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VOL. XXXIX. LONDON, ONTARIO

JUNE 16, 1904.

WINNIPEG, MANITOBA.

No. 612

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PIANOS, ORGANS, PIANO PLAYERS AND BELLOLIAN

> Self-Playing Organs. The Best Canadian Productions. They satisfy.

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Ask for the Octagon Bar.



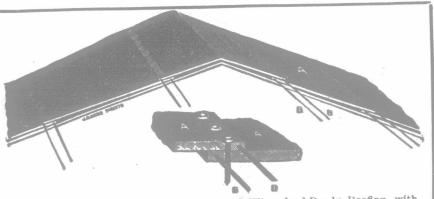
No modern cow stable is complete without one of Louden's Feed & Litter Carriers.

Our Double-beaded Steel Track can be curved and

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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 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.

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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

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THE WILKINSON PLOUGH CO. LTD., M'F'RS., TORONTO, CANADA

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.

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.

OF CANADA.

Head Office, TORONTO.
Chief Executive Office, MONTREAL. BRANCHES:

AYLMER AMHERSTBURG MARKET BRANCH. BURKS FALLS CLAREMONT CLINTON DASHWOOD EXETER

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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.

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who graduate in telegraphy in our school are always in demand, for we make the work as nearly like that of the regular railway or telegraph office as it is possible to have it. Our telegraph book, sent free, tells how.

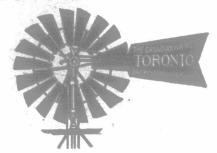
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A CANADIAN AIRMOTOR in one single year

Will save you Time, Labor and Money. It has a constitution that will

Storms, Hard Work and all Opposition. STAND Investigate for yourself.

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FOR HOUSE, BARN AND SILO WALLS, STABLE FLOORS, ETO.

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

USHER ISAAG

Queenston, Ontario.

IN NEW ONTARIO.

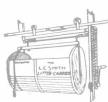
Write for descriptive pamphlet and maps

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

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THE L. C. SMITH FEED and LITTER CARRIERS.

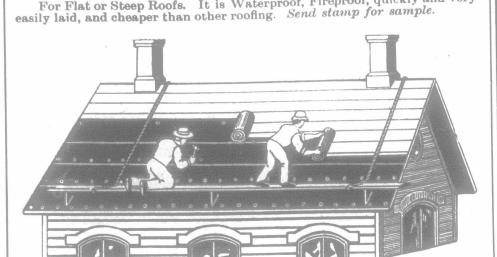


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ROOFING For Flat or Steep Roofs. It is Waterproof, Fireproof, quickly and very



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60 CATHERINE STREET NORTH, HAMILTON, CANADA.

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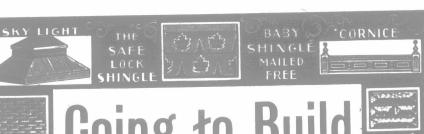
The Right Paint

Whether you are going to paint the whole house, or only the porch—the interior woodwork, or a floor-there's the right paint in Ramsay's Paints. Just the shade, tint or color you wantmixed just right-in the right proportions. And it paints right-looks right-wears Try them this spring. Then you'll say-as folk have said for

more than 60 years—Ramsay's Paints are the right paints to paint We have a Booklet, both

interesting and helpful, for anyone who paints. We send it, free, to those who write for it.

A. RAMSAY & SON, MONTREAL. Paint Makers Since 1842.



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We can help you with our Sheet Metal goods in

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They are fire and lightning proof, handsome and durable. Send rafter and ridge lengths for roofing estimate; outside measurements for siding estimate, and careful diagram for ceiling estimate and free catalogues.

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WHITMANS"WORLDS LARGEST & MOST PERFECT GUARANTEED TO
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SEND FOR WHITMAN AGRL GO.

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STANDARD"BALING LINE IN AMERICA. HAVE NO EQUAL AGRICULTURAL MACHINERY CATALOGUE. ST.LOUIS, MO.

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Clean Dry

THERE ARE NO impurities in Windsor Salt; no black specks. It is dry, white, flaky-it is all Salt. It is the Salt that is most generally used by the most successful butter-

Leading Grocers Sell It.

EXCELSIOR LIFE

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TORONTO. HEAD OFFICE, ASSETS, ONE MILLION DOLLARS

Insurance in force over 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.



loose or in sheaves. Send for catalogue to M. T. BUCHANAN & CO., Ingersoll, Ont.

A larger advertisement appeared last week and another will appear next week.

BOYS FOR FARM HELP. BOYS FOR FARM HELP.

The Managers of Dr. Barnardo's Homes invite applications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mostly between 11 and 13 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 214 Farley Ave., Toronto.



A Startling Discovery eminent Toronto specialist, by which Rupture of all forms and which Kupture or all forms and conditions, no matter how bad, or of how long standing, can be cured, painlessly, rapidly and permanently, at home; without a moment's loss of time from a moment's loss of time from work. REV. C. N. DEWEY, of Wheatley, Kent Co., Ont., whose portrait here appears, is cured and not a moment from his pastoral duties. A valuable book full of in-

formation to the ruptured and a Free Trial Treatment sent, plainly sealed, free of all cost. Strictly confidential. DR. W. S. RICE, 2 Queen St. East, (Dept. 272), Toronto, Ont.

WE SHIP ON APPROVAL

without a cent deposit and allow 10 DAYS FREE TRIAL on every bicycle. Any wheel not satisfactory returned at our expense. Highest Grade **58.75** to **517**1904 Models **75** to **517**Coaster Brakes. Hedgethorne puncture proof tires and best equipment. 1902 & 1903 Models **57** to **512**Best Makes Best Makes
500 Second-Hand Wheels
All makes & Models
good as new
Great Factory Clearing Salest
half factory cost half factory cost.

EARN A BICYCLE taking orders from sample wheel furnished by usour agents make large profits. Write at once for catalogues and our special offer AUTOMOBILES, TIRES, Sewing Inchines, Sundries, etc., half usual prices.

MEAD OYOLE CO., Dept. 2540. Chicago

GOSSIP

· To have a horse properly trained to observe your commands when you speak to him will sometimes save you from a serious runaway.

Some farmers are constantly using the word "Whoa" in driving and directing their horses, yet failing to bring their horses to a standstill when the command is uttered. These animals are not very likely to stop when something goes and the driver orders them to stand still. We have on the other hand, seen a badly-frightened horse, which was just commencing to run, come to a sudden halt at the command of his master. Just the difference in training, you know. -[Dominion City Echo.

The Japanese themselves attribute their high average of physical strength to a frugal diet and the system of gymnastics called jiu-jitsu, which includes a knowledge of anatomy, and of the external uses of water. Although during the period of their ascendancy the Samurai kept the secret that their great physical superiority was due in a great measure to the internal and external use of water, the belief that if used liberally and intelligently, water is an infallible weapon against disease is now generally held. By those who go in for jiu-jitsu an average of one gallon a day is drunk. It is noteworthy that rheumatism is almost unknown in Japan; it is probable that the absence of meat from the diet, combined with the use of plenty of water, accounts for this immunity.

A Scotsman who visits Ireland free quently tells an amusing story of his last stay in the land of the shamrock. For some reason or other he found that a suit of clothes he was anxious to wear were much too tight for him. He parcelled them up and despatched a servant to a tailor in the next street with He enclosed a note which directed that they were "to be let out."

A few days afterwards, as there was no sign of the return of the suit, he went down to the tailor and said:

"What about my clothes, young man? I sent them down last week to be let

"Oh, most successful, most successful, sir," was the reply with much glee, "I have let them out for a month at a shilling a week!"

John D. Rockefeller, Jr., was one day talking about industry.

"Our industry," he said, smiling, "should not be of such a nature that the remark once applied to a certain Scot could ever be applied to us. Two old farmers were walking up a road near Dunfermline, when one of ing his eyes from the sun, pointed to a

distant field and said : " ' I wonder if that figure over there is

a scarecrow? "He paused and considered the matter for awhile and then, in a satisfied tone,

concluded: 'Yes, it must be a scarecrow. It's not moving.'

"But the other Scot had a sharper pair of eyes, and perhaps a better understanding of human nature.

"'No,' he said, dryly, 'it's not a scarecrow; it's only a man working by the day.'"

The catalogue of 26 registered Shorthorn cattle, 20 females and 6 bulls, property of Mr. H. Parker, Durham, G. T. R., Ont., to be sold, June 22nd, by Capt. T. E. Robson, auctioneer, on the terms of nine months' credit, reveals that the cattle are a very well-bred lot in-The imported roan three-yearold Kilblean Beauty bull, Verschoyle =36125=, bred by Mr. Bruce, of Heatherwick, and sired by Sturdy Prince, by Prince of Archers, is included in the dispersion, as are five of his yearling sons. The females represent such good families as Cruickshank, Lustre, Kinellar, Claret, Syme, and several other good feeding and milking strains. Durham is the terminus of the Palmerston and Durham branch of the G. T. R., and is 26 miles from Palmerston Junction, reached from Guelph, Stratford and Owen Sound.

The plug that stops the leak is the

DeLaval

Cream

The Genuine The Standard First and Best

have found

Separator

A Free Trial Proves it

Catalog Free

THE DeLAVAL SEPARATOR CO.

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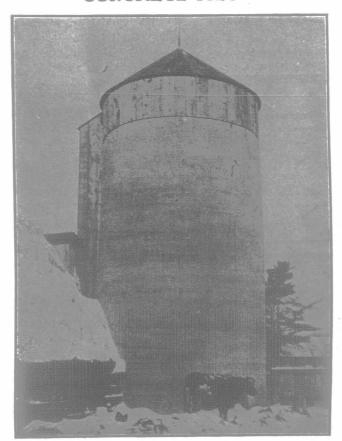
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77 York St., TORONTO

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MONTREAL

PORTLAND CEMENT CONCRETE SILO



Built for HENRY BROUGHTON, Sarnia Township, Lambton County, Ontario, 14 feet in diameter and 30 feet high, with

"Rathbun's Star"BRAND

MANUFACTURED BY

THE GANADIAN PORTLAND GEMENT GO., SOLE SALES The Rathbun Company

310 and 312 Front St. West, TORONTO, ONT.

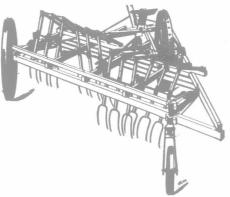
GOSSIP.

Before the Committee on Agriculture, at Ottawa, recently, Mr. J. H. Grisdale, agriculturist, completed his statement of results obtained in feeding steers and hogs for market at the Central Experimental Farm. He reported that steers allowed to run loose in box stalls cost one-third of a cent. less per pound of added flesh than did the same grades and ages when fed tied up. Those fed in a loose box also cost less for labor and attendance. The comparative cost of adding 100 lbs. of flesh at different ages was as follows: Three-year-olds, \$5.22; two-year-olds, \$4.30, and one-year-olds, \$4.50; and the sale price averaged \$7.91 In hog-fattening experiper 100 lbs. ments those animals living and fed outside in the open cost two cents per pound of added flesh more than those housed and fed in pens. Shorts and skimmed milk has been found by actual test the best food for young weaned

A new advertiser of Shorthorn cattle, Clydesdale horses and Oxford Down sheep, is Mr. Richard Wilkin, of Spring field Stock Farm, Harriston, Ont., 50 miles from Guelph, on the Southampton branch of the G. T. R., and 40 miles from Stratford on the Wiarton branch, Though a new advertiser in the "Advocate," Mr. Wilkin is a breeder of some years' standing, who believing in getting the best, has established a herd of very useful Shorthorns, headed by the Scotchbred Provost =37865=, bred by H. Cargill & Son, from imported sire and dam, a fine large, straight bull, that will weigh over a ton now, in his three-yearold form, in only good breeding condition. He is getting nice stock of good quality, and has been a winner at local shows, as have also several of the females in the herd. One of the oldest of the cows is Gipsy Queen, of the Kinellar Mina family, bred by J. & W. Russell. Her daughter, Gipsy Queen of Minto, by Minto Chief, is another good one. Mount Forest Lady, a fine, large, roomy, good milker, is a very useful cow that is raising some good young things. Later additions have been made to the herd by purchasing from Messrs. Cargill, at a good price, Castilla C., bred from imported sire and dam. She has produced a very nice bull that is ready for service now, sired by Provost. Mayflower 3rd, three-year-old, imported by Messrs. Cochrane, of Hillhurst, Que., and sold at their sale at Hamilton last year, was knocked down to this breeder, and has produced an especially nice heifer call. There is also a very nice yearling bull, by Provost, from Red Rose, a Minto Chief cow, that should do someone good

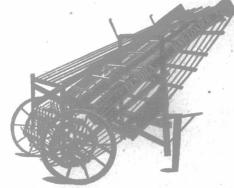
Clydesdales are represented by Lilly lexander, imported by Dalgety Bros., ondon, Ont. This mare is being bred London, Ont. to one of the best horses that can be found, and will, no doubt, give a good account of herself. There are also others here eligible for registry.

Oxford Down sheep, from Cargill ewes and a Cousins ram of the most approved type, are kept here, a few good young rams being for sale now.



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 oirculars, prices and terms.



WORKS CO., LTD., ELMIRA, ONTARIO.

Hints on House-cleaning

Here's a list of a few things that are an absolute necessity to every wellregulated household:

Boeckh's

BAMBOO-HANDLED BROOMS
HAIR BROOMS SCRUBBING BRUSHES
BANNISTER BRUSHES
STOVE BRUSHES RADIATOR BRUSHES
FEATHER DUSTERS
CORNICE DUSTERS

Cane's

PAILS TUBS WASHBOARDS AND CLOTHESPINS

All good grocers sell them. Manufactured by

UNITED FACTORIES, LIMITED.

Operating Boeckh's Toronto Factories, Bryan's London Factories,

Joseph Rodgers & Sons

SHEFFIELD, ENGLAND.

James Hutton & Co., Montreal, SOLE AGENTS



GOSSIP.

A TRUMPET CALL.

Young men, do you ever pause to reflect that the future of the country dethat the value of your ultimate influence will be in accordance with the foundations you lay now in knowledge and method in habit. Remember while the craze for sport possesses you that you may be the champion catcher or pitcher of your country now, but that the generations in sporting life are short, and in five years your fame will be forgotten. See that the mind is nourished during these years, or it will become so far atrophied it will lose its keenness. Knowledge is power, and the mind that is not well stored and well exercised handicaps a young man in the race of life. But it handicaps him too as a citizen. We are all proud of the Empire. Love of Empire is one of the mystic influences, akin to religion, which animates every Briton. But why love it in the abstract only? It did not become great by chance. The millions of stolid, unthinking, physically selfish did not make it great. It was the work of the comparatively few. The work of the minds which could see " far ben " as the Scotch The work of those who schooled themselves to think and with whom to think was to act. What opportunities there are in this country of ours to-day, opportunities going a-begging. We have a population pining for reform, at present toiling for the enrichment of a dollarocracy. We have a land richly endowed by nature awaiting development. Think of the scope you have, young man. Don't throw away the bat and ball, we want Virden to excel in sport as in other things. We want lusty, healthy men, but we want them with character, with individuality, and with knowledge .-

How Delightful Is Independence with the New Century Ball Bearing Washing Machine



and a couple of children over five years old the was hing need not stand over if the maid does not reportforduty. Eive minutes to a tubful, and you will have no use for wash boards. It cleanses perfectly.

You cannot afford to do without it.
Order through your dealer. We will
mail you a booklet on application.
THE DOWSWELL MANUFACTURING CO. LTD.

Bargains for Threshermen.

Here are some sample prices: Barnes or Myers Tauk Pumps, \$7 each; best 2-inch 50. per foot.; 3-inch

wire-lined suction hose, 35c. per foot.; 3-inch four-tone chime whistle, \$6.50; Ham headlight, \$9.50; boiler tubes, 2-inch, 14½c. per foot, and 2½-inch size, 15½c. per foot; cylinder oil, made from Pennsylvania stock, guaranteed 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.

RUPTURE.

Write for particulars as to how to cure it without a risky operation. Invaluable advice FREE C. H. Dorenwend, R. S., Toronto, Ont. State your case when writing. 393 Yonge St.

CANADIAN CORDAGE AND MANUFACTURING CO., LIMITED PETERBOROUGH, ONT.

MAKE THE FINEST

BINDER TWINE

MADE IN CANADA.

The Longest and Strongest.

ADE OF THE BEST MANILLA HEMP grown in the Philippine Islands. The ROYAL STANDARD is made of the best Sisal grown in Mexico and specially selected for us by the growers. Made on the latest machinery and in the most improved manner. Come and see it made in Peterborough, the Electric City of Canada.

EVERY BALL of our Twine is GUARANTEED to be of SUPERIOR QUALITY, and

WE STAND RIGHT BACK OF OUR GUARANTEE.

Try it once and be convinced that Canadian Twine is the Best in the World—that is when it is made by the CANADIAN CORDAGE & MANUFACTURING CO., Limited, of PETERBOROUGH, ONT., CANADA.

Ask your DEALER for ROYAL BRAND, and SEE THAT YOU GET IT, as

ROYAL BRAND TWINE is the BEST BINDER TWINE MADE.

Farmer's Mavocate and Home Magazine.

"PERSEVERE AND SUCCEED."

REGESTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

ESTABLISHED 1866.

VOL. XXXIX.

LONDON, ONT., AND WINNIPEG, MAN., JUNE 16, 1904.

No. 612

EDITORIAL.

How to Know What to Produce.

Beginning with the new year, we have been publishing letters from London, England. These reports, coming from the greatest consuming center in the world, and a market that purchases a large amount of Canadian produce, have proved a most interesting and valuable feature of the weekly "Farmer's Advocate." At present, Canadian trade with Britain is largely on the increase, and is likely to continue so for many years. In order to capture new markets and retain our present position, Canadian producers must cater to the demands of the British epicure and the needs of the masses. We must know what our customer wants, and endeavor to supply his needs. He has peculiarities of taste that cannot be fully comprehended by a causual visitor to the old land, even though his mission be to study the conditions and requirements of the British market. That is better done by someone living in the midst of the trade and familiar with all its movements, like our London, England, correspondent, who is epecially well posted in the provision, meat and cattle trade. From his letters, producers on this side the water will be able to furnish just the kind of fruit, butter, cheese, bacon, etc., that the British taste demands. This is an age of strenuous competition. Other countries are making Herculean efforts to secure British trade, and if Canadians, by the slightest neglect, fail to supply products that do not equal and surpass in quality and package those of any other country, the result can not be other than disastrous.

Develop the Egg Business.

When the fact is considered that Great Britain, in addition to the home supply, imports annually over \$26,000,000 worth of eggs, towards which Canada contributes only something over \$1,500,000 worth, it may at once be seen what a future there is for the industrious Canadian hen if she will get down to business in earnest, and if those concerned with the development of the trade will but push it intelligently. It seems to us that the egg trade is capable of very great improvement. Advances are being made in many centers, but in too many places it is a go-as-youplease business from the nest to the shippingcrate. Thousands of farmers' wives are still trading eggs for groceries at country stores, and receiving but small returns. During the past season, a cheese-and-butter factoryman of our acquaintance took up purchasing eggs on commission for a firm of packers and exporters. He paid cash for the eggs, which were delivered at the factory, and were there packed and shipped from the adjacent railway station to the city headquarters. This way of doing business became popular with those who had eggs to sell, and the factoryman, besides satisfying them, was getting as good a return per week out of the egg trade as he was from the factory. In a small way, this illustrates the point we are endeavoring to make. In the Poultry Department of this issue of the "Farmer's Advocate" we give particulars of a much more striking and systematic undertaking carried on most successfully by the cooperative poultry societies in Ireland-an enterprise conducted by the people themselves, and the results of which are fast revolutionizing the egg business, greatly to the advantage of the poultrykeepers of that Island. Is there any good reason of all the rules, to see that all are warned out

Canada? The business of the Irish poultry societies does not merely begin and end with that branch of the trade relating to handling and marketing eggs, including supervision of the making of crates, but extends to improvements of breeds, instruction to members on the best methods of breeding, rearing, feeding, fattening, handling and marketing all classes of poultry. We commend the subject to the careful consideration of farmers and all others interested in the advancement of this branch of agriculture.

The Live-stock Catalogue at the Shows.

" Many of the live-stock exhibitors are loud in denouncing fair managers for allowing horse racing and vaudeville to bulk so largely at the big shows as 'attractions,' for which condition, they, the exhibitors, cannot be considered free from

Such a statement by a careful observer is worthy of consideration when put in conjunction with the incompleteness of the live-stock catalogue usually found at the big shows. Exhibitors should give the association every assistance in parade. At the Old Country shows, the catalogue is reliable, and is used and appreciated by the visitors, as it is a great aid to locate any animal and learn its breeding, age and ownership, thus assisting in the study of the live stock. The more the visitors study the stock the better for the exhibitor. A catalogue cannot be gotten up by any association, to be of use, unless the exhibitor does his part by carefully filling out the entry form and by sending it in in good time to the show manager or secretary. A catalogue without the color, weight, height, pedigree number or breeding, and correct numbering, is valueless, and if the benefits from this handbook are to be had the stockman must see that either he or his assistant wears the number given to the particular animal in the catalogue when in the showring; not only so, but a duplicate number should be tacked up in a conspicuous place in that ani-

The advantages of exhibiting stock at the big shows are many, especially if one is fortunate enough to be a winner. The publicity obtained, the chances to make sales, and get a share of the prize moneys, all contribute to pay, and pay well, for the effort, and it is up to showmen to do their part by sending exhibits forward in good shape, by being neat in their dress, especially while in the ring, and by giving all the information possible through the catalogue, and those doing so can rest assured that such efforts will return many fold for the exertions made. It is good business to do as suggested. Note how anxious a merchant is to give all information regarding his goods on exhibition, and how neat and attractive exhibits and attendants are. There is no excuse for stockmen being less careful or businesslike. The exhibitor who hangs back from following out the rules of the association, by not furnishing the information for the catalogue, by untidiness, by coming into the ring without his number, or by being late and keeping judges and other exhibitors waiting, deserves to suffer. Allowing him to go scot free is not fair to other exhibitors who are trying to do what is right. In this connection, any fair of importance should have a salaried live-stock superintendent, armed with proper authority, to compel the observance

why the principles and plans of the system so promptly for the classes, and that all get out, as successfully operated there cannot be adopted in well as the hundred and one other things that need looking after. It is unreasonable to expect directors, unpaid, to do this work, which is sometimes disagreeable. In this matter, there is room for improvement at many exhibitions. appointment of a man as suggested would aid in the successful, frictionless running of the big attraction-the live stock end of the show. Our shows are past the stage (or should be) when it is, perhaps, necessary or good policy to be lenient with untidiness, lack of business methods, or anything but straight dealing. The visitors It is the to the shows have rights. gates which money they pay at the makes the show possible, and when articles or animals are brought to a show and a fee charged people to see those exhibits, every facility to comfortably see the exhibits should be afforded by the management and the exhibitors.

Nova Scotian Progress.

The Agricultural Department of Nova Scotia is to be commended for the attention which, it is devoting to educational work in several directions. The "illustration idea" has been applied in horticulture by the planting of model orchards, of which there are now twenty-seven, one or more in each county of the Province, except in the fruit valley, King's and Annapolis. This work was begun three years ago, and four orchards were planted the present season. They are looking very well, and give encouraging prospects, but the winter just passed has caused some loss of trees in every part of the Province, even in the fruit valley, but nothing serious. These orchards contain about eighty or ninety apple trees, with about as many plums, pears and cherries filled in between the apples on one way of the rows, then, between this, small fruits, the whole forming what may well be considered a model orchard. The indefatigable Secretary for Agriculture, Mr. W. Chipman, accompanied by Prof. F. C. Sears, of the School of Horticulture, have been overseeing this work and holding public meetings in many places.

Two or three travelling dairies will be sent out about the first of July. Mr. Logan, formerly of the Acadian Creamery Co., and of late years taking a course in Guelph Agricultural College, is inspector of cheese factories and creameries during the summer months, and will take up this work in a short time.

The agricultural college project is progressing, and will open as a fairly well-equipped institution. In addition to the college building, there will be a large live-stock pavilion, eight square, to seat two hundred and fifty people, with ample room in the center for stock, even horses and carriages. The short course in animal husbandry last winter was given in this building. There is also a creamery in connection with the institution, and a course on dairying will be given in the winter months.

After Thirty-five Years.

I have been taking your valuable paper since the year 1869, and I am not tired of it yet; in fact I don't see how I could farm successfully without it. Enclosed, find my subscription for another year. Wishing you all success, I am,

Yours, JOSEPH G. WIGGINS Peel Co., Ont.

HORSES. THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

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How to Cover the Continent.

To the Editor "Farmer's Advocate":

Sir,-As a result of the description of the Chillwack Valley, B. C., which appeared in the "Advocate" of the issue of the 6th of January, 1904, and in consequence of an advertisement of my own, which was in the same issue, of farms and farm lands for sale in this section, I have received over six hundred letters of enquiry from the farmers of Ontario, Quebec, Manitoba, N.-W. T., P. E. I., N. S., N. B., and many states in the Union, which proves clearly to me that the "Farmer's Advocate and Home Magazine" is the proper channel through which to reach the farmers of this broad Dominion, and, for that matter, the whole continent. A good many of the writers of these numerous letters have already paid this section of B. C. a visit of inspection, and with very few exceptions have expressed themselves well satisfied with the country and its prospects. succeeded the other day in locating Mr. W. S. Hawkshaw, of Glanworth, near London, Ont., on what is generally considered one of the best dairy and grass farms in this municipality, and the residents of Chilliwack should congratulate themselves on having farmers of Mr. Hawkshaw's stamp come and settle in our midst. Being one of the leading pure-bred importers of the Dominion, he should, and no doubt will, do much towards the improvement of the stock in this section. Mr. Hawkshaw has left here for his home in Glanworth well satisfied with his purchase, and will be pleased to give intending settlers any information in his possession.

Quite a number of properties here have already changed hands, and it is very evident that the value of the farm lands here will rise, from the fact that they are of a very limited quantity, in comparison to the whole area of the Province. and when the mineral, lumbering and fishing industries of the Province become fully developed it must of necessity give the farmer one of if not the best market in the whole Dominion. This, coupled with our very mild and invigorating climate, will keep the price of farm lands at the very top notch. S. A. CAWLEY.

Chilliwack, B. C.

Congenital Scrotal Hernia in Colts.

Congenital scrotal hernia is quite a common, and, fortunately, not often a serious condition in At the posterior portion of the floor of the abdominal cavity, or, more correctly speaking, on the floor of the pelvic cavity, there are two openings, one on either side, passing through the tissues that form the floor. The superior orifice of each opening is called the internal inguinal ring; the inferior, the external inguinal ring, and the cavity between the two is called the inguinal canal. In the female, the mammary vessels pass through these canals to reach the mamme, and in the male the testicles pass through to reach the scrotum, and the spermatic cords in the entire animal continue to occupy them, hence the canals remain potent until the animal is castrated, when, in most cases, they become partially obliterated, and while scrotal hernia may occur at any time, even in a gelding, it is not often seen except in stallions. ever, it is of the congenital form we wish to speak It is not at all uncommon for this at present. form of hernia to exist at birth, or appear within a few days. The scrotum will be noticed fuller than normal; usually only one side contains intestine, but in some cases both. If the tumor be not very large, there is no occasion for alarm. «It will be noticed, if the colt be held upon his back, that the contents of the sac can be readily returned to the pelvic cavity, but in most cases quickly returns to the scrotal sac when he regains his It does not interfere with the health of the animal, and if closely watched will, in most cases, be noticed to vary in size. This is accounted for by a spontaneous return of the intestines for a As in umbilical hernia, the mesentery which suspends this intestine is proportionately longer and looser in the foal than in the animal a few months or even a few weeks old, and as age advances it gradually contracts, and thereby draws the hernia up into the abdomen, and a spontaneous cure results. In most cases, this cure results by the time the foal is weaned, but in rare cases not until a year or a year and a half old. The application of bandages, trusses or liniments should not be resorted to, as the anatomy of the parts is such that they can do no good, and if persisted in do harm, by causing irritation. Extraneous interference is seldom Nature should be allowed to have its called for. course, and will generally succeed in affecting a However, there are cases in which treatment is necessary. All cases should be carefully watched, and if the tumor is not becoming larger, even though it may not be noticed to be growing smaller, or even to be less noticeable at times, leave it alone, but if a gradual or sudden increase in volume be noticed, which will interfere with the little animal's action, causing him to walk with a straddling gait, which becomes more marked, more or less quickly, according to the rapidity with which the intestine gains entrance to the sac, then treatment becomes a necessity. In cases of this kind, the services of a skillful veterinarian should be procured without delay, as an operation is The patient must be placed upon his necessary. back and held there, the scrotum and surrounding parts thoroughly washed with a disinfectant, as a 5-per-cent. solution of carbolic acid, of the operator and assistant also, instruments also disinfected. Then the scrotum is carefully cut through, and the intestine exposed and carefully returned through the canal into the abdominal If the testicle be present, it should be cavity. removed (and, of course, its fellow also), and a clam, enclosing the abdominal coverings, along with the spermatic cord, applied, the animal allowed to rise, and the clam left on until it In some cases the testicle has not sloughs off. yet descended and cannot be found. condition exists, after the intestine has been returned, the edges of the external ring must be drawn together with carbolized catgut or silk sutures, which will become absorbed, and in the meantime the opening will become so contracted that a recurrence of the hernia is not probable, although the testicle will, in most cases, descend into the scrotum. This, of course, is an operation that should not be attempted by any except an expert, where the services of such can be

Percheron Horse Registration.

It should be noticed that the Dominion Fair authorities will only recognize as pure-bred Percherons, horses whose owners produce the pedigree certificate from the new Percheron Association, of which Secretary Stubblefield has charge. in line with the regulation of the U.S. Bureau of Animal Industry, which recognizes only the record mentioned by the Winnipeg people.

Enclosed find \$1.50, being subscription for another new name for the paper that a farmer cannot very well do without. WM. FIEGHEN, Jr. Grey Co., Ont.

STOCK.

Some Phases of Cattle Feeding.

The person not familiar with experimental work in feeding animals, can form no idea regarding the difficulties which have to be overcome, and the long time it takes to procure anything like satisfactory results. We have now been working from seven to eight years with experiments in fattening steers, and the work accomplished looks very small indeed. Experiments must be repeated over and over again in order to make sure that differences in results are due to the methods of feeding, and not to the individuality of the animals under experiment, or to other causes which are not under the feeder's control. There are so many problems facing the man who feeds cattle, that it is difficult to decide upon which of these are the most important and should, therefore, be given precedence in our experiments. This paper will deal with only two of the problems in cattle feeding which we have attempted to investigate up to the present time.

