN.

"Farmer's Advocate" office, London, Ont.

Some "M. E. Graham" recipes:

**Fruit Puffs.**—Use one pint of flour, a heaping teaspoonful of baking powder, a little salt, and milk (or water) enough to make a soft batter. Grease half a dozen cups; put in each a spoonful of batter, then a spoonful of stewed fruit, any kind of canned or preserved fruit, or even dried apples. Cover with another spoonful of batter. Steam twenty minutes to a half hour.

**Suet pudding.**—One cup of molasses; one cup of suet; one cup of raisins; one cup of currants; one cup of milk (or water); two and a half cups of flour; two level teaspoonfuls of baking powder. Steam two to three hours without a break. Of course, spice and peel may be added; or the sauce only need be flavored, and as you will notice there is no sugar in either of these puddings, the sauce must be sweetened. The suet pudding will be all right re-warmed any time through the winter.

**Sauce for puddings.**—A small teacupful of sugar; a lump of butter (dripping would do) the size of an egg (hen's); a heaping teaspoonful of flour. Rub all together until smooth; add cupful of boiling water, and season to taste. Let boil a few minutes.

From the above recipes a beginner in cookery may go on ad libitum.

M. E. GRAHAM.

### An Essay on Habit.

A story is told of an English school-master who offered a prize to the boy who would write the best composition in five minutes on "How to Overcome a Habit."

At the expiration of five minutes the compositions were read. The prize went to a lad of nine years. The following is his essay:

"Well, sir, habit is hard to overcome. If you take off the first letter, it does not change 'a bit.' If you take off another, you still have a 'bit' left. If you take off still another, the whole of 'it' remains. If you take off another, it is wholly used up; all of which goes to show that if you want to get rid of habit you must throw it off altogether."

### Gems of Thought.

Each day is in itself a little sphere. We have but to round it out to perfection and the year will take care of itself.—Selected.

Love should be the supreme thing, because it is going to last; because in the nature of things it is eternal life.—Drummond.

You cannot prevent the birds of sadness from flying over your head, but you may prevent them from stopping to build their nests there.—Selected.

Do not dare to live without some clear intention toward which your living shall be bent. Mean to be something with all your might.—Phillips Brooks.

How careful one ought to be to be kind and thoughtful of one's old friends. It is so soon too late to be good to them, and then one is always so grieved.—Sarah Orne Jewett.

It is an excellent plan to have some place to go to be quiet when things vex or grieve us. There are a good many hard times in this life of ours, but we can always bear them if we ask help in the right way.—Miss Alcott.

Nothing is sweeter than love, nothing stronger, nothing higher, nothing broader, nothing better either in heaven or earth, because love is born of God, and, rising above all created things, can find its rest in Him alone.—Thomas A. Kempis.

We talk about the telescope of faith, but I think we want even more, the microscope of watchful, grateful love. Apply this to the little bits of our daily lives, in the light of the spirit, and how wonderfully they come out.—Frances R. Havergal.

"I can forgive, but I cannot forget," is only another way of saying, "I will not forgive." A forgiveness ought to be like a cancelled note, torn in two and burned up, so that it can never be shown against a man. There is an ugly kind of forgiveness in the world—a kind of hedgehog forgiveness shot out like quills.—Becher's Life Thoughts.

The inward influences and illuminations which come to us through those who have loved us are deeper than any that we can realize: they penetrate all our life, and assure us that there must be a fountain of life and love from which they and we are continually receiving strength to bear and to hope.—F. D. Maurice.

### Running for Girls.

To take a mile run daily, as a man in training would do it, is the best way in the world for a girl to get color into her cheeks and sparkle into her eyes.

"If girls would turn their attention to running, they would find it the most exhilarating pastime in the world, as well as one of the most healthful," says an authority in athletics. "Besides adding roses to the cheeks and inches to the lungs, running is the stout woman's best resource."

"Let her take a brisk run daily, beginning with a few yards, and getting up to a mile or thereabouts and she will not need to resort to a diet—that most melancholy and depressing method of reducing avoirdupois."

A run out of doors, however, is the ideal practice, for fresh air is one of the important factors of the sport. It is fresh air that gives a girl bewitching color in her cheeks and purifies every drop of blood in her body.

After a little practice a girl can run half a mile without stopping. Then let her pause for a two-minute rest before doing the next half mile. Run briskly, but not at top speed.

Without question, one of the best exercises in the world for girls is running. It contributes for one thing that elasticity without which grace is impossible, and spurs every bodily function to its appropriate duty.

Other things being equal, the girl who knows how to run, and does run, will out-class in general attractiveness the girl who does not. She will carry herself more gracefully. Her pose will be easy; she will be better set up, and generally better able to take care of herself in society or out of it.

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





### The Asparagus.

Those who have never tried to pot asparagus have no idea of the satisfaction there is in possessing a few of these dainty plants. Many flowering plants are not especially beautiful, except during a period of bloom. The asparagus, whose glory is its foliage, is beautiful at all times. It may be placed in the same order of usefulness with palms, ferns, rubber plants, araucarias, umbrella plants, and rex begonias, but, although sometimes called "asparagus fern," it is not a fern. Neither does it resemble very closely in appearance the well-known asparagus of the vegetable garden. The color of the foliage in all the varieties is a vivid green. In the variety, "plumosus," the leaves spread out from the slender stems in delicate, lacelike fronds, whose feathery divisions are much finer than those of the most finely pinnatifid ferns. In asparagus sprengeri, the foliage is not so fine, but the branches grow very rapidly, spreading and drooping until a veritable mantle of green falls about the pot, often to a length of three or four feet; hence, the situation which pleases asparagus sprengeri best is on a bracket from which its branches may droop at their own sweet will. This variety also has the advantage of being suited with any situation, so long as the light is good. It does not object to sunshine, but will grow just as well without it in a northern window, or in an eastern one, where it can only get a glint of sunlight in the forenoon. Asparagus plumosus always does better in a northern situation. Asparagus will grow nicely from seed. Plant the seed in shallow boxes, and keep the soil moist and warm. They usually germinate in about three weeks; in less time if you have taken the precaution to soak them for three or four hours in lukewarm water. Transplant the young plants when ready to small pots, and shift from these just as soon as the roots fill the pots. Give plenty of water, put on some liquid manure once a week, and keep the foliage clean by sprinkling well every day. In the summer, the asparagus is the better for being rested for a while. Simply set it in a cool, shady place, say in June, and leave it there, giving it very little water until August, when it should be repotted, and its water rations increased. Asparagus plumosus nanus, which has deep roots, should, as it grows older, be shifted to deep pots.

FLORA FERNLEAF.

"Farmer's Advocate" office, London, Ont.

### Androcles and the Lion.

Androcles is said to have been a Roman slave, who fled from a cruel master and took refuge in a cave. While there he saw a lion approaching. He feared lest he should be slain. But as the lion came nearer, Androcles saw that the beast was limping. He seemed to be in great pain. Androcles plucked up his courage and took up the lion's paw. From it he extracted a large thorn, which had caused the flesh to fester. The lion seemed most grateful and showed its pleasure by fawning upon its benefactor. The story tells us that later, when Androcles was taken prisoner and sent to Rome to be delivered up to the wild beasts, a lion was set loose to devour him. It was the same lion that Androcles had relieved in his agony. The animal remembered with gratitude his deliverer, and instead of springing on him to devour him, he went up to him and fawned upon him. Appian declares that he witnessed with his own eyes the scene between Androcles and the lion in the Roman circus.

### Something Each Day.

Something each day—a smile,  
It is not much to give,  
And the little gifts of life  
Make sweet the days we live.  
The world has weary hearts  
That we can bless and cheer,  
And a smile for every day  
Makes sunshine all the year.

Something each day—a word,  
We cannot know its power;  
It grows in fruitfulness  
As grows the gentle flower,  
What comfort it may bring,  
Where all is dark and drear,  
For a kind word each day  
Makes pleasant all the year.

Something each day—a thought,  
Unselfish, good and true,  
That aids another's need  
While we our way pursue;  
That seeks to lighten hearts,  
That leads to pathways clear;  
For a helpful thought each day  
Makes happy all the year.

Something each day—a deed,  
Of kindness and of good,  
To link in close bonds  
All human brotherhood,  
Oh, thus the heavenly will  
We all may do while here;  
For a good deed every day  
Makes blessed all the year.

—George Cooper.

### The First Plowing.

By Charles G. D. Roberts.

Calls the crow from the pine-tree top  
When the April air is still.  
He calls to the farmer hitching his team  
In the farmyard under the hill.  
"Come up," he cries, "come out and  
come up,  
For the high field's ripe to till!  
Don't wait for word from the dandelion,  
Or leave from the daffodil."

Whistles the highhole out of the grove  
His summoning loud and clear:  
"Chilly it may be down your way,  
But the high south field has cheer,  
On the sunward side of the chestnut  
stump  
The wood-grubs wake and appear:  
Come out to your plowing—come up to  
your plowing—  
The time for plowing is here."

Then dips the colter and drives the share,  
And the furrows faintly steam.  
The crow drifts furtively down from the  
pine  
To follow the clanking team.  
The flycatcher tumbles; the highhole  
darts  
In the young noon's yellow gleam.  
And wholesome sweet the smell of the  
soil  
Upturned from its winter's dream.

### Humorous.

"I'm free to admit," remarked Farmer Cornstossel, "that I won't never get through demandin' more prosperity."  
"But you are in comfortable circumstances. What do you mean by prosperity?"  
"There's jes' the difficulty. It means somethin' different fur everybody. Ef you've got a mortgage, 'prosperity's' gettin' it paid off. Ef ye've got it paid, 'prosperity's' ownin' a cabinet organ. Ef ye've got a cabinet organ, 'prosperity's' havin' enough to be able to trade it in fur a grand pie-anno—an' so on, without no limit whatsoever."

It was at an open-air meeting in a village near Exeter that a well-known speaker was holding forth.  
"Men!" he shouted, "what we want and what we are going to get is free land. We want the land for the people. Free land, men, we want, and we are going to have free land."  
Just then a large piece of earth landed on the speaker's eye, and while he was removing the clod a voice yelled out:  
"There's a bit of Devonshire to begin with!"

### For Tender Feet.

Old shoes are not all they are cracked up to be. When the soles are worn down, paper thin, there is no more prolific source of callous places under the ball of the foot. Cobblestones, hot concrete, inequalities in the pavement—every trifling circumstance that, were the feet well shod, would be passed unnoticed, bruise and irritate the feet through the thin soles.

Cheap shoes are quite as bad. A cheap sole soon gets full of humps and hollows, or it warps, or sometimes cracks into a deep ridge across, producing immense discomfort to the foot inside. Sometimes a good, perfectly new shoe will produce a welt across the foot above the toes. It may be a wrinkle in the lining, or in the shoe itself, but the result is pretty much the same in either case. If the shoe store or cobbler cannot remedy the trouble, try taking a small piece of soft white felt, pare down the edges as thin as possible, and place it inside the stockings over the welt.

If a foot is aching or smarting badly after one has walked or stood a lot, relief may be obtained by plunging it for a few minutes in hot water in which a handful of salt has been dissolved. Then cool the water off gradually till it is quite cold. Moderately warm water to which a little ammonia has been added is also immensely restful to tired, hot feet.

The nails of the toes stand in just as much need of careful, systematic cutting as do the finger nails. Some people, you know, let them go till they wear holes through their stockings, and then they complain about the miserable, flimsy way they make stockings these days. Cut the nails twice a week regularly, and cut them straight across, not rounding. To allow a nail to grow long is to tempt Providence, for it runs the risk of being pressed into the skin, and it may take you weeks to overcome the pain and trouble caused by that trifling neglect.

### Advice.

Do not "kick" about the weather! It won't change conditions whether you are satisfied or not. If each day you find it raining, don't waste any time complaining. Just be glad it isn't hot.

If it's hot, try not to mind it. Just be cheerful. You will find it to be far the safer rule. Fussing will not make it better. Everybody hates a fretter. Kicking never makes you cool.

Take what comes, and just enjoy it: Don't let discontent alloy it: It's the wisest thing to do. Try this plan I've given thought to, if it helps you, as it ought to, Maybe I will try it, too.

—Somerville Journal.

### Humorous.

More men than horses have been spoiled by having too many ancestors.

Applicant—"Oid like a job wid ye, sorr." Foreman—"Well, I don't know. There isn't much doing just at present. I don't think I could keep you busy." Applicant (reassuringly)—"Indade, sorr, it 'ull take very little to kape me busy."

Teacher—"Have animals a capacity for affection?"

Class—"Yes, nearly all."

Teacher—"Now, what animal possesses the greatest attachment for man?"

Little Girl—"Woman!"

### TRADE TOPIC.

"Economies in Dairy Farming" is the title of a seventy-page volume, by Ernest Mathews, the English dairy authority, who has tested and closely studied over 1,500 cows. The work includes an exhaustive discussion on the characteristics of dairy cattle, with very many excellent illustrations of different types of cows, peculiarities of the udder, etc. Country Life are the publishers, and the illustrations and typography are characteristic of the excellent work of this splendid magazine. The selling price of this volume is \$2, through this office.

### A Woman's Sympathy.

Are you discouraged? Is your doctor's bill a heavy financial load? Is your pain a heavy physical burden? I know what these mean to delicate women—I have been discouraged, too; but learned how to cure myself. I want to relieve your burdens. Why not end the pain and stop the doctor's bill? I can do this for you, and will, if you will assist me.

All you need do is to write for a free box of the remedy which has been placed in my hands to be given away. Perhaps this one box will cure you—it has done so for others. If so, I shall be happy and you will be cured for 2c. (the cost of a postage stamp). Your letters held confidentially. Write to-day for my free treatment. Mrs. F. V. CURRAH, Windsor, Ont.

## CANADIAN PACIFIC RY.

### Homeseekers' 60 DAY Excursions

Winnipeg \$30.00	Regina - \$33.75
Mowbray } Doraine } 31.50 Souris } Brandon } Lyleton } Lenore } Miniota } 32.00 Elgin } Wawanesa } Bincarth } 32.25 Moosomin } Arcola - - 32.50 Estevan } 33.00 Yorkton }	Moose Jaw } Kamsack } 34.00 Swan River } Saskatoon 35.25 Pr. Albert 36.00 Macleod - 38.00 Calgary - 38.50 Red Deer - 39.50 Strathcona 40.50

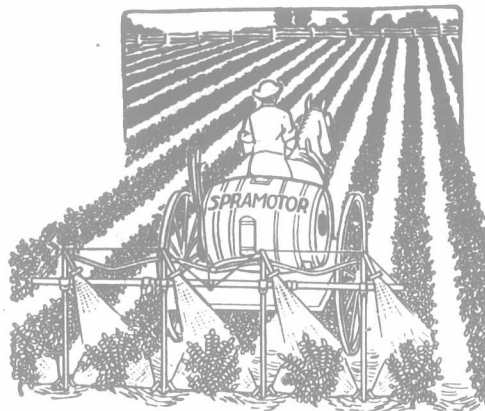
Going JUNE 28th and JULY 19th. Returning until Aug. 29th and Sept. 20th, respectively. Tickets are not good on "Imperial Limited." Pamphlets and full particulars from any Canadian Pacific Agent, or A. H. Notman, Toronto.

## WOODSIDE FARM

### Southdown Sheep

Write for what you want  
JOHN JACKSON, Abingdon, Ontario.

**Earn a Bicycle**  
taking orders from sample wheel furnished by us. We want an Active Agent in each town. Large profits. Write for special offer.  
Highest Grade \$8.75 to \$17  
1904 Models  
Coaster Brakes, Hedgethorne Puncture-proof Tires and best equipment.  
1903 & 1905 Models, Best Makes \$7 to \$12  
500 Second-Hand Wheels  
All Makes & Models, \$3 to \$8  
good as new  
Great Factory Clearing Sale at half factory cost.  
We Ship on Approval without a cent deposit, and allow TEN DAYS FREE TRIAL on every bicycle. Any wheel not satisfactory returned at our expense. Write at once for catalogs and our special offer. AUTOMOBILES, TIRES, Sewing Machines, Sundries, etc., half usual prices.  
MEAD CYCLE CO., Dept. 254 Chicago



### You might as well turn your labor into money as lose it.

Do you know that three barrels of Bordeaux mixture, costing 20c., and 8c. worth of Paris Green, at a total cost of 34c. each barrel, through a SPRAMOTOR, will prevent both the blight and bugs, and change your yield from practically nothing in a bad year to 400 bushels per acre? Full particulars free.

SPRAMOTOR CO.,  
68-70 King St., London, Ont.



QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free. 2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer. 3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given. 4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

Veterinary.

FLESHY UDDER.

My cow's udder has become fleshy, and she does not yield so much milk as in other years. She is a Shorthorn.

M. J. F.

Ans.—There is a congenital predisposition in some cows (especially of the beef breeds) to fleshy udder. It is, of course, an undesirable characteristic, but it cannot be corrected, and so long as no inflammatory action or diseased condition is present, treatment is not called for.

LARYNGITIS—RINGWORM.

1. Colts cough and discharge matter from nostrils. 2. Colt has whitish blotches around eyes and mouth.

SUBSCRIBER.

Ans.—1. Keep warm and comfortable. Rub throat twice daily for three days with a liniment composed of equal parts sweet oil, oil of turpentine and spirits of ammonia. Give two drams of chlorate of potash three times daily. If complications arise send for a veterinarian. 2. This is ringworm. Isolate the colt; soften the scales with sweet oil, remove them, and apply tincture of iodine daily, as long as indicated.

TUMOR IN NECK.

Fat steer has a lump, the size of a duck's egg, in his throat, about four inches from the jaw. It appears loose.

H.

Ans.—This is either an enlarged thyroid gland, which will do no harm, or a tumor, which may be actinomycotic (lump jaw), and can be dissected out. It is not safe for an amateur to attempt the operation on account of the proximity of the large blood vessels. You had better call a veterinarian, and allow him to operate or treat. If it is simply an enlarged gland, it can be reduced by the daily application of compound iodine ointment.

CHRONIC COUGH.

Mare has been subject to a hacking cough for seven years. Last winter she caught cold, and our veterinarian treated successfully; but she is coughing again.

G. M.

Ans.—It is probable she has developed heaves. In the most favorable cases, a cough of seven years' standing is difficult to treat. Wet all she eats with lime water; feed nothing but food of first-class quality, and feed sparingly on hay or other bulky food. Do not give exercise soon after a meal, and give every morning a ball composed of two drams solid extract of belladonna, one and a half drams gum opium, twenty grains digitalis, and one dram camphor, with sufficient treacle to moisten.

WEAK COLT.

Mare had a colt, after having had wax on teats for a month previous to foaling, and having milk for about two weeks. Foal was weak, but about 20 hours afterwards could almost get up itself and suck. At about 24 hours, it seemed to be sick and would not get up, but would lie with its head between its front legs. The bowels moved. What was wrong with the colt? Would it have been possible for a veterinary surgeon to have saved it? Do you believe, when a mare starts to run milk, she should be made to foal, whether her time is up or not?

J. S.

Ans.—The colt was simply one of the many weak ones that have come this year. The lack of exercise afforded mares, by reason of the severe weather and the depressing effect of the cold itself, were doubtless responsible for much of the loss of foals this spring. The best possible treatment the colt could have had was some of the dam's milk, and if that failed to give him strength, it is problematical if the veterinarian could have saved him. Never tamper with an in foal mare; let nature have her course in such matters. Considerable exercise and judicious feeding would have reduced the tension on the udder.

ABORTION—BONE SPAVIN.

1. About February 1st my pregnant mare became sick, and about a tubful of water escaped, and she soon aborted. Would it be wise to breed her again? 2. Three-year-old appears to have a bone spavin, but is not lame. J. R.

Ans.—1. It is probable the abortion was caused by an injury of some kind, and there is no reason why you should hesitate to breed her again. As mares readily acquire the habit of abortion, keep quiet, and take extra care of her about the same period of gestation at which she aborted this year. If she shows symptoms of abortion, give two ounces laudanum in half a pint of cold water every hour, until symptoms abate. 2. Occasionally bone spavins do not cause lameness, and, when so, it is better to leave alone. If the colt becomes lame, get your veterinarian to fire and blister. Spavins sometimes appear quickly, and at other times very slowly. Lameness is usually present early, sometimes before any enlargement can be noticed.

V.

BLACK QUARTER.

Bull calf did not come to take feed. I went for him, and found him lying; I got him up, and noticed his left shoulder badly swollen, and he was unable to use the limb. He suffered greatly, and died about noon. I examined him, and found the flesh quite dark and loose from the bone. I lost a two-year-old heifer with same symptoms last fall.

J. M.

Ans.—This is black quarter, for which there is practically no cure. In some cases the administration of one to two drams of iodide of potash every two hours in the very early stages effects a cure. Prevention consists in keeping young cattle (it seldom attacks an animal over two years old) off low-lying or damp pasture, where they get the virus of the disease. Immunity can be given with reasonable certainty, by inoculating with anti-blackleg serum, which, with instructions and the necessary instruments, can be procured from Parke, Davis & Co., Walkerville, Ont., or possibly other manufacturing chemists.

V.

Miscellaneous.

SOWING TURNIPS WITH GRAIN DRILL.

Can you tell me of anything that would mix with turnip seed in order to sow successfully with a grain drill on the level?

A. W. L.

Ans.—We have sown rape seed, which is identical with turnip seed in size and appearance, in drills on the level, by using the grass seed attachment of the grain drill, closing with rags all the seed openings, except two or three, using the holes nearest the desired distance apart and bending the rubber tubes to convey the seed into these. To sow from the grain box of the drill sifted wood ashes, fine ground bone dust, or other fertilizer, might be used with which to mix the seed, but it would require some calculating to determine about how much seed per acre was being sown.

GOSSIP.

IN THE LIST of improved farm machinery, Noxon's No. 9 binder holds an enviable place. The popularity of the implements turned out by the Noxons is so great that it taxes their factory to the utmost to supply the large demand. Examine their list of harvesting and cultivating implements, and you will be satisfied there are none better.

Messrs. J. Watt & Son, Salemn, Ont., in addition to a new announcement in their advertisement of Shorthorns, write: "Our cattle are all at pasture and are doing well. We have recently sold to Wm. C. Wilson & Sons, Hawkestone, Ont., Augusta 4th =52555=, by Sittytown Chief =20104=, a large cow, and a very superior breeder. To Mr. Jas. Riddel, Beeton, Ont., Royal Archer (imp. in dam), bred by Wm. Anderson, Wardes, Kintore, Scotland, sired by Golden Prince (83609), dam Lady Lintz, by Belisarius (74051), a grandson of William of Orange. He is the making of a good show bull. We still have for sale Royal Wonder 2nd, with a straight English Lady pedigree, and with three very superior top-crosses. He will be sold very reasonably. Also a number of cows and heifers in calf and calves at foot to imported bulls."

GOSSIP.

T. J. Cole, Bomanville, Ont., changes his advertisement in this issue from poultry to Yorkshires, of which he has a good supply. Note his offering.

That is a capital good farm and milk business advertised in another column by John Taylor, Todmorden, Ont., just on the outskirts of Toronto. It would be difficult to conceive of a more favorable location.

The following interesting notes on their Shorthorn transactions are sent by Messrs. R. Mitchell & Sons, Nelson, Ont.: "Our sales of bulls since Feb. 1st, 1904, are: To Jas. Duggan & Son, Schomberg, Imp. Lusty Prince, a massive red, of the Marr Red or Roan Lady family; to Judson Barlow, Binbrook, Imp. Strawberry Chief, a very deep-fleshed bull, of grand character; to Wm. Hiscock, Holstein, Ont., a big, strong-backed yearling; to Geo. Strachan, Boxalder, Ont., a good yearling; to G. H. Gartly, Strabane, Ont., a yearling. These three are sired by Imp. Prince William, recently in use in our herd, weighing 2,700 pounds. To Geo. Alderson, Sr., Carlisle, one yearling bull, of the Marr Flora tribe; to Wm. Elrick, Hillsdale, a yearling; to M. H. Lawrence, Honeywood, a twelve-months-old bull; to J. McFarlane, Ont., a yearling bull; to John McNabb, Rockwood, a yearling. These four are all very thick, short-legged fellows, with extra backs, big-hearted, and grand heads and horn, all out of good imported cows, and sired by our herd bull, Imp. Greengill Victor, a Princess Royal, bred by W. S. Marr. We still have for sale a half dozen good bulls ready for work. Three of them are very choice, from imported sire and dam, one being by Imp. Village Champion, and out of Imp. 1st Rose of Summer, by Marengo, champion of Great Britain. We have thought enough of two of these young bulls to use them on some of our best Scotch heifers. We are also in good position to supply some good Scotch females, in calf to Greengill Victor (imp.)."

THE SALE OF THE SEASON.

The Shorthorn sale, at Hamilton, on Tuesday, June 28th, promises to be the greatest drawing event of the season of its kind, and everything points to a very large gathering of cattlemen to witness the disposal of 60 head of high-class cattle from the six strong Canadian herds. The date of the sale is a favorable one for farmers, since haying this year will not be quite as early as usual, and will hardly have commenced at that time, and most farmers can afford a day off at this season. Hamilton is a handy place to reach from any direction, the train service being first-class, while a pleasure trip may be combined with business by taking the boats from many points. The beef cattle business is in a very encouraging condition at present, the best class of cattle selling readily at \$5.50 and upwards, with a good prospect of going higher. Farmers are seeing the advantage of raising well-bred cattle, which cost no more to feed than inferior stuff, and sell for lots more money, thus paying much better prices for the feed they consume. Intelligent young farmers are founding herds of pure-bred cattle by the purchase of a few good animals, and they can buy them now at a price that can hardly fail to prove a good investment. The cattle in this sale are an exceptionally well-bred lot, most of them being young, and sired by first-class bulls. Many of the cows have calves at foot that will be sold with them, and most of the females are in calf to one of the excellent imported Scotch-bred bulls in service in the herds from which they come. It is an unusually favorable opportunity to secure a young cow or heifer, or a number of such, or a first-class young bull of the best breeding at the buyer's own price. Breeders will find it to their own interest to attend this sale, as there is inspiration in numbers, and every breeder in the country is interested in the success of this sale, as it will, to a large extent, set the standard of prices for breeding cattle for the balance of the year. Let there be a grand rally of breeders and farmers generally at Hamilton on the 28th.