In selecting steers for feeding the farmer has a choice between two well defined classes. The first class is what is known as short-keep cattle. This comprises steers that are in good fleshy condition and weigh, roughly speaking, anywhere from 1,100 to 1,300 pounds. Such steers can be finished for market by increasing their live weight from 150 to 200 pounds. and, therefore, it is necessary to feed them for a comparatively short period. Of course, in some cases, they have to be fed longer than in others, but, in any case, they should be in sufficiently good condition that they can be finished in from three to four months feeding. The second-class comprises lighter and thinner steers, weighing, say from 950 to 1,150 pounds. Owing to their thin condition, it is necessary to increase their live weight very considerably in order to have them properly finished for the export trade. Possibly, 300 pounds is a fair estimate of the average amount of increase in weight which it would be necessary to put upon these steers. Owing to the greater length of feeding period, this class is frequently called long-keep

The first problem which we set out to investigate was the best method of feeding long-keep steers; that is to say, whether it is better to feed them a heavy meal ration and finish them in the shortest possible time, or whether it is better to feed a lighter meal ration and carry them on for a somewhat longer period. The results of our experiments along this line seem to be very conclusive. In every case where we attempted to force the cattle by feeding a heavy meal ration, we found that it cost considerably more to produce a pound of gain than where we fed a lighter meal ration. It would take too long to go into all the details of our experiments, and, therefore, we shall concern ourselves only with what we found to be the most economical method of feeding this class of cattle. When the steers were first put in the stables, they were fed mainly bulky food, such as hay or chaff, with roots or silage, and they were given little or no meal during the first month of the feeding period. In this way, the animals gradually became accustomed to eating meal, and the quantity of meal was very gradually increased from month to month. The rate of increase in the meal was not the same in all our experiments, because we had to adapt our methods to circumstances, and increase sufficiently to have the steers finished by a certain time. Some years the steers required rather less meal than others in order to bring about the desired result, and in this matter, as in all other matters pertaining to feeding live stock, the feeder must use his judgment. On an average, the steers would receive about one-quarter of a pound of meal per day per 100 pounds of their live weight during the first month of feeding. The next month the quantity was gradually increased until, as a rule, it reached about one-third of a pound of meal per day per 100 pounds live weight. After this time, the increase in the amount of meal was usually somewhat more rapid, and during the last month of feeding they were usually as high as from two-thirds to four-fifths of a pound of meal per day per 100 pounds of their live weight. On an average they usually received about 1 of a pound of meal per day per 100 pounds of their live weight for the whole feeding period. With this method of feeding, and with good average long-keep steers, it usually required about six months to make the steers ready for

This method of feeding is not in accordance with the accepted feeding standards for fattening cattle, and yet it seems to me to be in accord with common sense, and is certainly in accord with the practice of many of our most successful and shrewdest feeders of cattle. Before being put in the stable, the steer is used to eating bulky, succulent food. If he is placed in the stable and required to consume a large amount of concentrated food in the form of meal, we would naturally expect that digestive troubles would be the result. By commencing according to the other method, and feeding the steer bulky food, his digestive organs gradually become accustomed to changed conditions, and, as time goes on, he is able to make use of a large amount of meal without suffering any inconvenience therefrom. One of the great troubles in feeding cattle is the socalled "burning up" of the cattle with meal. This simply means that their digestive organs have been called upon to do more work than they were able to perform, and the result is disaster. Where cattle are handled judiciously, and the change from one kind of food to another is made gradually, one next to never hears of such a thing as "burned-out" cattle. So far, then, as the method of feeding long-keep steers is concerned, we feel quite certain that our experiments are reliable, and that our conclusions are quite in accord with what one would naturally expect.

We have now commenced another series of experiments upon a very important subject; but it is going to take a number of years before anything like definite conclusions can be obtained. One of the great problems facing the farmer is whether he should buy long-keep or short-keep steers. The long-keep steers can be bought at a lower price per pound, but, as already pointed out, they must be fed for a longer period, and made to increase considerably more in weight than the short-keep steers. The problem is. therefore, "how much more per pound can a farmer afford to pay for short-keep steers than for long-keep steers, and come out equally well financially." far as we have gone our experiments indicate that the long-keep steers will make somewhat cheaper gains than the short-keep steers; but there is another phase of the question, which must not be overlooked. tening steers, especially with the present prices prevailing for foods, it is impossible to produce a pound of gain in weight for the price which that pound of gain is worth on the market. In other words, if finished cattle are worth 5c. per pound, we could not put on the necessary gain in weight at a cost of 5c. per pound. The chances are that each pound of gain in weight would cost between 8c. and 9c. would, therefore, be a loss of between three and four cents on every pound of increase in the weight of the cattle, and the only way in which this loss can be made up is by increasing the value of the original weight of the animal. Thus, if a steer weighed 1,000 pounds when purchased, and had to be increased 300 pounds in weight before he was ready for market, and if it cost 9c. to produce a pound of gain, the cost of producing 300 pounds gain in weight would be \$27.00. If the selling price of cattle is 5c. per pound, this 300 pounds would sell for \$15.00, or a net loss of \$12.00 on the 300 pounds increase in weight. Now, if the purchaser had paid 5c. per pound for the 1,000-pound steer, then twelve dollars would represent his total loss on the steer. If, on the other hand, he had paid 4c. per pound for the steer, and sold him at 5c. per pound, there would be a profit of \$10.00 on the original weight of the steer, to balance against the \$12.00 loss which was incurred in increasing his live weight by 300 pounds. From this, it will be seen that the smaller the increase in live weight necessary to make a steer fit for market, the smaller will be the loss to be made up by increasing the value of the original weight of the steer. This is the reason, therefore, why shortkeep steers command a higher price per pound than long-keep steers, because the feeder can accept a smaller margin between the buying and selling price per pound, and come out equally as well as in the case of longkeep steers. As already intimated, this line of work has merely been commenced, and as yet we have no definite recommendations to make. It is an important problem, however, and we trust that in the course of two ar three years we may have something more or less conclusive to offer the public. The explanations regarding the advantage possessed by the short-keep steer are offered in the hope that they may help to clear up a point which is but imperfectly understood by the average feeder, and the problem we have set out to solve in our experiments is just how great an advantage the short-keep steer possesses. Ontario Agricultural College.

Prof. Grisdale's Steer-feeding Test.

To the Editor "Farmer's Advocate";

To the Editor "Farmer's Advocate";
Sir,—To all cattle feeders, Prof. Grisdale's experiment, as reported in the "Advocate" of May, 26th, is interesting reading; but without more information I cannot rest satisfied. To get full benefit from the experiment, we must know more about it. The point on which we need to be informed is, "How was the feed used valued?"

If valued at market prices, less the cost of hauling to market, it is a semarkable showing.

to market, it is a semarkable showing.

If valued at what the feed cost to produce it on the

farm, then it is a different story.

I think in order to know whether fattening cattle is

I think in order to know whether lattening cattle is profitable, and what the real profit is, the market values of feeds must be charged to the bullocks.

It is an easy matter to figure up a profit, if we charge only cost of production values. For instance, in reckoning cost of fattening, turnips or mangels are usually valued at six cents per bushel, whereas they can frequently be cellared at three cents per bushel, and sometimes at less. Supposing a bullock is fed a bushel per day for six months, to figure on cost, the roots alone would be \$5.40; but if we figure on their market value, we make it \$10.80. Carrying out the calculation in figuring on hay, grain and ensilage, we readily see how easy it is to make a large profit appear, if the profit resulting in growing the different feeds is credited to the steers.

To me it seems the fair and intelligent method is to know what profit we first get from the crops we grow, and after ascertain how much increase of value we can obtain by disposing of said crops, in the line of fattening steers on other lines of farm manufacturing. I trust you will place in the "Advocate," from Prof. Grisdale, full particulars of his excellent experiment.

JOHN CAMPBELL.

Victoria Co., Ont.

Sheep Profitable Stock.

The evidence of farmers who keep sheep almost invariably is that, considering the cost in labor and feed required, there is no class of stock more profitable in the long run. And yet no class of stock has been more neglected by Canadian farmers in recent years than sheep. While twenty years ago few farmers were without a flock, now comparatively few have any. This is accounted for in many districts by the fact of dairying being made a specialty, and the pasturage being reserved for cows, in which case there is some show of reason in the decision to discard sheep, which bite close and are supposed to be specially severe on the pasture. But, even in this case, injustice is done the gentle sheep, as it is known they reject the rankest grass, choosing the short nibble, and eat with a relish many weeds and herbs that cattle disdain to consume, or which, if they do, are hurtful to the flavor of milk, and are better out of their way. Sheep, therefore, serve a good purpose in clearing the farm of weeds and keeping it clean, and in many cases can be kept in summer largely on land not suitable for pasturing cattle, while in winter they may be kept in inexpensive buildings, require little labor in their feeding or care, and will do well on cheaply-grown The ewe flock more than doubles its numbers yearly, besides paying an extra dividend in the fleece produced, which, even in these times of low prices for wool, is generally worth enough to pay for their winter's keep. And the outlook for a rise in wool values in the near future is now Lambs bring good prices bright with promise. in the fall and winter months, and, considering cost of production, no other class of meat is as profitably raised; while even ewes that have passed the profitable age for breeding may quick-

ing around a bunch of pure-bred ewes may be secured at little more than the cost of grades, in which case it will be good policy to buy the former.

An Old Country Breeder on Our Herdbook Restrictions.

I think the United States and Canada might very well relax their conditions with regard to entry in their Shorthorn herdbooks, and assimilate them to those of the English Shorthorn Of course, if the Shorthorn societies are run for the benefit of the owners of the old stocks, if that is the aim and object of breeding pedigree stock, it may be the right thing to maintain the exclusiveness of the conditions, but if the herdbook is intended for the public benefit, I maintain that it should be run on broad lines. I take it that the really crucial question is whether, for all practical purposes, an animal tracing its descent unbroken on the male and female lines to Vol. 20, or earlier, is any better or more impressive as a breeding animal, than one of shorter registered pedigree? If that were the case, why have not the oldest families maintained their position in this country? As a matter of fact, many of the oldest families are considered to be "played out," but whether that is the case or not, can it be contended that these families are in such perfection, judged from every point of view, as they were, say, forty years ago? The answer certainly would be no. Then, if that is answer certainly would be no. the case, it would appear that it takes some forty years or so to bring a family to its best, and that after that time a deterioration sets in, unless great care is taken in the breeding and plenty of new blood introduced. Then, why are not the families dating from, say, forty years ago (and I am only using this figure for the sake

of argument) equally good as those of eighty years stand-I think it ing? should always be borne in mind that the great object of pedigree stock breeding is to level up the general stock; not so much to improve the pedigree stock, but by maintaining the excellence of the pedigree stock to improve the "million." The owners of pedigree stock are quite able to take care of themselves, and will not introduce short pedigrees that are likely to be injurious to their old families, which, so long as their standard of excellence is maintained, will always be worth more than parvenues, but their number must always



Shire Mare, Flower, and Foal.
Sire of foal, Carbineer, Crewe District, England.

ly and cheaply be put in good flesh on pasture,

and sell readily at a fair price. The excuse that dogs are a menace to sheepbreeding, while it has some foundation, is greatly exaggerated, as experienced breeders will testify. In an experience of over forty years with a large flock, located within three miles of a town on one side and two miles of a village on the other, the flock was attacked but once in that time, with a loss of three sheep, which were paid for by the The only precaution taken owner of the dog. was the keeping of a couple of small cow-bells strapped to the necks of two sheep in each section of the flock, but even this seems to be too much trouble and expense for farmers who are looking for an excuse for not keeping sheep. In England, where villages are thick and dogs many times more plentiful than in Canada, and do many times more damage, sheep are considered the sheet-anchor of successful farming, and the abandonment of the flock is no more thought of than the quitting of grain-growing on account of the rooks

and sparrows.

We confidently look for better times for Canadian sheep-breeders before many moons have passed, and feel safe in advising the founding of more flocks now that stock may be secured at moderate prices. The early autumn is the best season to secure the foundation for a flock or to add to an existing flock, as then the lambs are weaned, and ewes or lambs may be selected and bought to suit the needs of the buyer, and a strong ram lamb answers well for breeding to a moderate sized flock. It may not be advisable for all to go into breeding pure-bred sheep, as good grades may be bought for less money, but only a pure-bred ram should be used, and by look-

be limited, and there are millions of cattle capable of being greatly improved by the use of a well-bred bull. Is it better, for the sake of keeping up the imaginary interests of a few, to curtail the general benefit of the many? My own cattle are all qualified for the American or Canadian herdbooks, and my families are among the oldest, but I have always thought it wise to encourage the raising up of new families to be registered in due course. This cannot be done without the use of our pure-bred bulls, but if it were possible for our forefathers to raise up and firmly establish tribes of Shorthorns from the materials so indifferent, so scattered about the country, and so difficult to collect and arrange, why should not this process be far more easily accomplished in these days, when nearly all Shorthorns are more or less purely bred, and when suitable materials are far more easily obtained than formerly? I maintain that it is in the interest of Shorthorn breeders to promote this, and their duty to the community at large. A good animal with a good old pedigree will always be worth more than a good one with a short or new pedigree, but the former is necessary for the production of the latter, and I maintain there is room for both, and that after a family has been established for a certain period, for all practical purposes, it is fully equal, if not superior, to the older families-mere antiquity of lineage is useless-and after a given time, say, five or six generations, if carefully bred, such animals may be used upon ordinary stock with as much success I have long thought as those of older pedigree. that there might very well be a new classification for new pedigrees, such as an A-and-B classifica-All animals dating from, say, 1850, to tion.

go into Class A, and subsequent ones into Class B. I think, in conclusion, that it is neither in the interest of breeders of Shorthorn cattle to maintain very exclusive conditions, and certainly not to the advantage of the community at large, that unreasonably severe restrictions should be placed upon the importation of good stock to foreign countries, or in their entry in the breed societies' registers.

The Duffryn, Newport, Mon.

Prevention of Milk Fever.

Mr. John Gilbert, of Tolworth Court Farm, Surbiton, in a letter to the London, England, Live-stock Journal, of May 27th, 1904, writes: "I will introduce my plan of prevention by stating that I have milked about eighty cows, and calved quite one hundred a year (as I buy incalvers), and for the last twelve years without one single sign of a case of milk fever, though previously I had lost many. I may say that I had the tip quite by accident from, in my opinion, without doubt the very best dairy farmer in England. The plan is too simple for many to believe in its effectiveness, but I am open to wager anyone the odds of two to one annually that I do not have a single case. The plan is as follows:

over shall be liberally fed on usual keep, according to time of year; in winter, she shall be kept in a box (loose) when expected to calve. She shall have one or two pints best linseed oil a day or so before calving, and again twelve hours after calving; bran mash an hour or so after calving, and bran mash, with chaff and hay, for two days. The cow and calf lie loose, but the cow shall not be milked for at least forty-eight hours after calving. In the case of a dead or weakly calf, about a quart may be milked four times in twenty-four hours.

"And this is the whole secret. To many it may seem unnatural, but a heavy-milking cow is an unnatural animal. And is it natural to take from a cow just calved what the calf would not take until a month old? The strain on the system in replenishing the milk supply is, I think, the sole cause of milk fever—together with the

neglected state of the bowels.

"If anyone will read this plan through very carefully, and then make up his mind to try it faithfully in every case, and immediately discharge even the best man in his employ who disobeys his instructions in the slightest degree, I honestly believe the odds of my wager given above may be doubled with safety."

Death of Joseph Culshaw.

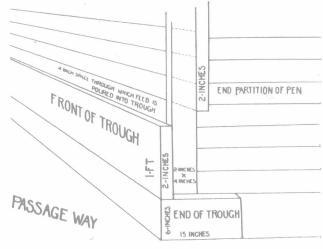
A correspondent of the London Live-stock Journal writes :- On Whit-Sunday last, there passed over to the majority, Mr. Joseph Culshaw, of Castle Hill, near Burnley, at the age of ninety-three years. fifties there were few names better known amongst Shorthorn stockmen than that of Joe Culshaw, the herdsman to Col. Towneley, of Towneley Park, Burnley, for in that decade was fought what may be called the "battle of the giants" for supremacy in honors at the Royal Agricultural Society of England, in which each and all were in turn successful-namely, Messrs. Bates, Booth and Towneley. It was freely acknowlthat in preparing cattle for the show-ring, Joe Culshaw had no superior in the United Kingdom, and in 1852, 1854, 1856, 1857 and 1860, he had the proud privilege of bringing back from the "Royal" premier honors to Towneley Park, mostly with animals of the Butterfly family. After the dispersion of the late Col. Towneley's famed herd, deceased continued his services as head bailiff at Towneley Hall, spending sixty years in the faithful service of the Towneley family, and only retiring at the age of four-score years; and even after that, so strong in him was the love of cattle, he was never without a cow or two of his own. In his later years he was much in request as judge of cattle at agricultural shows. He retained his faculties to a remarkable degree, and even so late as 1902 he went from Burnley to attend the selection sale of Mr. Victor Cavendish's Shorthorns at Holker in September of that year, when he was the guest of his half-brother, Mr. George Moore, who has for so many years been herdsman to the one-time world-famed Holker herd of the late Duke of Devonshire, and who, although but a decade younger than his deceased brother, still scouts the idea of pensions and leisure, and continues his duties in the herd at Holker. Only last year, at the local shows at Barrow-in-Furness, and the North Lonsdale Show at Ulverstone, George was seen leading his cattle into the rings to victory; he also attended the three Westmorland Shorthorn sales last September, at which he made purchases for the Holker herd. The late Mrs. Culshaw-Moore may thus be said to have given birth to two of the most noted herdsmen known in Shorthorn history.

Best of All.

I subscribe to fourteen other papers and periodicals, but consider the "Advocate" "on top" since it became a weedly. A A. EVANS. Drummond, Que.

Pigpen Front.

A correspondent writes: "Having tried different kinds of troughs for feeding pigs and different styles of fronts for the pens, I have found that the cement trough is by far the most durable and satisfactory, especially from a sanitary point of The swinging front I have tested for several years, but discarded it as entirely unsatisfactory. Last year, I put in a different style, and am so well pleased with it that I feel in duty bound to give stockmen generally, who may not be acquainted with its merits, a description there-I send you a pencil sketch, from which an engraving might be made. At each end of the trough stands upright a 2 x 4-inch scantling. On the side of this next the passageway is nailed a two-inch plank one foot wide, which forms a barrier between the triangle and the alley. on the inside, two or three planks or boards are



STATIONARY PIGPEN FRONT.

nailed, the bottom of the lowest one being on a level with the top of the one forming the front. This leaves a clear four-inch space directly above the trough, and through which the food is poured. Thus the pigs cannot crowd the attendant or pail, and the whole arrangement is strong and solid. I have had this plan in constant use for nearly a year, and find it perfectly satisfactory."

With the Flock.

When the grass comes the sheep are generally the first stock to go out, as the blue grass of the rough places on the farm and in the lanes is generally considered as belonging to the sheep. It is good, too, but does not last long in spring, and when it begins to fail the sheep should have mixed tame meadow to succeed it. Too often sheep are put in a "back run," and kept there all season, and the natural grass is pretty dry and brown in August. At this time the ewes and lambs will be out to grass. In most cases the lambs will all have been dropped. The late ones are sometimes a little troublesome. Ewes turned on the new grass a few days before lambing are frequently troubled with caked udder. The sudden increase of succulent food stimulates milk secretion too hastily. They should be watched.

There is much to be learned at this time of the year from the thrift of the lambs. There are always in every flock of ewes certain old stand-bys that are kept in spite of age, on account of their certain breeding qualities. We have known a certain ewe to bring the best lamb of the flock for season after season. It is a matter of constitution, good digestion, and strong maternal qualities. Others that are well to look at are frequently followed by light, poor lambs. The mothers thrive, but do not milk well. There are contrasts in ewes in this respect as marked as the differences between the beef and dairy breeds in cattle. Sheep are meat animals, but as each sheep has to support a lamb, it is unprofitable to keep a very poor milker. The tendency of sheep husbandry on the farms, and more particularly among the best breeders, is not to develop a milking flock. Fleshiness is the chief desideratum, and this is to some extent opposed to heavy milking qualities. The supplementing of the ewe's milk by concentrated foods, almost from the beginning of the life of the lamb, in order to promote rapid maturity, tends to lessen the importance, as it lessens the necessity of heavy milking in the ewes. Total neglect of the milking properties of ewes would be a serious mistake, however, as good milking qualities go along with strong maternal instincts, and these again co-exist with fecundity and readiness to breed.

Prolificacy is a matter that can be improved in a flock by selection, and the spring is a good time to judge of it. A shepherd should know the record of each ewe for each year she has bred. Some always produce twins, and others seldom produce them. This shows that the property is inherent and constant, and the offspring of such ewes will be likely to raise twins also, not only the female offspring, but the males. Many shepherds will not buy a single lamb for a sire. Single lambs, however, are generally better fleshed the first season than twins are, and if a man is selling ram

lambs in the fall for breeding purposes, he can put a higher finish on the singles than on the twins. The ewes that raise twins are the best ewes, even though single lambs might be desired for special ends, for the most prolific are the surest breeders and the best mothers.

J. McCAIG.

Wool in the Western States.

All the expressed determination to buy the new wools at low prices or not at all has been thrown Representatives of eastern wool merchants and others seem to be climbing over each other, in some sections, in their eagerness to secure their share of the new wools, and, it is needless to say, are paying higher prices for them than they were a year ago. The fever to buy is widespread, and wools are being contracted for on the sheep's back at high prices. In the brightwool sections the markets are excited. In Wyoming prices are being paid which mean a scoured cost, landed, of over fifty cents, some wools costing, it is claimed, fifty-four cents. Large purchases have been made at a scoured cost of not less than fifty cents, landed.

The steadily advancing prices which wool men are to-day paying for the new clip are justified, in their minds, by the belief which is entertained, that in the fall of the year, or by the time when the mills begin to make preparations for their next heavy-weight season at any rate, the price of wool will be materially higher than it is now. Certainly the purchases made cannot be justified by the present condition of the wool market at the seaboard, for manufacturers cannot see anything in the outlook for the goods market to warrant them in adopting any other than a very conservative course in the purchasing of their raw material, and they cannot be induced to pay any higher prices for wool, but the wool men claim that an advance in the price of the manufactured article always follows an advance in that of the raw material, and some of the dealers have actually expressed their determination to compel consumers to pay them higher prices for wool this year, believing that they are in a position to do this on account of the depleted condition of stocks of old wool, the continuously advancing tendency abroad, which will render it impossible for foreign wools to compete successfully with the domestic, and the improvement in general business which is expected to be in evidence in the fall .- [Shepherd's Bulletin.

FARM.

Rotation in Sugar-beet Growing.

At the recent convention of the American Beet-sugar Association, at Washington, D.C., one of the speakers was Dr. B. T. Galloway, Chief of the U. S. Bureau of Plant Industry.

The President—Doctor, what about rotation of the rops?

Dr. Galloway—I have not taken up that subject at all, Mr. Oxnard, but, of course, the question of rotation is a very important and essential one in growing any crop. You cannot expect to grow any crop for any length of time successfully and get the best results without some system of definite rotation, and while I have not and shall not probably have an opportunity to talk on that subject, it is an important one, and probably will be developed. I would like to ask Mr. Oxnard what the practice is in California as to rotation. Do you adopt any system of rotation

The President—We do on a large farm. We have some 5,000 acres of our own that we rotate. We have established a system of beets every third year. We put in beans, beets and barley. The place is on the coast, about twenty miles south of Santa Barbara. We have a very large farm there, and about one-third of it each year goes into those three crops.

Dr. Galloway—Do the beets follow after the barley or after the beans?

The President—The beets come after the beans.

Dr. Galloway—That leaves your nitrifying organisms in the soil.

The President—That is the idea.

Dr. Galloway—I may say in that connection that we have perfected some rather interesting results in the matter of nitrifying organisms. That is, we have secured a method of disseminating organisms in such a way that they can be applied to all these legumes like clover and beans and crops of that nature, and thereby cause the growth to increase from one-fifth to one-third.

Mr. Winfried Roelker—I should like to ask one more question as regards rotation. Do you not think that if we take the best soils to produce beets, in the course of time that soil will become tired of producing beets?

Dr. Galloway—Undoubtedly; we must diversify in order to keep up the crops.

On account of the late and unfavorable spring, it is expected that the sugar-beet acreage in some of the main beet-growing States will be less than last year, but it does not follow that the production will show a decrease. With improved culture, and a good season, a better product will result.

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Attention to Detail.

By Mrs. Anna L. Jack.

Someone left the wheelbarrow by the roadside and went away to dinner, without emptying the load of sticks that had been gathered on the lawn after a high wind. A skittish horse, driven by a careless boy, took fright at the red-painted barrow, and bolted—only to stop at some choice plum trees, that were bark-torn and injured by the contact. It was inattention to detail and thoughtless want of method that caused the trouble. How tired one gets of picking up after a careless person, and suffering from their blunders. It makes all the difference in the result, this attention to detail, and learning to do all work well.

"If called to sing—sing,
If called to soar—soar,
If called to burrow—burrow,
But in everything, and evermore,
Be thorough, be thorough."

Nowhere is this more demonstrated than in every-day work on the farm. A spade is wanted, and instead of having a place for it, the workman tries to remember where it was used last, and sets up a search. If only a corner of the woodshed, let it be called the tool-shed, and the smaller implements that are in constant use kept there. Children and hired help soon learn to know the place, if there is one, for all the needed gardening tools, and save time by regular

method. I have known a basket of currants, or of strawberries, left in the row when the dinner-bell rang, and the picker had not learned the necessary method of taking the fruit to the packing-house before leaving the field; and in the asparagus beds, the tall, lank stalks soon betray the careless cutter. All this means loss of money to the employer, and he has no redress except to discharge the delinquent, who may otherwise be worthy, though having this serious fault. Slipshod work soon stamps itself in any department of fife, and the farmer who is training his boys and girls to follow his footsteps (with all the improvements of the age), cannot do better than to make an important and strictly followed maxim; "Hoe out your row," that though old-fashioned, still holds good.

though old-fashioned, still holds good.

"For want of a nail the shoe was lost"—for want of a little care in autumn, and covering up of tender things, the flowering branches are stark and dry when spring returns. For want of tying up, the wind twisted the choice grapevines, and the fruit is lost; while for want of a trellis and a little training the sweet peas sag and get set in their ways. For want of a prop the heavy-laden branches of early apples break down the tree, and for want of spraying, the later fruit is spotted and cracked. Everywhere, if this lack of method is tolerated, the result is the same. Fences are neglected, and the cattle soon learn to forage on forbidden ground.

"I will fix that gate to-morrow-

But that night the cows got into the corn "-

is the experience of too many of us. And it is well if the training schools and agricultural colleges impress upon our young people that the first element toward success is strict and honorable attention to detail in all departments of farm work.

The Hired Man.

To the Editor "Farmer's Advocate":

Sir,-I read a letter in this paper, from one Alick," and he gives the farmer advice how to use his hired help. He tells how things used to be 15 years ago. I would like to say how things are now, so I will apply here for a situation on a farm. I want to hire for eight months or a year (just as it suits myself, of course). I will take \$25 a month, or \$240 for a year, and board and washing. I keep a driving horse and a top buggy. I will want pasture for the horse; he will jump in the grain some, and it will take the farmer and all the family to get him out again, but that time don't count on a farm-hired help must be used right. I want a place in the barn for my buggy; we can run it out and in again every day we are drawing in the harvest, as the drive-house is full of the farmer's implements generally. I may sell my horse, and if I do I will keep a wheel. I am very particular about quitting at 6 o'clock-I do not want the hours that Alick tells about. A hired man should quit early, so he can have three or four hours to wheel for life and death to rest himself. I will not want to work very fast on Monday forenoons, as I will be wheeling every Sunday from morning till midnight. If the wheel should happen to break 15 miles from home, and I have to walk, I will be tired for two days. I do not want to do any of that clearing up swamp that I will expect a sawing-machine to Alick speaks of. cut the wood for the house. When we commence seeding, I can carry the heavy end of a pair of lines up and down the field, and sit on the spring-seat of the cultivator and roller for three weeks. Then comes the putting out of the manure; I will expect the farmer to get a man by the day to fill it, and then he will have a manure spreader, which I can handle to perfection. When this job is done, then plowing the root ground with a sulky and double-furrow plow, which I can handle well. The turnips are now sown; when they are ready to hoe, I can do as much as any boy the farmer can hire for 60 cents a day. When the hay is ready, I can ride on the mower and rake as well as

any man; then the hay-loader will pitch it on, and with the help of the horse-fork I can pitch it off. If I hire for the year I will expect the farmer to have a wind-mill to pump the water, cut the roots and grind the grain, as I do not think a hired man should have to be out in rough weather, when only getting \$240 a year, with board and a few other privileges, which only amounts to about \$360. Of course, ordinary farms won't rent for that much, but I am good company. I think my application is in keeping with that of the average hired man, and would like to hear if I

am right.

To be honest with the farmer, I do not wish to compete for the prize that is given to the hired man now whose hands show the marks of hard work.

SANDY.

[Note.—The correspondent "Alick," to whose letter in the "Farmer's Advocate" for May 26th "Sandy" is replying in the foregoing communication, is now the owner and worker of a farm himself; so that the disabilities under which he labored as a hired man on coming to Canada from the Old, Country 15 years ago did not prevent his getting on successfully in life. What appeared to be hardships, doubtless helped to make him a better man and farmer. Very often the best thing that ever happened a young man was not to be born and raised with a silver spoon in his mouth.—Ed.]

Mustard Spraying.

A good deal has been written of late about spraying to destroy mustard, but not all who are troubled with this weed seem to have received all the information that has been imparted, as we have an enquiry for the formula to be used in mixing the materials and our opinion as to the action of the solution upon clover, barley and other grain crops.

The principle of the practice of destroying mustard by spraying lies in the fact that a solu-

to spray an acre. Obviously, the weather conditions effect the success of the operation. If rain falls before the solution has had time to act, the operation must be repeated. Warm days are the best on which to do the work. Mustard may be sprayed in crops of barley, oats, wheat, clover, corn, rye, peas or sugar beets, but potatoes, turnips, rape or beans are injured by the solution. The application should be made when the plants are well up, but before they bloom profusely (first two weeks in June in Ontario). A large apparatus is best for doing the work. If a community of farmers would buy a power pump and tank, to be used for orchard spraying, it could The cost for also be used for spraying mustard. materials for application on an acre would be about eighty cents, and the labor of applying it With so many advantages in favor is not great. of the practice of spraying to kill mustard, the great wonder is that it is not more generally followed.

Investigation of Soils Rich in Vegetable Matter.

Under the above heading, Mr. Corilis has an interesting paper on page 38 of the recently-issued annual report of the Ontario Agricultural College. He gives the results of the application of potash and nitriflying germs in garden soil to a soil deficient in potash but rich in organic nitrogen, as all black mucky soils

The oats were sown in flowerpots, and the photograph is shown when we should judge that the plants are between five and eight inches in height, and the rather hasty conclusion is drawn that this soil needed nitrifying germs more than potash, when it is very probable that both were equally required.

As a practical farmer, I would be much interested in studying the effect of the above management upon

plots of not less than one-tenth of an acre, and allowed to ripen in the open air.

If oats on a plot deficient in potash and rich in nitrogen, to which nitrifying germs have been added, do not go down and lodge on account of the rank, soft, sappy growth, it will be a revelation indeed to those familiar with such soils.

It would also be interesting to know the result of the addition of an application of potash along with the nitrifying germs to the above - mentioned We would naturally suppose that the potash would supply the deficiency in this respect, the nitrifying germs would liberate available nitrogen, and if there was sufficient phosphoric acid in the soil we would expect a record - breaking crop from the otherwise almost worthless piece of



Aristocratic Bovine Emigrants Landing at Levis, P.Q.

tion of copper sulphate (bluestone) of sufficient strength will destroy vegetable tissue if they can be kept long enough in contact. This discovery was made some time ago in Europe, and has frequently been favorably referred to in the After many trials, it "Farmer's Advocate." was discovered that those plants whose leaves were rough and hairy retained the solution upon their surface long enough for it to be absorbed into the plant cells, where it subsequently mingled with the plant fluids and caused death. Fortunately, mustard, one of our worst weeds, has these rough leaves, and so is susceptible to the effects of bluestone solution. Other rough-leaved weeds may also be destroyed with the solution, such as black bindweed and sow thistle, though not as easily as is mustard. In order to fully test the efficiency of this treatment, the Ontario Government made an appropriation for the purpose of giving demonstrations throughout the country of the efficacy of this plan in eradicating Consequently, during the last five years, many farmers in different parts of the Province have availed themselves of the services of officers of the Ontario Agricultural College, and had positive proof that bluestone will adhere to mustard and destroy it, but will not adhere to grain crops or clover, and, consequently, does them no

The preparation is made by dissolving ten pounds of copper sulphate, by suspending it in a coarse bag in a pail partly filled with water. The solution is then made up to forty or forty-five gallons (a large barrel), which amount will suffice

During the past year I have had the opportunity of seeing the results of experimental work, both at the stations and also by the farmers on a large scale in the black soils of Indiana, Illinois and Wisconsin, and all without exception attest the value of potash on such soils. But this I do know, that the packing houses and phosphate-fertilizer manufacturers have been forced, much against their will; by the demands of the farmers, to keep constantly increasing the percentage of potash in their fertilizers used in these sections.

This would not be true unless the potash was giving good results. It seems to me a great mistake to give out such conclusions as the above, unless the experimental work warrant them, and I hope that the experiment will be continued this year, and that potash and nitrifying germs will be used combined on the same plot, as well as separately, the crop allowed to ripen, and the results noted.

But it is not necessary for farmers who have unproductive peaty soils to wait for the college. Let them read the directions given on page 42 of the same report, on "Soils and fertilizers," and experiment for themselves; for the nitrifying germs can be easily obtained, as explained in the report, by scattering some rich garden soil over the plot, while the potash can be obtained from any fertilizer dealer at a reasonable cost. So it is within the reach of any farmer to try this interesting experiment himself.