TRADE TOPICS.

THE CANADIAN CORDAGE CO. is one of the twine manufacturing concerns that is turning out a full length, high quality of twine for both Canadian and American markets. All their brands are made of the best material available for the purpose, and their plant is so equipped that the cost of producing the best brands of twine is reduced to a minimum. The Royal Brand and the Royal Standard are two grades of twine that never fail to give satisfaction.

THRESHERMEN, if you are considering buying a new engine or separator, just remember this, that the American-Abell engines and threshers are not surpassed by any on the continent. Their portable engines are models of compactness, efficiency, convenience, and the Toronto Advance thresher is equipped with every modern device known to the threshing trade. Consult them before buying. It will be to your advantage. Your customers are partial to the "Cock of the North Line," so try to do their threshing with a machine they like.

GIRLS, READ THIS!—It is indeed, as has been said, "Neither weakness nor vanity to care for one's complexion, hands or hair;" it is a woman's duty and privilege to look just as attractive as she can. If you are troubled with freckles, pimples, blackheads, etc., do not give up hope, but see what the Graham Dermatological Institute has to say of the wonderful Princess Complexion Purifier, manufactured by that firm. The advertisement appears elsewhere in this issue. Do not neglect to read it.

THE LAND OF PROMISE.

"For Canada, the hour of destiny has struck." Her physical construction forms the basis for an empire, and the stream of immigration which has begun, is swelling into a mighty movement. The advance of civilization has ever tended westward, and to-day Western Canada is the "land of promise" for people of all nations.

To the Red River Valley in Manitoba and to the Langenburg and Davidson districts in Eastern Assinibola, the Cooper-Walch Land Co. invite your attention. Here there are 200,000 acres of fertile land, which they offer at low prices and on easy terms.

Of the Red River Valley, we need only say it is commonly known as the "bread basket of the world," and you will readily realize the nature of the land. This is a home of No. 1 hard. It was the Indian's "Garden of Eden."

Should you desire a section especially adapted to mixed farming, study the Langenburg district in Eastern Assinibola. With its rich soil it is becoming one of the best grain-growing districts in Western Canada. Its rolling prairie is interspersed with groves of timber, which border its lakes and streams. It is settled by an industrious and intelligent class of Germans, Americans and Eastern Canadians.

The Davidson district, with its gently-rolling, open prairie, is located conveniently to the towns of Craik, Girvin and Bladworth.

Mr. Lawrence A. Walch, Manager of the Cooper-Walch Land Co. and Vice-President of the International Land and Investment Co., with offices at St. Cloud, Minnesota, Minneapolis, Chicago and Houston, Texas, stands ready to point to you the "open door to prosperity" in these districts. He is the man who knows, and with his able assistance, the intending settler should have no difficulty in selecting a farm suitable to his individual means and temperament. To him you can look for definite information regarding the lands of this company.

The company is distributing a beautiful illustrated booklet, descriptive of their land, which can be had by readers of the "Farmer's Advocate" by addressing a request for same to the Cooper-Walch Land Co., Canada Life Building, Winnipeg, Man. Advt.

\$30.00 to Colorado and Return Via Chicago, Union Pacific & North-Western Line. Chicago to Denver, Colorado Springs, and Pueblo, daily throughout the summer. Correspondingly low rates from all points east. Only one night to Denver from Chicago. Two fast trains daily. B. H. Bennett, 2 East King St., Toronto, Ont.

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



QUESTIONS AND ANSWERS.  
Miscellaneous.

KILLING GRASS.

We have a walk from our front door to the gate made of two-inch slats, and the grass keeps growing up between them. As we cannot cut it, would you kindly let us know what would kill it?  
B. C.

W. P.  
Ans.—First have a definite edge to which the grass is allowed to grow on either side of the walk, then it will not grow as persistently beneath. A solution recommended for such a case is hot brine, made in the proportion of a pound of salt to a gallon of water. A strong solution of copper sulphate, say six pounds to the barrel of water, might also be effective.

BARREN COW.

Cow comes in heat every eighteen or twenty days; have changed bulls once, but no use. Veterinary surgeon opened the os, but it did no good. I see advertised in the "Farmer's Advocate," "barren cow cure." Is this a sure cure, and is it harmful to a cow in its after effects?  
F. G. B.

Ans.—We cannot answer from experience or from reliable reported trials. We have little faith in other means than you have tried. Bleeding is sometimes helpful. A young bull should be used early and late in term of heat. We should not fear any harm from the "cure" referred to, and it might be worth trying, in which case we will be glad to know the result.

BAD WEED—IMPURITY IN FLAX SEED.

1. Kindly identify the enclosed weed? It grows up and has a yellow flower. It is hard to kill, as I plowed the field twice last fall, and the weed came up as fresh as ever. Would you let me know how to kill it?

2. Also find enclosed a sample of flaxseed. Will you let me know what the impurity is?  
R. W. C.

Ans.—1. This is perennial sow thistle one of our worst weeds. Closely examine recent numbers of the "Farmer's

## Do You Want a Free Homestead?

There are some good ones left in the

# Last Mountain Valley

The way to get a CHEAP FARM is to TAKE UP A HOMESTEAD and buy the ADJOINING QUARTER SECTION.

BUT YOU'LL HAVE TO HURRY.

PRICE **\$9.10** PER ACRE.  
EASY TERMS.

WRITE FOR  
MAP AND  
DESCRIPTIVE  
PAMPHLET.

**WM. PEARSON & CO.**  
383 Main Street, WINNIPEG.

Advocate" for methods of treatment. Spraying with Bordeaux will destroy all green parts of this weed; but it is able to send up new growth from the roots, so such a treatment must not be considered final. Practice cultivation as recommended in our June 9th issue for twitch grass.

2. The impurity is the seed of foxtail; but very much of it could be removed with a good fanning mill. Seed with a large percentage of impurity as the sample sent should never be sown.

A SICK FLOCK.

I have quite a large flock of hens, which have some disease; they turn white in the head and sit around dumpish. It does not seem to kill them very quickly.

Could you tell me what the disease is and what to do for it? It affects the old hens most.  
J. McK.

Ans.—The symptoms given indicate debility, anæmia or consumption. Examine the lungs of a dead bird. If diseased, hard and tense, you may conclude you have consumption in the flock, the remedy for which would be to kill affected birds and disinfect the plant with Zenoleum, or some of the disinfectants advertised in this paper. If there is no tuberculosis present, change the food; give plenty of exercise; examine for lice, and try some of the poultry remedies put up by the Carnefac Stock Food Co., of Toronto. They can be had at all feed stores.

REGISTERING COLT.

How many crosses are necessary in order to get a colt registered? Is it necessary that the sire be an imported horse? For instance, I have a young mare with three imported crosses, then I bred her to a Canadian horse from imported stock, both sire and dam being imported, he himself being registered. Would this mare's foal register, or would the fact of breeding to this Canadian horse break the thread of breeding for registration, and where and how should I apply to get her registered?

SUBSCRIBER.

Ans.—You do not say of what breed the sires used were. Clydesdales are admitted to registry in the Clydesdale Studbook of Canada as follows: 1. Stallions or mares by sire and out of dam both recorded in this book. 2. Clydesdale stallions having five top-crosses, with their dams on record, and Clydesdale mares having four top-crosses, in each case by sires recorded in the Clydesdale Studbook of Canada. It is not necessary that all or any of the sires be imported. Apply to Henry Wade, Parliament Buildings, Toronto, for forms and terms. In the Dominion Draft Studbook mares presented for registry must have three crosses of sires registered in either the Clydesdale or Shire Studbook, not necessarily imported. Apply to Jas. Mitchell, Secretary, Goderich.

Veterinary.

MILK FEVER TREATMENT

One of your correspondents, some time ago, gave a description of treatment for milk fever by filling the udder with air. I should like to know if this treatment has been generally successful?  
Yorkshire, Eng.

W. R. Y.  
Ans.—Yes, as a substitute for oxygen, fresh air from an open, healthy stable, or entirely out of doors, has given good results. One must be careful, however, to sterilize the utensils used, and to use plenty of antiseptic about the entrance to the udder. We would only recommend the use of air when oxygen could not be procured. Never drench for milk fever.

# This is the Engine!

Send for Catalogue of

Engines.

Separators,

Baggers, Blowers,  
Stackers, Chaffers,  
Self-feeders,  
Elevators, etc., etc.

Clover Hullers,

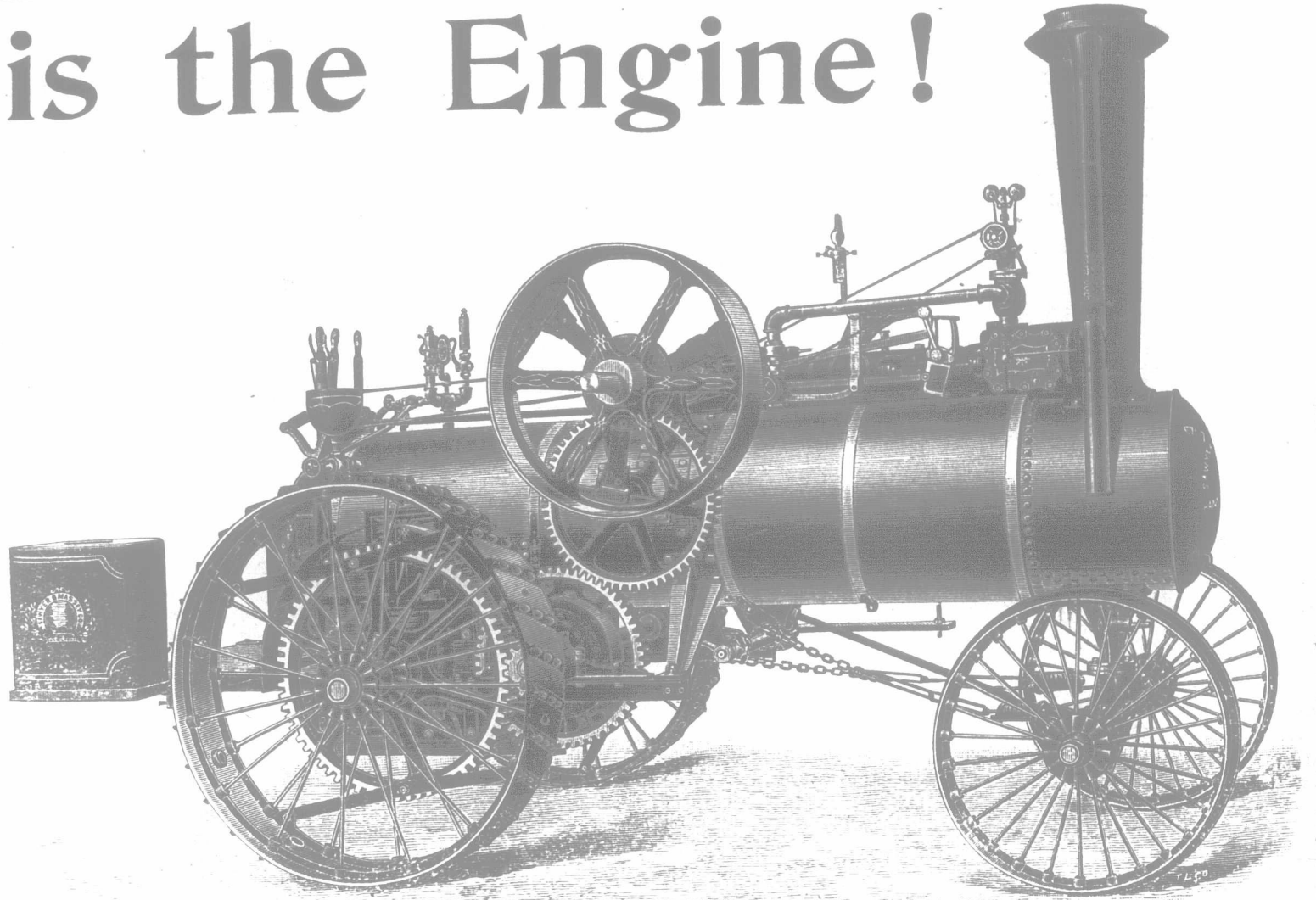
with or without Self-  
feeders and Blowers.

Level Tread and Sweep  
Powers.

Plowing Engine Tenders.

Portable Saw Mills and  
Engines.

Road-making Machinery



SAWYER & MASSEY NEW 17 H.-P. SIMPLE ENGINE (TRACTION AND PORTABLE)

all the **Threshermen and Farmers** are talking of.



FOR  
PARTICULARS  
WRITE

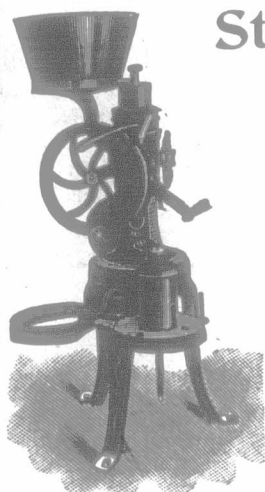
SAWYER & MASSEY CO., Limited., HAMILTON, CANADA.

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



# The National

## Stands First.



This is no vain boast. Others may claim this place, but the National Cream Separator soon proves its superiority when brought into competition with them.

The National is as represented. The closeness of its skimming has not to be sacrificed to keep up its advertised capacity.

It makes smooth cream, which is easy to churn.

It turns easily, is quickly cleaned, having so few parts, and these easily adjusted. Its milk tank is conveniently low, and its gearing enclosed.

Send for terms to

The Creamery Supply Co., Guelph, Ont.,  
The T. C. Rogers Co., Guelph, Ont.,  
Jos. A. Merrick, Winnipeg, Man.,  
H. E. Nunn, Truro, N. S.

CAPACITY:  
Style B—250 lbs. per hour.  
Style No. 1—330 to 350 lbs. per hour.  
Style No. 1A—430 to 500 lbs. per hour.

Or to the manufacturers,

**The Raymond Mfg. Co. of Guelph**  
GUELPH, ONTARIO. Limited.

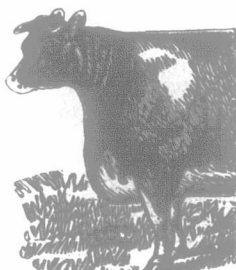
# Imp. Clydesdales and Shorthorns

**MESSRS. SMITH & RICHARDSON,**  
COLUMBUS, ONT.

Importers of Clydesdale horses and Shorthorn cattle, are now offering 10 imported stallions, including sons of the renowned Baron's Pride, Prince Thomas, Royal Carrick and Mountain Sentinel; also 10 mares, 6 of them imported, and the balance from imported stock. Shorthorns, imported and home-bred, all ages. Stations:

Oshawa & Brooklin, G.T.R.; Myrtle, C.P.R.

40 miles east of Toronto.  
Long-distance Telephone at residence, near Columbus. Telegraph, Brooklin.



### QUESTIONS AND ANSWERS. Miscellaneous.

#### GROUND IVY.

Please give the name of the enclosed weed? Plowing will not kill it. What is the best to do with it? ZEPHYR.

Ans.—This is *Nepeta glechoma*, commonly called ground ivy, creeping Charlie, or Gill over the ground. It has never been considered a very noxious weed. Thorough cultivation should destroy it. If in small patches, smother it out with straw or manure.

#### WEED IN MEADOW.

Please give the name of the enclosed weed, also the means of destroying it? The weed has made its appearance in a new meadow, completely covering the ground in some places. C. E. M.

Ans.—This is one of the species of buttercup, or crow foot. It is not considered a bad weed, and has likely been seeded as an impurity in the seed, or by the meadow being flooded. It should disappear with ordinary cropping.

#### BLADDER CAMPION.

Please identify the enclosed weed.

G. W.  
Ans.—This is a specimen of (*Silene inflata*) bladder campion, a weed that appears to be changing in its characteristics from an annual to a most persistent perennial. Unlike many other perennials, it sends up new plants from a severed end of its large taproot, rather than from root nodes. Formerly its flowering season was from July to September, but now it blossoms in June. No other treatment can be recommended than cultivation, as for our worst perennials, such as twitch grass, bindweed, and perennial sow thistle, as outlined in our June 9th issue.

#### APPLE TREES FROST-KILLED.

In my twelve-year-old orchard, some of the trees have leaves turned slightly yellow and small, as if dry weather was curling them up. On examination, I find in the crotches of many, most noticeably Ben Davis, a large spot of dead bark, and under that apparently dead wood; and up some of the limbs, more or less dead bark. The only crotches that seem to be affected are the large lower ones. Has this been caused by the cold winter we had this year? How would you advise treating those trees that are not badly affected? G. McI.

Ans.—This is the result of the cold weather. All that can be done is to prune out the affected parts of the tree. It would have been better if this had been done earlier, so that the energy of the tree could have been directed to the recuperation of the less-damaged parts.

#### SOW THISTLE.

In your issue of the 26th, ultimo, there was a short article headed "The Yellow Peril." Having recently gone on a new farm, I find about half an acre infested with sow thistle. Am desirous of destroying it, but nobody could suggest a plan. When I saw said article in "Advocate" I was pleased to know of so simple a remedy.

1. At what time should the spraying be done?
2. Would it do to just cut them off about level with the ground, or so that the milky fluid oozes out, and then spray?
3. What amount of salt would kill said weed, put on a patch about 10 or 12 feet square? No matter if it killed other grain or kept it from growing, or would it be effective at all?
4. At what time of the year is best to plow summer-fallow to kill Canadian thistles? R. S. K.

Ans.—In treating sow thistle with bluestone solution, remember that there are two varieties of the weed, the annual and perennial. The former may be destroyed by one spraying, but as the latter propagates from the roots, it will have to be treated several times. The variety you have is evidently the perennial. Spray just before flowering.

2. It would not assist the action of the bluestone to mow the thistle.
3. A pound of salt to a gallon of water applied hot is said to be effective, and is recommended for paths and roads in parks. We should just as soon pile on a stack of straw or manure.
4. Cultivate in spring. Plow after seeding, and keep cultivated at short intervals all summer, to prevent green leaves from forming, and to promote decay of the roots.

## Spavin and Ring-bone

Once hard to cure—easy now. A 45-minute treatment does it. No other method so easy, quick and painless. No other method sure.

**Fleming's Spavin and Ringbone Paste** cures even the very worst cases—none too old or bad. Money back if it ever fails. Lots of information if you write. Book about Spavin, Ringbone, Curb, Splint, Bog Spavin and other horse troubles sent free.

FLEMING BROS., Chemists,  
45 Front Street, West, Toronto, Can.

## Dr. Page's English Spavin Cure

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hocks, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 and 9 YORKSHIRE ROAD, LONDON, E.C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., DRUGGISTS,  
171 King Street East, - Toronto, Ont.

To cure a Bruise or Strain quickly, proceed as follows: Wring out a sponge in boiling hot water and hold on the affected part, keeping the sponge hot by repeating the operation for from 15 to 30 minutes. Rub dry and apply

## ABSORBINE,

rubbing it in well. Use the hot water steaming process once a day and apply the Absorbine from three to four times a day. One or two days usually cures fresh cases. Absorbine is unequalled in removing bunches caused by a bruise or strain from animal or mankind. Vet. dose, \$2 per bottle; for mankind, \$1 per bottle; delivered or furnished by regular dealers. Write for pamphlet. Manufactured by W. F. YOUNG, P. D. F., Springfield, Mass.

LYMAN, SONS & CO., Agents for Canada.

## FONTHILL STOCK FARM

# 50

## SHIRE HORSES AND MARES to choose from.

MORRIS & WELLINGTON,  
FRONTHILL, ONTARIO.

## BAWDEN & McDONELL

Exeter, Ont.

IMPORTERS OF  
**Clydesdale, Shire and Hackney Horses**

Our new importation has arrived, and we have now about 30 stallions for sale, ages from 2 to 7 years; the best that could be purchased in Scotland and England.

## FOR SALE

REGISTERED THOROUGHBRED No. 21377  
—FOALED JUNE 2ND, 1899—  
ch. mare, sire Wickham; dam Fanny Carter; 15 2 hands; absolutely sound, keen and high-lifted; has been ridden by a lady. For further information, address  
P. O. Box 543, Port Hope, Ontario, Canada

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS

MAXWELL TEDDER SIDE DELIVERY RAKE & LOADER

MAXWELL

ST. MARY'S, ONT. CANADA

IS THERE AN AGENT IN YOUR DISTRICT IF NOT ADDRESS THE FIRM DIRECTLY

DAVID MAXWELL & SONS, ST. MARY'S, ONTARIO, CANADA

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





**Myers' Royal Spice**

keeps live stock in perfect condition, prevents stomach and bowel troubles, cuts down the feed bills. Used by hundreds of farmers and stockmen all over this continent.

Write for testimonials and free literature

MYERS ROYAL SPICE CO.  
NIAGARA FALLS, ONT. & N.Y.



## Queenston Gement

The best and cheapest  
FOR HOUSE, BARN  
AND SILO WALLS,  
STABLE FLOORS, ETC.

Send for our NEW ILLUSTRATED CATALOGUE - it tells all Prices and estimates cheerfully given. Write to

**ISAAC USHER**  
Queenston, Ontario.



**SOOK SALT** for horses and cattle, in ten and one ton. Toronto Salt Works, Toronto.

**RUPTURE** Have you a rupture that all the specialists have failed to hold or to cure? Have you wasted money in a vain pursuit for relief? If so, write me, and I will tell you how to cure yourself. If you have a very bad case, it's for you particularly. Full information free.

F. H. Weese, Specialist, Toronto, Ontario.

**REGISTERED HEREFORDS.**  
For sale: 5 young bulls, 16 and 17 months old; also some young heifers, 15 to 17 months; all from my stock bull, Prince of Wales 1267  
E. S. LEE, Williamsford P. O., Ont.  
Holland Centre Station, C. P. R.

**THE SUNNYSIDE HEREFORDS**  
headed by imp. Onward, for March On, for sale. 10 choice bulls, imported and home-bred, from 1 to 2 years old; also 1 bull 13 months old, a high-class hard-header. All bulls are of the heavy, low-down, blocky type. We can yet spare a few choice cows and heifers. Inspection invited.  
O'NEIL BROS., Southgate, Ont., Lucan Station, G.T.R.; Hilderton or Denfield on L.H. & E.

**THE MAPLES FARM HEREFORDS**  
Near Orangeville, Ont., on C. P. R. (Owen Sound branch).  
Imported and pure-bred bulls and heifers for sale, from imported and pure-bred dams, and sired by imp. Spartacus, No. 106228, -1716-, winner of sweepstakes and silver medals, Toronto, 1902 and 1903. Young bulls a specialty. Prizewinners wherever shown. Inspection invited. Popular prices. W. H. HUNTER, on Near Orangeville, Ont. THE MAPLES P. O.

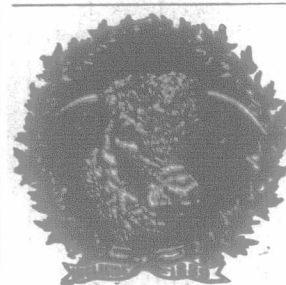
**ABORTION** RETENTION OF PLACENTA and Failure to Breed  
Kellogg's Condition Powder  
is a positive cure for these diseases. Prevents abortion, calves and garlic in milk. Indorsed by the Iowa Agricultural College, Ames, Ia., and hundreds of the most prominent breeders. Write for booklet giving full information, price list and testimonials. Address  
H. W. Kellogg Company, Dept. Y, St. Paul, Minn.

ADVERTISE IN THE ADVOCATE.

## BRITISH TROOP OIL LINIMENT

FOR  
Sprains, Strains, Cuts, Wounds, Ulcers, Open Sores, Bruises, Stiff Joints, Bites and Stings of Insects, Coughs, Colds, Contracted Cords, Rheumatism, Neuralgia, Bronchitis, Croup, Sore Throat, Quinsy, Whooping Cough and all Painful Swellings.

A LARGE BOTTLE, 25c.



## INGLESIDE HEREFORDS 100 Head.

Calves to 6-year-olds. If you want to start a small herd, write for particulars. The quality and breeding is of the best. A good foundation means success, and here is where you can get it at prices and terms to suit your purse. ON H. D. SMITH, OOMPTON, QUE.

## ABERDEEN-ANGUS.

No bulls for sale at present. Will sell some females bred to imp. Klondyke of the Burn.  
Drumbe Station, ON WALTER HALL, Washington, Ont.

## Day's Aromatic Stock Food



Saves feed by assisting stock to digest their food. A small dose in the usual food twice each day. It contains no drugs; purely aromatic.

3 LBS. 30c. 36 LBS. \$3.10.  
Ask your dealer or write us.

The Day's Stock Food Co.  
STATION C. TORONTO.

## Shorthorn Cattle and Lincoln Sheep

Scotch Heifers for sale: Clippers, Mis-Ramsdens, Maids, bred to imported Governor General - 28865-, and imported Proud Gift (84421). They have both breeding and individual merit.

J. T. GIBSON, Denfield, Ontario.

## JOHN GARDHOUSE & SONS

Highfield P. O., Ont., Breeders of  
Scotch and Scotch-topped Shorthorns, Shire Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 49, at head of herd. Royal Albert (imp.) 20387, at head of stud. Farms 3 1/2 miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

We are offering: 4 BULLS ready for service, 14 ONE-YEAR-OLD HEIFERS, 3 TWO-YEAR-OLD HEIFERS, 10 COWS with calves by side or carrying calves; also this year's crop of calves, both male and female. Prices and terms will be made to suit customers. Our herd is headed by imports of Diamond Jubilee - 28861-. FITZGERALD BROS., Mount St. Louis, Elmvalle Sta., Hillsdale Tel. Office. om

## T. DOUGLAS & SONS,

STRAITHROY STATION & P. O.,  
BREEDERS OF Shorthorns and Clydesdales

85 Shorthorns to select from. Present offering: 14 young bulls of splendid quality and serviceable age, and cows and heifers of all ages. Also one (imp.) stallion and two brood mares.  
Farm 1 mile north of town.