G. F. MARSH.

Governor Odell, of New York, has signed a bill appropriating \$60,000 for beet-sugar bounties this year.

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of Wheat Bran.

Under the title, "The feeding value of wheat bran," Prof. Snyder, of the Minnesota Experiment Station, has the following in the Northwestern Miller:

For producing beef, milk, or for general feeding purposes, wheat bran is one of the cheapest and best foods that can be used. Many of the most successful farmers in this country recognize its merits, and use it liberally. While there are other feeding stuffs which contain more protein, none contain their protein associated with other valuable nutritive substances in the same proportion as found in bran. Bran is one of the safest foods that can be fed to farm animals. It does not cause digestive disorders, even when fed in large amounts. It can be combined with and made to improve any kind of feeding stuff. It is alike valuable for beef or dairy animals, and can be fed to all kinds of live stock.

Some of the special characteristics of bran and its merits as an animal food are worthy of consideration. Wheat bran is distinctly an animal food, and not a human food. In the process of milling, the bran is removed because it can not be milled with the flour, and furthermore, its removal is necessary because it is indigestible as a human food. The human stomach is not made or intended to digest bran, but farm animals, as cattle, sheep and horses, have stronger powers of digestion than man, and are able to digest and utilize wheat bran to advantage. BRAN OCCUPIES THE SAME PLACE AS AN ANIMAL FOOD WHICH WHEAT FLOUR DOES AS A HUMAN FOOD.

THE COMPOSITION OF WHEAT BRAN.

Wheat bran consists of the outer layers or episperm of the wheat kernel, which are removed in the roller process of milling; from 12 to 15 per cent. of the wheat as milled is recovered as bran. The aleurone, or socalled gluten layer, is removed along with the three bran coats, and forms an essential part of the bran. This aleurone layer is not capable of being digested or made available as human food, but is reduced and digested by farm animals, as cattle, horses and sheep.

In chemical composition, bran varies according to the composition and character of the wheat from which it is made and the process of milling employed. Average wheat bran contains about 18 per cent. of protein, which is considered the most expensive and valuable nutrient of foods, 4 to 5 per cent. of fat and 55 per cent. of carbohydrates. Wheat bran contains about 8 per cent. of fiber, from one-third to one-half of which is capable of being digested and utilized by farm animals. The average chemical composition of wheat bran is as

sj		Bran from winter wheat
	per cent.	per cent.
Water	11.5	12.3
Ash		5.9
Protein		16.0
Crude fiber	8.0	8.1
Carbohydrates	54.5	53.7
Fat		4.0

Almost invariably wheat bran has been found to contain more of protein and fat than is given in this table. As far as chemical composition is concerned, bran is not liable to be deficient in digestible protein, fat or carbohydrates, the most valuable nutrients for Compared with other grains and feeding purposes. farm products, wheat bran contains a larger amount of protein and fat than corn, oats, rye, barley, spelt, or the various varieties of wheat. These grains usually contain from 10 to 14 per cent. of protein, and from 2 to 5 per cent, of fat. Thus it will be seen that, as far as chemical composition is concerned, wheat bran

compares favorably with average farm grains. The digestibility of wheat bran is given as follows:

	Average	Maximum
	per cent.	per cent.
Protein	. 75.8	82.3
Carbohydrates	. 68.4	74.6
Fat		82.6
Fiber	000	56.3

These figures show that under favorable conditions from 75 to 80 per cent. of the most valuable nutrients of wheat bran are capable of being digested and utilized by animals. The most successful feeders are those who obtain the largest returns from the foods consumed, and since bran is usually fed in a mixed ration by the best feeders, its maximum digestibility is thus secured. If a sample of bran contains 18 per cent. of protein, there will be from 131 to 141 per cent. of digestible or available protein. This protein is associated with from 40 to 45 per cent. of available carbohydrates, and about 3 per cent. of available fat. While there are other feeding stuffs which contain more of some of these nutrients, there are none which contain all three in such a well-balanced form. AN EXCESS OR A SCANT AMOUNT OF EITHER PROTEIN, FAT OR CARBOHYDRATES IN A FOOD IS UNDESIR-ABLE. In wheat bran this balance of nutrients is well maintained. In all classifications of feeding stuffs, wheat bran is classed among the nitrogenous or proteid feeds which are particularly valuable for promoting growth in young animals and stimulating the production of amimal products.

A Noted Agricultural Chemist's Opinion BRAN USEFUL FOR BEEF AND MILK PRODUC-TION

The value of bran for making beef has been recognized by the Standard Cattle Co., of Ames, Neb. This company is extensively engaged in the fattening of range cattle for the market. From 1886 to 1897 nearly fifty thousand cattle (49,648) were finished and placed on the market. The amount of bran fed from year to year varied, presumably with the market price. The grain ration consisted of about 20 per cent. of wheat bran, and Mr. R. M. Allen, manager of the company, states: "I regard wheat bran as one of the most valuable food products in use." the cattle were fattened in the corn belt and corn was extensively used, bran was evidently found both desirable and necessary in order to make a more balanced ration, and to secure larger financial returns from the The use of 20 to 25 per cent. of wheat bran, even in the corn belt of this country, is quite extensively practiced among cattle feeders. Its use results in the production of a better quality of beef, and at a less expense.

In a dairy ration, wheat bran is universally recognized as one of the best feeds for forming the basis of the grain part of the ration. The best results in the feeding of dairy stock, and, in fact, in the feeding of all farm animals, are secured when two or three grains or milled products are mixed and fed in combination instead of singly. Bran can be combined to advantage with any grain or milled product, and in almost any proportion. Corn meal, oats, barley, linseed meal, and all grains and milled products, can be safely combined with bran, and better returns secured than if the bran were omitted from the ration. Wheat bran compares favorably in milk-producing powers with the most concentrated and expensive feeding stuffs.

The most extensive feeding tests which have been made show that, pound for pound, bran is equal in milkproducing power to mixed farm grains.

WHEN BRAN SHOULD BE BOUGHT.

In purchasing feeding stuffs, the safest rule for the farmer or feeder to follow is when wheat bran and other common feeds and grains are selling for the same price per ton, to give the preference to bran because it will produce fully as much milk as any grain and at the same time produce a better quality of product, and return more fertility to the soil. When the most concentrated meals exceed bran in price by more than 20 per cent., then the preference should always be given to bran.

When live stock is fed upon the farm, the manure not only adds new stores of fertility, but it makes the reserve fertility of the soil more active and available. Wheat bran occupies a high place among feeding stuffs, as producing a valuable manurial product.

Wheat bran as offered for sale in the market has never been found to be adulterated when in original sacks. In a few cases bran in bulk has been found to be adulterated.

BRAN FEEDING NECESSARY TO RETAIN SOIL FERTILITY.

In the feeding of bran, its manurial value is an important item, and is worthy of consideration. The best systems of agriculture demand that some live stock should be kept and fed upon the farm in order to conserve the fertility of the soil. The combination of live stock and grain farming furnishes the most rational of agricultur basis upon which any system When live stock is fed upon the farm, the mabased. nure not only adds new stores of fertility, but it makes the reserve fertility of the soil more active and available. Wheat bran occupies a high place among feeding stuffs, as producing a valuable manurial product.

A ton of wheat bran contains 55 pounds of nitrogen, 52 pounds of phosphoric acid, and 30 pounds of potash. If purchased in the form of a commercial fertilizer, the nitrogen would cost fifteen cents per pound, the phosphoric acid and potash each five cents per pound, making the manurial value of a ton of wheat bran worth \$12.90. Lawes and Gilbert estimate that 80 per cent. of the fertility in the foods consumed by live stock is returned to the soll, making a return to the soil of \$10.32 per ton of bran. It has been found more economical to purchase feeds of high manurial value, as bran, for the feeding of live stock than to purchase commercial fertilizers. There is no farm grain which produces as valuable manure as bran. When the feeder purchases bran and feeds it to his live stock, he is adding fertility to his soil. THE SHIPMENT OF WHEAT OFFALS AND OTHER GRAINS OUT OF THE COUNTRY IS A MENACE TO THE FERTILITY OF THE SOIL AND ITS CROP-PRODUCING POWER.

Wheat has from the earliest times been the staple food of man. Its highest value as a human food is secured when the wheat is milled so as to obtain standard white flour, leaving the bran and shorts as valuable animal foods. Wheat bran is one of the most valuable feeding stuffs that can be fed to farm animals; when fed to live stock it produces a valuable manure and adds fertility to the soil. It is not only an animal food of high value, but also a plant food, and, if used intelligently, will assist in producing not only wealth, in the form of live stock and live-stock products, but permanent wealth, in the form of soil fertility, which is "the riches of states."

Killing Weeds in Wet Weather.

If a dry summer confers no other benefit upon the farmer, it at least enables him to kill weeds at a minimum of cost for labor. In fact, there are some weeds that cannot be managed by tillage with any degree of satisfaction unless the summer be dry. These are of the perennial class that reproduce by creeping roots. Perennials are so called because they live from year to year, producing a plant from the same root. The perennial sow thistle is a prominent and, unfortunately, too frequently in some districts of Manitoba, example of the creeping perennial. Couch grass comes in the same list, as does also the These weeds are sometimes men-Canada thistle. tioned when it is desired to show how necessary it is know the habits of growth of a weed before a successful course of eradication can be carried out. A little experiment with a vigorous specimen of one of them will show that if a root be severed while the soil surrounding it is moist there will spring up from both ends a new plant. For this reason many who have had serious trouble in eradicating couch grass claim that cultivation in moist weather appears to increase rather than diminish their numbers. The same is the case with all plants of this class. Cultivation in wet weather is of little value in wiping them out. It is, nevertheless, always a good thing to cut off the tops, and thus prevent them weathering through their leaves, but to go down deep enough to cut the roots in two will bring no good returns for the labor expended.

In a wet year, the only effective means of checking these intruders is through smothering them out with some such crop as rape. latter appears to have some majestic power as far as exterminating thistles is concerned. have known reliable farmers to make the statement that they cleaned land completely that was badly infested with thistles with one crop of rape. Where there is a very large area in which thistles or couch grass has got a very strong foothold, it will take considerable rape to sow it sufficiently thick to smother the weeds, but it will pay in succeeding crops, and if there is a reasonably large herd of live stock about the farm, the fall pasture from the rape will also more than pay for the seed. When rape is being sown for the purpose of lilling weeds, from three to four pounds seed per acre should be used.

Manuring Root Land.

It is true that most of the farmyard manure produced on farms is used in dunging land for root crops, but there is seldom enough for all the root area, and distant fields often only receive a dressing of superphosphate. No other fertilizing principle is so effective for turnips and swedes as phosphoric acid in its many forms. Nitrogenous manures are also useful, for farmyard dung is a typical nitrogenous manure. The soil is naturally rich in nitrates during the late summer and early autumn, when root crops are developing, hence phosphatic manures are most necessary. We are only beginning to realize the importance of potash, and it is not likely that potassic manures will be generally used for many years, simply because dung is a potassic manure, and the consumption of hay and straw on the and as a rule gives all the potash that is necessary Phosphoric acid, therefore, remains as the principal manure for roots, and no experiments have been able to shift this farming opinion. The best possible dung for swedes or turnips, I should say, is about 12 tons of dung plowed in, and about 3 or 4 cwt. of a good phosphatic manure drilled with the seed. Given the remaining conditions of moisture, fine tilth, and thorough hoeing, with this dressing we ought to be rewarded with a good crop.-[Agricultural Gazette.

Twine Prices.

Dealers in binder twine, according to a trade journal, are doing very little business these days, and were it not for the fact that so large a part of the total product is in the hands of a few dealers, prices would come down. There is in sight a supply for the season greatly in excess of the largest estimated consumption. It appears reasonable that the buyer who holds off until harvest will get his twine just as cheap as the man who purchases now, besides standing a chance to take advantage of any drop.

The large dealers quote sisal and standard, 9%c. and 10½c; standard manilla, 11½c.; 600 ft. manilla, 12½c.; pure manilla, 13½c.; carloads, ½c. less.

A Good Reputation.

The "Advocate" has always been a most welcome visitor here, and you have fully vindicated your right to the reputation of publishing a live, bright, up-to-date farm journal. My son and I have appreciated every effort you have made to improve your journal, and wish the "Advocate" A. F. DEMPSTER. every success.

Elgin Co., Ont.

The Farmers' Technical School.

No other agricultural college in the world has a wider and more enviable reputation than the Ontario Agricultural College at Guelph, but it is yet comparatively little known by many whom it is intended to serve. At present, however, the College is enjoying a period of extension and prosperity unparalleled by any other educational institution in Canada. The principal cause of this is the installation of the Macdonald Institute and Manual Training School in connection with the Agricultural College proper. The inception of these new features in connection with the College was Sir William C. Macdonald's, and to carry out his plans he has already donated \$210,000 to be expended upon buildings and equipment. Another cause of the increasing popularity of the College course for farmers is a realization of the fact that, with equal natural endowments. the young man or woman with a liberal technical education is more capable of improving his conditions than another who has not received special academic and technical training. In other words, the farming community are coming to more fully realize the value of a trained mind in the solutions of problems that are constantly being confronted in farming operations. Incidentally, those in charge of the College are providing better equipment and more practical courses of study and experimentation. With these auspicious conditions, commodious buildings, modern equipment, and a public sentiment in its favor, the work and expansion of the Ontario Agricultural College during the next few years should be phenomenal.

At present, the heads of the different departments of the College are applying themselves to their several tasks with a diligence characteristic of modern men of affairs. The change in the presidency of the College, which took place some months ago, while it removed a man with a rare combination of executive ability, practical lnowledge and scholastic accomplishments, also instituted a regime that will be characterized by more independent investigation among professors and a greater development of the individual, for President Creelman is a man who will not interfere with the work of others, but will give a free hand to his lieutenants and require results.

The experimental farm, of which Prof. C. A Zavitz is in charge, is of particular interest at this time of the year. Nowhere in the world is more careful work done in testing varieties of grain, grasses, clovers, corn, roots, and all classes of farm crops, as is done on these plots. The thousands of excursionists who are thronging over the plots these fine June days cannot fail to secure much useful information concerning the characteristics of different varieties of crops. such trips the visitor should carry a notebook and pencil, for before the stroll is completed there will be many facts imparted that the mind cannot Plant-breeding is being taken up in earnest at the College by Mr. John Buchanan, an agricultural student working under the direction of Prof. Zavitz. As demonstrator in field husbandry he will deliver a course of lectures to the students next winter on his special subject. Mr. Zavitz considers that by selection the characteristics of a variety are fixed for all practical pur-

poses five seasons after the first cross is made The work of the poultry department, under Prof. W. R. Graham, is in keeping with the importance to which this industry is attaining. The season has been unpropitious for young stock, but plans are laid for carrying out extensive experiments upon the question of wintering laying stock. Four pens are to be built this summer-one will be warm, another about like the average, and two The pens will be stocked quite open and cool. with Barred Plymouth Rocks, White Wyandottes and Orpingtons. An attempt will be made to discover the effect of warm and open pens upon the constitution of the fowl, upon the fertility of their eggs, and upon the relative cost of the eggs The work will extend over about five produced. years, but it is expected important results will be

obtained.

Prof. H. H. Dean, as head of the dairy department, is maintaining his reputation as one of the foremost investigators upon his subject. Professor H. L. Hutt was unfortunate in losing a large number of apple, pear and peach trees, as well as raspberry canes, in the horticultural department last winter, but is renewing his plantation as quickly as possible. The growing of a large number of forest trees for distribution among the farmers of Ontario in the near future is now under way in charge of a new man on the staff, Mr. E. J. Zavitz

A decidedly strong feature of the Agricultural College is its chemical department, with Professor R. Harcourt as chief chemist, and Professor W. P. Gamble as associate. At present a large amount of work is being done in soil analysis with the object of suggesting some treatment for the swamp soils of Ontario, Prof. Harcourt has also been asked by the Northwest Territories

Government to conduct analyses of Western wheat and investigations into its bread-making properties, the Territories paying chemists to do the actual work under Professor Harcourt's direc-

Greater interest in live stock is being aroused under Professors Day and Cumming, whose whole duties now are to be confined to the work of animal husbandry and the management of the farm. At present, Professor Day, in company with the Hon. John Dryden, is on a trip to the Old Land, where they will secure pure-bred stock to reinforce the herds and flocks of the College farm.

The work and scope of the new Macdonald Institute, under Prof. W. H. Muldrew, is a matter of great interest. The object of this newer education being inaugurated at Guelph is to give the young women of the country a technical education in housekeeping and all branches of domestic economy corresponding to that which the young men receive at the Agricultural College, and to fit public school teachers for the work of teaching manual training in towns and nature study in the country. Last winter these courses began, although the buildings in which the work is to be carried on were not completed, and if one were to judge of the ultimate usefulness and success of the Institute by the numbers taking the course the prospect is most assuring. A note of warning to young women of the country might be sounded just here. The Macdonald Institute is built particularly for the daughters of the farms, but admission cannot be refused to girls from the towns, and as the capacity of the school is limited, those intending to enter should get their applications in early to insure of acceptance. Already the town and city girls, realizing the



J. W. Hotson, M. A.
Principal New Consolidated School, Guelph, Ont.

value of the course in domestic science, have begun making applications for entrance, so that unless the country lasses improve their opportunities early the classes at Macdonald Institute will be composed almost wholly of their city cousins. By September it is expected the residence building for girls will be completed, and all branches of the Macdonald Institute will be taken up in earnest. Both short practical and long technical courses are provided, so that the teaching will conform to the conditions of all classes.

On the College campus there is now being built one of the consolidated schools that Professor Robertson and Sir William Macdonald would like to see within reach of every child in Canada. The school at Guelph will serve four ordinary school sections, and will be under the principalship of J. W. Hotson, M. A. With all these educational features about the Agricultural College, surely the work of educating the young people of the farms will be capably carried out.

Opinions.

R. N. Mason, Norfolk, Ont.—We think it is the best agricultural paper in America.

W. J. Stockdale, Bridgeburg, Ont.—We appreciate very much your efforts in publishing the "Advocate" every week. It will bring you great success.

R. G. Kendall, Simcoe, Ont.—Enclosed find my renewal to the best farmer's paper. I like every department of it.

W. A. Ruthven, Simcoe, Ont.—Enclosed find my \$1.50 renewal subscription to "F, A.," the best money the farmer can lay out.

The New Seed Bill.

As announced some time ago, Hon. Sidney Fisher has introduced a bill into the Federal Parliament at the present session, to be known as "The Seed Control Act." Realizing the importance of the bill, a meeting of a large number of interested seedsmen and others has been called for the 14th, 15th and 16th inst., to consult with the Minister on the following provisions of the Act:

1. This Act may be cited as The Seed Control Act,

2. This Act shall come into operation on the first day of July, 1905.

3. No person shall sell, or offer, expose or have in his possession for sale, for the purpose of seeding, any seeds or cereals, grasses, clovers or forage plants containing any seeds of the following weeds: Wild mustard or charlock, tumbling mustard, hare's-ear mustard, ball mustard, field pennycress or stinkweed, wild oats, bindweed, perennial sow thistle, ragweed, great ragweed, purple cockle, cow cockle, orange hawkweed or paint brush, ergot of rye, unless each and every receptacle, package, sack or bag containing such seeds, or a label securely attached thereto, is marked in a plain and indelible manner:

(a) With the initials of the Christian names, and the full surname and address of the wholesale or retail seller.

(b) With the name of the kind or kinds of seed.
(c) With the common name or names of the aforenamed weeds, the seeds of which are present in the seed sold or offered, exposed or had in possession for sale.

4. No person shall sell, or offer, expose or have in his possession for sale, any seeds of timothy, red clover, alsike, or any mixture containing the said seeds, in or from any receptacle, package, sack or bag upon which is marked "No 1," or any other designation which represents such seeds as of first quality, unless they are free from the seeds of weeds named in section 3 of this Act, and are also free from the seeds of white cockle, night-flowering catchfly, false flax, Canada thistle, ox-eye daisy, curled dock, blue weed, ribgrass, chicory, and contain out of every one hundred seeds not less than ninety-nine seeds of the kind or kinds represented, or seeds of other useful and harmless grasses and clovers, of which ninety-nine seeds ninety seeds must be germinable.

5. The Governor in Council may make regulations determining the maximum proportion of seeds of the weeds named in sections 3 and 4 of this Act, that may be tolerated in any seeds which shall, within the meaning of the said sections, be considered as free from the seeds of the said weeds.

6. No person shall sell, or offer, expose or have in his possession for sale, for the purpose of seeding in Canada, any seeds of timothy, alsike or red clover, or any mixture containing the said seeds, if the seeds of the weeds named in sections 3 and 4 of this Act are present in a greater proportion than three to one thousand of the seed sold, or offered, exposed or held in possession for sale.

7. The provisions contained in this Act shall not apply to:

(a) Any person growing or selling seeds for the purpose of food.

(b) Any person selling seeds direct to merchants to be cleaned or graded before being offered for sale, for the purpose of seeding.

(c) Seed that is held in storage for the purpose of being re-cleaned, and which has not been offered, exposed or held in possession for sale for the purpose of

seeding; or

(d) Seed that is grown and sold by any farmer on
his own premises, unless the purchaser of the said seed
obtains from the seller at the time of the sale thereof
a certificate that the said seed is supplied to him sub-

ject to the provisions of this Act.

8. Every person who, by himself or through the agency of another person, violates any of the provisions of sections 3, 4 and 5 of this Act shall, for each offence, be liable to a fine or imprisonment.

9. The person on whose behalf any seed is sold, offered, exposed, or had in possession for sale, contrary to the provisions of the foregoing sections of this Act, shall be prima facie liable for the violation of this Act.

10. Any person charged with the enforcement of this Act may enter upon any premises to make any examination of any seeds, receptacles, packages, sacks or bags of seeds are on the premises of the owner, or on other premises, or in the possession of a railway or steamship company, and may take any samples of the said seeds from any receptacle, package, sack or bag, for which samples the owner of the seed shall be paid in accordance with the amount of seed thus taken and its current value; and any person who obstructs or refuses to permit the making of any such examination, or the taking of any such samples of seeds, shall be liable to a fine or imprisonment.

11. Any inspector, informant or complainant who finds or suspects seeds to be sold, offered, exposed or had in possession for sale for the purpose of seeding, in violation of the provisions of this Act, shall take a sample from the said seeds and forward it to such person as the Governor in Council appoints as an official seed analyst, to examine and report upon any seed submitted for analysis under the provisions of this Act.

12. Any sample of seed taken for official analysis

under the provisions of this Act shall be taken in the presence of:-

(a) The person who sold or offered, exposed or had in his possession for sale the said seeds; or

(b) Two impartial or non-interested witnesses, and—
In accordance with the rules for seed testing, prescribed by the Minister of Agriculture, and shall be inclosed in a sealed package, together with a certified
statement of the inspector, informant or complainant,
which shall include the name and address of the person
who sold, or offered, exposed or had in his possession
for sale, the seeds from which the said sample was
taken, the manner in which the receptacle, package,
sack or bag was marked, and the section or sections of
this Act in violation of which the said seeds were found
or suspected to be sold or offered, exposed or had in
possession for sale.

13. Any sample of seeds taken from any seed which are found or suspected to be sold in violation of the provisions of this Act shall be taken and forwarded to an official seed analyst within seven days from the date on which the seeds entered into the personal possession and became the property of the purchaser.

14. It shall be the duty of any official seed analyst to examine any seeds sent to him, in accordance with the provisions of this Act, by following the methods for testing seeds prescribed by the Minister of Agriculture, and to send one certificate of analysis of the said seeds to the inspector, informant or complainant from whom they were received, and one certificate to the seller of the said seeds, and to place one certificate on file in the Department of Agriculture.

15. The certificate of analysis of any official seed analyst on any sample of seeds forwarded to him under this Act shall be accepted as evidence in any prosecution of any person who may have sold or offered, exposed or had in possession for sale any seeds in violation of the provisions of this Act.

Draining.

A reader asks for some hints on underdraining, the smallest sized tile recommended for laterals, the size of tile required to carry the rainfall off fifty acres accumulating at one place, how to protect the outlet from frost, how to level the bottom of the drains, and how to prevent silt from accumulating in the drains?

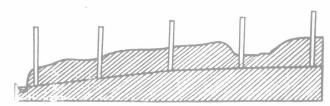
In our April 21st issue, page 563, D. discusses the general principles of drainage, but to illustrate some of the details of the work, we might add a few remarks. Evidently, the land referred to by our reader requires a large drain through the main watercourse to carry off the surplus water on fifty acres. The average rainfall does not enter into consideration here, but the greatest rainfall that may come at any one time. Properly speaking, we should provide for the carrying off of the surplus water in twenty-four hours that may fall during the next twenty-four In Eastern Canada, we may assume that the maximum rainfall at any one time will not exceed two inches. On the basis of a two-inch rainfall, C. G. Elliott, an American civil engineer, has made the following calculations for drains laid not less than three feet deep, and with a fall of three inches in one hundred feet :

For drains not more than 500 feet long, a twoinch tile will drain two acres. Drains more than 500 feet long should not be laid of two-inch tile. Three-inch tile will drain five acres, and should not be of greater length than 1,000 feet. Fourinch tile will drain twelve acres. Five-inch tile will drain twenty acres. Six-inch tile will drain forty acres, and a seven-inch tile will drain sixty acres. A long drain has a less carrying capacity than a short drain of the same size tile, laid upon the same grade. If we double the grade per one hundred feet of the drain, we increase its carry-The depth to ing capacity about one-third. which the land is drained and the nature of the soil will vary the conditions, so that the amount of water to be taken off may be much less. fact that the soil when drained to a depth of three or four feet will hold an immense quantity of water, which will not for a time interfere with the growth of crops, allows us to use much smaller tile than if we were required to move all Deep the surplus water in twenty-four hours. drains require tiles of less capacity for the same area than shallow drainings, and an increased fall may also reduce the size of the tile required.

Before beginning the actual digging of the drains, the levels and grades of the field should be determined. In most cases where draining is done, there is not much question of sufficient fall, but the drain should be as level as possible, to prevent the accumulation of silt. To get the proper levels, always begin at the outlet, and level, by means of a spirit level, sighting along its top to a point farther up the course of the drain. In some cases, two grades can be made, where such a practice would obviate considerable digging (see Fig. 1)

The position and size of the lateral will depend upon the area to be drained. In Fig. 2 is represented a plan that is both expensive and un-

necessary, as the area between lines A and B and C and D is drained by the main, hence the uselessness of laterals on this portion of the land. Figure 3 represents a plan where the overlapping is not so extensive. Drains should be at least two and one-half feet deep at the head, and deeper if the land is a low, stiff clay. If there is a hard-pan, it is little use going very deep into it. When digging, stretch a strong line about four inches from the side of the drain, to guide in keeping it straight. Have suitable tools for digging, and do not make the trench more than twelve inches wide for a depth of four feet or less. In such a trench there will be room to work if proper ditching tools are used. Figure 5 shows a method of determining the level of the bottom of the drain. Where there is a quicksand bottom to a drain, it may be necessary to lay a board



on the bottom upon which to place the tile, or

Fig. 1.—Diagram showing two grades in one drain.

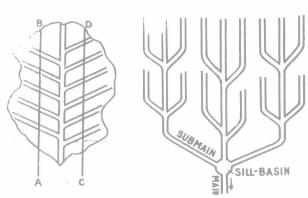


Fig. 2—A common system of draining not to be

Fig. 3.—A very good system of drainage.



Fig. 4 —Drains adapted to suit the land.

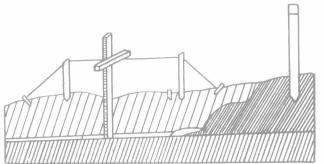


Fig. 5.—Diagram showing a simple plan of leveling the bottom of a drain.



Fig. 6.—A well-protected outlet.

the bottom covered with clay, or if the quicksand is left to dry a few days it may become dry enough to lay the tile

enough to lay the tile. One of the most important features to bear in mind in laying tile is to get them level and straight and well joined at their ends. Round tile are by all odds more convenient than flattened, as they can be turned around to be made to fit closely. After they are laid they should be carefully coverd with coarse soil, well packed, to prevent silt getting in. Where there is a quicksand, one must be very particular about this point. Figure 6 shows a good method of protecting the outlet, though, most generally, no further precaution is taken than that of placing a heavy flat stone over the tiles at that point Cement concrete tile is now being made and a few of these at the outlet would add to the durability of the drain.

The Corn Crop.

The prospects for an average crop of corn in Ontario this year is rather discouraging. continued cold and wet weather has delayed the planting, and, in many places, caused the rotting of the seed, which, as a rule, was lacking in vitality, owing to the fact of the last two summers being wet and cold and the ripening and drying process incomplete. Attention early in the spring was directed in these columns to the wisdom of testing the germinating power of seed generally, and of corn particularly, before sowing, to ascertain in what proportion of it the vitality was strong, but it is feared that few followed the The weather conditions of late advice given. however, have been such as to try the mettle of the soundest seed, and in many instances the second sowing has proven a failure, as well as the first. It is yet not too late to plant with the hope of securing a fair crop of ensilage or The land is well supplied with fodder corn. moisture, and if warm weather comes the growth of corn may be rapid. With a good preparation of the seed-bed, and judicious cultivation afterwards, there may yet be secured a good yield of cattle food from this source, and, as observation has shown that fall frosts do not severely damage the crop for ensilage purposes, a later harvesting may be risked without fear of loss. have doubts about the prospects for corn planted after this date may yet, on the land prepared for this, secure a good crop of millet, which makes excellent stock food when well saved, and there is also time yet to sow turnips with every hope of a good crop, and the preparation made for corn should answer well for turnips.

DAIRY.

Dairying at the Western Fair.

For years the want of proper accommodation for exhibits of dairy products, apparatus and demonstrations of an educational nature has been a standing reproach to the Western Fair. In fact, this exhibition has had no dairy buildingno home for the country's best industry-but a sort of wooden annex to the horticulture and agricultural hall, where the temperature went where it liked and the crowds craned their necks in a vain struggle to see what was going on. Matters had come to such a pass that the director in charge of the department declared in the writer's presence that he had concluded that if the department could not be properly housed he would throw up the sponge. He did not propose to degrade the industry by asking dairymen to put up with such facilities any longer. what had been done for the Toronto Exhibition, and recognizing the merits of the case of the Western Fair, the Provincial Government at the last session of the Legislature set aside \$10,000 towards the erection of a new dairy building at London, according to plans to be approved by Prof. Dean, of the Agricultural College, one of the most practical dairy experts in Canada.

Western Ontario agriculture sustains the city of London, and the Western Fair and dairying are two of its best allies. The Western Fair is admittedly one of the most successful Canadian ex hibitions. The management has spent on these grounds out of their own profits some \$58,000 in recent years in permanent buildings. The Fair Association, not unreasonably, ask, before spending over \$10,000 in erecting an absolutely necessary structure, that there be some assurance of permanence by a twenty-year extension of othe lease of the fair grounds from the city. are, unfortunately, at once met with a nagging policy of a short-term lease that threatens to completely block the erection of the dairy building. One objector fears that the grounds will be spoiled in appearance by what is to be really one of the handsomest buildings, though small in size compared with the other structures. An economist wants the grounds sold for town lots, and streets run through them, thus blotting out forever "Queen's Park," with its fine grove of stately natural forest trees. To destroy this breathing place would be little short of vandalism. Rather let the Civic Improvement Society and the Park Commissioner take a hand in improving it as a resort for the people, towards which the Fair Board would gladly assist, and an annual home for this splendid exhibition, which for years has proved a drawing card for London, and one of its very best assets. Immense sums have been spent by the city and Fair Association on the existing permanent buildings and improvements. and the sober sense of a debt-burdened municipality will not authorize the folly of laying all this low and beginning another era of expenditures on a new site. In the interest of all concerned, we trust the council will promptly meet the Fair Board in a liberal spirit, so that the work on the new dairy pavilion will at once proceed, in order to be ready for this year's fair.

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Dairy Farming.

[Synopsis of an address by Prof. Dean, at the East Middlesex Farmers' Institute annual meeting.]