## GOSSIP.

The Ontario Department of Agriculture, in order to assist those who have settled in the West, and also to encourage the breeders of the Province, has from time to time helped to gather together a sufficient number of live stock to take advantage of carload rates. Last week a shipment, bought by L. W. Paisley, Secretary of the Live-stock Association of British Columbia, was sent west in two palace horse cars and one smaller car. It consisted of ten horses, forty cattle, twelve sheep and ten pigs. In the consignment were a Clydesdale team, formerly owned by Mr. J. L. Clark, of Norval, which won second prize at the Toronto Horse Show, and a pair of Hackney mares from Mr. Yeager, of Simcoe, one of which got first prize at Galt Horse Show.

Mr. H. J. Davis, Woodstock, Ont., sails July 1st for Great Britain for another importation of Shorthorns and Yorkshires. His address while there will be care of Mr. Geo. Hood, Ashbourne, Derbyshire. Mr. Davis writes: "I have recently sold to Mr. F. W. Scott, of Highgate, Ont., the fine three-year-old imported heifer, Pansy Blossom, with a fine roan heifer calf at foot, by Bapton Chancellor (imp.). She is a very promising heifer of the low-down, blocky type. Also to Harry Smith, Exeter, the imported yearling heifer, Jewess 2nd, sired by Cornelius, a Royal winner, and full brother to the great Corner Stone. To Geo. Simpson, Moffat, the fine breeding cow, Lily Buckingham, in calf to imported Bapton Chancellor. Our bulls were all sold by March, and we have a fine crop of bull calves coming on, by Bapton Chancellor, which intending purchasers would do well to look over.

## WORKING HOURS.

Our men stop with the six o'clock whistle in the evening. They are at the chores at six a. m., and get to work after breakfast by seven. If there is anyone whose work is in better shape or closer up to time, we have not seen them. And yet on farms all over the country there are men who think that it is necessary to start with the cock crow and work until sundown. Then, all completely tired out, go to bed after supper, to rise unrefreshed in the morning to go through the same long drag. There is no time for reading or for social intercourse, and it is no wonder that the young people under such conditions come to look on farm work as hopeless drudgery. Stop off at six o'clock and rest and read the papers, and have time to get acquainted with the family and neighbors. Get completely cooled off before going to bed, and you will rise in the morning with renewed vigor for the day's work, and your men will also benefit by the rest. For the regular work of the farm the long hours are not needed any more than in other work— [Practical Farmer.

## TRADE TOPIC.

KEEP THE STABLES FRESH.—It has been proved beyond a doubt that a very large proportion of the manure made upon the average farm is entirely lost before it reaches the land. This loss is particularly heavy in the warm summer seasons, and the odors arising from the decomposing manures in stables, sheds or pens is most unpleasant and harmful. These conditions suggest the need of a good deodorizer that will arrest fermentation of the manure. Such an article is Arbut, sold by Campbell Arnott & Co., Toronto, as per advertisement. A small quantity scattered daily in the barns, stables, and other places where stock is kept, will not only keep them sweet and fresh, but will also preserve the health of the animals. This article has no objectionable smell, but is odorless and non-poisonous, and hence there is no danger to the user or the animals. It is put up in bags containing 25, 50 and 100 lbs.; sample packages, 25c.

## The Druggist Recommended It

Because He Knew of Scores of Severe Cases of Piles That Were Positively Cured by

## DR. CHASE'S OINTMENT.

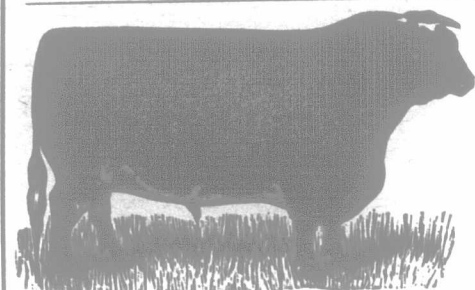
The writer of the letter quoted below suffered dreadfully from itching protruding piles for six years.

Like hosts of others, he was only disappointed with the many treatments he tried, until his druggist told him of what Dr. Chase's Ointment was accomplishing as a cure for this wretched ailment.

Mr. G. W. Cornell, who is with the Shaw Milling Company, St. Catharines, Ont., writes: "In justice to suffering humanity I write to tell you of the world of good I obtained from the use of Dr. Chase's Ointment. For about six years I was the victim of itching and protruding piles and was in dreadful agony day and night. Doctors were unable to help me, and I could get nothing to relieve the suffering. I was about as miserable a creature as was to be found on the face of the earth.

"One day my druggist, Mr. A. J. Greenwood, advised me to try Dr. Chase's Ointment, which I did, and obtained relief from the first box and complete cure with the second. My trouble was caused by heavy lifting, and I consider that Dr. Chase's Ointment would be cheap at fifty dollars a box in view of the good it did for me. A feeling of sympathy for others similarly affected prompts me to give this testimony."

Dr. Chase's Ointment, 60 cents a box, at all dealers, or Edmanson, Bates & Company, Toronto. To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.



30

## First-class Shorthorn Heifers For Sale

9 imported heifers.  
21 home-bred heifers.  
These heifers are Scotch, many of them in calf.  
Prices moderate. om

ARTHUR JOHNSTON, Greenwood, Ontario

Sunnyside Stock Farm. JAMES GIBB, Brookdale, Ontario.  
Breeder of high-class SHORTHORN CATTLE (imp.) "Brave Ythan" at head of herd. Stock for sale. om

## MAPLE LODGE STOCK FARM, 1854

Am offering a very superior lot of Shorthorn Bulls and Heifers as well as something VERY attractive in Leicesters.

Choice ewes got by imported "Stanley" and bred to imported "Winchester." Excellent type and quality.  
A. W. SMITH, MAPLE LODGE, ONT. om

## SHORTHORNS

Some extra good young bulls for sale. Catalogue.

JOHN CLANON, Manager. om

H. CARGILL & SON, OARGILL, ONTARIO.

BELL BROS., Cedar Stock Farm, Bradford, Ont. Breeders of Shorthorns, Clydesdales, and Shropshire sheep. Present offering: Two bulls, 9 and 14 months. Stock always for sale. om

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



Shorthorns, Clydesdales, Yorkshires
Special offering at present: Young York-
shire pigs, either sex; pairs not akin, and of
right type.

A. E. HOSKIN,
Cobourg, Ont., P. O. and Station.

SHORTHORNS.

Importer and breeder of choice Shorthorns
Scottish Hero 156736 at the head of herd.
JAS. A. ORERAR, Shakespeare, Ont.

HIGH-CLASS SHORTHORN CATTLE AND OXFORD
CLASS DOWNSHEEP
Present offerings: Young stock, either sex
For prices and particulars write to
JAS. TOLTON & SON, Walkerton, Ont.

GREEN GROVE STOCK FARM.
Herd headed by Abbot-
ford = 19146. Choice lot
of young cows and heifers for sale, of such families as
Clarets, Villages, Fairy Queens, Isabella's, Urya, Rose
of Autumn, and other good families. Apply to W.
G. MILTON, Goring P. O., Markdale Sta., Ont.

JUNE 28

A. D. MCGUGAN, Rodney, Ont., will sell at the
Great Combination Sale at Hamilton

fifteen imported and home-bred females
grand individuals and richly bred, of the
Marr, Roan Lady, Missie, Miss Ramsden,
Mina, Ury, and Claret families.

W. G. PETTIT & SONS

FREEMAN, ONT.,
Importers and Breeders of

Scotch Shorthorns

110 head in the herd, 40 imported and 20 pure
Scotch breeding cows. Present offering: 3 im-
ported and 6 pure Scotch from imported sire
and dam; 6 Scotch-topped from imported sires;
also imported and home-bred cows and heifers
of the most popular type and breeding. A few
choice show animals will be offered.

Burlington Jct. Sta. Telegraph & Telephone

First-class Shorthorns—Young cows and
heifers of fashionable
breeding. Also Shropshires of different ages.
Write for prices, etc., to
T. J. T. OOLE,
Bowmanville Sta., G. T. R. o Tyrone P. O.

RAISE YOUR CALVES
cheaply and successfully on

Blatchford's Calf Meal

AND SELL THE MILK.
Free Pamphlet - - How to do it.
ADDRESS
CHAS. COWAN, LONDON, ONT.

PROSPECT HILL FARM High-class SHORTHORNS

FOR SALE: 4 bulls, from 7 to 12 months old;
3 sired by Aberdeen Hero (imp.), 2 by Royal
Duke, he by Royal Sailor (imp.). Also some
heifers bred to Wandering Count.
J. R. McDALLUM & SON, Iona Pta., Ont.

HIGH-CLASS SHORTHORNS.
8 heifers, in calf to an imported Scotch bull; 6 bulls
ready for service; about 15 heifer and bull calves,
from 3 to 12 months old. Prices very reasonable,
considering quality. Inspection invited. FRANK
W. SMITH, Walnut Farm, Scotland, Ont.

HILLHURST FARM (ESTABLISHED FORTY YEARS)

SHORTHORN herd numbers 30, with Imp.
Scottish Hero (Missie) and
Broad Scotch (Sittton Butterly) in service.
Some choice young bulls and heifers for sale,
by Joy of Morning, Scottish Beau, and Lord
Mountstephen, from imported and Canadian-
bred dams of HAMPSHIRE flock 80 ewes;
milk strains. HAMPSHIRE '03 lambs sold
Jas. A. Cochran
HILLHURST P. O., o COMPTON Co., P. Q.

SHORTHORNS AND SHROPSHIRE.
FOR SALE: Young bulls and heifers from
best blood. Shearlings and lambs bred from
imp. stock on side of sire and dam. Prices
reasonable.
E. E. FUGH,
Claremont P. O. and C. P. E. Sta.

PINE GROVE SHORTHORNS

High-class CRUICKSHANK, MARR and CAMPBELL
SHORTHORNS, and SHROPSHIRE SHEEP.

Herd won 1st prize, open to all ages, and 1st for herd under 2 years, at Dominion Exhibi-
tion, Toronto, '03, headed by imported "Marquis of Zenda," bred by Marr, assisted by imported
"Village Champion," bred by Duthie; also "Missie Champion," son of imp. "Missie 153rd,"
and "Clipper King," a superior young bull, full of the blood of the Cruickshank Clipper
family. One imported and four superior young home-bred bulls, ready for service, fit
for herd headers, for sale.

On JUNE 28th next, we sell at PUBLIC AUCTION, in conjunction with other
Canadian breeders, at the Sale Pavilion, Hamilton, Ont., 15 of our imported and home-bred
cows and heifers.

W. C. EDWARDS & Co., Limited, Proprietors.
JOS. W. BARNETT, Mgr., Rockland, Ont., Can.

W. B. Watt's Sons

BREEDERS OF SHORTHORNS and GLYDESDALES

Don't miss the chance to get a grand cow or heifer, in calf to the \$1,200 Scottish Beau
(imp.), from the herd that has produced more champions and won more herd prizes than any
other herd in Canada. A fine blocky pair of bull calves and a yearling stallion for sale at
once. Write for particulars.

Elora Sta., G.T.R. & C.P.R. Salem Post and Tel. Office. \*Phone connection.

IMPORTED SHORTHORNS AND GLYDESDALES

15 imported Scotch Shorthorn heifers, all
in calf or calves at foot; 2 imp. bulls; both in
pedigree and individually these animals are
gilt-edged. Four three-year-old imported
Clydesdale fillies, very large and AI quality.

ALEX. ISAAC, o Cobourg P. O. and Station

Scotch Shorthorns & Berkshire Swine

AT VALLEY HOME STOCK FARM
For Sale—Stock of all ages, of both sexes. Our
Shorthorns are the thick-fleshed
sort, of choice breeding and quality. Also
young Berkshires of AI breeding. Stations:
Meadowvale or Streetsville Junction, C. P. R.,
and Brampton, G. T. R. Visitors welcomed.
J. J. PEARSON, SON & CO., Meadowvale P. O. and Telegraph.

3 Choice Young Shorthorns and a number of
COWS and HEI-
FERS with calves at foot or bred to Scotland's
Fame, Imp. Also BERKSHIRE PIGS nearly
ready to wean. DAVID MILNE,
E. HELL, ONT.

Shorthorns, Berkshires and Leicester.
FOR SALE: Choice two-year-old heifers, well gone
in calf; also yearling heifers, bull calves. Boars
and sows fit for breeding, and young pigs.
ISRAEL GROFF, ALMA, ONTARIO.

WE HAVE FOR SALE

7 Shorthorn Bulls

of serviceable age and of present-day type. 1
imp. in dam, 3 from imp. sire and dam, 3 from
imp. sire, and from Scotch dams of such noted
families as Rosebud, Claret, Missie, Stamford,
Augusta and Strawberry, mostly sired by imp.
Greengill Victor, a Princess Royal, bred by W.
S. Marr, and one of greatest bull-getters living.
Also can sell a number of choice Scotch heifers,
in calf. If you want a herd header, or cows
that will produce them, write us. Herd num-
bers 75. Bull catalogue on application.

R. MITCHELL & SONS,
Nelson Ont., Burlington Jct. Sta.

SHORTHORNS and GLYDESDALES

Present offerings: Spicy Count (imp.), Duthie;
15 bulls and heifers of his get, from 10 to 18
months old; also a few cows in calf to S. C.
Fair heavy draft, rising three years old.

J. S. McARTHUR
Pine Grove Stock Farm. GOBLE'S, ONT.

J. WATT & SON

FOR SALE: ROYAL WONDER 2ND, red,
19 months old, sired by Royal
Wonder, dam Engli-h Lady 12th by Royal
Sailor (imp.), g. dam by Bampton Hero. Also
cows and heifers in calf and with calves at
foot to imported bulls with the most up-to-date
pedigrees.

P. O., Salem, Ont. Elora Stations, G. T. R. & C. P. R.

Queenston Heights Shorthorns

Derby (imp.), a Jamieson-bred "Secret,"
at head of herd. Write for what you
want.

HUDSON USHER, - QUEENSTON, ONT
o Farm 3 miles north of Niagara Falls.

FOR SALE: STOCK BULL

Captain Bruce, quiet, active
and sure. Also four young
bulls, three roans and one red
from 10 to 16 months, of the
low-down, thick-fleshed sort.
Anyone wanting a first-class
animal should come and see
them, or write for prices.

W. McDERMOTT,
Living Springs, Ont., Fergus Station.

SHORTHORNS for sale, either
sex. Also Scotch
collie pups now ready for shipment; color-
able and white, well bred and well marked. Write
for particulars. J. K. HUX, Rodney, Ont., P. O. & Sta.

GOSSIP.

Dunedin Park Jersey herd, the property
of Mr. W. W. Everitt, Chatham, Ont.,
was recently inspected by a representa-
tive of the "Farmer's Advocate," and
found in the pink of condition. They are
mostly of the St. Lambert family.
Rosa's Comet and Monarch head the
herd. Rosa's Comet has proved himself
an excellent stock-getter. Among his
progeny we noticed a seven-months-old
bull calf from Vita of Glenallan, that
should make an exceptionally good one.
His dam is a heavy milker; has a butter
record of 14 lbs. in seven days on grass
alone. Carnation's Cherub, we are in-
formed, is giving 14 quarts of milk a
day, now about three months of calving.
This is certainly persistent milking.
Vita's Riotress is developing into a fine
cow. This is her first season at the
pail, and she is giving 12 quarts per day
on grass alone, and it is several months
now since she dropped her calf. Mr.
Everitt has a few choice ones yet to dis-
pose of. Readers of the "Farmer's Ad-
vocate" wanting to get a cream or
butter cow would do well to call and see
Mr. Everitt's stock, or correspond with
him.

The live-stock exhibits of the Universal
Exposition, at St. Louis, continue to at-
tract general attention, and stockmen in
all the breeding districts of the world
are looking forward with eager antici-
pation to the assembling of the best
specimens of all the improved breeds of
domestic animals at St. Louis from
August 22 to November 19.

The Universal Exposition is daily in
receipt of advices of important meetings
to be held at St. Louis during the
period of the Live-stock Show. All in-
terested in arranging live-stock meetings
at the World's Fair have been invited to
file dates for such conventions with Col.
Charles F. Mills, Chief of the Live-stock
Department of the Exposition.

The dates for exhibition of live stock in
the several divisions will be as follows:
Horses, August 22 to September 3, in-
clusive; cattle, September 12 to 24;
sheep and goats, October 3 to 15; swine,
October 3 to 15; poultry, October 24 to
November 5; carload lots of cattle,
November 14 to 19.

Parades of live stock at the World's
Fair will take place as follows: Horses,
asses and mules, Tuesday, August 23,
and Thursday, September 1; cattle, Tues-
day, September 13, and Thursday, Sep-
tember 22.

Among the enterprising farmers and
stockmen of Kent Co., Ont., is Mr. W.
J. Mitton, whose farm is known as
Mapleton Park, located a short distance
west of Thamesville, G. T. R. Mr.
Mitton does not believe in putting all his
eggs in one basket. He has established
a nice quality herd of Shorthorn cattle
and also breeds Yorkshire hogs as well
as carriage horses and Brown Leghorn
fowls.

The Shorthorns are headed by Chester-
field Minto = 44437-, by Pride of Har-
wich, dam Chesterfield Queen, by Royal
Chief, grandam by Duke of Salisbury
(imp.). Among the female foundation is
Lady Howard, of the Princess family,
sired by Bothwell Chief 18592, dam
Rosy B. Lady Mapleton was sired by
the Cruickshank bull, Earl Buckingham
= 24560-. Of this sire Mr. A. J. C.
Shaw, of Thamesville, Ont., says, "It
was one of the greatest mistakes I ever
made in Shorthorn breeding when I let
Earl Buckingham go." Lady Mapleton
has a good bull at her side about twelve
months old that will develop into a good
one. Princess Mapleton, from Lady
Mapleton, by Dawn Chief, is another use-
ful cow, as is the herd throughout.

The Yorkshires are headed by the grand
imported boar, Dalmeny Duke = 14818-,
bred by Lord Roseberry, and the fine im-
ported sow, Worsley Queen 8th, bred by
the Earl of Ellesmere, has recently been
added to the original herd, which are
of the best breeding and quality,
being bred from the best of
the Oak Lodge stock, and from
present appearance Kent Co. will not re-
quire to go farther than Thamesville
while the supply at Mapleton Park lasts.
Of Brown Leghorns, Mr. Mitton is
quite an extensive breeder, and his
motto is, "The best is none too good."
We solicit a portion of this trade for
this breeder, who is also a breeder of
some good carriage horses; some of his
breeding having recently been sold to the
Prince of Wales.

THOROLD CEMENT
AND
PORTLAND CEMENT

FOR BARN WALLS AND FLOORS,
HOUSES, SILOS, PIGPENS,
HENHOUSES; AND SEWERS,
TILE, ABUTMENTS AND PIPES,
FOR BRIDGES, GRANOLITHIC
SIDEWALKS; IN FACT, FOR ALL
WORK THAT CAN BE DONE
WITH CEMENT.

Estate of John Battle
THOROLD, ONT.
WHOLESALE IN CAR LOTS ONLY.

SHORTHORN BULLS FOR SALE.

We have three choice young Shorthorn bulls
now on offer, one Cruickshank Mysie, and one
Scotch Jessamine, each 12 months old and
sired by Spicy Robin; and one Cruickshank
Orange Blossom, from imported sire and dam;
also females of all ages. Herd headed by imp.
Joy of Morning (7693), winner of 1st prize at
Toronto Exhibition, 1903; also S.-C. White Leg-
horn eggs for sale at \$1 per 12.
GEORGE D. FLETCHER, Binkham, Ont.

Rose Cottage Stock Farm SHORTHORNS
Royal Prince = 31241- at the head, assisted
by Sir Tatton Sykes = 49402-, Royal Prince,
the sire of Fair Queen, winner over all best
breeds at Chicago International Fat-stock
Show, 1903. We have 6 heifers and 4 bulls for
sale. o H. K. FAIRBAIRN, Thedford, Ont.

Family and Stockmen's Recipes

Receive expert attention with us. Send
recipe for price, it will be observed as
confidential and returned promptly.
The Worthington Drug Co., Guelph, Ont.
Chemists and Manufacturers of Worthing-
ton Stock Food.

For Sale: 3 SHORTHORN BULLS

from 12 to 20 months old, from Scottish
Baron = 40421-.
H. GULDING & SONS, Thamesford, Ont.

SHORTHORNS.

8 young bulls, 11 heifer
calves, yearlings, two-year-
olds and young cows for sale. Several Miss Hamilton
and the very best families represented. Prices mod-
erate.
G. A. BEOLIE, Bethesda, Ont.
Shedville Station.

SHORTHORNS

Present offerings: Roan
Robin 2377, a Watt bull;
Prince Charlie 6 412, a Russell bull. Also a few
good females. For price and particulars write
to
W. W. WALLACE,
Woodland Farm, Mount Forest, Ont.

High-class Shorthorns—Two bulls ready for
service. Also young
cows and heifers of different ages, of the Lavina and
Louisa families. For prices and particulars apply to
BROWN BROS., Lakeview Farm, Orono P. O.
Newcastle Station, G. T. R.

Shorthorns, either sex; also Oxford rams,
For prices and particulars write
to
RICHARD WILKIN,
Springfield Stock Farm, o Harriston, Ont.

JERSEYS

For quick buyers, we are going to
sell 15 bulls and 25 females. Owing
to the natural increase of our herd and so many
heifers coming into milk, we make the above
offer. Stock of all ages. State what you want
and write to-day to
B. H. BULL & SON,
o G. T. R. and G. T. R., Stratford, Ont.

Riverside Holsteins

80 head to select from. Young bulls whose dams have
official weekly records of from 17 to 21 lbs. of butter,
sired by Victor De Kol Pietertje and Johanna Rue
5th Lad. Write for prices.

Matt Richardson & Son,
Caledonia P. O.
and Station.

Holstein Bull Calves

Sired by Beryl Wayne Paul Concordia, whose
sire's dam has an official record of 27 lbs. 14 oz.
in 7 days. His sire's sire, De Kol and's Paul De
Kol, is sire of 32 cows with official records
averaging over 20 lbs. each. Bull calves for
sale.

BROWN BROS.,
Lyndale Stock Farm, LYX, ONT.

Brookbank Holsteins

16 to 25 lbs. of butter in 7 days' official test are the
records of this herd of Holstein cows. Heifers of
equivalent records. Bulls for sale whose sires and
dams are in the Advanced Registry, with large
official butter records.

GEORGE RICE, TILSONBURG, ONT.
If You Want a Bull (under 1 year) to show
and win with this fall,
bred from officially tested stock, write
H. BOLLEB, Cassel, Ont.

Ridgedale Farm Holsteins

Bull and heifer
calves, bred from
rich milking strains, on hand for sale. Prices
right. Write for what you want.
R. W. WALKER, Utica P. O., Ontario.
Shipping stations: Port Perry, G. T. R., and
Myrtle, C. P. R. Ontario County.

4 HOLSTEIN BULLS

FOR SALE: From 4 to 7 months old, having sires in
their pedigrees from such strains as Inka, Nether-
land, Royal Aaggie, and Tritonia Prince, and out of
imported females that have proven their worth at
the pail. THOS. B. CARLAW & SON,
Warkworth.

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**AYRSHIRES AND YORKSHIRES**



**YORKSHIRE**  
Boars and sows, four to eight weeks old, \$5.00 each at farm, \$1.00 extra crated and shipped.

**YEARLING Ayrshire Bull**, fit for service, \$65.00.

SEND FOR CATALOGUE

**J. G. CLARK,**  
Woodroffe D. and S. Farm, Ottawa.

**BARREN COW CURE**

makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from **L. F. BELLEBOK,** Morrisburg, Ont.

**IMPORTED AND HOME-BRED AYRSHIRES**

The average butter-fat test of this herd is 4.8. A few young bulls and females, all ages, FOR SALE.

**Robt. Hunter & Sons, Maxville, Ont.**  
Farm one mile from Maxville station on C.A.R.

**For Sale**—Ayrshires, all ages, and eggs for hatching from Leghorns, Hamburgs, Dorkings, ducks and Bronze turkeys. Also five Collie pups. For further particulars write to **WM. STEWART & SON,** Meade, Ont.

**SPECIAL OFFER**—BULL CALVES out of such dams as Cherry of Hairlock and Merjorie, one of the best Silver King cows in herd. These calves will be sold at very low prices, quality considered. **ISAL EIGHT GRANGE FARM,** J. N. Greenhalghs, Prop. Danville, P. Q.

**BARGAINS IN FASHIONABLE AYRSHIRES.**

Three 2-year heifers, in calf, at \$40 each; three 1-year heifers, from \$25 to \$40. one 1-year bull, a Chubb, at \$45; one 10-month bull calf, full brother, \$30. The above stock is well grown, and would be in the game in any competition, and from stock of heavy milkers, with grand udders and quarters. **O. H. SNIDER, Attercliffe P. O., Can ship via M. C.R. or G.T.R. at Danville, or C.P.R. Smithville.**

**3 Ayrshire Bulls** one year old, fit for service, all prizewinners last fall at Ottawa Exhibition. Females any age. Shropshire sheep, Berkshire pigs; a fine lot of young ones, both sexes, and H. P. Rocks. Eggs for hatching. **J. TUILL & SONS, Carleton Place, Ont.**

**SUNNYSIDE AYRSHIRES.** Are prizewinners as well as enormous producers. I have for sale 4 young bulls, sired by the Pan-American winner, Leader of Meadowbank; females all ages, of true dairy type. **JOHN W. LOGAN, Alma's Corners P.O., Que. Howick Sta., G.T.R.**

**AYRSHIRE HERD-HEADER.**

I offer the grand imported bull, Royal Peter of St. Annes, an A No. 1 bull, both individually and as a sire. Also three yearlings and a number of calves, including three last August bulls.

**W. W. BALLANTYNE, STRATFORD.** "Heldpath Farm" adjoins city.

**Homecroft Farm.** High-class Ayrshire Cattle, Chester White Swine, Barred Rock Eggs

for sale at reasonable prices. For particulars write to **J. F. PARSONS & SONS, Barnston Que.**

**STOCKWOOD AYRSHIRES** are bred for size, beauty and profit, from imp. and home-bred stock with high milk records and extra high test. Young stock always on hand. Prices right. **David M. Watt, Allan's Corners, Que. Brysons, G.T.R., 4 miles; St. Louis Sta., C.A.R., 2 miles.**

**AYRSHIRES**

From winners in the dairy test five years in succession. Dairyman of Glenora, bred from imp. sire and dam, at head of herd. Young bulls fit for service and bull calves and females for sale.