The outlook for dairy products early this spring was anything but bright. Dealers lost heavily on the latter part of last season's operations, so decided to recuperate themselves this year, hence the low prices of cheese, but from now on we may expect the cheese market to improve. Dairy farmers, however, must study how to produce economically. Sometimes one wonders that with all the opportunities for improvement, why farmers are not more advanced in their methods. One thing all must do, and that is read all the up-to-date literature on their business.

Dairy farming is without doubt the most intricate of the many branches of farming. profitably convert the raw materials of the farm into such highly-finished products as butter and cheese requires the exercise of no small amount of intelligence. To do this, one is required to know the comparative values of crops for the production of milk and the sustenance of life. Wisconsin, farmers claim that a ton of alfalfa hay is of equal value for the production of milk to a ton of bran. If this is true, how much are the dairy farmers of Ontario losing by not fully appreciating the value of alfalfa? Then, there is the old reliable crop of corn; but there is corn and corn, and farmers cannot afford to grow anything but the best-yielding varieties, both of grain and fodder. For summer feeding, there is nothing that can equal well-cured ensilage. In the rush of our farm work, no one can afford the time to mow green feed and cart it to the barn, and to throw it over the fence is not a profitable method

of feeding. Then, the dairy farmer must be a liberal feed-There is a point in feeding cows just where the amount fed is sufficient to maintain the animal in fair condition, but anything fed over this amount is devoted to increased production of Too many farmers just feed to this point. In winter, they seem to feed with the idea of tiding their cows over until grass comes; then they look for profits, but when the grazing season arrives the best growth of the pasture is required to recuperate the cows after their winter treatment, and by the time they are in good condition In some rethe pastures are brown and dry. spects, Canadian farmers can take a lesson from those of the Jersey Islands. On one large farm there (forty acres) a man will keep thirty cows, a large herd of swine, and employ five or six hired men. It's a serious charge against our farmers to say their farms are too large. Sometimes a man is too small for his farm. one thing about dairy farming that has received a lot of attention, and that is the stable. stable is clean as long as it has wooden floors. Nothing but concrete floors should be used, neither should there be any manger in a dairy stable, and do not neglect the ventilation.

The dairy herd should be a constant study Never try to conduct a dairy farm without study-In the Coling the individuality of every cow. lege herd, the best cow produced, last year, \$76 worth of butter-fat, and the poorest \$33 worth, and required just about as much feed as the form-The best cow gave 10,000 pounds of milk, and in the near future we hope to raise the average yield of the whole herd to 8,000 pounds. Two wever, must be considered in valuing a cow-the quantity and quality of her product In every stable or milk-room there should be a spring balance, record chart and sample bottles. It is a good sign to see a dairy farmer have several cows to sell each year, for it is certain that all his cows are not as good as the best, and he should glways be looking for something better. The farmer should follow the example of a celebrated English breeder of dogs who attributed his success to the fact that he bred a great many and hanged a great many. Among all the breeds there are good cows, but no one can tell by the breed or appearance of a cow whether she is a first-class heavy producer or just a medium-good cow.

Shall we Abandon Cream Ripening?

J. H. Monrad, the noted dairy expert, has the following to say on "a cream-ripening experi-

ment" reported by Prof. Dean: " If the result is to be accepted as conclusive, it ought to revolutionize the art of cream ripen-'Two lots of butter made from pasteurized cream were judged. One of these was cooled immediately after separating, culture was added, and it was churned at once; the score for flavor was 42 out of 45. The other lot was ripened the usual way, and scored 41.5 for flavor. another illustration of the practicability of omitting the ordinary process of cream ripening, and

yet securing good flavor. "In spite of the indication given by Prof. Dean that this was the second test along this line, it seems to me a little hasty coming from an investigator. If it had been reported by a layman, I should have read it with interest and passed it, but coming from Prof. Dean, I must call for more facts and proofs, in order to accept

better flavor (as indicated by the score) without the ordinary process of ripening.

Have we all wasted our labor in watching the ripening of the cream, not to speak of testing the acidity so as to churn at the most favorable moment? If so, I propose that the younger generation of buttermakers erect a statue to the honor of Prof. Dean !-just think of the convenience of being able to churn just after separating and cooling the cream, and get the butter from the morning's milk into the refrigerator by

3 or 4 p. m.
"The extractor, accumulator and radiator advocates did not go quite so far, as they wanted to soak the butter granules in the starter for some hours, but even they do not seem to have con-It remains to be seen what quered the market. the Prof. Dean method will do, but, pending a more exhaustive line of experiments with close commercial scoring of the butter, I must advise my readers to continue the orthodox method of

The Influence of the Hand Separator on Dairying.

A dairyman of note, well known to many of our readers, Prof. G. L. McKay, of the Iowa Agricultural College, has the following to say in the Drover's Journal regarding this important and timely topic:

The introduction of the creamery system has largely done away with buttermaking on the farm, as greater quantities of a uniform quality of good butter are made at creameries or central places, hence better prices can be paid. The introduction of the little hand-separator on the farm promises to bring about additional changes; it has already greatly depreciated the quality of creamery butter. This is largely due to the unfamiliarity of patrons with the new conditions that confront them, as well as to the practice that some creamerymen have of requiring the cream to be brought in but two or three times a week. If the cream had been properly cared for it could be delivered every other day in good condition.

One of the first considerations is to thoroughly cleanse the separator every time it is used. The desirable and undesirable bacteria growth depends upon the cleanliness observed. The putrefactive species, or those that cause ordinary decay and undesirable flavors, are commonly associated with filth. In cleaning the separator, first thoroughly cleanse the tubes and intricate parts with warm water. After all the milk has been removed, thoroughly scald all parts that come in contact with the milk. When purchasing a hand-separator, simplicity of construction should be one of the first considerations in influencing the buyer.

Cream should be aired and cooled as soon as separated; fat is a poor conductor of heat or cold, and must necessarily be stirred while cooling. If cream has been treated this way it will keep sweet in a cool

the dictum that it is practical to get as good or place for two or three days. Warm cream should never be added to cold cream until it has been reduced to the same temperature.

Cream will keep sweet much longer than milk, if properly cooled, as it contains less milk serum or food for the action of bacteria. It should be kept where the surrounding atmosphere is pure, so as to prevent it from taking up flavors by absorption. If cream is kept in a cellar the walls should be whitewashed a couple of times a year, as lime is a great purifier. Vegetables should never be put in the same room with cream. It is well to ventilate the cellar during the night, and close it during the heat of the day.

The writer WHEN SCORING BUTTER IN VARI-OUS PARTS OF THE COUNTRY HAS FOUND THE MOST COMMON FAULT WITH DAIRY BUTTER IS

THE LACK OF GOOD FLAVOR. Most of the flavors are those acquired by absorption, taken up from foods and decaying vegetables kept, near the cream. There is no reason why as good or better butter cannot be manufactured by the individual dairyman on the farm as in the creamery. The little separator, if properly cared for, will greatly facilitate

the work. I would advise skimming about 30 per cent. and cooling it immediately, as recommended above. As soon as sufficient quantity is obtained for a churning, the entire lot should be warmed to 65 degrees F., and about five per cent. clean flavored sour milk added to The cream should be held at this temperature until it begins to thicken and has a pleasant acid taste. It should then be cooled to churning temperature, preferably 52 degrees or 54 degrees, depending somewhat

on the locality. If the cream is very thick it should be churned at a lower temperature to insure a good firm body. Butter should gather in about twenty-five or thirty minutes, and should be churned in granules about the size of The buttermilk should then be removed, and the butter washed once with water at about the same temperature as the cream. About the same amount of water should be used as you had of cream. As soon as the butter has been drained, an ounce of salt, or three-quarters of an ounce, as market requires, should be added for each pound of butter.

If the butter is in granular condition, as it should be, the churn can be revolved a few times to thoroughly mix butter and salt. The butter should be permitted to stand in this condition from thirty minutes to an hour, so as to permit the salt to dissolve. Butter should then be worked until all the loose moisture is expelled and it loses its gritty feeling, or assumes a massy condition, and then it is ready to pack.

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.



In the Chilliwack Valley, B. C. Barn and part of herd of Ayrshires and Jerseys, property of A. C. Wells, Sardis, B. C.

POULTRY.

Co-operative Egg Business in Ireland.

Among the many organizations established in Ireland during the past ten years, with the object of promoting the commercial and industrial development of the Emerald Isle, one of the most prominent is the Irish Agricultural Organization Society, established in 1894 by Sir Horace Plunkett and Rev. T. A. Finlay. The method adopted by this Society has been to establish cooperative societies throughout the Island, and so successful have its operations in this line been that, since its organization eight hundred societies have been formed, embracing all such industries as dairying, agriculture, poultry-keeping, gardening. fruit-culture, home industries, etc.

Early in its career, the attention of the Society was drawn to the fact that, in addition to the home supply, the people of Great Britain import annually upwards of 6,000,000 pounds worth of eggs from foreign countries. also noted that Irish eggs, owing to bad handling and to being kept too long before they reached the consumer, were in poor demand. Here, then, was an opportunity for bringing about a new state of affairs, and building up a trade which might become at once lucrative and constant. The Society immediately bent every effort to secure this result, and, by effecting a better system of handling, and educating the people along "poultry lines." have been so successful poultry lines," have been so successful that Irish eggs, instead of being a matter of con-tempt—" something to sniff at"—are now much sought after, and have attained a wide market.

An idea of the method adopted by these societies may be derived from a description of the Dervock Poultry Society, which may be taken as This Society was established near Ballymoney, Co. Antrim, in October, 1901, with a membership of 500, and a paid-up capital of £250. Its membership has now increased to 700, and its paid-up capital to £350, the nominal capital being £700. In order that everyone in the locality might become a member, the value of each share was placed at the low sum of five The taking of one share constituted shillings. one member of the Society, the scale being one share to be taken for every twenty-five hens kept, and each member being liable only for the amount of his share or shares.

The Society is governed by a committee of ten, elected by the members, each member having but one vote, no matter how many shares he holds. Subject to the committee, there is a paid manager, a staff consisting of four boxmakers and eggpackers, and four collectors. During the busy season before Christmas, of course, this staff has to be increased. The "headquarters" of the Society consisted originally of a few old buildings, which were re-fitted, and now do duty as office, shed for boxmaking, storage and packing The plant and entire fittings, room, stable, etc. including an acetylene gas plant, which proves a great convenience in testing the eggs, a horse, van, and set of harness, amounted, in all, to than £78 Since the trade logg done on a strictly cash basis, all eggs being paid for as soon as received, it has been found necessary to have a considerable sum on hand. This working capital has been provided partly by the paid-up share capital, and partly by a bank over-All the Irish banking companies have now agreed to lend money to the poultry societies at the rate of four per cent, per annum. It has been estimated that a society could make a start and carry on a successful business on a smaller investment than £100, provided that sufficient working capital for current expenses could be ob-

To the storage But, to return to Dervock. rooms described above the collectors bring the eggs from their district, which radiates to a distance of twelve miles from headquarters. convenience, the district is divided into four parts, each collector having his own section, which he visits regularly once a week in winter, two or The collectors acthree times a week in summer. cept only clean, fresh eggs, all others being rejected. They buy altogether by weight, never counting the eggs. After each transaction, they record the price and weight of the eggs in duplicate docket-books, giving a slip each time to the seller of the eggs. The eggs are then carefully packed and conveyed to the packing-store, where they are taken out, weighed, tested again, and separated according to weight into several regular sizes. At Dervock, the selections are into classes weighing 134 lbs. per 120, 15 lbs. per 120, and 17 lbs. per 120. They are sold by weight, the price of the larger grades, however, being much higher than that of the smaller ones. Incidentally, it may be said that, having found out this fact, the poultry-lectors have exerted themselves to secure larger pres, and by giving better care,

and by keeping only those strains of fowl which produce large eggs, have accomplished a marked difference in this respect. Two years ago, forty

per cent weighed 13½ lbs. per 120, and there were none that reached 18 lbs. per 120. At the present time only ten per cent. weigh 13½ lbs. per 120, while ten per cent. reach the 18-lb. standard. After separation, the eggs are packed carefully in clean, dry straw or wood-fibre, the cases are labelled, "Irish Fggs," "With Care," "This Side Up," "Keep Dry," and they are then sent directly to the various towns and cities of Great Britain. At the present time, the annual turnover in

ain. At the present time, the annual turnover in the egg department of the Dervock Society amounts to £6,000 per annum, the amount paid for 2,160,000 eggs, having an aggregate weight of

nearly 130 tons.

The Dervock members are well satisfied with their co-operative society. Since its establishment they have found that they realize fully two pence per dozen above the price they used to get when they sold merely to local dealers. This increase in price has been brought about largely by the doing away of middlemen, the eggs, under the present system, being sent almost directly from the producers to the consumers. In addition, the quality has improved, the demand has increased, and poultry-keeping has become an industry productive of pride as well as profit.

Chickens Dying.

A poultry-keeper writes: "About the middle of April I had over thirty fine Plymouth Rock chicks hatched, which have done exceedingly well, until a week ago, when I noticed a few of them hanging their wings and acting rather stupid, as if sick. Last Saturday one died, and since then two more, and several of the others have the same symptoms, and I fear I will lose them. I have been feeding them chiefly on cracked corn, corn meal, milk, and boiled potatoes. Can you tell me through the 'Advocate' what is the cause of the trouble, and how to remedy it? I have seventy younger chicks, which are all right. Is the trouble likely to affect them? They have no lice on them."

Replying to your reader, I am inclined to believe that the chickens have lice, notwithstanding that she says they have not. I would suggest that your correspondent look beneath the wings and also right on the top of the chicken's head for lice. Of course, if they have none, there is no use trying to say that the trouble is caused from this source. In case lice are found, I would suggest that the chicken be dusted slightly under the wings with any good dust powder, such as Rust's, or ordinary insect powder. Be sure to take care not to put too much on. If there are lice on the chicken's head, these can be gotten rid of by greasing the head very slightly with unsalted butter; be very careful not to put on too much, or it certainly will be fatal.

The trouble might also be caused by a lack of grit in food. On the ordinary farm, I should think there would be very little trouble in chickens getting enough grit, but there is a possibility that there would be none available, in which case I would suggest that she get some sharp sand or fine gravel, but if neither one is available, if she can get from a seedstore what we call chick-size grit, and feed a little, it might be beneficial.

The ration is rather one-sided; boiled potatoes, corn meal are more of a feed for fattening chickens than growing, but the milk is good. Could she not change the feed a little, and give them, say, half cracked corn and wheat, and milk; or if she wishes to continue the corn meal and boiled potatoes, use considerable bran and shorts, and I would suggest that under these conditions that she also give milk to drink. It is quite possible that under conditions such as we have this spring, that a cracked corn and corn meal ration might give satisfactory results, as there is an abundance of earthworms, etc., which would tend to balance the ration.

W. R. GRAHAM.

Denmark's Egg Trade.

The egg trade in Denmark is a very flourishing one, and constitutes one of the principal sources of revenue in that kingdom, increasing from year to year. In 1900 the exports were 332 millions of eggs, representing a value of over a million sterling, which shows an increase of 50 per cent. since 1898; while in 1870 the value of the eggs exported was little more than a thousand pounds. The increase in the production, as well as the high prices realized abroad, is due to the co-operative societies for the sale of eggs, principally to the Danish Society for the export of eggs, founded in 1895, which numbered in 1901 thirty thousand members, and exported more than sixty millions of eggs. The principle of this society is to export only eggs that are guaranteed fresh, each egg destined for export being marked with the number of the member, and bearing the date of laying. Any member who commits a fraud is severely punished. In this way the society has gained a very good reputation, so that the Danish eggs are sometimes sold in England for a higher price than the English eggs.-[Ex.

GARDEN AND ORCHARD.

Planting Evergreens.

A very large proportion of all the evergreens that are transplanted by amateurs in the business die the first summer, simply because they were not rightly handled while the roots were out of the ground. We planted evergreens every week during the growing season last year, and made them live and grow as well in June as we did in April. However, the greatest care must be exercised, when the weather is hot and dry, to save them. The man who plants an evergreen must continually bear in mind that he is handling a tree in full leaf, which will rapidly lose its moisture through the leaves if it is exposed to sun or wind. Again, remember, the sap of an evergreen is unlike that of other trees in this respect; it has in solution a large proportion of pitch, which becomes solid and insoluble in both root and branch very soon when the tree is out of the ground and exposed to the air, hence the roots should be kept in mud or water, and the tops covered to furnish sun protection. We succeed best with transplanting when the weather is damp and the sun obscured with clouds.

Where it is possible to use a plow, we prefer to use it in planting all of the large trees, by opening wide and deep dead furrows, in the bottom of which the roots are well spread, and the soil worked amongst them by moving the tree "churn dasher fashion," while an assistant shovels in the mellow surface soil. This should be so firmly packed about the roots that it would be quite impossible to pull up the tree by hand after the operation is completed. Don't fill the furrow at once with the plow, but do so gradually during the summer, by using a cultivator when needed to destroy weeds and maintain the earth mulch.

Our experience in handling thousands of evergreens every year, leads us to believe that cultivation is necessary for two or three years after planting into the permanent homes. Mulching may be substituted with fairly good results, but the shape and growth of the rees are never entirely satisfactory if they are not cultivated until well rooted and a good vigorous growth commenced. Don't use heating barnyard manures about evergreens for mulch, because it is quite sure to kill their root and branch. Keep the roots of the evergreens wet, or covered with earth, every minute they are out of the ground, and you can make them live through the operation of transplanting with very few failures. Don't attempt to handle them when the sun shines and the wind blows, but rather select the wet, cloudy days or nights for such work, when success is quite sure to follow rather than disappointment.-[N.-W. Agriculturist.

British Columbia Fruit.

ESTABLISHMENT OF FRUIT CANNERY IS ASSURED.

The growing commercial importance of the fruit industry of British Columbia is evidenced by the increased shipments by freight and express, as the following figures show: There were carried by the C. P. R. during 1902, 1,469 tons of fruit, while in 1903, 1,987½ tons were carried; an increase of 35 per cent. The Dominion Express Co. carried in 1897, 70 tons of fruit; in 1901, 378 tons; in 1902, 483 tons; in 1903, over 676 tons. The establishment of a fruit cannery in New Westminster is assured, which will employ forty to fifty hands during the season. This will give growers a market for their surplus fruit.

At the present time British Columbia tically rules the market as far east as Calgary. markets of the Northwest, though vast and valuable, are very scattered; Winnipeg is the great wholesale center, and is of such importance that it enters into the calculations of fruit-growers all over the continent, consequently the competition there is keen. Orders are being received from Australia, Hawaii, China and Japan, and efforts were made last fall to get a foothold in Britain. On Oct. 16th last, Messrs. Stirling and Pitcairn, of Kelowna, shipped the first carload of British Columbia apples, consisting of Spies, Baldwins, Ontarios and Canada Reds, to the British market. They arrived in Glasgow on November 9th, in firstclass condition, and were sold at an average price of about 6s. per box, while Eastern Canada apples were selling in the same place at about one dollar per barrel less, figuring three and one-half hoxes to the barrel. However, when the extra freight charges to Montreal were deducted, the net returns were hard,y satisfactory. Enquiries are now being received from other firms who saw the British Columbia fruit and learned that it gave first-class satisfaction, so that it is thought that if more and larger shipments were sent forward, better prices would be realized.-[Columbian.

Two Garden Insects.

Mrs. Silas Sullivan writes asking what will kill the green grub that attacks cabbages; also the white maggot that works at the root of onions. Ans.—For the green cabbage worm use pyrethrum powder, which is deadly to insects, but quite harmless to human beings who may eat the vegetable. Mix the powder with two or three times its own bulk of flour, and keep in a tightly-covered jar for twenty-four hours, then dust on the plants. Hot water, which must not, of course, be hot enough to scald the leaves, may also be used with good effect upon these worms. . The onion maggot

about a teaspoonful of bisulphide of carbon underneath each plant, taking care to avoid its direct contact with the roots as much as possible, has been recommended. After applying the liquid, press the soil about the plant to prevent the escape of the fumes.

APIARY.

An Amateur Bee-culturist.

By Mrs. Anna L. Jack.

Living alone on a small farm of a few rocky acres, simple living was made by pasturing cattle for neighbors, raising eggs and chickens for the storekeeper, and half an acre of small fruits, that taxed all my energies to cultivate and market. An orphan niece, 'Amanda,' stayed with me, and one day in early June as I was busy crumbling some johnnycake to feed the chicks, a buzzing noise caused me to look up, and I saw a swarm of bees settle on a branch of the lilac bush by the kitchen door. As no one near by kept bees, and they were very quiet, as if from a long flight, I was anxious to secure them, for they seemed to open a new way for money-making to meet our ex-

My eyes chanced to rest upon a half-barrel that had come to me from the store full of grain for the poultry; it was clean inside and out, and I took it into the shed and tried to prepare it for a home for the wanderers. I had seen the work done with rough boxes at places where I had visited years before, so with nervous haste I bored holes in the sides of the barrel and cut sticks half an inch in diameter, so placed as to cross each other through the center, to help support the future comb. Then a hole about an inch in diameter was made in what I called the front, half way to the top, to make an easy entrance for the bees when heavy laden. It was a very crude performance, but answered the purpose, for I cut off the lilac branch and placed the small barrel over it. The bees buzzed and murmured, but did not desert me, nor give one discouraging sting, and at night we carried them to a

stump set under an apple tree. That was the beginning of my interest in bees, and the way I proved that two lone women can manage them, for they brought good luck with them, and not only added to our pocket-money, but gave a zest and interest to the summer days. We studied the way of the bee in its daily life, and its method of working, and took a pleasure in welcoming the various plant foods that were sought for by our winged helpers. hepatica and bloodroot were our allies, in furnishing nectar, and the gay blooms of the dandelion were tolerated because valuable for this purpose. If the hives came out weak in spring, we knew they would find food in the maple blossoms; and the basswood was a mine of wealth. The barberry bush was thronged with bees in search of nectar, and the flowering currant has wonderful attraction at the season of blossoming, yielding a very peculiar aromatic sweet. We began to cultivate a patch of white clover in a little pasture, and sowed seed of alsike that furnished food all through July and August. After cutting and curing there was often a second bloom, that was valuable later in the season. Mignonette is profuse in nectar, except in wet weather, and sage, horse mint and catnip furnish white honey and remain a long while in bloom during the dearth of August, when bee pasturage is bare. farmers do not like the yellow glow of mustard among their grain, but we knew that it furnished the very best repast for our bees till buckwheat came into

rod and asters help our nectar-loving workers. But we found that though the food was plentiful, we were ignorant of the ways of the bees, and so studied their habits and read up the articles in our farm journals on the subject. But it was a miracle too complex to be understood. Why they left their homes after all their labor, the mysterious selection of a queen, and the wonderlul method by which they build their cell, was a never-ceasing surprise.

flower, giving a darkened color and peculiar flavor

Motherwort and milkweed will be found crowded with

bees, and, lastly, along the pasture fences the golden-

At first we sold only strained honey from the barrel and boxes, and found that our outer cellar was a good, dry, cool winter home for the hives. But one winter I procured a book that gave me courage and information, and an interest never before felt. It was written as far back as 1789, by Francois Huber, in the form of letters to a friend. He was a native of Geneva, and became blind in early youth, afterwards devoting all his time to the study of bees, amid many trials and disadvantages. The story touched my heart, and excited my admiration, for through it my courage was strengthened, and I learned many things about my helpers never before thought of. Then came knowledge of later students, who could teach us to take the honey without destruction of the colonies, and the making of artificial wax to save time and trouble. I learned too of the honey extractor, that can withdraw the honey by centrifugal force, without breaking the comb, and so found that the methods had changed since the primitive plan that I had seen in my younger days on the old farm in Ontario.

Into the old boxes the bee moth found its way, but we discovered that the best cure was to keep the hives strong, and that it was the feeble colonies that were infested; also that it is the weaker hives that are invaded by robber bees. No one could imagine, without

is more difficult to deal with. The plan of injecting making a study of the facts, that there are so many enemies to this useful insect; but they are beset by dangers by night and by day, and whether at home or abroad.

Practically speaking, it is possible to make beekeeping pay, but a great deal depends upon the health of the swarms, the food, and how they come out of their winter quarters.

A strong swarm may give twenty dollars' worth of honey in sections-a weak one not one-fourth of that amount. There is profit and loss, as in all other work, but a woman who becomes interested in the study and has no fear of results can make a hundred dollars from half a dozen hives.

But one section of country cannot answer for another; in some places honey may be a scarce commodity, and plentiful in others. In the nearest market town, when this is written, comb honey brings 15c. per pound, and strained honey 10c.; a fine grade of clover honey sometimes brings a little higher price.

In starting beekeeping, the purchase of the hives is the principal expense, and they cost, on an average in spring, from three to four dollars each. A strong hive will produce two or three swarms, and it is not long before they repay good interest on the outlay

This article is not a treatise on the improved methods of apiculture, but it aims rather to show women that there is a plan by which they can add to their pocket-money and yet not interfere with other The outdoor air and healthful exercise, the thought and skill necessary, and the pleasant prospect of remuneration, make the work possible for those in ordinary vigor. With good management there need not be heavy lifting; small-sized frames and hives are handled easily, while a good veil and a smoker will keep stingers at bay. A tranquil, quiet person will succeed among the bees, when one nervous and irritable will be likely to suffer.

In the above picture Amanda has no gloves, but her face is well protected, and her gentle movements do not disturb the bees, even if crawling upon her gown. She knows they cam get angry, and does not by any movement arouse their ire. We have learned to detect the sound of approaching swarming, and to find the queen in the new colony; and we know also the value of the bees to the fruit-grower, and keep our row of hives under the shade of the trees for mutual benefit.



Among the Bees.

Artificial Swarms.

By Morley Pettit.

(page 820) we described retarding and watching for the swarming impulse, down to the detection of queen cells containing a queen larva. Colonies having such cells are swarmed artificially in the following manner: Hives previously prepared for swarms have been distributed about the yard before starting operations. They each contain, in the order named, 2 dummies, 3 starters, 1 worker comb, 3 starters and 3 dummies-12 in all (this is the Pettit hive, which has 10-frame Langstroth capacity). One of these is brought and set down on a bottomboard and stand behind the hive to be treated. The operator who sits at the left of the hive removes the three dummies from the right or farther side of the new hive, and shoves over the remaining contents, so as to have the empty space next He now lifts the comb nearest him from the brood-chamber, shakes it almost free of bees, and places it in the new hive, next to the left wall. The next comb has a double space for shaking off bees in the old hive. It takes its place beside the first comb, and the return motion of the hands carries a dummy from the new hive to the old. Comb No. 3 is shaken, carried to the new hive, and dummy No. 2 is brought back. The fourth comb exchanges places with the first starter, and so on. When the twelfth comb has been shaken in its own hive, and transferred to the new, the sixth starter put in its place, and the old hive filled out with the three remaining dummies, we put on the supers, close the hive, and the bees have been swarmed.''

There is now a swarm hived on starters on the old stand, under conditions fairly natural, at the convenience of the beekeeper, and without fuss or worry. They should be treated exactly as a natural swarm. In extracted honey production, it may be best to give worker combs or full sheets of foundation in the broodchamber, instead of starters.

A few minutes after shaking, swarms sometimes

shown signs of queenlessness. The queen has been accidentally left with the brood, or, in rare cases, has been lost, In this case give them a young queen, a ripe queen-cell, or a frame of open brood and eggs. If the latter is given, all but the best queen-cell must be destroyed at the next weekly visit.

The "parent colony," as we may call the hive of brood, sits directly behind the swarm, and has enough bees to care for the brood and the best queencells which have been saved unshaken. It is given an extracting super at once, and removed to a new stand at the next weekly visit. To save time, these parent colonies might be given laying queens, or, on the other hand, the brood might be shaken clean of bees and used for building up weak colonies and nuclei.

EVENTS OF THE WORLD.

A tremendous free-trade demonstration, held at the Alexandra Palace, London, June 4th, marked the Cobden centenary. Eighteen thousand people were present at the meeting.

An American syndicate has obtained from Menelik, King of Abyssinia, an important preliminary concession for the construction of railways and exploitation of mines in Abyssinia.

The Germans are having more trouble in Africa, this time owing to a dispute over the German and Belgian boundary in the vicinity of the Congo. German troops took possession of Kutchuru, and turned out the Belgian officer in charge. In retaliation, Congo troops have been despatched, and a conflict is feared.

A cablegram from Berlin, says the existence of a secret personal compact between the Czar and the Kaiser, whereby the monarchs have bound themselves to prevent war between Germany and Russia as long as they and the present Crown Prince of Germany live, has been admitted by the President of the Reichstag. The announcement has made a sensation in political circles.

The Thibetans have rejected every overture made by the British. It is reported that they are now in possession of one thousand modern rifles, supplied to them by the Russians, and that they are enlisting help from the Mongolians, who are described as expert horsemen, familiar with the use of lance and gun, and much resembling the Cossacks in their methods of warfare. The British are still in the neighborhood of Gyangtse.

The ship Godthab, which arrived in Denmark recently from Greenland, brought letters from Dr. Erichsen, leader of the Danish Literary Society, Greenland expedition, which went to Greenland some time ago for purposes of investigation along literary lines. The doctor and his companions are living among the Eskimos, and have succeeded in gathering a rich store of Eskimoan legends and fables. The party is now at Upernavik, but will visit other coast colonies before returning to Denmark.

The Portuguese town of Setubal, which contains 30,000 inhabitants, is threatened with an epidemic of hydrophobia. A mad dog bit thirteen others, which in turn went mad, and bit 200 goats and cows that supply the town with milk. All of these were killed, and 600 cheese were destroyed, but not until two days after the biting had occurred. Much alarm exists in the the medical authorities are exercising strictest lookout for development of hydrophobia symptoms among the people.

Important naval manœuvres, based on the experiences of the contesting fleets in the Far East, are to be carried out this month in British waters, by British fleets. The successes of the Japanese navy, especially in torpedo work, have been watched by British naval experts with the keenest interest, and experiments along similar lines will be made. Many experiments will also be carried on with submarines, which the Japanese have not used. Notwithstanding the fate of the A1, in which eleven men were drowned, the Admiralty has at present over one thousand names of naval men eager to take part in these submarine exercises.

The situation in Morocco does not improve. Mohammed el Torres, the Sultan's representative for foreign affairs, is appealing to the tribes to capture Raisuli, stating that this alone can save Morocco from invasion, the presence of American war vessels in the harbor seeming to have but little effect upon the brigands, who feel quite secure in their mountain fastnesses. The demands of Raisuli, one of which calls for the deposition of the Pasha of Tangier, are exceedingly difficult to deal with, and it is thought that powerful European intervention may be necessary before the trouble is settled.

Owing to the peculiarity of the situation which has developed on the Liaotung, it is little wonder that the peninsula has become the center of the keenest interest, not only to the contestants themselves, but also to the outside world, which follows daily the events transpiring in the Far East. Although the several

akirmishes which have recently taken place north of Polantien signify nothing, yet, almost hourly, the situation becomes more tragic. Port Arthur still remains in isolation, the Japanese at her doors, her fleet practically useless in the harbor, her rations decreasing, and with little probability of immediate aid to encourage the desperate men whom Gen. Stoessel harangues each week, until the shout rises over and over again, "We will never surrender!" Not many miles away the enemies of the beleaguered city swarm, busy as bees, putting forth every effort which will tend ultimately to its reduction. Along the one hundred miles of the peninsula which have come into their hands, they are reconstructing, with all possible despatch, the railway which they themselves destroyed. In Talienwan Bay they are also busy, dragging the waters with steel nets, to clear it of the mines scattered by the Russians, and employing for the same purpose many divers, whose paraphernalia is so complete that they may remain under water half a day at a time. All this forebodes trouble for Port Arthur, for when Talienwan Bay is once cleared there will exist nothing to hinder the Japanese from landing the siege artillery which will be used in attacking the town. Further north an aggressive movement on the part of the Japanese army seems to be taking place. During the past week they have dislodged the Russians, successively, from Haicheng, Saimatza, and Sieuyen, all of these towns being on the road to Liaoyang. The Russians look on these skirmishes as a feint to distract attention from Port Arthur, but in European military circles it is questioned whether the Japanese are not really clearing the way for a final assault upon the main body of Gen. Kouropatkin's army, which, to the number of 200,000 men, is still in the vicinity of Liaoyang. Early developments are expected.

NOTES AND NEWS.

"The entire nature of man is the garden which is given him to cultivate."-Gladstone.

Oil, said to be superior to linseed oil for mixing paints, is now extracted from corn.