**N. DYMENT, CLAPPISON, ONT.**

**TREDINNOCK AYRSHIRES**

4 imported bulls from the best milking strains in Scotland head the herd of 75 head. Winnings for 1905 at Toronto and Ottawa: The gold medal and 4 first prize herds; 38 prizes in all—18 firsts, 6 seconds, 5 thirds, 9 fourths. In the Pan-American milk test, the 2 first Ayrshires were from this herd. Quality, size, milk and tests is our aim. Young bulls and heifers for sale. Price and particulars, apply to **JAS. BODET, Manager, St. Anne de Bellevue, P. Q. G. T. R. and C. P. R. stations on the farm, 22 miles west of Montreal.**

**BARREN COWS CURED**

Write for Pamphlet **MOORE BROS. V. S. ALBANY NEW YORK**

**Pennabank SHROPSHIRE and SHORTHORNS**

A number of extra good and well-covered yearlings of both sexes, sired by imp. Rudyard ram. Also two extra nice young bulls. Prices reasonable. **HUGH PUGH, WHITEVALE, ONT.**

**HILLOREST LARGE ENGLISH BERKSHIRES**

For sale from imported stock and Canadian show animals. Various strains represented and new blood introduced at intervals. Each purchaser gets registered certificate of pedigree, and any animal failing to prove a breeder is replaced. **JNO. LAHMER, VINE, ONT., Vine Sta., G.T.R., near Barrie.**

**I Will Import:**

Show or breeding rams or ewes, bulls or heifers, horses or pigs, of the improved breeds. Send orders soon to me:

**ROBERT MILLER,** Care of **ALFRED MANSELL & CO.,** Live-stock Exporters, Shrewsbury, Eng.

**Sheep Breeders' Associations.**

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to **MORTIMER LEVERING, Secretary, Lafayette, Indiana. Ont.**

**FARNHAM OXFORDS**

We had the champion flock of Oxfords in 1903. Importations annually. Animals of all ages and sexes, both imported and Canadian-bred, for sale at all times at reasonable prices.

**HENRY ARKELL & SON** ARKELL, ONTARIO.

**"MODEL FARM" SHROPSHIRE**

Do you want an imported ram or a home-bred one to improve your flock? Our offerings will please you. 10 imported rams and many home-bred ones (from imported stock) to choose from—massive fellows, all West and mutton and the type that pleases. Stock of all ages for sale. Prices consistent with quality. Long-distance phone No. 94. **W. S. CARPENTER, Prop., SIMCOE, ONT.**

**Dorset Sheep and Lambs,** also Large Yorkshire pigs from imp. boars, for sale. Prices reasonable. For particulars write to **ELMER DYMENT, Copetown P. O.**

**Shropshire Sheep and Lambs.** Also an Aberdeen-Angus Bull. For particulars write to **W. R. BOWMAN, Mount Forest, Ont.**

**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: **NOWBRAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.**

Cables—Sheepcote, London.

**TAMWORTHS—DORSET HORN SHEEP.**

Choice boars and sows of different ages at very reasonable prices. Also a few Dorset Horn rams from first-class stock. **JAMES DICKSON, Crono, Ont. "Glenairn Farm."**

**TAMWORTHS AND HOLSTEINS**

One bull calf sired by an imported bull. Boars fit for service. Sows bred and ready to breed. 50 boars and sows from 2 to 5 months old. Pairs not akin. **BERTRAM HOSKIN, Grafton Sta., G. T. R. The Gully P. O.**

**GLENHOLM HERD OF TAMWORTHS**

We are now booking orders for spring litters. Have 5 boars and 5 sows, 6 months old, left, and a fine lot of younger ones. **F. O. SARGENT, Eddystone, Grafton Sta., G.T.R.**

**Newcastle Tamworths & Shorthorns**

We have for quick sale a lot of choice Boars and Sows, Oct. and Nov. litters, the produce of our Toronto Sweepstakes Stock and the undefeated Boar, "Colwill's Choice" 1343. We are also booking orders for March and April Pigs, the choicest of breeding. We also offer for quick sale 2 or 3 choice Shorthorn Heifers, 12 to 15 months old; also one 2-year-old in calf; all first-class stock, got by bull weighing 2,500 lbs. Write quick if you want something good at moderate prices.

**COLWILL BROS., NEWCASTLE, ONT.**

**LARGE ENGLISH YORKSHIRE**

Sows safe in imported stock, bred to imported boars; boars fit for service, same breeding as sows; boars and sows three and four months old, from imported stock, pairs not akin. Write **JAS. A. RUSSELL, PRECIOUS CORNERS, ONT.**

**FOR SALE**—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigree and safe delivery guaranteed. Address **E. D. GEORGE, Putnam, Ont.**

**YORKSHIRES** Boars fit for service, at reduced prices. Sows in farrow and ready to breed, and young stock on hand. Write for prices. **WM. HOWE, North Bruce, Ont.**

**Hampshires at Wiltshire County Show.**

The increased interest taken in Hampshire Down sheep in Canada will render interesting a few notes re the exhibit made at this show, because the competition here ranks very high in the opinion of the breeders, and great efforts are made to secure an award here.

The entry, as a whole, was of very superior merit. In the yearling ram class, Mr. Carey Coles, with a splendid type of the breed, secured first honors. Second and third places were filled by two rams from Mr. James Flower's flock. These were of high quality, with capital fleeces and grand flesh. Mr. H. C. Stephens and Sir W. G. Pearce, a fresh exhibitor, came in for minor honors. The pens of three ram lambs were well brought out, Mr. Flower's being an easy first; second honors going to a big, well-grown pen of wide lambs from Mr. Ovey's; third were a pen from Mr. Coles. The r. n. pen of Mr. Stephens' were badly treated in being so low down as No. 4. This flock has been well bred for many years, and is fast coming to the fore. For single ram lambs, a notably fine and typical lamb, with the best of flesh, type and symmetry, property of Mr. Flower, was selected for premier honors. Mr. Coles secured second honors with a lengthy lamb, of good character and type; leaving third award to a meritorious lamb of Flower's. This last named exhibitor again demonstrated the merit of his grand flock by taking first and second honors in the class for pens of three ewe lambs; the winning pen being quite one of the best sent out for some years from Chilwark. This pen was made the champion pen of the show. Mr. Ovey's pen came in for the next award, a very wide and well-grown pen; whilst those from the flock of Sir W. G. Pearce was of great merit and quality. Mr. Stephens' flock was also represented by a specially good pen; whilst Mr. Cole's entry, that displayed good merit, was out of the competition owing to a slight accident to one of his lambs.

**GOSSIP.**

The Register Yearbook containing the official record cows and their sires, entire list of official butter and milk records of the Holstein-Friesian Association of America, together with the economic records, standard list of sires, a list of cows having two or more A. R. O. daughters, prizewinners of 1902-3, scale of points, etc., has been published, and is ready for distribution at the price of \$2. Breeders are finding this Yearbook a most useful test for reference. Fred L. Houghton, Brattleboro, Vt., is the editor.

Special cash prizes in the amount of \$600 are offered this year by the American Cotswold Registry Association: D. McCrae, Guelph, Ont., Pres.; F. W. Harding, Waukesha, Wis., Sec.-Treas. At the World's Fair, to be held at St. Louis, \$400 is distributed over the classification adopted by that Show; but competition for this special fund is limited to American-bred Cotswolds which are recorded in the American Cotswold Registry Association. Awards will be made by the regular judge after the following plan: All entries are to be placed by the judge in each section according to merit. Four prizes are offered in each section by American Cotswold Registry Association, and the four animals holding the highest places among those that are eligible to compete will be awarded 1st, 2nd, 3rd and 4th special prizes according to their respective positions.

At the next International Show to be held in Chicago in December, the prizes in the Cotswold sheep class will be duplicated by American Cotswold Association, but not to exceed \$200.

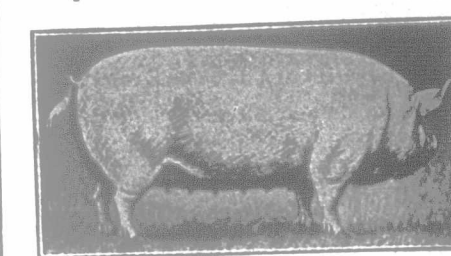
A day will be appointed later for a sale of Cotswold sheep to be held on the World's Fair grounds, St. Louis, during the time of sheep show. Entries will be confined to Cotswolds regularly entered and shown at World's Fair. Those desiring to enter sheep in sale should apply to F. W. Harding, Secretary.

**A BAD CASE OF KIDNEY TROUBLE CURED BY DOAN'S KIDNEY PILLS.**

Kidney Troubles, no matter of what kind or what stage of the disease, can be quickly and permanently cured by the use of these wonderful pills. Mr. Joseph Leland, Alma, N.W.T., recommends them to all kidney trouble sufferers, when he says:—I was troubled with dull headaches, had frightful dreams, terrible pains in my legs and a frequent desire to urinate. Noticing DOAN'S KIDNEY PILLS recommended for just such annoyances as mine, it occurred to me to give them a trial, so I procured a box of them, and was very much surprised at the effectual cure they made. I take a great deal of pleasure in recommending them to all kidney trouble sufferers.

Price 50c. per box, or 3 for \$1.25; all dealers or The Doan Kidney Pill Co., Toronto, Ont.

**Improved Yorkshires**



Over three hundred for sale. The last three years our herd has won ninety per cent. of the first prizes at the leading shows, competing against American and Canadian breeders. We have more imported animals in our herd than all other breeders combined in Canada. We have the best blood from the leading herds in England and Scotland. Prices reasonable. **D. O. FLATT & SON, MILLGROVE, ONT.**

**YORKSHIRES FOR SALE**

From the pioneer herd of the Province of Quebec. Both sexes and all ages. Satisfaction guaranteed on all mail orders. Also Pekin Duck Eggs for sale, \$1.00 a setting, or \$1.75 for two settings. Address: **A. GILMORE & SONS, Athelstan, Que. Railroad stations: Athelstan, N. Y. C.; Huntington, G. T. R.**

**ENGLISH BERKSHIRES.**

For Sale: Young boars of Bacon-type. Choice young pigs; pairs not akin supplied. Short-horn bulls, also calves of both sexes. **JOHN RAOY, Jr., Lennoxville, Que.**

**RIVER VIEW FARM**

**ROBERT CLARKE,** Importer and Breeder of **Chester White Swine** Pigs shipped not akin to each other. For price and particulars, write **41 COOPER STREET, OTTAWA, ONT.**

**MAPLE LODGE BERKSHIRES.**

Having left Snelgrove and secured Maple Lodge Farm, Brampton, I am prepared to supply pigs of the best bacon type and breeding, with fresh blood added, and in as large numbers as ever. Have a few good young boars ready for service and fine sows ready to breed. Spring pigs have come strong, and we can supply pairs not akin. Address: **WILLIAM WILSON, Box 191, Brampton, Ont.**

**LARGE YORKSHIRES**

**GLENBURN HRRD**—upwards of 100 fine spring pigs, sired by imported Holywell Hewson. Also a few 6 month s'boars. Prices reasonable. **DAVID BARR, JR., RENFRERW, ONT.**

**YORKSHIRES AND BERKSHIRES.**

**FOR SALE:** Sows safe in pig and ready to breed. Boars 2 to 5 months old, of the long deep-sided type. At bargain prices if taken soon. Write **C. & J. CARRUTHERS, Cobourg, Ont.**

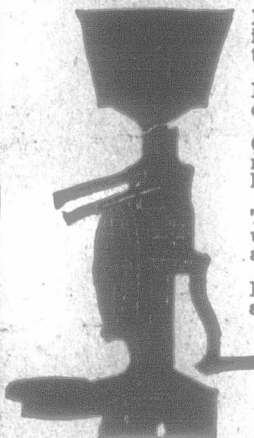
**MAPLE GROVE YORKSHIRES**

Six May litters from show sows, five of them Toronto winners, pairs not akin. Also young sows in farrow. Dalmeny Cavalier (imported) and Maple Grove Vanguard at head of herd. **T. J. COLE, Box 188, Bowmanville, Ont.**

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Never fails to give increased profits to users.

It is absolutely cleanly.

Combines best methods with lowest cost.

Thousands are using them and are satisfied.

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**YOU'VE HIT THE NAIL  
ON THE HEAD**



if you have come to the conclusion that you need

**THE  
U.S. CREAM  
SEPARATOR**

It's a necessity to every progressive dairyman who desires to make the most out of his cows. Write for illustrated catalogue telling about its

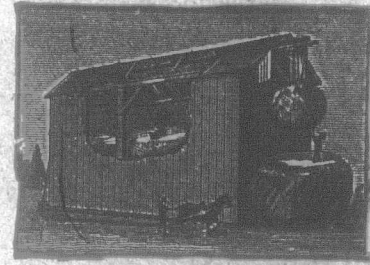
**THOROUGH SEPARATION, LOW SUPPLY CAN, POWER CLUTCH AND OTHER POINTS OF SUPERIORITY.**

We have the following transfer points: Portland, Me., Sherbrooke and Montreal, Que., Hamilton, Ont., La Crosse, Wis., Minneapolis, Minn., Chicago, Ill., Sioux City, Ia., Omaha, Neb., Kansas City, Mo. Address all letters to

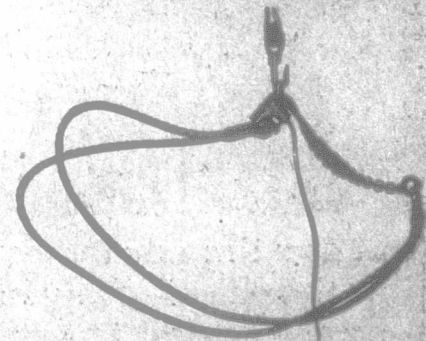
**Vermont Farm Machine Co., Bellows Falls, Vt.**

**BUCHANAN'S  
(Malleable Improved)  
PITCHING MACHINE**

For unloading hay and all kinds of loose grain.