Mr. George Johnson, Dominion Statistician, says that trade follows the advertisements.

The contract for building the Temiskaming Railway extension has been awarded to Mr. A. R. MacDonnell.

"Farm labor is precisely the least monotonous of

any in the world."-Prof. Waugh, in Harper's Weekly. The Toronto Exhibition directors have decided to recommend the erection of a new art gallery, at a cost

Dr. Wm. Saunders, Director of the Dominion Experimental Farms, has received an honorary degree from

Toronto University. A cargo of 14,000 birds from Australia was recently

brought to London, Eng., on one steamer. They were all disposed of at the dock to dealers. "It is with narrow-souled people as with narrow-

necked bottles, the less they have in them, the more noise they make in pouring it out." Pope. The Canadian Associated Press says Earl Grey has

been approached on the subject of the Governor-Generalship of Canada, but no definite appointment has yet

London medical journal says that slaves of ascohol and narcotics run great risks of being buried alive, especially in hot countries, where interment soon follows death. The plant of the Palmerston, Ont., Pork-packing

Company has recently been purchased by Joseph M. O'Mara, of Limerick, Ireland, and is now running to its full capacity.

Huge masses of rock crashing down the side of Turtle Mountain have excited some alarm among the inhabitants of Frank, Alta. There is said to be no danger, however.

William Rogers, a veteran of the Crimean war, died in Toronto recently. He fought at Balaklava and Inkerman, and was also at the siege of Delhi, and at Cawnpoor during the Indian mutiny.

Dr. Adolph Lehman, a graduate of the Ontario Agricultural College, and now director of the Agricultural Department of Mysore, India, is home on furlough. He has met with marked success in his work in India.

Mr. Hewitt Bostock, formerly M. P. for Yale-Cariboo, has been appointed Senator, to replace the late Senator Reid. Mr. Bostock, who is one of the youngest members in the House, is at present ranching in

The Government of British Columbia have decided to issue immediately licenses for prospecting for oil and coal on the two famous blocks in Southeast Kootenay, long held under reserve for railway pur-

Representatives of the Davies Pork-packing Company, of Toronto, are endeavoring to obtain, through the Colonial and Foreign Offices, a minimum tariff treatment for the admission of Canadian hams into France. The products of hogs are not included in the articles arranged for by the Franco-Canadian treaty of

The Chinese coolies sent to work in the South African mines will be obliged to serve their employers three years. At the end of that time they may be reengaged for a further three years period, but six years is the maximum time of contract. A guarantee is given that they shall return to China when the six years have passed.

Hon. John Dryden and Prof. Day started on June 8th on a two months' trip to Europe. While in England they will purchase pure-bred stock for the O. A. They will also spend some time in Denmark, studying Danish methods of dairying and bacon production, and hope to gain much information that will be of value to Canadian agriculturists.

A recent explosion in the eleven-story warehouse of the Corning distillery, Peoria, Ill., the second largest distillery in the world, wrecked the entire building. Ten men who were buried beneath the ruins were burned to death. From the warehouse the flames spread to the stock-yards, where twelve large cattle barns were filled with cattle ready for market; 3,200 of the cattle were

On June 12th, the steamer Cape Breton, a coaler, ran into the R. & O. N. Co.'s steamer, Canada, on the St. Lawrence River, three miles below Sorel, Que. Inside of ten minutes the Canada sank in forty feet of water. There were about one hundred people on board, all of whom were saved except five. The Canada was built in 1886, and the loss is placed at \$190,000. The Cape Breton sustained little or no damage.

The statistical report of the traffic through the ship canals at Sault Ste Marie for the month of May shows a most remarkable falling off from the records of last year, the difference up to date being more than 6,000,-000 tons. An interesting feature of the report is that the traffic of the Canadian canal is only 47,000 tons lighter than that of the American canal. Practically no ore has passed the Soo thus far this year.

Mr. J. R. Dalmeida, one of the teachers at Ridley College, St. Catharines, Ont., claims to have invented a practical air-ship. It is constructed as nearly as possible like a bird, having wings made of silk and bamboo, which are operated by the feet of the aeronaut. If his airship stands testing satisfactorily, Mr. Dalmeida will take it to St. Louis, to compete for the prize of \$100,000 offered for the best air-

United States transportation companies are raising tempest because certain U. S. shipping magnates, in direct violation of the regulations governing the coastwise traffic of the Republic, are allowing goods bound for military stations in Alaska to be shipped via the Canadian route of the White Pass Railway. Canadians may find some amusement in watching this fight between U.S. factions, one of which is thus contending for the right to give patronage to a Canadian line.

Mr. T. Aoyagi, who arrived recently in America, has been sent as a specially-instructed commissioner of the Department of Agriculture of Japan to investigate all conditions under which immigrants from Japan are received in Canada and the United States. The Japanese wish to send no emigrants to any country in which they are not welcomed, and if Mr. Aoyagi's report shows that this condition obtains in America, more rigorous laws against emigration to this continent will

"The business man who is ever changing his plans, and another seldom make a success in any line, and the same is true of the farmer who is ever ready to rush into the cultivation of any crop that for the time being promises profit, but with which he may be entirely unfamiliar. He will usually be left by men who stick at the crops they are familiar with, and study their improvement and more economical ways for growing them, for these men grow more expert in their work while the shifter from one crop to another is perpetually gaining nothing but new experience, and paying well for it."-[Practical Farmer

The Horse Tariff.

(Ottawa correspondence.)

The new tariff has a provision to prevent the importation into Canada of inferior horses. By the resolution introduced by Hon. Mr. Fidding, in his budget speech, the Customs Tariff of 1897 is amended by adding to the schedule of prohibited importations, Stallions and mares of less value than fifty dollars each." This tariff regulation will keep out of Canada a mongrel class of horses common in the Northwestern United States. The settlers of the Canadian Northwest have suffered much from the mingling of these degenerate animals with better horse stock north of the houndary line. On this account representations from the Northwest have been made, urging the Government to restrict the flooding of Canadian territory with diseased and practically worthless animals. One of the effects of the legislation will be the creation of a better market for home-bred horses. The fixing of the minimum value of imported horses at fifty dollars is expected to meet with the approval even of those who were opposed to an enactment that would raise the cost of working horses in the new country. Horse dealers will, no doubt, be more affected than any other classes by the new tariff.

British Trade and Market Conditions.

(Special correspondence.)

CROP PROSPECTS.

The country looks all the better for the abundant rainfalls we have experienced the last ten days, and with the warm, settled weather now on the haymaking goes merrily forward. At the present time, the oat crop promises to be the best of the white-straw crops, wheat being quite out of the running; while barley is moderately satisfactory. There has been an extraordinarily fine and general blossom on the fruit trees, and a splendid fruit season seems to be assured. A sunny, but not too dry, June is to be desired. At present there is plenty of moisture in the soil, and sunshine is the great desideratum.

THE GRAIN TRADE.

The grain markets continue very quiet, and although there has been no apparent pressure to sell, prices have been weak during the greater part of the week. The quantity of wheat afloat has further increased, and its abnormal size no doubt exercises a depressing effect upon buyers. Unless, however, America is going to resume her normal rate of shipments in August and September, it is probable that too much stress is being laid upon the size of the present quantity affoat, the arrival of a considerable portion of which must be spread over three or four months. There is no improvement to note in the flour trade, the demand generally being of such a meagre character that prices have been difficult to maintain. There has been a fair demand for maize during the week, and prices have been maintained for the most part. Oats remain very quiet, but are without quotable change in values. The stock of wheat in London is estimated at 80,000 qrs.; of flour, at 325,000 sacks, and of oats at 460,000

The following are the Mark Lane current prices: No. 1 hard Manitoba wheat, landed, \$8.58: No. 1 northern Manitoba, ex ship, \$8.40; No. 2 northern Manitoba, ex ship, \$8.16; No. 3 northern Manitoba, ex ship, \$7.85. Flour-Some of the first spring American patents, ex store, are

selling at \$6.36. On "The Baltic," yesterday, holders maintained a steady position, but buyers continued On passage, \$7.44 is asked for Californian, \$7.26 for white Walla, and \$7.32 for No. 3 northern, Manitoba, afloat, sold at red. \$7.35.

EMIGRANTS, GOOD AND BAD.

Judging from the press reports, the class of emigrants taking advantage of this cut-throat rate to New York is hardly the one Canada is anxious to welcome, however much we on this side are pleased to speed their departure. glad to learn from the official sources that the better sort of emigrant is still flowing into your country from Great Britain, irrespective of low rates.

PRODUCE SHOPS.

The Canadian Produce Corporation having been successful on the London market, as far as getting the money goes, it now remains for them to prove the statements made in their prospectus. It is stated fifty shops will be opened in London alone. As far as the public generally is cona new company in the field should be to cerned their interests, as prices will probably come down.

CATTLE, MEAT AND DAIRY PRODUCE.

The Deptford cattle trade has been rather uncertain of late, perhaps on account of the weather, which has chanced to be very wet on the market days. The Canadian cattle landed so far have been good, useful lots, and have made from 113c. to 121c. per lb. There have been some heavy consignments of U. S. beasts on this market, which have been quoted 13c. for the best, with seconds from 12c. to 12½c and 12¾c. per lb. States sheep are making 14½c. to 15c., and the tendency is upward.

The supplies to-day (Saturday) consisted of 1,244 States cattle and 360 from Canada. The trade was firm, and a few of the best States made 13c., while the bulk sold at 12½c. to 12¾c. The Canadians made 12c. to 12½c. per lb.

Bacon.—The market for Canadian bacon has been less buoyant this week, although sales to a Prices in the fair extent have been concluded. early part of the week maintained a high level, but since then a sudden abstention from buying has been experienced, which, with a pressure to The latest sell, has helped to force down prices. market quotations are: Leanest selections, 11%c.; lean selections, 10\frac{1}{4}c., and prime 10\frac{1}{4}c.

Hams.—The demand for both the Canadian long and short cuts (green) is good, and firmer rates have occasionally been paid this week. Prices: long cut (green), 12c., 121c. and 13c.;

short cut (green), 10%c. to 12c. per lb. The butter on the London market is very largely from New Zealand and Australia, and the demand has been fairly good, at the same prices as have been current for some time past, i. e., an average price of 18c. per lb. There is practically no Canadian butter on our market here, but at

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Liverpool, Canadian creameries are quoted at 17tc. to 18c. per lb.

The demand for Canadian cheese is still great, and the market, if not actually excited, has been buoyant and advancing, and parcels have been cleared off at a further advance of about 1c. per lb. on the spot, old season's colored fetching 9½c. to 10½c., and fancy perfect white, 9½c. to 10½c., with pet lots up to 10½c., and new fodder cheese at 9½c. The stock at Commercial Rd. Station is 36,000 boxes, as against 16,000 boxes a year

The Canadian Budget and Tariff.

The Canadian Finance Minister, Hon. Mr. Fielding, made his annual budget speech at Ottawa on June 7th, and announced the tariff changes. The surplus for the fiscal year was reported at \$16,500,000, which will permit a large debt reduction. The revenue for the twelve months, 1908-4, was estimated at \$71,000,000; the number of immigrants arriving in Canada during the last calendar year was reported as 184,870; homestead entries, 32,687, as against 22,215 in 1902; and and sales by companies, 4,229,000 acres, for \$14,-651,000. The surtax imposed on imports from Germany had steadily reduced importations from that country. During the previous fiscal year, Germany had sent Canada 174,000,000 pounds of raw sugar, which had now been entirely diverted to the British West India Islands.

PRINCIPAL TARIFF CHANGES.

A general revision of the tariff is postponed pending an enquiry by a commission, presumably composed of members of the Cabinet.

Mr. Fielding hints that when revision does come, it will be along the lines of a maximum tariff for countries which do not treat Canada fairly, and a minimum tariff for those who show a disposition to trade on equitable terms.

The British preference is to be maintained, and extended to South Africa on July 1st.

The woollen manufacturers are given relief, by the increase of the duty under the preferential clauses on tweeds, coatings, overcoatings, and other woollen goods (except blankets, bed comforters and counterpanes) to 30 per cent. It has been 231 per cent.

The twine and cordage men, who have also been feeling the effects of British competition, are given a minimum protection of 20 per cent.

Staffordshire china and earthenware makers are given additional inducement to trade with Canada, by the duties upon their products under the preference being reduced from 20 to 15 per cent.

Common window glass, when coming from Great Britain, is reduced from 13 1-3 to 7 per cent.

Pails and wooden tubs, from Britain, are increased from 20 to 25 per cent.

The import of stallions and mares worth less than \$50 each is prohibited.

Open carriages are to be henceforth valued at not less than \$40, and covered ones at not less than \$50 A provision is made that when it is proven that

any imported article is being sold in Canada at less than the fair market price in the country of origin, a special duty shall be imposed, not exceeding 10 per cent. ad valorem, except in the case of steel rods, on which a bounty is now paid in Canada, and on them the special duty is not to exceed 15 per cent.

The duty on refined petroleum, the coal oil of domestic use, is reduced from 5 to 2½ cents per gallon; crude oil is to be admitted free, but Canadian oil-well owners are to receive a bounty of 1½ cents per gallon, as compensation for the loss of the protection which they have hitherto had. Mr. Fielding estimates that this bounty will amount to \$252,789, and as the saving by the reduction of the duty on refined oil will be \$643,843, he looks for a total saving to the consumers of \$397,000.

Consequent upon the changes in the oil duties, these reductions are made: Paraffine candles, 30 to 25 per cent; paraffine wax, 80 to 25 per cent; illuminating oils, higher grades, 25 to 20 per cent.

The complaints of the neckwear manufacturers have been met by the reduction of the duty upon their raw material to 10 per cent. ad valorem.

The additions to the free list are: Goats, for the improvement of stock; whale oil soap; plain basic photographic paper (formerly 20 per cent.); hydrosalicylic acid; glass for making dry photo plates (formerly 25 per cent.); ferment cultures for buttermaking (formerly 25 per cent.); printing presses not made in Canada; brass-making machinery not made in Canada; well-drilling machinery not made in Canada; well-drilling machinery not made in Canada; artificial teeth; quassia juice; philosophical apparatus for universities

and schools.

The provision for the free admission of alluvial gold-mining machinery not made in Canada is extended

for another year.

Provision is made for the free admission of molasses from countries entitled to the British preference, which means the British West Indies.

Field Husbandry.

The appointment is gazetted of Mr. John Buchanan, of Hensall, Ont., to be demonstrator in field husbandry at the Ontario Agricultural College, to begin his duties on July 1st.

Notes from Ottawa.

(Special correspondence.)

The Minister of Agriculture estimates that the total cost of the Canadian exhibit at the St. Louis Exposition will be \$325,000. A memorandum, showing how \$145,000 of this amount will be expended has been prepared, and the items are: Agriculture, \$16,350; horticulture, \$7,700; forestry, \$11,900; mineral \$23-950; the Canadian pavilion, \$33,000; management and collection of exhibits, \$52,000. The four lines of exhibits mentioned comprise the national exhibit, with the exception of fish. These are articles of which it was considered private exhibitors could not make a display creditable to the country. The exhibits were purchased where they could not be procured otherwise. Private exhibits have been sent by firms, including a locomotive from Kingston; G. T. R. and C. P. R. exhibits; agricultural implements, and other manufactures, for which the Government is paying part of the expense. No cheese exhibit has been made by Canada, as it was considered that it would require \$10,000 to make a creditable display, and the prospects of trade did not warrant so large an outlay.

The Government has set apart \$75,000 for making exhibits in Liege, Belgium; and London and Liverpool, in England. A proposal to take part in an exhibition in South Africa was entertained for a time, and a sum was placed in the estimates for the purpose, but the enterprise was abandoned on learning more about the organization.

The exhibition in Belgium begins next apring, and will last till the first of July. By the expenditure of \$50,000, the Government hopes to attract much immigration to Canada. The sum is \$3,000 less than was spent in Osaka, but as the former place is more accessible, it is expected the exhibit will be as good as that made in Japan.

The London and Liverpool exhibitions are annual affairs. Mr. Fisher believes the trade in butter, cheese, bacon, eggs and flour can be extended by participation in them. The Liverpool exhibition will be in January. It reaches the trade in the thickly-populated district of South Lancashire. The London exhibition will be in autumn. Including both, \$25,000 will be expended by the Dominion.

The Mayor of New Westminster, B.C., has made application to the Government for a \$50,000 grant to an exhibition in that city next year.

Mr. Frank Shutt, head of the chemical laboratory of the Experimental Farm, has gone to British Columbia, where he will spend two months lecturing on soil

The Central Canada Exhibition Association has given the contract for erecting a house for a dog show. The exhibition will be under the auspices of the Ottawa Kennel Club. The old poultry building and a structure formerly used for a cinemetograph show will form the new house. A new entrance to the grounds is being constructed, providing more room.

J. L. Haycock, Dominion Binder Twine Inspector, who gave evidence before the Agriculture Committee, said that \$1,000 in fines and penalties had been collected during the past year. The prosecutions, he testified, showed that Canadian manufacturers turned out a better product than the United States firms.

Machinery with Intelligence.

One of the latest mechanical wonders in practical operation is called the dynograph, and it is used on the New York Central Railway to make reports as to the condition of the track, to record all deviations and defects, and to indicate where repairs are necessary. The mechanism for this work is carried in an ordinary car, half of which is fitted up for a workshop. It tests the rails over which the car passes, and makes records on a roll of paper, the whole being operated by power ob-The paper tained from the rolling of the car wheels. is unrolled by a shaft attached to the axle of the car, and is thus moved slowly as the car travels. Suspended over the paper are a number of glass tubes, each containing red ink. They are really glass needles, that make a continuous mark on the paper. There is one needle for each track, one for the gauge of the rails, another to measure the distance the car is travelling. These needles are all connected, first, by shafts attached to the axle, and then by delicate mechanism attached to each shaft. If the car is travelling over a perfectly level track these glass needles make a straight If there is an undulation in the track of a fraction of an inch, the sensitive mechanism wavers, and the line becomes broken. Since no track is perfectly level, the record for the best roadbed is wavering. When the undulation or break in the level of the track is one-eighth of an inch or more, the mechanism opens a hose attached to a can of blue paint on the trucks. The paint is splashed on the rail, and the defect is thus plainly marked for the section gangs. Every time the paint is thrown on the track a mark is made by the glass needle, giving a record by which to check the work of the track repairers. When the trip of this car is ended, there is also recorded on the paper the sum total of the amount of undulation. This does all the work of the track-walkers, who formerly tramped the ties with hammers, testing the condition of the road; and the work is done not only more speedily, but infinitely better and more complete. The mechanism never grows careless, and it makes no mistakes. Every year seems to witness the gradual relegation of human responsibilities to mechanical devices.

A Scholarship Competition at a State Fair.

The Iowa State Fair authorities are offering a scholarship worth \$200 to the best judging of live stock and corn by any boy living in the State of Iowa, under 21 years of age, who has not been regularly classified in any agricultural college; the restriction not applying to those who have attended only a two-weeks special course.

The Dept. of Agriculture will deposit \$200 with the Treasurer of the Iowa State College of Agriculture and Mechanic Arts, same to be paid to the boy winning this contest, at the rate of \$25 a month, until the full \$200 has been paid, provided the said boy complies with the conditions hereinafter named.

The boy receiving the scholarship must enter and be classified in the regular agricultural course not later than one year after such award has been made, or forfeit his right to the scholarship, in which case the boy receiving the next highest percentage will be declared the winner, and awarded the scholarship. Contestants' reports in the stock-ring will be graded on the basis of 100 points, divided as follows: Correctness of placing, 55 points; reasons substantiating the placing, 55 points; and in the corn judging, for the best ear of corn received from any of the contestants, 30 points; correctness of placing, 40 points; reasons substantiating the placing, 80 points.

All contestants will be allowed 25 minutes to place the animals or corn and write their reasons, no credit being given for any extra speed shown. Two rings each of horses, cattle and swine, consisting of three or more animals, and not less than two varieties of corn, of ten ears each. The entry fee for each competitor is \$2.00, and the competition will take place on August 22rd, the fair lasting from the 19th to the 22nd of August.

The People's Verdict.

E. Cox, Northumberland Co., Ont.—I am very much pleased with the "Farmer's Advocate" since published weekly, and think it is a cheap paper for the information about farming that can be read from it.

Hector Might, Peterboro, Ont.—I am a subscriber to your paper, and must say I have gained knowledge enough from it to fully pay the small subscription fee of \$1.50, and much more.

J. D. Clarke, Ottawa, Ont.—The "Farmer's Advocate" of to-day is the best weekly journal published in the interests of the farming community on the American continent.

Spraying Demonstration.

The Ontario Department of Agriculture has made final arrangements for the details of the mustard spraying demonstrations which it is about to conduct throughout the Province. The work in the east will be under the direction of F. W. Broderick, of St. Catharines, and in the west of W. R. Dewar, Guelph. The dates and farm upon which the demonstrations are to take place are announced by posters. Interested parties would benefit by attending these meetings, where they will see just how easy it is to check mustard by spraying.

Bass Fishing.

According to the new regulations governing the taking of bass, they must be at least ten inches long, but for the season which in Ontario opens on June 18th, no fisherman is allowed to take more than eight of these fish in any one day. Govern yourselves accordingly

An Ontario Forestry Officer.

The Ontario cabinet has appointed Judson H. Clark as provincial forester, as a preliminary step towards the establishment of a department of forestry in connection with the Crown Lands Department. A native of Prince Edward Island, Mr. Clark is a graduate of Cornell University, and is now engaged in the Forestry Department at Washington. He assumes his duties on August 1st.

Coming Fairs.

Senator Black.

Hon Thomas R. Black, of Amherst, N. S., has been appointed to the Canadian Senate. He is M.P.P. for Cumberland, and a member (without portfolio) of the Nova Scotia Ministry; is a prominent breeder of high-class horses, and an enthusiastic admirer of pure-bred stock, and in many lines has taken an active interest in its improvement in the Maritime Provinces.

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The English Derby.

Before a tremendous crowd, in a hard thunderstorm, the English Derby, the greatest of all the classic races in the civilized world, was won on June 1st by Mr. Leopold Rothschild's St. Amant, by St. Frusquin. Sir John Thursby's John O'Gaunt was second and Mr. Joel's St. Denis third. The French owner, M. Edmond Blanc, who paid 37,500 gs. for Flying Fox, had backed Gouvernant, son of that horse, to win, and many thought he would. A French triumph would have been a great loss to Britain. The French horse was the favorite, and more Frenchmen saw the race than have ever before been assembled at one time on Epsom

MARKETS.

Trade in cattle continues brisk at Canadian points, although buyers claim the best of exporters are all cleared out. Toronto dealers are very snappy buyers of butchers, and feeders are changing hands in large numbers. Hogs are again quoted down to \$5.101, but cheese prices, though not rising, show strength.

Export Cattle-The demand continues good, and the market generally steady, despite the fact that a fairly large run is offering. Most of the cattle are of good quality, although dealers say the best class of export cattle have already been shipped. Extra choice, \$5.20 to \$5.50 per cwt.; medium to good, \$4.80 to \$5.10; and cows, \$4 to \$4.40.

Butcher Cattle-Are in keen demand; prices show a firmer feeling, and some cattle sell as high as \$5.10 per cwt. The best steers and heifers are quoted at \$4.90 to \$5.10 per cwt., and good to choice loads at \$4.70 to \$4.90; fair to good loads, \$4.40 to \$4.60; mixed lots of medium cattle, \$4 to \$4.25; good cows, \$3.50 to \$4.30; and common to fair, at \$2.75 to \$3.25.

Stockers and Feeders-Continue active, and are firm in tone. Short-keeps, in good condition, are quoted at \$4.70 to \$5, and lighter weights at \$4 to \$4.50; good stockers at \$3.35 to \$4, and common at \$2.50 to

Milch Cows-The market has a slightly better tone, and trading is lively. There are still too many poor quality cows coming forward. The range of prices is about steady, at \$30 to \$50 each.

Calves-Firm in tone, and trade active. Quotations are slightly better at 4c. to 5\forall c. per pound, and \$2 to \$10 each.

Sheep and Lambs-Export sheep are quoted at \$3 to \$4.25; mixed sheep at \$3.25 to \$3.75, and spring lambs are firm at \$3 to \$5 each.

Hogs-The market is quoted at \$5.101 for choice selects, and lights and fats at \$4.85}.

GRAIN AND PRODUCE.

Toronto Wholesale Market.

Wheat-91c. to 92c. for No. 2 red and white, west and east; goose, 81c. for No. 2 east; spring, 86c. for No. 2 east. Manitoba wheat is steady at 93 c. for No. 1 hard, 924c. for No. 1 northern, 894c. for No. 2 northern, and 87c. for No. 3 northern at Georgian Bay ports, and 6c. more grinding in transit.

Flour-\$3.70 to \$3.75 for cars of 90 per cent. patents in buyers' bags west and east. Choice brands are held 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-\$17 for ears of shorts, and \$15 to \$15.50 for bran, in bulk west or east. Manitoba millfeed is steady at \$20 for cars of shorts and \$18 for bran, sacks included, Toronto freights.

Barley-42c. for No. 2, 40c. for No. 3 extra, and

88c. for No. 3 west or east. Buckwheat-45c. for No. 2.

II I HETPATIONS

Rye-57c. to 58c. for No. 2.

American, 59 c. for Corn-45c. for Canada west. No. 2 yellow, 58 c. for No. 3 yellow, and 57 c. for No. 3 mixed, in car lots, on track, Toronto.

Oats-No. 1 white, 32c. east; No. 2 white, 314c. east, and 31c. west.

Peas-61c. to 62c. for No. 2 west or east; milling peas, 3c. more. Beans-Are quiet, at \$1.55 to \$1.60 per bush. for

hand-picked, \$1.40 to \$1.45 for prime, and \$1 to \$1.25 for ungraded, in job lots here. Baled Hay-The market is easy on account of the

likelihood of a heavy crop. Cars on the track are quoted at \$8.50 to \$9 per ton.

Baled Straw-\$5 to \$5.50 per ton for car lots on track here. Potatoes-Are about steady, although the receipts

are large. Cars on the track here are quoted at 80c. to 90c. Butter-The situation is unchanged, with receipts heavy and the demand quiet for anything but good

stock. Creamery prints, 17c. to 18c.; creamery solids, 15c. to 16c.; dairy pound rolls, good to choice, 11c. to Cheese-Is in fair demand. Quotations are steady at 9c. for new large, and 91c. for new twins. Old

10c. Eggs-Are steady and quoted unchanged at 15c., with some dealers asking 15 c. for small lots. Seconds are 12c. to 124c.

large are gradually being cleared out of the market at

Retail Prices, Toronto Street Market.

Wheat\$	0	96			
Wheat, goose		80			
Wheat, spring		92			
Oats		381			
Barley		451	to \$	0	46
Rye		61			
Peas		66			
Hay, No. 1 timothy	10	00	to	11	00
Hay, mixed or clover	8	00			
Straw, sheaf	10	0.0			
Dressed hogs	6	50	to	7	00
Butter		15	to		18
Eggs, new laid		15	10		17
Fall chickens, pair		75	to	1	50
Old hens		1.0	to		11
Spring ducks, per lb		30			
Apples, per barrel	1	00	to	3	00
Potatoes, per bag	1	00	to	1	10
Montreal Wholesale	Pri	ces.			

Montreal.—Oats, 37c. to 371c. for No. 2 in store here; No. 3, 36c. Corn, American yellow, No. 2, 61c. to 62c.; No. 3, 59c.; white, No. 2, 59c. to 60c. Buckwheat, 59c. to 60c.

Flour-Manitoba patents, \$4.90; seconds, \$4.60; strong bakers', \$4.40 to \$4.60; winter wheat patents. \$4.75 to \$4.90; Ontario straight rollers, \$4.55 to

\$4.65; \$2.20 to \$2.30 in bags. Millfeed-Ontario bran in bulk, \$17.50 to \$18; shorts, \$19 to \$20; Manitoba bran in bags, \$18 to

\$19; shorts, \$19 to \$20. Beans-Choice primes, \$1.40 to \$1.45 per bushel; \$1.35 in car lots

Hogs-Fresh killed abattoir hogs, \$7.50; live hogs,

Eggs-Select, 16c. to 16tc.; new laid, 15c.

Butter-Full grass, 16 tc. to 17 c.; western dairy, 13c. to 14c. Cheese-Ontario, 81c.; best Quebec, 71c.

Chicago Markets.

Chicago.—Cattle—Good to prime steers, \$6.25 to \$6.50; poor to medium, \$5.60 to \$7; stockers and feeders, \$3 to \$4.70.

Hogs-Mixed and butchers', \$4.80 to \$5; good to choice, heavy, \$4.90 to \$5.

Sheep and Lambs.-Choice wethers, \$5 to \$5.30; fair to choice, mixed, \$3.75 to \$5; native lambs, \$5 to \$6.75; spring lambs, \$6 to \$7.25.

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Cheese Markets.

Kemptville, June 10.-2,056 boxes of cheese were boarded, of which 1,886 were colored. made at 8 3-16c. and 81c..

South Finch, June 10.—Number, 2,045 boxes; 220 colored and the balance white, were boarded. offered 8tc. for both.

Napanee, June 10 .- At the Cheese Board there were 1,070 colored and 1,010 white boarded. All sold at

8 tc. Iroquois, June 10.-Cheese boarded, 1,118 white, 1,-021 colored. Three lots sold on board at 8 1-16c.

Listowel, June 10.-Fourteen factories boarded 1,-493 boxes of white and 270 of colored cheese y 8c. bid; no sales. On street afterwards considerable was bought at 8tc.

Ottawa, June 10.—There were 1,903 boxes boarded, 707 colored and 1,196 white, and only a few boxes were sold at 7fc. The sellers were rather sore, as 8c. was paid on every other board in Eastern Ontario.

Picton, June 10.-Thirteen factories boarded 1,730, all colored; highest bid, 8 1-16c.; all sold.

Perth, June 10.-2,375 boxes on the market to-day, of which 1,675 were white and 700 colored. All sold

Stirling, June 8.—At Stirling Cheese Board to-day, 1,040 cheese were boarded. Sales were made at 7 c.

Woodstock, June 8.—Fifteen factories offered 3,000 boxes of cheese. The highest bid was 7fc., which was refused. The tone of the market was weak, there being little inclination to buy or sell.

Brockville, June 9.-2,997 cheese were boarded today, and 1,575 were sold on the board at 8c. Practically all the make went at that figure by private sale. Madoc, June 9.-1,330 were boarded: 1,280 sold at 7ic.; balance at 7ic.

Kingston, June 9.-1,162 boxes were boarded, of which 1,012 were colored and 150 white. Highest bid, No sales.

Tweed, June 9.—At Tweed Cheese Board here to-day 830 cheese were boarded. All sold at 7%c.

Winchester, June 9.-At a meeting of the Cheese Board held here to-night, 444 colored and 1,119 white were registered; 199 colored and 518 white were sold on the board at 8c.

Vankleek Hill, June 9.-There were 1,834 cheese boarded, 174 colored and 1,660 boxes white; all sold on board at 8c.

Barrie, June 9.-The Barrie Cheese Board met today; one hundred and seventy-five cheese boarded. All

sold at 8c. Belleville, June 11.-On the Cheese Board held here to-day there were offered 3,700 white and 400 colored cheese, balance May. Sales were 2,700 at 8 3-16c. to

Watertown, N.Y., June 11.-On the Cheese Board to-day 6,000 cheese sold at 71c. to 71c. for large, and 7%c. to 7%c. for small and twins.

Cowansville, Que., June 11.-27 creameries offered 2,165 boxes of butter, and 36 factories offered 2,523 boxes of cheese. Cheese sold at 8 1-16c. to 8tc.; butter, 17c. to 174c.

London, June 11.-At to-day's cheese market, 1,-142 boxes were offered at S 3-16c.; bidding ranged from 7tc. to 8 3-16c.

Alexandria, June 11.-1,279 cheese, 1,090 white and 189 colored, sold at 84c.

Buffalo Markets.

East Buffalo.—Cattle—Prime steers, \$5.70 to \$6; butchers', \$4.85 to \$5.65 Veals-\$4.25 to \$5.50.

Hogs-Heavy, \$5.10 to \$5.15; mixed and Yorkers, \$5.10 to \$5.20.

British Cattle Markets.