Unloads on either side of barn floor without changing car. No climbing necessary. Malleable Iron Cars. Steel Forks. Knot Passing Pulleys. Will work on stacks as well as in barns. Satisfaction guaranteed.



**The Common-Sense Sheaf-Lifter**

Works in connection with Pitching Machine, and is the most complete apparatus ever offered to the public for pitching sheaves. Sheaves left in the mow just as they come from the load.

**RESPONSIBLE AGENTS WANTED**

Circulars, Prices and Terms on application to **M. T. BUCHANAN & CO., Ingersoll, Can.**

**EXCELSIOR LIFE  
INSURANCE COMPANY.**

HEAD OFFICE, TORONTO.

ASSETS, ONE MILLION DOLLARS  
Insurance in force over \$6,000,000

A Company with an unparalleled low death rate, low expense rate, and earning over 6 per cent, on assets, is a desirable Company to insure in and a good Company to represent. Agents wanted. Liberal contracts offered good producers.

E. MARSHALL, Sec. D. FASKEN, Pres.

ADVERTISE IN THE ADVOCATE.

**STRENGTH FOR WEAK MEN**



Nature intended you to be strong. You have the physique, the constitution, and yet you do not feel the vim, the sand, the ambition one would expect in a person of your age. What is it? Why, a lack of vitality—the foundation of strength. You have lost it, no matter how. Get it back, feel young, look young, act young. Life is beautiful when you have health. I can cure you with my

**DR. McLAUGHLIN'S  
ELECTRIC BELT.**

It is a positive cure for all weaknesses in man or woman. It is a wonderful tonic, a vitalizer. When you arise in the morning, after having worn it all night, you feel the vigor of youth in your veins. It floods the body with warm, glowing vitality that makes the nerves strong, quickens the circulation, restores natural vigor and makes its wearer feel like one born again.

*It cures, to stay cured, Nervous Debility, Weakness of any kind, whether in Nerves, Stomach, Heart, Liver or Kidneys. It cures Rheumatism, Pains in Back and Shoulders, Sciatica, Lumbago, Indigestion, Neuralgia, Constipation, Dyspepsia and all troubles where new life can restore health.*

**STRONG PROOF:**

"If I can do anything to help you sell to others I will do so, for it will cure anyone suffering from pains in any part of the body. I would not take twice the price for mine now."—ROBERT RIMMER, Aroola, N.W.T.

"I am strong and weigh heavier than I ever did before. I have not tasted a single drop of medicine since using your Belt, whereas before I was constantly taking something. I find it all you claim for it, and more."—Geo. A. MULLETT, Elm Springs, Man.

"After thirty days' use of your Belt I feel more energetic, more lively, and better in every way. I have the greatest confidence in your Belt, and know that I shall soon be completely cured."—NICHOLAS SULLIVAN, Water, Ont.

"I have been wearing your Belt every evening for a month, and I must say that I feel ever so much better. On rising in the morning I feel so bright; in fact, dear sir, I do not know how to thank you."—MARGARET J. NELSON, 73 Hazen Street, St. John, N.B.

**I TAKE ALL CHANCES.**

All I ask is reasonable security that I will get my pay after you are cured. I will send you my New Belt with its Electric Suspensory and all attachments necessary for your case, and you can

**PAY WHEN CURED.**

**FREE BOOK.** I have a book which every man should read (one for women also). It tells of facts that are of interest to every man who wants to remain young in vitality at any age. If possible call and let me show you how my Belt cures. I will talk over your case with you. **CONSULTATION FREE.** If you can't call send for my Book. I mail it to you closely sealed free.

OFFICE HOURS:—9 a.m. to 6 p.m.; Wednesday and Saturday till 8.30 p.m. **DR. M. S. McLAUGHLIN,** 130 YONGE ST., TORONTO, CAN.

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Use metal inside and outside and your building will be warm and dry, lightning fire, wind and weatherproof, possessing a beautiful appearance at small cost.

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**WHY RUPTURED?**

You can be Cured at Home, Without Pain, Danger and No Loss of Time from Work. No Case too Bad or of too Long Standing



MR. JOHN MORRIS, Niagara St., St. Catharines, Ont., is cured of a dangerous rupture and lost no time from work. A Valuable Book, telling how all ruptures can be cured and a Free Trial Method sent sealed post-paid, free of all cost to all sufferers. Write at once; correspondence confidential.—DR. W. S. RICE, 2 Queen St. East, Dept. (271), Toronto, Ont.

**WOOL** E. T. CARTER & CO., TORONTO, ONT.

**HIDES AND SKINS**

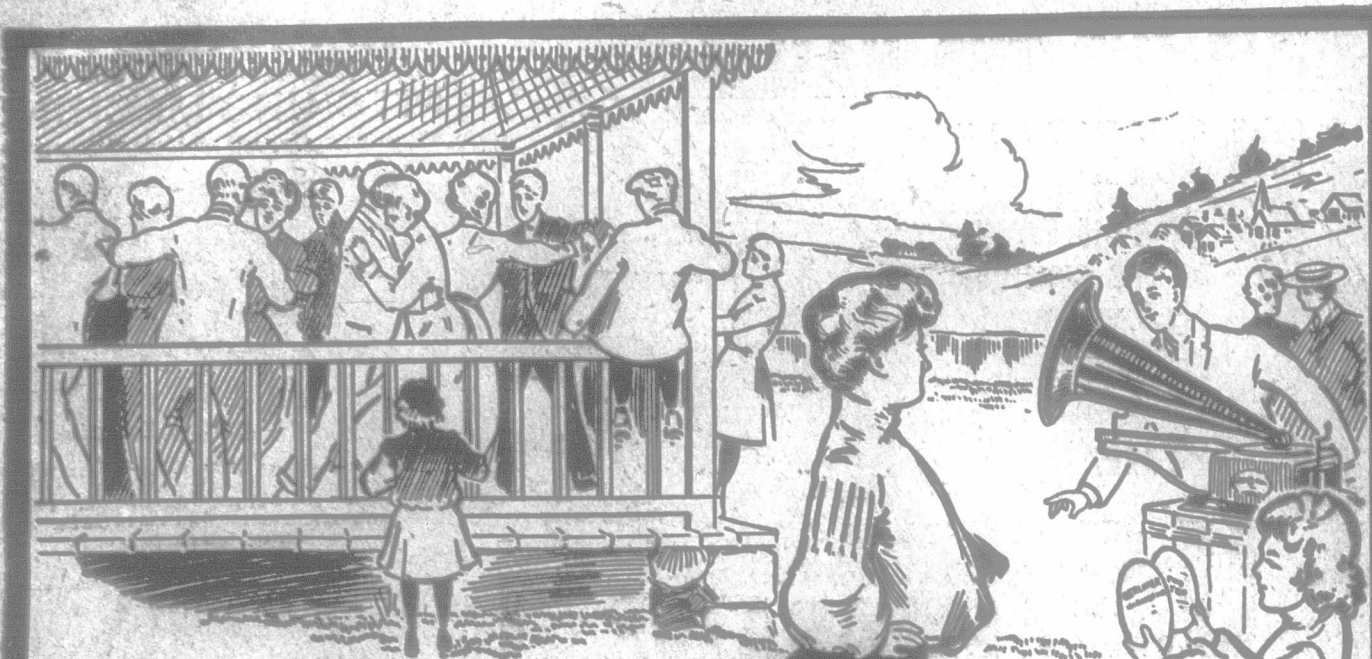


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**TRIPLEX HAY BALERS. SELF-FEEDER. LOW IN PRICE.** For Hand, Horse or Belt Power. Leverage 40 to 1. Bales quicker, easier and more solid than any other. Also Grinding Mills, Water Wheels, Saw Mills, etc. Catalogue free. **DE LOACH MILL MFG. CO.,** NEW YORK Box 932, Atlanta, Ga. ST. LOUIS

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at any time or in any place. Within the reach of any honest person on the easiest terms ever offered.

One dollar with coupon and a promise to pay less than seven cents a day—anyone can afford such a small sum to own an instrument that is not only a constant source of pleasure to children, friends and neighbors, but also familiarizes them with the latest and best in music. In your own home you can hear the voices of the great operatic singers; listen to the piano or violin solos of famous masters or laugh at the humorous dialogues of the "Minstrels." All vocal music from opera to the latest popular song; all instruments from piccolo solo to the full band of a famous regiment; music to suit all ages, any mood. Everything worth hearing in music, song and story, is at your command, if you have a

**Berliner Gram-o-phone**

The Berliner "Maroon" records, like the Gram-o-phones, are made in Canada. There are over 2,000 selections to choose from, and three records are given free with each Gram-o-phone. Berliner Maroon records will wear ten times as long as any others. They are maroon-colored, and the public is warned against imitations of a green color which are advertised as "Maroon." Berliner records have the "dog on the back"—the guarantee of perfect reproduction of voice and instrument. Gram-o-phones and records are for sale by 1,800 agents in Canada, who will be glad to give or send full catalogue and list of records free on request, or from any of whom you can have your

**OLD RECORDS EXCHANGED FREE.**

For every Berliner Record returned you buy three, and pay for two. Any quantity, large or small. For example: If you have ten Records, you buy thirty and pay for only twenty.

The agent will also give you, when you buy a new record, a coupon book, which will enable you to get the dozen price on single records.

**GRAM-O-PHONES** sold on easy-payment plan if desired. Read Coupon carefully, and cut out and send to us.

Cash Prices for Berliner Gram-o-phones, \$15 to \$45. These prices include 3 seven-inch Records of purchaser's choice. Full catalogue of Gram-o-phones and list of over 2,000 Records sent free on request.

Any style of Gram-o-phone sold on the Easy-payment Plan at a slight advance over cash prices, with option of paying in full at end of 30 days for spot cash price. Out out Coupon and mail it to us.

The **Berliner Gram-o-Phone Records** (don't forget the dog on the back) are made specially for it by musicians who are masters of their instruments: Band and Orchestral selections, Choral Pieces by full choirs, including the famous Papal Choir. The Band selections have been made specially for the Gram-o-phone by the Coldstream Guards, the Grenadier Guards, Godfrey's, Sousa's (plays only for the Gram-o-phone), and other famous American and European Bands, Civil and Military, Instrumental Solos on Piano, Violin, Banjo, Mandolin, Cornet, Trombone, Bagpipes, Clarinet, Piccolo, Flute, etc. The latest Songs, as well as the old-time favorites, Religious, Patriotic and Sentimental airs, as well as Coon Songs, Minstrels and Comic Ditties, Plays, Waltzes, Polkas, Two Step, Schottische, Quadrille, Lancers, Jigs and Reels, for dancing—Never tires.

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Manufactured only by

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**MONTREAL.**

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P. O. Address..... Province.....

Express Office..... Occupation.....

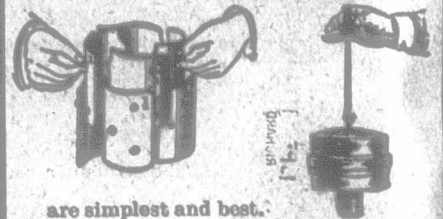
F. A. L.

Also send free of charge the following three Records:

Enclosed find one dollar in part payment on the Standard Berliner Gram-o-phone, type A, complete, with 16-inch Japanned concert horn and 3 records. If satisfactory after 5 days' trial, I agree to pay eight monthly payments of two dollars each. If not satisfactory, I will return the Gram-o-phone, and this order is null and void. If you wish a spun brass horn instead of the japanned horn enclose two dollars extra.

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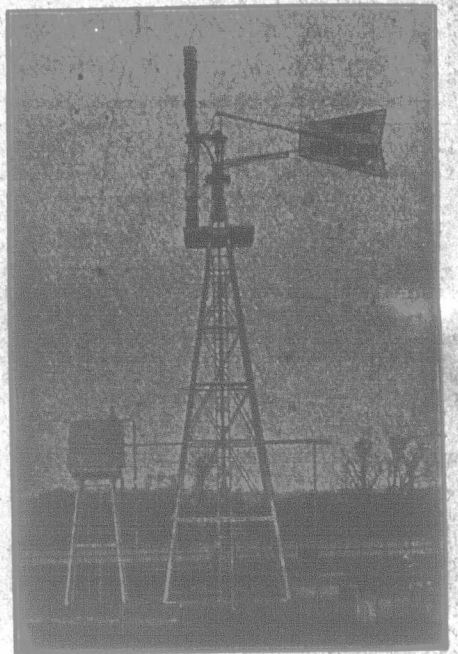
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