London.-Canadian cattle are steady at 11c. to 12 tc. per lb.; refrigerator beef, 9 tc. to 9 tc. per lb. Sheep steady, 12c. to 14c. per lb.; yearlings, 15c.

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"Oh! 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.'

Decadence in Art.

By Auta Powell.

Polly Anne Greenway's family thought her decidedly gifted, and that young lady's singular esteem for her relatives' opinions forced her to come to the same conclusion.

Nevertheless, when she announced her intention of studying art her father demurred. It was one thing to have talent, but quite a different matter to depart from the beaten track, and Polly's family had other views for her.

"Let her marry and settle down," said her father.

But Polly's lips came together in a very firm line. There were plenty of women in the world. Let those who felt inclined marry and be given in marriage; as for her, she had a mission in life and she meant to perform it.

And she went about wearing such a set-apart expression that parental objections gave way and she was allowed one meager but soul-inspiring year in

11.

32

New York. After that began the long battle with publishers and advertising bureaus. Discouragement she met at first with the joy of resistance, but that sort of joy weakens with use, and surely Polly's ill luck was phenomenal.

At last her cover for the Christmas number of a magazine was accepted, and hope once more lit its lamp in her breast. But when the villainous lithographer transformed her designs so that nothing remained that she could call her own, her stoicism gave way utterly, and she folded her wings for a season.

It was just at this juncture that the Y. M. O. D. C. made his appearance. This title he acquired later on, when she discovered that he was a young man of

diabolical cunning. Polly had met him at more than one large and uninteresting bowing acquaintance from which individuals were once in a long while selected to fill up vacancies made by removals and occasional

misunderstandings. Why should he call upon her? She ran rapidly over her scant knowledge concerning him as she came down to meet him. Rather stiff and expressionless. Rumored well off and on the point of Nothing marriage to some stranger. very decided, nothing particularly attractive.

The Y. M. O. D. C. rose before she had time to smile any "glad-to-see-you"

"Good morning, Miss Greenway! Perhaps I should apologize for troubling you, but the truth is I am in a dilemma and have come to you for advice."

Polly settled herself and became all attention. A man may be most uninteresting, but the moment he asks for advice he becomes, in the eyes of the woman he is consulting, a most discerning individu-

al and decidedly worth cultivating. "You probably are not aware that I have been building a house on Lincoln

She believed she had heard it mentioned in connection with the homecoming of the stranger-bride.

"It is completed," he continued, "and is now ready for the decorators. Just here is where I want your advice. There are numbers of professional decorators, but stood before her horrified eyes, and she Oi'm fatally twisted."

none of my friends' houses satisfy me. Some of them have been done by wellknown decorators. I choose to think they show a lack of individuality. Now, I beg of you to undertake the management of the whole scheme of decoration and furnishing. Oh, pray don't veto it," as Polly's eyebrows went up to her pompadour, "till you have heard me out. I want each room in my house to be part of one scheme and the keynote of the whole thing to be simplicity. If you will undertake it you shall have all the help you wish-anything, everything, you need to carry it out. It is well planned and well finished. I don't want it to be ostentatious or handsome, or any of those upholstery sort of things. but quiet, restful, artistic-a home in every sense of the word."

"But I don't believe I'm competent," said Polly, to whom the idea began to appeal strongly; "in fact, I am sure I'm

"Does that mean that you wouldn't care to undertake it?"

"Oh, dear, no! I think I should like it above all things. I wish I had taken up that sort of thing at the art school."

"Then let us go at once and look at

the house and you can form your plans." In five minutes they were on a car. Polly was carried off her feet; the whole undertaking grew momentarily more attractive, and as she was an inveterate castle builder, by the time the car stopped at Lincoln street, she had become a successful middle-aged decorator.

She found the house a perfect gem in its way, beautifully laid out and with all sorts of possibilities in the way of decoration. As she went from room to room her delight and enthusiasm were good to

So the work was undertaken, and upon the whole everything went well. She did not often see the Y. M. O. D. C., but his appreciation and suggestions were always helpful, and a telephone message brought him immediately when he was needed to smooth out difficulties with stubborn or inefficient workmen.

It is hard to say just when Polly began function, and he swelled the list of a to hate the bride-elect, but the feeling reaching its climax on that day when everything was completed, the workmen gone, and the owner out of town, she stole back for a last look before the key should have left her possession. She sat down on a high-backed settee commanding a vista of three rooms. The sun threw stains and splashes of color on the inlaid floor, and outside a high wind whistled mournfully-the sort of wind that sings to sensitive ears of sorrow and

desolation. "I don't care how many houses I should decorate, there could never be another one just like this, and his wife will bring a whole lot of wedding presents and stuff and just ruin everything-I wish I had never seen the place-I wish I had never been born," she ended miserably. Then she wiped and anorily. "No wonder I haven't been a Then she wiped her eyes angrily. "No wonder I haven't been a success," she thought. "I am a weakminded simpleton anyway, and no doubt that fact is patent to everyone but myself."

But notwithstanding her scorn of herself the tears continued to come from some inexhaustible source.

"Well, this is a success anyway," she mused, a trifle more cheerfully, "and the color scheme and the plan are my own, and it can not possibly turn into wretched, glaring pinks and blues, or any old washed-out things."

felt like a thief, as she stood up weakly and tendered him the key.

"No, sit down, let's talk about it," he id. "Great success, isn't it? I can not flatter myself too much for my courage and wisdom in going to you."

He sat down beside her on the settee, looking so thoroughly contented and prosperous that she hated him from the bottom of her heart, or thought she did, which is just the same thing till we find out the difference.

"Everything is finished. When shall we move in?" he said. "It needs a woman in trailing robes, handling delicate china and moving lightly from room to room to give the finishing touch and turn it into a home."

"It will need servants in the kitchen and provisions in the pantry and plenty of management," said Polly grimly, sick of the picture he drew, and determined to cut short his rhapsody.

"Well," he said, quizzically, "when shall we move in and begin the management?"

"I should think your fiancee would have some choice in the matter."
"Oh, I don't know," said he uncon-

cernedly, " I think perhaps she will be satisfied."

"You take a good deal for granted," said Polly. "You must think a wife is a perfect nonentity."

"You will be a good deal together, I hope," he went on, ignoring her remarks. "I like the way you manage things."

"Do you, indeed?" thought Polly. Her lips quivered, and she made a mental resolution never again to cross the threshold.

There was a long silence while Polly looked at the rooms, and the Y. M. O. D. C. looked at her. Finally Polly stood up, but he took her hand and drew her down again.

"When are we going to be married, Polly?" he said.

"Who?" gasped Polly.

"We-you and I-Polly."

"We-and your fiancee-what do you mean?" she cried in distress.

"There isn't anyone but you, Polly. I inst to decorate it, then people had to provide reason, and it really wasn't worth while contradicting them. I'm a dreadful sinner, Polly, but I couldn't interest you in any other way. Do forgive me, and admit that you love the house-and me."

But Polly, wholly unprepared and too paralyzed for speech, sat back cold and pale. She shivered slightly.

A fire of driftwood had been laid in the quaint corner fireplace.

"Come, Polly," he said, taking her hand again, "we will light the fire and talk it over." And they did.

He Wasn't Hurt.

Pat was working on the railroad, and was staying at the town hotel with a number of his fellow-laborers. Pat's room was on the third floor, up two flights of stairs. One night a severe fire broke out in the hotel. Pat was awakened from his deep slumbers, and immediately realized his danger. dressed hurriedly, and in his excitement he put on his trousers front side behind. He rushed to the window, and jumped to the ground. He was at once surrounded by his friends, who thought him seriously hurt. "Air ye hurt, Pat? Air ye hurt?" was heard on all sides.

Pat got up, shook himself, and then ny old washed-out things."

Then, all at once, the Y. M. O. D. C. said, "Oi don't belave Oi'm hurt, but

Our "Suggestion" Contest.

We have been very busy lately arranging and tabulating the replies to our questions published recently in an article headed, "What do You Think?", and now we are ready to award the prizes promised therein, for the best and most suggestive comments regarding our Home Department. We take this opportunity of returning sincere thanks for the many beautiful and kind letters received, containing such warm, appreciative words in regard to our Farmer's Advocate Home Magazine. Our purpose is, as was said before, to please and to edify," and it is most gratifying to the editor and her earnest and untiring helpers to know that our readers are so well satisfied. We asked for criticism, and we got praise unstinted in all our departments. As for our dear "Hope," ner consecrated talent seems to be bearing such rich fruit that it must be not only a cause of great rejoicing and thankfulness to herself, but also a high tribute to the taste of the readers of the "Advocate." Some praise the stories; others the travel notes; some wish for more articles from H. A. B.'s facile pen; others request wider space for domestic economy; a great number are enthusiastic over Dame Durden's hospitable and helpful Ingle Nook; the Flower Corner and the nurse's Health Talks are "just exactly what we need"; others would like a whole page of fashions and fancywork; a few wish for music and more poetry; but all agree in their unswerving devotion to "Hope." Our illustrations have Our illustrations have often been very costly, but we are more than repaid in having our efforts in the direction of art culture so thoroughly appreciated. Even our bits of humor are commented upon by numbers of our friends, one of that our says witticisms should be read aloud during meal-time, as an aid to family cheer and also to digestion. We thank you again, one and all, for your generous and kind praise, and promise to give our readers the benefit of the valuable suggestions received.

Our prize list is as follows: First prize, Mrs. Theodora Moore, Cornell Place, Stanbridge, Que.; second prize, "Sunglint," Orillia, Ont.; third prize, "Minnie Myrtle," Bay Ont.; View, P. E. I.

Sure Enough Success.

A successful revivalist recently had an amusing experience. He had been holding a "mission" in a certain town parish, and, on its conclusion, paid a round of farewell visits with the rector. Among those visited was a young dress-

maker who had attended the services regularly, and who told Canon --- how much she enjoyed them, and how sorry she was they were all over.

"Do you think the mission has done any real good?" the canon asked.
"Oh, yes, sir, indeed!" she replied,

heartily. "What makes you think so?"

"Well, sir," the dressmaker answered, "I don't think you'd doubt it if you only knew how many people have called during the last few days to pay their bills."-[Epworth Era.

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In the Strawberry Season.

When one tires of the plump red berries served with rich yellow cream, there are other ways to dispose of them, ranging from strawberry froth to strawberry soup, but in whatever form they come, the luscious fruit is tempting, healthful, and eagerly welcomed.

Strawberry Froth.-Beat the whites of six eggs to a froth, add a bit of salt and enough confectioners' sugar to form a stiff meringue, then beat until stiff; cut one pint of strawberries into small pieces, and as the meringue is being beaten, add a few from time to time until all have been stirred in; chill upon ice and serve in sherbet glasses

Strawberry Pie.-Beat the whites of three eggs to a froth, add one cup of sugar, one teaspoonful of vanilla, and a good pint of large, perfect berries; have ready baked a fresh, flaky crust, and into this heap the berries and cover with an unbaked piece of pastry. Bake in a slow oven until well browned.

Strawberry Tapioca.-Prepare one-half cup of tapioca by cooking in a double boiler in one pint of water, and adding a pinch of salt; about one hour's steady cooking will render it transparent, when it is ready to be removed from the fire. Add one quart of luscious berries, and sweeten to taste. Cool upon ice, and serve with whipped cream.

Strawberry Salad.-Prepare one quart of berries, two oranges, two bananas, and one pineapple; slice the fruits, place in a dish, and sweeten to taste. Cover with Meringue, or serve with whipped cream.

Strawberry Shortcake.-Make the shortcake by rubbing into a quart of sifted flour, to which two teaspoonfuls of baking powder have been added, one heaping tablespoonful each of butter and lard, and add sufficient milk to make a soft dough; bake in a quick oven, and as soon as done cut open with a sharp, hot knife, and butter thickly; chop one quart of strawberries and add to them one cupful of granulated sugar; spread this between the layers and on top, and serve hot with whipped cream.

Strawberry Cakes.-Dip ripe berries in powdered sugar, and allow to stand for some time; take small sponge cakes, or cut a large sponge cake into squares, and cut out the center of each square so as to form a hollow; fill this hollow with the sweetened berries, then cover with whipped cream; garnish the cakes with berries and serve.

Strawberry Gelatine.-Dissolve three ounces of gelatine in cold water to cover, stirring occasionally until it becomes smooth; color with the sweetened juice of strawberries; place a few luscious berries in individual glasses and pour the serve with whipped gelatine over them cream flavored with vanilla.

Strawberry Custard.—Sweeten a quart of very ripe strawberries and line a large glass dish with them; make an ordinary egg custard, and pour this over the berries; whip some sweetened cream and pile on top of the custard.

Strawberry Toast.-Stew and sweeten one quart of strawberries; have ready thin slices of buttered toast, and while the fruit is still hot pour it over the toast, having alternate layers of fruit and toast. Cover with meringue, brown slightly and serve hot.

Strawberry Dumplings.-Use the same dough as for strawberry shortcake; cut into small squares, and fill the centers with sweetened strawberries, mixed with cracker crumbs, and flavor with lemon peel; roll up each dumpling and tie tightly in cheese cloth to prevent escape of juice, but allowing enough room for the dumpling to rise. Steam for fortyfive minutes, and serve hot with strawberry sauce .- [Prairie Farmer.

Some time ago, in a certain village in Berkshire, an old man of eighty was engaged to a "sweet young thing" of seventy-eight. After a betrothal of six months, it was reported that the couple had quarrelled. The minister, hearing this, went to the old man to speak to him on the subject. "Well, Baldwin, I am sorry to hear your engagement with Betsy is broken off." "Yes, sir," said the old man, "we found out at last we could not agree who was to eat the crusts."



Faithful Unto Death.

Did you say that "the days are over When man for his kind would die; That life is more precious than duty . When the flames are raging high? Twas Satan invented the falsehood-" All that a man hath he will give, Will sacrifice honor and duty, If only he's suffered to live.'

Though he dared to hurl that assertion In the face of high heaven's King, The words have been proved a slander By records each age can bring. To-day I would call your attention To one of these records true, When a girl braved a fiery furnace-A young girl of twenty-two.

She was nursing a helpless patient, Three stories up from the ground, In a hospital over in Cleveland, When she heard an awful sound-Heard the cry that drives strong men frantic.

The terrible cry of "Fire!"-Ringing through the frail wooden building,

Which blazed like a funeral pyre There was hurry and wild confusion, While patients were dragged from death; They escaped to the yard in safety, Then the nurses held their breath. Far up at a third-story window, Minnie Baumer's face appeared, As she shouted, "Oh, help my patient!"-'Twas not for herself she feared-

Surely someone will come and help me! I can't get him out!" she said, For his hip is so badly broken, And he's strapped down tight to his bed I"

But no one answered her summons-What use to venture inside Such a burning flery furnace-Jump and save yourself!" they cried. "I can't leave my patient," she answered,

Then hurried back to his side, Dying there in a last endeavor To get his bonds untied. She was found at the post of duty, A faithful servant and true, When death's angel gently whispered: "The Master has come for you."

'To what purpose is this waste! But what is the Master's answer? "If a man true life will taste, He must lose his life for My sake, Nor falter at duty's call, Who saveth his life shall lose it "-It is grand at one's post to fall. Oh, a glorious inspiration Such a noble death must be Rousing men to a high ambition

Some said, "Her devotion was foolish,

To a service that makes them free. HOPE. * " And Satan answered the Lord, and said, Skin for skin, yea, all that a man

hath will he give for his life."-Job ii. 4.

About the Fresh-air Mission.

I have just received the yearly report sent out by the "Children's Fresh-air Mission" of Toronto, and will give a few quotations from it:

" As gold lies hidden in the rough places of the earth, so capabilities lie hidden in these boys and girls, which, for their future well-being and happiness, must be developed. The Children's Fresh-air Mission is an aid to this. Two weeks holiday in the country brings such a change to the lives of the boys and girls. With freedom they can hardly understand, and with the loving care they receive,, many of the most delicate and sickly children become quite well and

strong. "In speaking to one of the mothers, she said: 'You don't know how thankful I have been that my little girl was sent out last summer. Why, she hasn't been troubled with a child for want of a home or lack bronchitis this winter.' There are of funds. Last year, after sending

city who have been saved much anxiety by the kindness of our friends who have opened their homes to receive these children in all parts of Ontario.

" Life in the country gives them new ideas, and creates in them longings for better things. Some of the boys sent out last year have expressed the desire to begin life on farms in the West, away from the narrowing, blighting influences in which they have lived.

"Children talk big things, and sometimes friends are puzzled to know what to believe. For instance, one little girl told the friends that she lived in a brick house on one of the up-town streets, and they had a The friends wrote, asking why such children were sent, and the following facts were sent in reply: The little girl, with her mother, father and two other children, a cat, dog, and all their earthly possessions, lived in a room 8 x 10 feet, in the loft of a brick stable, which was reached by crawling through a window and climbing a ladder. No rent was paid for this magnificent dwelling, as no one knew it was occupied until a policeman stumbled on the This same child, fearing her little parcel of clothes would be pawned for drink, left them at the home of one of the Workers the week before going out. Many such stories, more or less interesting, are told by some of the children, but the reality dwells only in their imaginations.

"We were much encouraged last summer by a request for twenty-three of our worst children. They were sent, and only one was not invited to go back.

Very interesting and amusing stories could be told of the impressions made on the boys and girls. One child said they had a prayermeeting every night where he stayed. How could he recognize family prayers, never having seen such before? But who can estimate the benefit for these boys and girls to learn what prayer and reading of God's word means?

"One little girl of three went to a home where some months before the only little one of the household had been gathered in the Shepherd's arms. Such love and affection were bestowed that when the parting time came the child put both arms round the neck and clung to the one she had learned to call papa, while tears were in several eyes on that railway

platform. "God gave us this plan of sending them out two by two to the homes of His children, which gave them their first impressions of what a real home was, and how God's children live according to His own plan and will. It is easy to tell the story of the love of God, but how can children understand in homes where it is unknown? The drunken father and mother do not exhibit this love, and the story sounds strange to them in our gospel meet-

"These Christian homes in the country are got by corresponding through friends of the Mission, and in answer to believing prayer the number is increasing each year. The Mission is solely a work of faith, trusting God for the homes, the children and the money. Many of the children have to be clothed throughout. We never ask, or allow our friends to ask, for financial needs. Each year we print a report, and if God lays it heavily upon the heart of anyone to give of His own, our treasurer gladly receives it. never go into debt, and never refuse many more grateful mothers in our out a contingent of seventy-three

children on one train, our treasury showed a balance on hand of three cents, and before the next day's children were ready, enough had come in for this need. The average cost per child for a two weeks' holiday in the country is about \$1.00. This is very small, considering the cost of travel, which varies from the price of a street car ticket to the fare of one hundred and sixty miles on the railway."

The children are sent two and two to prevent homesickness, and may be kept longer than the regulation two weeks if desired. The Mission pays railway fare both ways, asling only that the children may be received into Christian homes for the sake of Him who has said: "Inasmuch as ye have done it unto one of the least of these, My brethren, ye have

done it unto Me.

Think what this holiday may bring to some of them-perhaps an inspiration to live a cleaner, purer life, which will bear good fruit through all eternity. Some of you may be willing to take in two of the children for a fortnight, or longer. Others may help with their quarters and their dimes. What a wonderful help this Mission would receive if every reader of the "Advocate sent ten cents-who can calculate the big sum it would amount up to? I hope if you do help in either of these ways—and surely you will—you will mention the "Advocate." so that I may be able to tell how much the Mission has been helped. I don't belong to the Mission, being only a well-wisher, so I may venture to ask for financial help. The Secretary is Miss Florence Roberts, 21 Scarth Road, Toronto. The Treasurer is Chas. D. Gordon, Dominion Bank (Esther St. Branch), Toronto.

The Blight of Pessimism.

Considering how unprofitable such efforts are, it is surprising how many make a business of looking for trouble, of cultivating and coaxing it, and running to meet it. They find the thing for No one ever looked for which they look. trouble without finding plenty of it. This is because one can make trouble of anything if the mind is set that way. It is said that, during the development of the West, in the days of rough frontier life, the men who always went armed with pistols, revolvers and bowie knives always got into difficulties, while the men who never carried arms, but trusted to their own good sense, self-control, tact, and humor, rarely had trouble. The incident that meant a shooting affray to the armed man was merely a joke to the more sensible unarmed man. It is just so with the seekers for ordinary trouble. By constantly holding discouraged, dejected, melancholy, gloomy thought they make themselves receptive to all that depresses and destroys. What to a cheerful person would be a trifling incident, to be laughed at and dismissed from the mind, becomes, in the minds of the croakers, a thing of dire portent; an occasion for unutterable gloom and foreboding.

Most unhappy people have become so by gradually forming a habit of unhappiness, complaining about the weather, finding fault with their food, with crowded cars, and with disagreeable companions or work. A habit of complaining, of criticising, of fault-finding, or grumbling over trifles, a habit of looking for shadows, is a most unfortunate habit to contract, especially in early life, for, after a while, the victim becomes a slave. All of the impulses become perverted, until the tendency to pessimism, to cynicism, is

chronic.-[Success.

Siamese Women. In one country at least a woman's dress is regulated entirely by the day of the week. In Siam every woman is a living calendar. On Sunday red silk with a parure of rubies is worn; Monday brings silver and white dress and a necklace of moonstones; Tuesday is dedicated to light red, with coral ornaments; Wednesday is devoted to green, with emeralds; Thursday sees a display of variegated colors, with cat's eye; Friday the lady is arrayed in pale blue, with flashing diamonds, and Saturday is more somber, darker blue, with sapphires to match.

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Domestic" Economy.

When persons who do not otherwise appear to be ill suffer from continued wakefulness, this is a sure sign of mental exhaustion.

A physician says that nausea has its seat in the brain and not in the stomach, and that relief may be obtained by cooling the base of the brain.

To remove a glass stopper from a bottle, dip a piece of cloth in boiling water and hold it for a moment or two around the neck of the bottle. The heat will cause the glass to expand, when the stopper can easily be removed.

Instead of putting food into the oven to keep hot for latecomers, try covering it closely with a tin, and setting it over a saucepan of hot water. This plan will keep the food hot, and at the same time prevent it from drying.

To clean bottles, decarters, etc., half fill with warm water with a little soda then put in small cinders sufficient to cover the bottom of bottle. Shake well until all stains are removed, then turn out the cinders and rinse in clear warm water.

Jars and pickle bottles that smell of onions may be made quite sweet if filled with garden mold and left standing out of doors two or three days. When thoroughly washed, they will be found quite sweet, and may be used for jam or any other purposes.

CARE OF THE HAIR.

The use of oils on the hair has gone out of fashion, but there are many persons to whom something of this sort is almost a necessity. The hair becomes so dry that its beauty is gone, and in addition it is so badly nourished that it loses its strength and lustre. In such cases a little fine oil is the proper remedy. Those who have very dry and rough hair, especially if subject to pain and feverishness in the head, will do well to try some softening application, at least as an experiment.

TREATMENT OF EARACHE.

Onions are an old-fashioned but useful remedy for relieving earache where it is merely otalgia, proceeding probably from cold. Get a Spanish or large common onion, put it in the oven, or cut in half

and hold (on a toasting fork) before the fire. When quite hot place on the ear, covered over (both sides) with thin flannel or linen. Continue to apply, putting the onions on as hot as they can be borne, till the pain is relieved or gone. hot onions will tend to melt the wax in the ear, it should be seen afterwards whether the ear is quite clear; if not, syringe very gently with lukewarm water. little lint of cotton-wool may be placed in the ear after the onions are removed, to avoid fresh cold being taken.

HOMEMADE YEAST.

Pare four good-sized potates, and let them lie in cold water for a half hour. Put one quart of boiling water in a saucepan. Now grate the potatoes quickly and stirthem into the boiling water; stir over the fire for five minutes, then take form the fire, add a cupful

of sugar and two tablespoonfuls of salt, turn into a stone jar or bowl, and let stand until lukewarm, then add one cupful of good yeast, cover and ferment three or four hours; stir it down every time it comes to the top of the vessel; then put it into a jar or large bottle, or something you can cover tightly, and stand it in a place where it will keep very cold, but not freeze. It will keep two weeks. Save one cupful of this yeast to start with next time. This is the simplest and best yeast that can be made

THE FARMERS ADVOCATE

HEALTH IN THE HO'ME. GBy a Trained Nurse

Accidents.

FIRE.

In an accident of any kind it, is of primary importance not to lose composure and self-control, for to retain these is the only way in which disaster can be prevented. A person who, taking fire, rushes screaming out of doors, throws away whatever chance there is of help. Fire cannot burn without oxygen. Therefore, if burn without oxygen. air can be quickly cut off from the burning object, the fire is choked and injury prevented. Anyone whose clothing catches fire while alone in the house had better make for the nearest bed, and wrap himself or herself up tightly in the bed-clothes, not moving quickly enough, however, to create a strong draft. A woman, while moving towards a bed, or rug, or blanket, or something of the kind, in which to roll herself, can wrap her skirts tightly about her. A man can remove his coat and use it as a blanket as the first movement, when nothing else is near at hand. there is absolutely nothing available, lie down on the floor and roll over on the burning spot. A pillow or cushion can be used with good effect. There is seldom enough water standing near to do much good, but many country houses have a barrel for rainwater standing near the kitchen door, and supposing this to contain water, it would be sensible to get into it, a feat that most people could accomplish with the fear of burning to death as an alternative. It is essential to have something definite in mind. It would be madness to open the door and go out, except with the certain knowledge that there was water in the barrel, and the determination to get into it. Do not open the doors or windows with burning clothing on to call for If the blaze is not too strong, and the step taken immediately, the clothing may be quickly removed and IF A LAMP IS UPSET

and a blaze occurs, throw a heavy quilt over it, and as many other articles of the kind as come to hand, and stamp on it, to shut off air and stifle the fire, and let someone in the meantime get water and drench the whole. If grease takes fire in a pan on the stove, cover immediately with a lid, and, if necessary, put a flatiron on top to keep it down. Matches, especially the kind that will strike upon anything, should not be kept in the regular matchbox in very hot weather, but in a metal box or a covered china bowl. Matches sometimes ignite spontaneously, and are apt to do so if knocked down from a high shelf upon the floor, and on that account should be kept in a cool place, and out of the way of children and mice. The latter have been supposed to cause fire by scattering matches, which have afterwards ignited, and might easily do so by knocking them down. There should always be a metal, china or glass receptacle for burnt matches, and they should never be thrown into a waste-basket. Numbers of people have been burned to death through

STARTING A FIRE WITH KERO-SENE.

A little kerosene can be poured on the wood when laid ready for lighting, and the match thrown in afterwards, but it is extremely dangerous and equally foolish to pour kerosene on a fire already started, even if it is almost out. The reverse of this rule applies to gas. Put the lighted match in first, placing it so that it will meet the gas where it first emerges, and then turn it on. This is the only safe way to light gas. Gasoline and other substances of the kind should never be used in the same room with a lighted stove, lamp or gas light,

the mother's attention was for a moment withdrawn from the child.

THE RELIEF OF BURNS until medical aid can be procured consists in putting on an oily or alkaline air-tight dressing of some kind. A cloth wrung out in sweet oil may be laid upon the injured part, with some cotton or a piece of flannel over that, and a bandage applied. Butter or white of egg may be used instead of oil. Everything, of course, must be scrupulously clean. If the burn is not too deep, a cloth wrung out in a strong solution of baking or washing soda may give relief, or a combination of the virtues of both dressings may be obtained by using a strong solution of Epsom salts, made with glycerine and water, about half of each.

LARGE BLISTERS

may be treated by pricking at one point with a needle, allowing the fluid thus liberated to run into and be absorbed by a piece of cotton held in readiness to catch it. fluid must not be allowed to run over the skin, as it will cause another blister wherever it goes. The needle used for this purpose must be boiled or passed slowly through a flame, and not allowed to touch anything of any description after that until it has been used to open the blister and is no longer needed. needle not treated in this way might be the cause of blood poisoning. After the fluid has run out of the blister into the cotton, some talcum powder or boracic acid powder may be dusted on the part, which is then covered with a scorched rag, handled after scorching by the extreme corners only, and bandaged, not too tightly. A little vaseline may be used if there is nothing else at hand, but powder is better. A. G. OWEN.

"Weeding the Pavement."

Our picture this time takes us to Holland, probably to the entrance of the canal on the banks of the river Maes, not very far from Rotterdam. This river empties itself into the North Sea or German Ocean. This group of women weeders is typical of the dainty cleanliness of the Dutch people in every department of social life, indoors and out of

Between the doors. stones upon the landing-place whereon cargoes are discharged and passengers arrive, not even a blade of grass, certainly not a solitary weed, is to be suffered to grow; whilst, after their roots have been prodded out by the hardy fingers of the kneeling women, there is still the further process of sweeping up the stray fragments, and even carrying them away in a basket, no such slipshod makeshift as brushing the rubbish into the canal ever entering into the minds of the cleanly Dutch Note the workers. somewhat nondescript building, which may be a homely little church or even the town hall, and you may be sure that the painter, G. H. Boughton, would not risk his reputation for accurate representation by leaving out of his

picture the inevitable summer-house, in which the Dutch pater familias loves to smoke his pipe, and, "tell it not in Gath," his gossip with his chums. It is to one of these summer-houses that the old Dutch Captain will presently retire when he is tired of watching the busy weeders upon the pavement. H. A. B.



"Weeding the Pavement."

rolled into a hard bundle, in which case it cannot go on burning. precautions are taken instantly, the chances are that serious damage will be prevented, but death may be the result of a few moments wasted in screaming and running about. Draperies in the house catching fire should be pulled down and rolled up quickly, and fire can sometimes be put out by beating with wet cloths. If sometning in a room catches fire and efforts to put it out fail, shut the doors and windows, and get the family out while someone goes for help.

should be used out of doors or by an open window, being very inflammable, and when no longer needed thrown out the window, and not down the sink. Articles cleaned with gasoline should be hung in the air until it has all evaporated. Children should never be left alone in a house where they can by any means get at the stove, neither should a pan of boiling water ever be put upon the floor or within the reach of a child, unless some grown person is present, and even then it is not safe. Many babies have been fatally burned in this way, because

"That was a terrible typographical blunder your paper made," said the foreign nobleman to the editor. "What was it?" "You referred to the heiress I am about to marry as my financee."

Notes from Some Old-time misery of wet blankets and soaked Chronicles.

INWARD BOUND FROM HUDSON'S BAY.

In a previous number I have told of the gracious welcome and unbounded kindness which provided for all our needs when we arrived at York Fort, on the threshold of a new world. To the "strangers within their gates" the Hudson's Bay Comwere ever hospitable, bed and board at their forts being always offered ungrudgingly and without question. We were told, and afterwards found it true, that if your tent were pitched by lake or riverside in near neighborhood of one of their oatposts, flour for your bannocks, fish for your frying-pan, vege-tables (if they had any) from their garden, would surely be contributed towards your meal, and, as in our own case, at both Norway House and Oxford House, a pressing invitation might probably accompany them to remain for at least one night, the acceptance or otherwise of the courtesy depending far more upon its being a fair or a head wind than upon one's inclinations. If the steersman in command should be obdurate, certain that the moon would rise at a convenient hour and the wind be favorable enough to admit of hoisting a sail, your visit would have to be a very short one, and it would be expected of you that you should hold yourself ready for a prompt obedience to the hurried gathering together of your camping paraphernalia in response to the call in French Patois, or in English, with its unmistakable Scotch accent, of "All aboard!"

And here I would revert once more to the pages of the old journal: "Our stores of provisions are all packed in the travelling canteen and basket placed at our disposal. The necessaries are a quarter of mutton roasted, a ham boiled, dried buffalo tongues, a keg of eggs, butter, flour, rice, cheese and biscuits, the ship's cook having added a huge plum cake by way of an occasional treat, and as a reminder of the good ship, Prince of Wales, which had been our home for so many weeks. must get your men to give you a share of the fish they are sure to catch and the birds they will shoot from time to time on your way,' and this they were always willing to do for a small consideration."

Under date, 30th August, 1851, I find this entry: "And now we have fairly commenced the last stage of our long, long journey towards another home, some four or five thousand miles from our dear Hampshire St. Cross At half past one the three boats of our brigade, already awaited freight-laden, us by the brink of the Hayes River, the crews of each, mostly half-breeds or pure Indians, consisting of eight men and the steersman or guide, who, with his long oar or 'sweep,' has to steer the cumbersome looking craft through swift currents and dangerous rapids. One of our crew is told off as our cook and general attendant, to look after the pitching of our tent and general needs. We are struck with the straightness of figure and elasticity of limb of these manly fellows in their blue-cloth hooded capoles, with scarlet woollen belts and bead-worked gaiters, and as they bend to their long oars or leap ashore to take their place at the tow-rope, as they so often will have to do, we know that they will be prompt in action and ready of resource whatever emergency may confront us. And this confidence was amply verified, for, though I cannot tell you all about it, they brought us safely through storms in lakes, squalls in the broad stretches of rivers, and even left more than one 'lop-stick' in our honor at places at which we had camped. I seem to hear still the 'leve, leve, leve' (lift!) of our steersman and guide (big Sandy S.), the rattle of the tent poles as the men hurriedly pulled them from under our canvas home, a fair wind having suddenly arisen at early dawn, and I can almost feel the occasional

garments, which no camp fire could adequately dry. Could I ever forget the magnificent night scenes, the gorgeous coloring of that mystery of the northern skies, the Aurora borealis, which we could not only see, but positively hear, or the tender light of moon and stars above us! Memory brings back the very roar of the thunder under the cliffs of Grindstone Point, and the blinding flashes of lightning which at frequent intervals threw out into vivid relief the band of 'voyageurs' who, with ourselves, were grouped for our nightly prayer and song service around 'the parson,' who occupied another boat in our brigade, on his way to the mission field of Rupert's Land. Except for an occasional interchange of mere exclamations or queries as our boats pass one another, we can hold but little conversation during the day with Mr. H., our fellow travel-ler, familiarly known on board ship as the quiet little parson. Yet, all the same, we are glad of his comradeship when we are called upon to tramp over the thirty-six portages which lie between York Factory and the Red River Settlement, the most unpleasant features of which are the clinging mud, the devouring mosquito, the persistent sand fly, and, worse still, though less frequently, the big bulldog fly, whose bite draws blood. Poor Mr. H. seems peculiarly their victim. 'One has to drink one's tea by stratagem,' said he, one day, as he tried to get a sip here and there between the onslaught of his enemies." "To Mr. H.," continues the journal, "we are indebted for much of interest which we might When the boatotherwise overlook. men are struggling from point to point, either with their heavy loads upon their backs, to the light rythmic tramp, tramp of their moccasined feet, or are singing and shouting as they drag their boat overland, or, where possible, up the foaming rapids, Mr. H. explores for nature's treasures and makes discovery of points of beauty, to which He shows us the dams he pilots us. of the skilful beaver, waterfalls bridged by that almost human intelligence. He scatters crumbs to draw more closely around us the fearless birds which haunt our camping ground, the whip-poor-will and the comical little whiskey-jack. He has an ingenious interpretation even for the bull-frog chorus, which was unceasingly dinned in our ears, and, though he never killed either bird or beast, he seems to have an instinctive acquaintance with their haunts.' The Journal gives a list of thirtysix portages, with their distances, as estimated by Lieutenant Moody of the Royal Engineers, in 1846, the longest of them appearing to be that of Whitefall or Robertson's Portage, and the shortest, the Little Beaver Dam, to cross which, nevertheless, equally entailed the unlading and relading of every boat of every brigade before it could reach its goal of Norway House, in Lake Winnipeg, where portages ceased. It was on the 30th of September, one month after leaving the shores of Hudson's Bay, that we reached the outlaying parts of the Red River Settlement, and, later in the day, were welcomed as the guests of Governor and Mrs. Coloile at Lower Fort Garry, or the Stone Fort as it was also called, until the arrival of Bishop Anderson, who had himself most kindly arranged to take charge of us through the last stages of our journey to the home and duties awaiting us. And here I must fold away the pages of the old Journal, and in doing so I should perhaps offer an apology for having ventured to present to the up-to-date readers of the "Home Magazine" such a musty old record. "What," they may ask, "have we of the prosperous and enlightened present to do with that effete old past? In these days of steam and electricity, of wireless telegraphy, of telephonic communication bridging thousands of miles of space, what is it to us that the only highway to our big Northwest was once upon a

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time across the ice fields of Hudson's Bay, through the froth and foam of the rapids, and over the waters of Lake Winnipeg? A fig for your recollections! A flip of our modern angers for your yellow old Journal!" Well, my friends, for every oak tree there has been an acorn, for every waving corn-field its tiny seeds. It will certainly be denied to the planter of the acorn to sit under the shade of the grand oak tree, nor always can the hand that sows the seeds enjoy the pleasure of reaping the grain, but, nevertheless, may we not believe that some time, somewhere, it may be given to them to rejoice together? H. A. B.

The Value of a Laugh in China.

Julian Ralph, the well-known journalist, was one of the war correspondents in China during the Boxer rising. In writing of some of his experiences in that country, he says in his book, "The Making of a Journalist": My travels in China now seems to me the most enjoyable journey I ever made, but had I not been armed with good-nature I mighty easily have been mobbed several times and possibly killed. We rested at a village one day while our servants were re-stocking our boat with provisions, and Mr. Weldon and I went ashore. I took with me a very stout walking-stick, which was the only weapon I ever carried out of the boat-in which we kept our guns and pistols.

I took the stick for frequent use against dogs, but I will not say here and at this time that I did not suspect a possibility of trouble with angry Chinamen as well.

The neighborhood was disturbed by an anti-missionary movement, but of this we had not been warned. The men of the village followed and watched Mr. Weldon and me, but kept well apart from us until at last we were in the thick of the houses, and surrounded by the people.

Then one of the head men boldly advanced, backed up by a crowd, and touching my stick, made motions as if to ask if it was not intended for Chinamen's heads. We were by this time well aware of our danger, but I dispelled it In an instant.

"No, no," I replied, by means of motions; it is to hit dogs with."

This idea I conveyed by snapping and snarling and barking, while I laid about me, right and left, with my stick. At the end I laughed, and, as I expected, all the Chinamen laughed with me. They were all my friends from that instant, and the only trouble I suffered was from being obliged to repeat my pantomimic explantion over so many times before I left the place.

I rank a laugh above money in China—far above firearms as a protection; high beyond any power that a white traveller can bring to his aid in an emergency. A light heart, a kindly bearing, and a merry spirit will grease a foreigner's way anywhere in China.

Humorous.

"Who wrote the most, Dickens, Warren, or Bulwer?" Warren wrote "Now and Then;" Bulwer wrote "Night and Morning," and Dickens wrote "All the Year Round."

This is how a Chinese writer describes Englishmen in a Chinese paper: "They live months without eating a mouthful of rice; they eat bullocks and sheep in enormous quantities, with knives and prongs. They never enjoy themselves by sitting quietly on their ancestors' graves, but jump around and kick balls as if paid for it, and they have no dignity, for they may be found walking with women."

A young minister had obtained a kirk in a mining quarter, greatly to his joy—not because of the locality, but because of the kirk. After a deal of difficulty he managed to secure lodgings in the place, and congratulated himself on the end of his troubles. The first morning after his arrival the landlady knocked at the door, with the rather unusual query as to whether he had washed himself. "Yes," he said pleasantly; "why?" "Because," she replied calmly, "A'm gaun tae mak' a dumplin' for the denner, an' A wad like the len o' the basin!"

THE CHILDRENS OF C

Prize Competition.

There seems to be some confusion in the minds of our essayists as to the date of Empire Day. Most of them say it is the 24th of May, and at least one thinks it is the 22nd. I thought that the 24th was called Victoria Day," and the 23rd had been set apart as "Empire Day, but perhaps I am mistaken. The prizewinners are: Class I.—Eva W. King and Edna I. Isbister (aged 13). Class II.—Mabel Giffen and Gladys C. Weber (aged 12). Class III.-Myrtle Awrey (aged 10). Gladys Pentland, Nathaniel Angus and Belle McKenzie deserve very honorable mention, and the essays written by Cecil Yeager, James Boggs, Arch. August and May Knight were also fairly good. Many other letters have reached me lately, most of them describing farm life. The best of these will be published from time to time, as we have room. I am always glad to hear from you, and hope you will write and tell me when you have had a particularly good time. We all like to hear about "good times," but it is wiser far to keep the "bad times" to yourself if you can. They don't often last long, and it is generally possible to bear them Sbravely and wait till the clouds roll by

COUSIN DOROTHY, Newcastle, Ont.

Empire Day.

"Oh girls, I have been thinking of a good plan lately, wouldn't you like to hear it?" said Dora Elliot, coming up to a group of girls who were discussing plans for Easter vacation, which began two days later. "Why yes, Dora, tell us, please," they all cried.

"Well, last night I began to think that we ought to celebrate Empire Day in some patriotic fashion. Don't you think we could get up some sort of programme? I asked mamma and she said she thought it would be splendid," answered Dora.

"I move that we go up and ask the teacher before we build too many castles in the air,' said Ethel Williams.

"I second that motion," laughed Dora, so they accordingly took their plans to Miss Dawson, the teacher.

"Why, yes, girls, I am glad you thought of it; we can learn patriotic songs, as we have the organ right here in the school, and my sister would gladly come and help you sing," was Miss Dawson's hearty reply.

"But when will we begin to prepare?" asked Ethel. "Well, girls, look up as many patriotic songs and recitations as you can during the holidays; won't that be all right?" said Miss Dawson.

"Why, yes," exclaimed Dora, "and the girls can come to my place two or three times, and we can arrange together, and perhaps we can raise enough money among us to get two or three pieces of sheet music, with some '24th of May' songs on them, and Ruth will play them for us, so we can get the tunes into our heads, and so help the other girls when we all practice."

"That will be excellent," said Miss Dawson, "but it is schooltime now, and we must get to work for a while." When all were seated the teacher told all the girls (it was a girls' room) the plans that some of them had made. They all agreed to do their best towards helping with the programme during vacation.

On Easter Tuesday some of the girls came to Dora Elliot's pretty country home. A number of them brought sheet music, and Ruth Elliot, Dora's sister, played the pieces over for them. After that Ruth said, "Say, girls, I have got a surprise for you; can you guess what it is?" They all tried, but in vain, and presently Ruth came out of the library with a book full of recitations, etc., just splendid for Empire Day.

"I noticed it on Saturday, when I went to the city, and thought it would

suit you girls," she said. They were all delighted, and at once began to pick out the pieces each one should say. There was a drill in it for girls about Dora's age, so they chose who should take part in it. There was also a dialogue, which Ruth promised to help six little girls get up. It was called "The Maple Leaf Drill," and turned out very pretty.

As the children had a long time to prepare, they were in splendid order when the day came. On writing out the programme, it was found that there were to be eight recitations, three dialogues (including the drill), and five patriotic songs.

The day previous to the "Great Day," as some of the girls termed it, was a holiday, given them by the trustees, to decorate the schoolroom. There were several small flags hung around the room, and outside the door, flapping high on a flagstaff, was the Union Jack. There were several vases of wild flowers in the windows and on the teacher's desk, which the girls had gathered in the pretty woods not far from the school.

The Twenty-fourth dawned an ideal day, clear, warm and calm, and altogether presented such a lovely scene that the girls all shouted when they met. When they got to school, the first thing that greeted their eyes was a lovely drawing of maple leaves on the blackboard, in the center of which was written "Canada, My Home," all done with different colored crayons.

This was what had kept the teacher so long at the schoolhouse the evening before, for it was she who did it. The girls all thanked her when she came, for they had been wishing for something like that.

The crowd began to arrive in the early afternoon, and soon the schoolhouse was full—seats and aisles. The programme began at half-past two, and lasted till four. Among the songs were, "The Maple Leaf Forever," "The Soldiers of the King," "The Land of the Maple," and "My Own Canadian Home."

Everyone was delighted, and told the teacher and her pupils that they had certainly been successful with their plans.

EVA W. KING (age 13).

Hickson, Ont.

Empire Day in the Country.

"Oh, Carry," said little Mabel Morrison, bounding into the room where her sister was dusting, and throwing her books on the table, "Guess what we are to have at school on the twenty-second of May?"

"I am sure I cannot guess," said Carry, half crossly, "but you had better go and hang up that satchel."

"Yes, Carry, but can't you guess? Well, I will tell you," said Mabel, unable to keep the good news, "we are to celebrate Empire Day, and have songs and recitations, and, oh, dear! I don't know what to sing, but I will ask mamma," she said, brightening, and off she ran to hunt mamma and tell her her troubles.

At last the eventful day arrived, and all the school children were in their usual places, all with their Sunday clothes on.

"Well, children," said the teacher from the platform, "as this is Empire Day we shall have no lessons, but shall spend the forenoon in preparing and decorating the school for your parents.

The school was swept and dusted, and the flowers were arranged in neatest order. The pupils brought large branches of maple leaves, and they were hung over the pictures and blackboards, and a number of the children walked to the bush near by and brought back such large bunches of May flowers, which were put in every available dish that would hold water, and last, but not least, the large flag was hoisted to the top of the school, and waved triumphantly in the wind.

About one o'clock the trustees and the parents began to arrive, and soon the programme commenced.

The teacher first explained that the object in celebrating Empire Day is to arouse patriotism and loyalty in the hearts of the rising generation.

Then one of the girls sang "Canada's National Anthem," which was very much enjoyed by all, and the applause that greeted her when she had finished was the best way to express their pleasure.

Then one of the boys recited a patriotic piece, showing how much farther advanced are the people of Canada than those of other countries, and how loyal her sons.

Little Mabel Morrison's song, entitled "Canada, the Land of the Maple," came next. This sweet piece describes the maple tree as a spreading maple tree, wherein sweet-voiced songsters delight to pour forth their shrill sweet notes to their mates.

There was several other songs such as: "Three Cheers for the Red, White and Blue," "A Handful of Maple Leaves," and "He Sleeps in the Transval To-night." The last song mentioned is a song dedicated to the mothers of Canada, telling them of the bravery and loyalty of their sons in the Boer war.

The teacher then read an article on the bravery of the Canadians in the Relief of Ladysmith, and the number who won the Victoria Cross.

When all the programme was ended, everyone joined in the song, "God Save the King," their hearty voices ringing out the clear sweet notes joyfully.

When this was over, Mabel Morrison ran up to her mother and said, "Wasn't it lovely, mamma?" and her mother turning from the teacher smilingly agreed. Then they all went home, declaring they had had a lovely time, and the lusty cheers of the boys for old Canada could be heard for a long distance. (Original composition.)

EDNA I. ISBISTER (age 13). Wingham, Ont.

With the Flowers

JUNE NOTES.

Don't forget to thin out your annuals sufficiently this month. If you do, your neglect will probably be rewarded by weak and straggling plants.

Turn your Calla on its side out in the garden somewhere one of these days. Pay no attention whatever to it until September; then bring it in and attend to it well, if you wish to have fine bloom in the winter season.

A BOOK FOR FLOWER LOVERS.

How many of our Flower Department friends have ever read "Elizabeth and Her German Garden"? Writing to us of it recently, Miss S. E. Leeson, herself a garden-lover, says:

"Right here, if you lack the proper spring enthusiasm and wish to go flowermad, you should read, 'Elizabeth and her German Garden.' Here is a breath of spring from its pages:

"'During those six weeks, I lived in a world of dandelions and delights. The dandelions carpeted the three lawns... and under and among the groups of leafless oaks and beeches were blue hepaticas, white anemones, violets, and celandines in sheets... All the bird-cherries blossomed in a burst... And then came the lilacs... shining glorious against a background of firs... My days seemed to melt away in a

dream of pink and purple peace."

"Like Elizabeth, I do sincerely trust that the benediction that is always awaiting me in my garden may, by degrees, be more deserved, and that I may grow in grace and patience and cheerfulness, just like the happy flowers I so much love."

We heartily endorse all Miss Leeson has said about "Elizabeth." If the above extracts will induce some others to read this delightful little book, Miss Leeson will not have written in vain.

Merchant (to new boy)—"Has the book-keeper told you what you are to do in the afternoon?" Youth—"Yes, sir; I am to wake him up when I see you coming."



It is perhaps a query, if the lamp of Alladin were vouchsafed us towith its attendant genii ready to grant us any good thing we might wish, how many of us would ever think of asking for that homely old virtue of common sense, of which Samuel Taylor Coleridge has said, with much truth: "Common sense in an uncommon degree is what the world calls wisdom." Not that this faculty is the highest with which human nature may be endowed, but that in consideration of what it is and can do for us, it surely is an attribute well worthy of being desired and striven for.

Have you ever noticed how your respect deepens for the man of whom you hear it said: 'He is a man of out-and-out common sense.''—how you feel that here is one in whom you might place confidence, to whom you might go for advice on occasion, feeling sure that you would come from him helped and encouraged? You know, too, that this one, although probably the most unassuming man in the neighborhood, is a power in it, his example one to be words to be followed, his listened to in every important issue. In short, you know him to be one of the sanest of the sane.

That last sentence has not been used unadvisedly. The more you think of it, you know, the more you are tempted to believe that there are degrees of sanity among the sane, and that the great majority of us are at times liable to be tilted just a little from the philosophic calmness and serenity which are characteristic of absolute "level-headedness." With one, the "fit" may come in the form of outbursts of unreasonable anger, or periods of undue and foolish elation or depression; with another, the lack of balance may be due to the habit of magnifying trifles, of borrowing trouble, or to the scarcely less disastrous malady of overimpetuousness, which leads one to jump at conclusions and act upon impulse rather than as a result of deliberate and dispassionate thought. When you come to think of it, too, does not the indolent man or woman show lack of complete balance, likewise the jealous one, the extravagant one, the uncharitable one-and so it In fact, the more one goes on. ponders upon it, the more desirable does this seemingly unsentimental, hard-headed old faculty of common sense appear to be, for will not its full possession ensure to us a path through life at once more serene, more prosperous and more useful than can ever be attained without

True, all people do not come into the world endowed with the same degree of this desirable faculty. As with greatness, so with common sense. Some are born with it, others achieve it by constant vigilance and practice, and other have it thrust upon them by reason of much blundering or of much knocking about in the world, which is so ready to rub off angles. Experience is a dear teacher, however, if an effective one, and the wise will not wait altogether for its lessons. Constant vigilance against crochets and one-sidedness, resolute adherence to those attitudes of mind which we know to be sensible, deliberation in forming conclusions, willingness to learn from others and to find good rather than evil in ithose about us, may work wonders for us. There is no monopoly of common Its possession is open to one

May our Ingle Nool Circle also be a Common-sense Circle. We may not have the large of Alladin at our everything every time it was passed."

beck and call, but we may all have, as a writer to our Corner recently said, "grit, grip and gumption," and with these we may accomplish much.

DAME DURDEN. "Farmer's Advocate" office, Lon-

AN OUTDOOR COSY CORNER.

don, Ont.

Dear Dame Durden and Friends,-Such beautiful weather! It is a favorable change, and now as spring is here, I imagine I see some gardening, and others housecleaning, and others at their differ-

Dear Dame Durden, your most cordial welcome to come again and tell of my "cosy corners," accounts for my visit to the Ingle Nook. My winter cosy corners and entertainments have disappeared with the cold weather, and I am now planning my summer outings. do not intend going away this summer; there is plenty to do at home this year, as we are starting to build. How many know how much that small word build contains? It tells a good deal to me, as I am all alone, and only a young girl going on nineteen. I can pride myself in knowing how to bake, and dearly love Bread and cake are my favorite accomplishments, and papa says I can't be beaten (or perhaps he means the bread, like the hard-boiled egg). However, as I fully know what there is to do this summer, I have planned a few comforts: one being a "cosy corner," where, in spare moments, I may have a little rest. There is a small spring running at the bottom of our lawn, which is large, and we play tennis on one half and croquet on the other, where there are plenty of trees, and it is here that I have chosen for my cosy corner. Between two trees I have made a covering of shingles to guard against rain, etc.; from the edge of the covering, which is triangular in shape, hangs strings for vines. vines are to be morning and evening glories. There is an old, high-back seat, which I have just finished graining, and also a small cabinet made of a box with a sliding lid, this I also made, by putting on legs and a top to represent a table, and grained it too. Standing the box sideways before putting on the top for the table, I made a few shelves for it, and am going to keep a collection of books in it, so as not to have the disadvantage of running to the house for reading when there. Then there is room enough left for a hammock and a couple of chairs. This, I think, will be all it will contain, except a few cushions, and, of course, people. Ha! Ha!! Ha!!-! - I didn't make it a very short description, did I? But I'll try and do better next time.

Nearly all the wheat is killed around here. We have one field that is not so bad, and is the best in this neighborhood. How many have their summer sewing done? I have, and can say I did it all mysell. I only finished, though, in time to do some gardening before it got any later. AN ORPHAN.

I think "An Orphan" is a "brick," don't you, to manage all those things herself. No telling what a young girl can do if she tries. Speaking of graining, I saw a house in one of our towns last summer-a new house, and considered a fine one—in which all the inside painting and graining had been done by a girl scarcely older than our cosy-corner friend. Come again, my dear, and encourage more of our younger friends to visit the Ingle

Bobby had returned from his first teaparty, his round face wreathed in smiles. "I hope you were polite, Bobby," said his mother, "and remembered your 'Yes, please,' and 'No, thank you,' when things were passed to you." membered 'Yes, please.'' said Bobby, cheerfully, "but I didn't have to say 'No, thank you,' mother, because I took GOSSIP.

There is advertised in another column a first-class saddle and driving mare, by Wickham, who ran the mile in 1.41. This mare is sound and true in every way, and bred in the purple. F. N. Schwartz, Port Hope, is the owner.

THE GREAT SALE OF IMPORTED CLYDESDALE FILLIES.

Farmers throughout the Dominion will be interested in the important auction sale, at the Repository, Toronto, on June 23rd, of 50 imported Clydesdale mares and fillies, selected and brought over by Graham Bros., of Claremont, to be sold to supply an acknowledged need in this country, that of good heavy draft breeding mares. The great demand for horses and the good prices offered has tempted farmers to part with their best, until good brood mares are deplorably scarce in almost every section of the country, and if we are to be prepared to share in the trade for high-priced horses, we must breed the class that brings hig money. It costs no more to raise that sort than the cheap-selling sort, and it makes all the difference between profit and loss or coming out about even whether we raise high-class horses or the middling class. These imported mares have been selected by a member of the firm, a first-class judge, who knows the class and quality needed to improve the horse stock of the country. They are the get of some of the most noted stallions in Scotland, and many of them were served before leaving there, by high-class horses, which will greatly add to their value to the purchaser. This will be a rare opportunity to secure an imported mare to breed from, and farmers may rest assured that in no other way could they likely secure as good ones at the same cost, as the most favorable freight rates have doubtless been secured on so large a consignment as this, and the prices will be fixed by the buyers themselves. All interested should apply early for the catalogue to the auctioneer, Mr. Walter Harland Smith, of the Repository, Toronto, as per the advertisement.

TRADE TOPIC.

A WARNING.-Messrs. Edmanson, Bates & Co., proprietors of Dr. Chase's family medicines, desire to warn the readers of this paper against having anything to do with testimonial fakers at work in this country, as they positively refuse to accept any testimonials except directly from persons who have actually used their medicines. Though the police authorities made an effort to put a stop to this fraud some days ago, it is still going on, and thoughtless persons are being induced, by the offer of a dozen free photographs, to sign fraudulent statements about medicines almost, if not entirely, unknown to them. Every testionial and every photograph used in reference to Dr. Chase's remedies is backed by a \$500 guarantee that it is For Hand, Horse or Belt Power. Leverage 40 to 1. genuine. The original, signed letters of persons recommending Dr. Chase's medicines are kept on file at the offices of Edmanson, Bates & Co., and will be

cheerfully shown to anyone who doubta the truthfulness and accuracy of any published testimonial. You are also invited to call on the person whose name appears on the testimonial whenever possible. So many people are ready and willing to certify to the merits of Dr. Chase's medicines that it is quite unnecessary to employ persons to solicit testimonials.

Tobacco and Liquor Habits.

Dr. McTaggart's tobacco remedy removes all desire for the weed in a few days. A vegetable medicine, and only requires touching the tongue with it occasion-

ally. Price \$2.

Truly marvellous are the results from taking his remedy for the liquor habit. Is a safe and inexpensive home treatment; no hypodermic injections, no publicity, no loss of time from business, and Address or consult Dr. McTaggart, 75 Yonge

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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 Cambie St.,

Vancouver, B.C. P. O. Box 329.



It is Neither

weakness nor vanity to care for one's complexion, hair, hands or body, but a duty. Why have your face covered with pimples, blackheads or any form of acne when it can be cured if you use Acnetine and Dermo-Nervine.

We care not how bad the case is, they will cure. Consultation invited at office or by letter. Superfluous Hair moles, warts, etc., removed permanently by Electrolysis. Satisfaction guaranteed Send stamp for our handsome new book, and sample of cream.

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THE ARNOTT INSTITUTE, BERLIN, of SPEECH DEFECTS. Dr. W. J. Arnott, Superintendent. We treat the cause, not simply the habit, and therefore produce natural speech. om Write for particulars.



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Almost every feeder in Canada knows that Carnefac Stock Food is the cheapest and best tonic and regulator for Calves and Hogs. But some are not aware that Carnefac Poultry Food is the only thing they can procure to prevent their young Chickens and Turkeys from drooping and dying in this wet weather.

Prof. Graham, of O. A. C., Guelph, will tell you to use it and no other preparation. Ask your dealer for it, or write us direct.

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40 to 1. nan any Wheels,

. LOUIS

Important Auction Sale at the Repository, Toronto THURSDAY, JUNE 23, 1904,

50 Imported Registered Clydesdale Fillies

PROPERTY OF GRAHAM BROS., CLAREMONT, ONT.

Personally selected by one of the above firm from the best Clydesdale establishments in Scotland. Sired by such noted stallions as Baron's Pride, King of the Roses, Prince Thomas, Up-to-Time, etc.

> LARGEST AND MOST VALUABLE CON-SIGNMENT OF CLYDESDALE BROUGHT INTO AMERICA.

These fillies are one, two and three years old, and the two-year-olds and three-year olds have been served by the very best sires before leaving Scotland. A most important opportunity for farmers to secure first-class, young, imported breeding mares. Address:

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Bicycles for Ladies and Gentlemen, only \$10.00. For the small sum of ten dollars we can sell you a first-class second-hand wheel, These wheels are all up-to-date and fully guaranteed, nicely enamelled, and look as good as new ones. nicely enamelled, and look as good as new ones.

Last year we sold a vast number of them; this year we expect to sell a still greater number. We sell our wheels all over the Dominion. In many when a wheel is in a neighbord is seen by the the purchaser, we

instances, purchased and friends of the purchaser, orders from

how our wheels are liked.
With each wheel we send a tool bag and full kit of tools.
Wheels are nicely crated for shipment without extra charge. Remember, many of these wheels are worth \$20, but to make a quick sale of them we are offering them at this very low figure. We advise customers to buy before the rush. Remember the price, only \$10.00.

We have all kinds of Haying Outfits for Steel, Wood and Cable track. As sample of one of our Outfits, we quote the fol-lowing. All fully guaranteed.

Our No. 3 Wood or Steel Track Outfit, 1 Improved Car Stop-block 75

No. 42

Wilkins & Co.

Combination Cobbler's Harness-maker's, and Tinsmith's Outfit, only \$1.80. This very handy set of tools will save many a run to the shoemaker's, harness - makers, or the tinsmith's; only \$3.00 and \$4.00.

Farm Bells, \$1.75, \$2.25, Church Bells, from \$12.00

Remember, we have been in the mail-order business for nearly twenty-five years. 7

\$15.91 If the whole outfit is not required, will sell any parts at price listed. We have also Center Trip Slings at \$2.25 each, and Sling Attachments at \$2.20 each. we acu. We have everything necessary for Haying Outfits, Haying Forks as low as \$1.25 each. Track for Steel Outfits, per foot, 14c.

Rubber Drive Belts. 100 feet 6-inch 1-ply extra star belt (endless).... " 7-inch "

All sizes rubber belting in stock. Will sell any quantity. WILKINS & CO., 166 and 168 King St. East, Toronto, Ont. GOSSIP.

Mr. James Dalgety, of Dundee, Scotland, and London, Ont., sailed from Quebec, June 8th, for the purpose of selecting and importing Clydesdale and Hackney stallions and mares, and will be pleased to have anyone write him to Park Place, Dundee, who wants any special order, which will receive his best attention.

OPEN-AIR HORSE PARADE.

The entries for the second annual Openair Horse Parade which is to be held in city of Toronto on the morning of Dominion Day, July 1st, in the Queen's Park and adjacent streets, close on Monday, June 20th, at the office of the Association, 358 Yonge St., Toronto. A glance over the very extensive prize list will show in the commercial classes, sections for cart horses, coal, bakers, milk, laundries, grocers, florists, butchers, brewers, and other trades not enumerated above. A show similar to this was held in Boston, Mass., last week, and was pronounced a very great success. The object of holding this horse parade is to improve the condition and treatment of commercial horses, etc., to induce owners and drivers to take more pride in their appearance, and the public to take more interest in their welfare. This open event is free to all, and open to all Canada. A souvenir prize list and catalogue is being printed, and will be given away free on that day. Directors of the Association render their services, which in some cases are arduous, without compensation; and it is confidently expected that those who love horses and derive pleasure or profit from them, will render the Association every possible assistance. No entry fees are charged for this exhibition, and, in fact, everything is free. All information and entry blanks can be obtained by writing or sending to the office of the Open-air Horse Parade Association, 358 Yonge

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WATCH the business man's timekeeper

Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watchest "Timemakers and Timekeepers," an illustrated history of the watch, sent free upon request to

ELGIN NATIONAL WATCH CO., ELGIN. ILL.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscriber's to the "Farmer's Advocate" are answered in this department free.
2nd.—Questions should be clearly stated and

ma.—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. Srd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given. kth.—When a repty by mail is required to urgent veterinary or legal enquiries, \$1 must be exclosed. be enclosed.

Miscellaneous.

SILAGE CROF-ALSIKE.-1. In case we cannot get a corn crop this year, how would millet do for the silo? I could grow stacks of that. 2. In the June 2nd issue, there is a question re cutting alsike. Would you prefer that plan to the one in the Farmers' Institute report, 1897-8, page 95, re alsike? G. W. A.

Ans.-1. We would rather plant the corn yet, and would plant an early maturing variety. The first of July will be time enough to sow millet, and then you will know what the prospects for are. We would not recommend millet for ensilage, but rather for hay. Rape would carry the stock over the fall feeding, if no ensilage could be grown. We think there is every hope of fit weather for corn. If millet is sown, let it be the Japanese Barnyard or Panicled. 2. The plan mentioned in the report: to set the mower high and cut off the first bloom of alsike, is all right on low, rich soil or on high land in a wet season; but our experience has been that the mower cuts too close to the ground in average years, and that the second crop is too short in the stems. One must judge by the growth made and likely to be made before the crop is ripe, and treat This year with so much accordingly. moisture in Ontario, it is possible that the best results would be obtained by cutting in June, setting the mower as high as possible. It might be a good plan to raise the cutting-bar with the shoe and wheel used with a pea-harvester attachment.

BARREN MULBERRY TREE.-I have a Russian mulberry tree, about eight inches in diameter, which flowers profusely, but does not bear fruit. What can be the cause of this? E. J. Y. Ans.—The mulberry is invariably a monœcious plant: that is, its flowers, while not perfect, being either staminate or pistillate, are found on the same plant, and so the pistils are fertilized. It may be, however, that the tree in question is a freak, and has only the one

kind of flowers. See illustration. Or it



Staminate flower



Pistillate flower

may be that the flowers do not mature at the same time. Examine the flowers, and their characters may throw some light on the subject. The remedy we should suggest would be to get another tree and plant it near the present one.

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

TERMS—Three cents per word each inser tion. 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 com-pressed-air hand sprayer made. Splendid seller. Liberal terms. Cavers Bros., Galt, Ont.

RARM foreman wanted. Dairy and oure-bred stock farm at Hudson Heights, Q.; proprietor's summer residence; school, Episcopal and Methodist summer residence; sonod, Episcopa and Meshodist churches near; thirty five per month to begin; free house, garden, fuel, milk; pleasant, permanent, excellent prospects for good worker with brains; teetotaler, graduate of Agricultural College, or with experience on high-class stock farm, preferred. State age, if married, children, experience, and references as to work and character. M, Box 2407. Mostreel. 2407, Montreal.



Sewing

For 20 days' trial.

For 20 days' trial. We send out all machines on 20 days' free trial before we ask you to accept or pay for them. If not satisfactory, send them back at our expense. We sell a 5-drawer, drop-head sewing machine, handsome oak woodwork, for \$17.5C; a better machine, same pattern, guaranteed for 20 years, sells for \$21.50'; machines with ball bearings and extra fine woodwork cost a little more, but only about half what others charge. Our sewonly about half what others charge. Our sewing machine catalogue, fully explaining our different styles, will be sent on application. Windsor Supply Co., Windsor, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

ORPHAN GIRLS .- Please give some addresses of orphan homes where 1 should be apt to get a girl of twelve or thirteen years of age?

MRS. THOS. DONNAN.

Ans.-Protestant Orphans' Home, Mt. Hope Orphanage, and Children's Rescue Home (Joseph Saunders, Secretary), London, Ont., or Girls' Home, Stratford,

LAME HEN .- A Buff Orpington hen went lame, and sits around unable to walk; is apparently in good health, and lays an egg occasionally. Please prescribe, G. M.

Ans.—There is some local trouble with her foot or leg. Examine carefully; if wounded, dress and keep clean; if bruised, treat accordingly with hot bathing and comfortable quarters.

ROYAL EXCHANGE. - Was Royal Exchange a Shire or a Clydesdale stal-What was his number? Kindly give a little of his pedigree.

ENQUIRER.

Ans.-We find, in Vol. 9, Canadian Clydesdale Studbook, Royal Exchange [2298], bred by R. Mackie, Dalkeith, Scotland, foaled 1873, imported in 1876, by Richard Graham, Claremont, sire Prince of Wales (673), dam mare by Gartverrie, which is all the pedigree We also find, in Vol. 1, Canagiven. dian Shire Studbook, Royal Exchange [152], foaled; in 1881, bred by Jas. Hopper, Kellothorpe, England, imported in 1883 by John Donkin, Riverview, Ont., sire King Tom (2446), dam Jet, by Commodore (2413).

TURKEYS DYING.-Kindly let us know what is the proper food for little turkeys just hatched, and how to care for them? We had a number out last month, and they seem to droop and die. Have been giving bread crumbs, hard-boiled eggs, and small quantity chopped onions; later have been feeding little raw oatmeal and corn meal. I feel sure it must be the food, for they seem to have the cholera, and they collapse.

Ans.—The food is all right if it is fed in a clean place and the water is pure. The only change we could suggest would be to swell the oatmeal before feeding, and to make johnnycake of the corn meal. This season has been particularly trying on young stock; the egg germs being weak, and the weather too cold and damp. If you suspect cholera of a contagious character, change the feeding ground, and sprinkle lime on the contaminated soil.

BUTTERMILK .- We have two cows; last spring and since going on grass this spring, the buttermilk has had a bitter I did not notice the bitterness in the butter last year, but of late it has been quite pronounced. The pasture has the same both seasons, and has heen

been unbroken for years. Ans.-Bitter taste in milk may be produced by several causes; certain weeds, such as ragweed, lupines, etc., occasionally produce a bitter flavor when eaten by cows in considerable quantities. Cows far advanced in lactation also produce bitter milk, and in certain diseases of the udder the composition of the milk may be changed and bitterness developed in milk. The commonest cause, however, is due to bacteria, or yeasts, which find entrance to the milk subsequent to milking. Some of these organisms are found upon the surface of leaves, from whence they may be carried by air currents to the milk, and, finding a suitable food, grow rapidly and produce bitter substances. In such cases the bitterness increases with the aging of the milk. If your correspondent sends a sample of the bitter milk, which faithfully represents the trouble complained of, we shall be pleased to examine it and report upon it more F. C. HARRISON. definitely. Bacteriologist.

Do Not Wait for Sickness.

Do not wait until your good health is impaired, but take steps to keep it up to the mark. Remember that ailments, apparently trifling, may very soon develop into serious diseases.

Do not hesitate to take

BEECHAM'S

on the first appearance of any distressing symptoms. They will do more to establish and maintain your general health than any other means you can employ. For a

Sluggish Liver, Sick-Headache. Indigestion, Loss of Appetite, Constipation.

and the depressing nervous conditions that arise from these troubles, there is no more reliable remedy than

BEECHAM'S PILLS

Prepared only by Thomas Beecham, St. Helens, England. Sold everywhere in Canada and U. S.
America. In boxes, 25 cents.





Condensed advertisements will be inserted 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.

CANADIAN Poultry Review, Toronto, Canada's leading poultry journal. Fifty cents a year; three years, one dollar. Sample free.

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

A.E. SHERRINGTON WALKERTON, ONT. Importer and BARRED P. ROCKS

exclusively. Eggs. \$1.00 and \$1.50 per setting of 13, EGGS We offer eggs for hatching from Barred Plymouth Rock hens, good in size, shape, color and laying qualities, mated with good cockerels, at \$1 per 15, \$2 per 45, \$4 per 100. Circulars free.

H. GEE & SONS. Selkirk, Ont.

FOR SALE

REGISTERED THOROUGHBRED No. 21377

-FOALED JUNE 2ND, 1899ch. mare, sire Wickham; dam Fanny Carter; 15 2 hands; abso'utely sound, keen and high-lifed; has been ridden by a lady. For further information, address

P. O. Box 543, Port Hope, Ontario, Canada

Won't buy it, but we will send "FREE" to any address our "Farm Pamphlet," which contains valuable information regarding

British Columbia Farm Langs in the far-famed LOWER FRASER VALLEY, "THE GARDEN SPOT OF CANADA."

F. J. HART & CO., Real Estate Agents, NEW WESTMINSTER, B. C.

Lamb Fence will fit the ground in any place, and can be erected in less time than

it takes to get ready to weave a hand-made fence. It is made of the very best High Carbon Steel Wire, which has much more tensile strength than the hard steel wire or common soft wire. Lamb Gates are efficient as well as handsome.

LONDON, ONTARIO. MAN. H. R. LAMB FENCE CO., LTD.,

1866

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GRAND COMBINATION SALE

IN SALE PAVILION, STOCK-YARDS HAMILTON, ONTARIO, ON

TUESDAY, JUNE 28TH.

62 Head Imported and Canadian-bred Shorthorns 56 Females, 6 Bulls.

Contributors: W. C. Edwards & Co., Rockland; A. D. McGugan, Roiney; Charles Bankin, Wyebridge; D. Milne, Ether; T. E. Robson, Ilderton; Hudson Usher, Queenston.

A choice collection of high-class individuals in type and breeding. For catalogues and all information, address

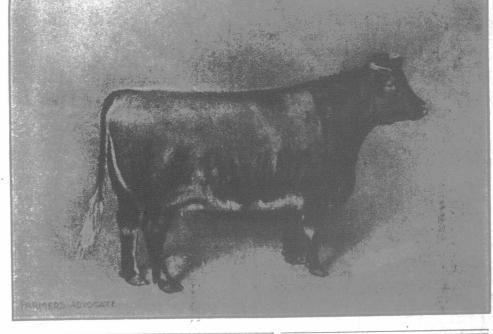
HUDSON USHER, Queenston, Ont.

Auctioneers—CAPI. T. E. POBSON, THOS. INGRAM.

GOSSIP.

THE HAMILTON SHORTHORN SALE Interest in the great combination sale of June 28th, at Hamilton, Ont., of 60 head of selected Scotch-bred Shorthorns from six superior herds, grows and intensifies as the days go by, as indicated by the numerous inquires and applications received for the catalogue. The greatly-improved tone of the markets for export beef cattle, and the upward tendency of recent sales in the U.S., together with the high prices at which breeding stock is now held in Great Britain, owing to the phenomenal demand from South America, are all factors in brightening the prospect for good prices prevailing for high-class Shorthorns. In addition to the animals noticed in former issues of the "Advocate," we give the following brief description of the contribution to the sale from herd of Mr

Hudson Usher, Queenston, Ont. : Rose of Vineland is a beautiful red heifer, in calf to Imp. Derby, described, by a good judge, as one of the best Scotch sires ever brought to this con-This heifer is especially well modeled in .ront, being deep and thick, with smooth covering of crops, and with ample merit to commend her to discriminating breeders. Meadow Beauty is a big, smooth heifer, and has begun her usefulness early in life, having at foot a good roan heifer calf, which was dropped when she was just past two years. Her dam also was a great milker and a rapid breeder. Vacuna 44th is another example of the money-making kind, she is not yet seven years old, and has at foot her fourth calf, and is due to calve again in September to Imp. Derby. She is a very stylish, attractive cow, reat length and depth, with level quarters. Whoever buys her wills get large value for his money. yearling bull, Queenston Cavalier, dam Vacuna 44th, above mentioned, is a big roan, by Imp. Derby. The breeder whose cattle lack size and constitution, and who wants a big, thrifty, strongboned bull, should secure this one. has not been fed to carry excessive flesh, but is a deep, thick fellow in good, useful condition, and will develop into a big, smooth bull. Queenston Queen is a beautiful roan yearling, by Imp. Derby, and is an all-round good one, having the covering and mellowness that are so de-Bessie Lady, of the Kinellar Bessie tribe, is one of the best things in the sale, and has a most attractive pedigree. She was got by John Miller & Son's Imp. Royal Prince, one of the best sires of the present time. Her dam was by Imp. Craven Knight, used with such good success in Col. Harris' Linwood herd, and described in Mr. Sanders' Shorthorn history, as probably the handsomest Cruickshank bull ever seen in the Western States. Bessie Lady is one of the thrifty sort, with plenty of scale and spring of rib. She has at foot a red-roan bull calf, and is in calf again to Derby. Isabella 16th is a big, red threeyear-old, got by the Crimson Flower bull, Trout Creek Barmpton, selected at a long price for shipment to South America. She is of the old Isabella, or Mina, tribe, noted as regular breeders and deep milkers. This young cow will



of REGISTERED SHORTHORN CATTLE on

at RIVER FARM, DURHAM, ONT.

Stock bull, bred in Scotland, included in sale. Catalogues mailed on application.

H. PARKER, Durham, Ont. Capt. T. E. Robson, Auctioneer.

We sell Cylinder Oils, 650 fire test, made from Pennsylvania stock, dark or amber color, as follows: 4 gallon jacketed can, \$2.50; 8-gallon jacketed can, \$4.0; half-barrel (25 gallons), \$10.50; barrel (50 gallons), \$18 00. We guarantee satisfaction. Anyone not pleased may return oil at our expense and we will return pay for unused portion. Our catalogue on application.

Credit Auction Sale A very prolific cow is Queen's Diamond, whose extended pedigree shows the best Cruickshank breeding. She has at foot a good bull calf,, and is bred again to Queenston Montalis, a roan yearling, reserved for use at Queenston Heights She is also dam of Queen's Farm. Wednesday, June 22nd, '04 Jewel, included in the sale as No. 39, a yearling, by Red Duke (imp.). This is a heifer of extra quality and one that will make good outcome. Queenston Chief is a good roan, September calf, by Derby, with good back and loin, and the mellow skin and handling quality that one might expect from the array of good sires in his pedigree. Nora is a dark roan, of the good old Syme family, one of the best ever brought from Scotland. She is four years old, and has produced three good heifers-one in 1902, and remarkably good, thick twins last year. She has typical head and horns, and is a fine, breedy-looking cow, and should prove valuable in any herd. The pedigree of the red two-year-old, Kinerlar Maid, shows a Scotch cross on a good Bates foundation, and as she is due to

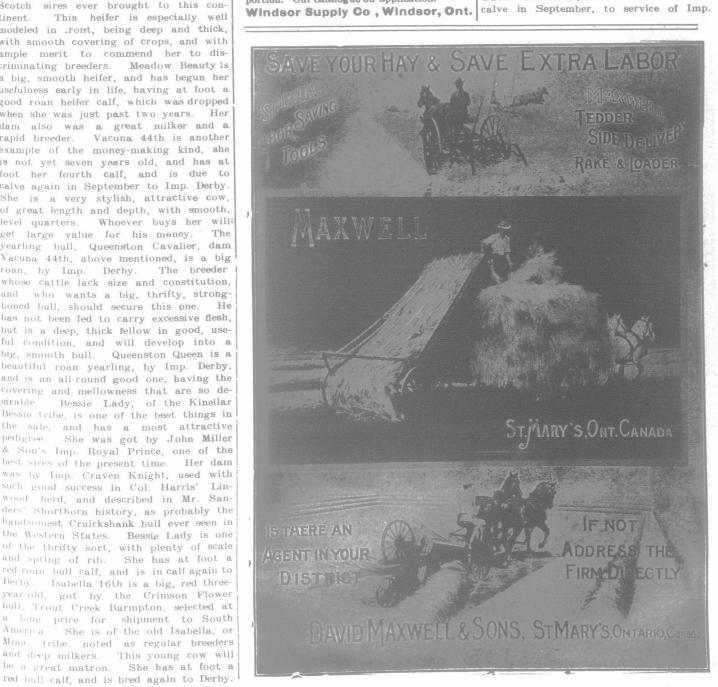
Derby, should prove a good investment for someone. It will be noticed that most of the cows fisted have one or more of their produce in the sale, which will afford an excellent opportunity for the beginner to judge what he requires, and also for breeders to make desirable additions to their herds.

MOMENTARY OPPORTUNITY.

Employers who are popular among employes have a habit of watching for and taking advantage of chances to interest employes in better methods. There are times when the most naturally indifferent have an admiration or desire for genuine intelligence. To believe this and see in time to encourage the condition is what enables some employers to surround themselves with excellent employes. There are employers who do more than believe and see; by various methods they plan for and encourage the employe to reach a mental height where the momentary desire for a greater accuracy is

By leading a person to higher ground, from which a glimpse of a lake may be secured, a desire to see the lake from its own shore may be created. After a trip to the lake has been taken the person may say what is claimed one man did say after a forty-five mile ride: "If the world is as far the other way it is an awfully big place." In the world of good methods some people seem to have travelled only a few rods, yet the naturally accurate and progressive people do not always stop to think that some are born sluggish in action just the same as some are born blind or deaf. The employer who helps to lift a deficient employe up into skill and forethought does mrore than the man who drains a swamp, because a rescued person will "drain" a dozen swamps in one way and another. There is a very successful and useful man not far from Chicago who came very near being discharged as a hopeless case some ten years ago. He was helped to conquer and get above his old disposition by means of almost unlimited zette.

patience, resourcefulness and watchfulness on the part of his superiors. They believed it possible, and watched for momentary opportunities.-[Breeders' Ga-C. & J. Carruthers, of Cobourg, write: The Yorkshire sows we are offering are in pig to the imported boar, Summer Hill Dalmeny Royal, and should make grand brood sows, as all their ancestors have been. The Berkshires are an excellent lot, with plenty of length and depth, and very nicely marked. We also have some young Yorkshire boars, by Dalmeny Royal. They have plenty of bone, and will make hogs that will improve any person's stock. The advertisement of Barred Rock eggs was very satisfactory. We are offering them now at half price.



Warranted to give satisfaction.

GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.

Every bottle of Caustle Balanm sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY Terente, Can.

WALTER HARLAND SMITH, Prop



Cor. Simcoe and Nelson Sts., TORONTO.

Auction Sales of Horses, Carriages, Buggies, Harness, etc. every Tuesday and Friday at 11 o'clock.

Special Sales of Thoroughbred Stock conducted. Consignments solicited. Correspond ence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

Clydesdales



My lot of se-lected stallions and fillies just landed were got by such noted sires as Senator's Heir, Prince of Carruchan (8151), Moncreiffe Marquis (9953) and others not-ed for their indi vidual quality,

GEO. STEWART, Howick, P.Q.

Make More Money.

If you could get a full course of instruction in Stock-raising, Dairying, Fruit-growing, Poultry-raising, or Farm Crops, do you think it would help you make your farm pay better?

We teach these subjects thoroughly BY MAIL at a very small cost.

More knowledge means more power to making profits.

Write for our free booklet, stating the subject which interests you.

Canadian Correspondence College, Limited, TORONTO, CANADA. WALTER JAMES BROWN, B. S. A., Principal.

RUPTURE Have you a rupfailed 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.



NEWTON'S Heave, Cough, veterinary specific for wind, roat and stomach troubles. trong recommends. \$1.00 per Strong recommends, \$1.00 per an, mail or express paid.

Newton Hemedy Co.,

Tolede, Ohio. Your druggies.

Las is on on ges it from any wholesale druggies.

The late Judge Dykman once had before him a respectable-looking man who was charged with the theft of jewellery. The man pleaded guilty, but it was urged that there were extenuating circum-The defence introduced stances. medical expert, who swore that the prisoner suffered from kleptomania.

"What's that?" asked the Judge seriously.

"It's-a-er-disease, your Honor." "What kind of a disease?"

"Well-it's a-mental disease, that causes the subject to appropriate property not his own." "Makes him steal?"

"Yes, your Honor; that is generally the case.'

"I know the disease," said his Honor. "I know the disease, and I am here to cure it."

A "GENERAL-PURPOSE" COW. The following special dispatch to the New York Tribune from New Brunswick, N. Y., shows that the special-purpose cow has been again outclassed in a "public" test:

"John Sutphin, a Franklin Park farmer, asked the police to-day to help him find a pet heifer which had strayed away from his farm. He declared she was a great fish catcher, and frequently would go to ponds on the farm, stand motionless for a time in the water near the bank, then suddenly thrust her head in the water and bring up a small fish in her mouth.

"On the advice of the police and with their aid, the shores of the Raritan river were searched. The heifer was found watching for fish near the landing bridge.''

A SOUTHERN EXTRAVAGANZA AND A MORAL.

A lady residing on Butter Creek one night last week hung a bucket of cream in the well near the house so that it might keep cool. During the night a frog fell into the bucket of cream and in his struggle to get out actually converted the cream into butter. When the lady visited the well the next morning she found the frog sitting on a ball of butter washing his feet in buttermilk .- [Heppner Times.

The real story is that two frogs fell in and one gave up in despair at once and drowned, while the other kept on kicking as described, and the moral is that if you keep up kicking (in a diplomatic manner) you will get that new cement floor, that starter can, etc., and your patrons will deliver clean milk.

THE ROYAL COMMISSION ON TU-BERCULOSIS.

The Royal Commission, appointed in August, 1901, to investigate the connection between human and animal tuberculosis, has reached certain conclusions it considers as interim report, which, in effect, refutes Prof. Koch's much discussed theory that tuberculosis cannot be communicated by animals to human beings. The commissioners immediately attacked the problem experimentally instead of beginning by collecting opinions.

Their main conclusion is thus expressed: "We have most carefully compared the tuberculosis set up in bovine animals by material of human origin with that set up in bovine animals by material of bovine origin, and so far we have found the one, both in its broad general features and in its finer histological details, identical with the other.

"Our records contain accounts of postmortem examination of bovine animals infected with tuberculosis material of human begins which might be used as typical descriptions of ordinary bovine tuberculosis.

"This, in the judgment of the commistioners, seems to show quite clearly it would be unwise to frame or modify legislative measures in accordance with the view that human and bovine tuberculosis bacilli are specifically different or that the disease caused by one is wholly different from the disease caused by the other.'

The commissioners experimented with more than 200 bovine animals. Their present conclusions, which will be followed by a further report, strikingly support the view of the majority of English medical men, and are likely to lead to the strengthening of the regulations regarding the sale of meat and milk.

MANUFACTURERS OF

Farm Wagons in Trucks

COMBINATION RACKS, ETC.

Strictly First-class.

Fully Warranted.

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



Clydesdales.

We have a number of YOUNG CLYDESDALE MARES AND FILLIES for sale, and any person wanting to purchase a good young brood mare should come and see what we have before buying elsewhere.

HODGKINSON & TISDALE

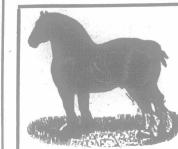
Beaverton, Ont. Long-distance 'phone in connection with farm. 70 miles north of Toronto, on Midland Division of G.T.R

CLYDESDALES

I have just returned from Scotland with a fine lot of Clydesdale stallions of great breeding and individuality. They are indeed a fine lot and just the kind the country needs. Write for prices and description, or, better still, come and see and be convinced of what I say.

WM. COLQUHOUN, om

MITCHELL P. O. AND STATION (G. T. R.), ONT.



International Importing Barn J. B. HOGATE, Prop., SARNIA, ONT., IMPORTER OF

CLYDESDALE, SHIRE AND HACKNEY STALLIONS

Last importation Nov. 9th, 1903, consisting of stallions sired by Sir Everard, Hiawatha, Black Prince of Laughton, King of Kyle, Sir Thomas, Royal Carrick, Clan Chattan, Lord Lothian, Balmedie, P. Charming, Prince of Airies, and from noted dams, Several are tried horses. If you want first-class horses at right prices, terms to suit, write for particulars, and come; I will pay one-half railroad fare. Think I can save you money.

H. H. COLISTER, Travelling Salesman.

IN THE HAMILTON SHORTHORN SALE.

In the catalogue of the 60 Shorthorns to be sold by auction at the combination sale, at the stock-yards in Hamilton, Ont., on June 28th, are listed a half dozen from the excellent herd of Messrs. D. Milne & Son, of Ethel, Ont. Two of these are of the Lady Fanny family, as bred by Bruce, of Fochabers, noted as excellent milkers and good feeders; one a roan three-year-old cow in calf to Imp. Scotland's Fame, a Kinellar Claret bull, sired by the Duthie-bred Golden Fame; the other a roan yearling heifer, by Prince Eclipse, a son of the Duthie-bred Imp. Prime Minister. No. 31 of the catalogue is vanity, a red two.year-old heifer, by Royal Ury, of the popular Kinellar Ury family, a son of the Nonpareil bull, Imp. Royal Member. Her dam was by Scottish Chief, a Kinellar Clementina, by the Missie bull, Scottish Pride Imp.), a son of the great Pride of Roan Lovely, No. 20, and Velvet Rose, No. 54, both yearlings, have for sire Imp. Red Duke, a son of the Missie bull, Lord Hampton, and have nine top crosses of imported and Wattand Dryden-bred bulls, tracing to Imp. Daisy, by Romulus. Mr. Milne also contributes the roan imported two-year-old bull, Scotland's Fame, a Kinellar Claret, with the Duthie-bred bulls, Golden Fame, a Brawith Bud, and Count Amaranth, for sire and grandsire; the latter a son of Sittyton Amaranth, bred by Mr. Duthie.

RUPTURED Horses, Colts & Calves CURED. Circulars and Testimonials Free.
MOORE BROS., V. S., Albany, N. Y.

> IF YOU BUY HARNESS REQUISITES.

Harness Composition Saddle Soap Saddle Paste Jet Black Oil Black Dye For staining Hoof Oil **Ebonite Waterproof Blacking** British Polishing Paste For Metals and Class

Sold by all Saddlers and Ironmongers. Manufactory: London, Eng.

AGENTS FOR CANADA: B. & S.H. THOMPSON & CO., Ltd. MONTREAL.

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GOSSIP.

"And there is one thing about the pupil of the eye that I can't any about lots of other pupils," remarked the

"What is that?" asked the scholars in chorus.

"It is always found up around the head."

It was a well-dressed young man, with a sad, far-away look in his eyes, that stood on the steps as the lady opened

"Excuse me, madam," he said, as he lifted his hat, "but could you direct me to the Home for the Friendless?"

"Do you mean to say that you are seeking it as a refuge?" she asked in surprise.

'I am, madam," he replied. "I am a baseball umpire."

\$6.20 FOR EXPORT CATTLE.

The annual consignment of cattle bred by the Illinois Experiment Station, numbering this year 136 head, was sold in Chicago on June 2nd for an average of a little less than \$6.10 per 100 lbs. They were weighed and sold in 11 lots, and lot 1, 15 head, weighing an average of 1,466 lbs. at home and 1,434 lbs. at Chicago, brought \$6.20 per 100 lbs. The lowest price received for one lot was \$5.95. The cattle were high-grade Shorthorns.

A head gardener, whose work is admired by thousands of visitors every was summoned before the directors of the establishment where he is engaged to explain why he had made certain alterations without consulting the board.

"Well, gentlemen," he remarked, "the alterations are a success, an' that satisfies me!"

"But that isn't the point!" said the chairman. "Why didn't you consult me in the matter?"

"Because, sir, I'm satisfied with my place at present, and intend to keep it." "I don't think you're going the right way about it!"

Well, I do, an' that's where we differ," said the gardener. "I've had the job five years, and before I came you'd four gardeners in twelve months. Why? Because the first tried to please the chairman of the board, and failed. The second tried to please the manager, and didn't stop a month. The third tried to please the secretary, and the directors The fourth tried to please the whole board, and so ran foul o' the manager and the secretary. The fifththat's me-pleases hisself, an' keeps his

THE INTERNATIONAL LIVE-STOCK EXPOSITION.

At a meeting of the directors of Chicago's great show, a resolution was passed that all exhibitors at future shows must be members of the exposition company, the annual membership is \$10. In future no prizes will be offered in the classes for breeding hogs; the bacon hog and the fat barrow will monopolize the show henceforth. . This move is largely due to the danger of breeding hogs contracting hog cholera at the stock-yards. Dr. Alexander will prepare a set of dentition plates to be used in settling

disputes re the ages of cattle. Where but one exhibitor shows, one prize only will be warded; two where two exhibitors, and aree when three or more come forward.

The amphitheatre for judging, to be erected, awaits the pleasure of the subscribers of the \$60,000 stock of the exposition company. Subscriptions are only coming in very slowly. After 1904, carload lots of Western cattle must not have been moved out of the district from which they are shown longer than thirty days prior to the show.

The International should be a fat-stock show, and not a show for breeding cattle or swine.

Leg and Body Wash.

When it comes to stiffness and soreness of muscles, tendons, etc., nothing equals

Tuttle's Elixir

for restoring normal conditions. Apply to the body as a mild sponge bath and put on light blanket. Sponge the legs and put on light bandages. Used and Endorsed by Adams Express Company.

Tuttle's American Condition Powders A specific for impure blood and all diseases arising therefrom.

TUTTLE'S FAMILY ELIXIR cures rheumatism, prains, bruises, etc. Kills pain instantly. Our 100-page book, 'Veterinary Experience,' FREE. Dr. S. A. TUTTLE, 66 Beverly St., Boston, Mass., Beware of so-called Elixirs—none genuine but Tuttle'a.

Avoid all blisters; they offer only temporary relief, if any.

16 -- Clyde Stallions -- 16



I will have in Toronto. 16 Clydesdale Stallions from are imported, and which will be sold on small profits. These horses are by such noted sires as Baron's Pride, Prince Thomas, Sir Thomas, Sir Robert, Clan Chattan,

Intending purchasers will consult their own interest by looking them up before buying elsewhere. T. H. HASSARD, MILLBROOK. - - ONTARIO

Two choice young stallions: also one good Shorthorn bull and a few heifers. Prices right. Visitors will be met at Seaforth, G. T. R., on application to

D. HILL, STAFFA P.O., ONT.

Thorncliffe Clydesdales

THORNCLIFFE STOCK FARM has for sale some excellent YOUNGCLYDESDALE STALLIONS of right stamp, and a number of superior MARES from imported dams, by imported sires, and now in foal to the imported stallion "Right Forward." or prices, etc., apply to

ROBERT DAVIES

36 Toronto Street, TORONTO.

CLYDESDALES



importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have by Baron's Pride, Sir Everitt, and Boal & rick, I Percheron, and I Hackney, winners. Ayrshires of both sexes, and

Imported Clydes & Shires Shorthorns & Yorkshires



Five Clydesdale Stallions, one Shire Stallion, three Shorthorn Bull Calves, imp. in dam; a few imported Heifers, and imported Yorkshire Hogs.
Clydes by such sires as Prince of Carruchan, Prince Stephen, Prince Thomas and Royal Champion.
Write for prices, or come and see. om and see.

GEO, ISAAC, Cobourg Station, G. T. R. COBOURG, ONT.

FOR SALE. Three Imported Clydesdale Fillies

3 years old, weighing from 1,550 to 1,700 lbs each. o

PATTERSON BROS., Millbrook, Ont. Cavanville, C. P. R. Millbrook on G. T. R.

QUESTIONS AND ANSWERS. Veterinary.

CHRONIC COUGH.-Horse coughs frequently, and occasionally, especially in the morning, breathes heavy, and holds head down after a drive. Is there any danger of heaves? W. W.

Ans.-I am afraid it is already heaves. If not, the cough may be checked, and, at all events, the symptoms lessened by the following treatment: Feed hay, of excellent quality, in small quantities; also grain of good quality, in quantities; proportionate to the amount of work he performs; dampen all he eats with lime water. Give every morning the following: Two drams solid extract of belladonna, one dram powdered opium, one dram gum camphor, and thirty grains powdered digitalis. Mix well, moisten with oil of tar, make into a ball, and administer; or, if you cannot give a ball, mix with a pint of cold water, and drench.

MARE VICIOUS WITH FOAL. - Mare took sick two hours after foaling, and got vicious with foal; she recovered in four days, but refused to have anything to do with the foal. G. L.

Ans.—By applying a twitch to the mare, and getting the foal to nurse; watching and teaching the mare, by the use of a whip, if necessary, that she must not injury it; applying the twitch when it requires more milk; removing the foal when the attendant has to leave. etc., you may be able to effect the desired result. It requires patience and handling according to the peculiar disposition of the mare. I have known good results follow the spraying of the foal with brandy, and rubbing the mare's head, nostrils, etc., with the same. Some may consider this quackery; but I have frequently known it to be effective, especially when the mare is vicious at first. If you have to raise the foal on cow's milk, select a newlycalved cow, dilute the milk with an equal quantity of water, and add a dessertspoonful of brown sugar to a pint. Feed often.

Miscellaneous.

RIGHT TO MANURE.—1. A sells a twoacre lot in a village, on which there is a stable, to B. Nothing is said about the manure from the stable in making the bargain. To whom does the said manure belong, A or B? 2. Does the same ruling apply to farm property?

Ans.-1. We should say that it belongs to B 2. Yes.

A SEED IMPURITY. - Kindly identify the enclosed seed, found in a package of mangel seed.

Ans.—This is a deformed and discolored cimen of one of the varieties of English horse beans. The natural color is reddish brown, and in form it is longer and flatter. It is a cultivated plant, and harmless as a weed.

AN UNSATISFACTORY COW .- A had an auction sale; B bought cow highly recommended; B paying \$48.25, cash, for same. After B started home with cow, he found she was not a full milker, that she had one bad teat. B wrote to A concerning same. A paid no attention. After having calf, B found she had only two teats. Should A make it right with B, and, if so, what steps should be taken?

Ans.-We think A ought to do so; but upon the statement of case submitted, we cannot say that he could be legally compelled to make B any return of money. Under the circumstances, while it might be well for B to make a demand upon A for compensation and press it vigorously, we could not advise him to litigate the

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fills the bill, and you will find it the best value for your money. Made in Seven different sizes. Send for par-ticulars to ticulars to

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Agents wanted in unrepresented districts.



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.

B. S. LEE, Williamsford P. O., Ont, Holland Centre Station, C. P. R.

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., Gueiph, Ont. Chemists and Manufacturers of Worthington Stock Food. For Sale: 3 SHORTHORN BULLS

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

CLASS Shorthorn Cattle AND OXFORD CLASS OF COMMISSION OF CLASS OF COMMISSION OF CLASS OF COMMISSION OF CLASS OF COMMISSION OF CLASS OF CAMPACTURE O

SHORTHORN BULLS FOR SALE. We have three choice young Shorthorn bulls now on offer, one Cruickshank Mysic, and one Stotch Jessamine, each 12 months old and sired by Spicy Robin; and one Cruickshank Orange Blossom, from imported sire and dam; also famales of all ages. Herd headed by imp. Joy of Morning (76929), winner of 1st prize at Toronto Exhibition, 1903; also S.-C. White Leg. horn eggs for sale at \$1 per 13. GEORGE D. FLETCHER, Binkham, Ont.

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.

First-class Shorthorns—Young cows and breeding. Also Shropshires of different ages. Write for prices, etc., to T. J. T. COLE. Bowmanville Stn., G. T. R. o Tyrone P. C.

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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

QUESTIONS AND ANSWERS. Veterinary.

BARRED-WIRE WOUND. - Two-year-old colt got badly cut between fetlock and hoof with barbed wire. The cut extends all across the limb; is ragged, and deep. I think the joint oil is running. My veterinarian dressed it, and applied a bandage; but she tore bandage off with her teeth, and he said to leave it off. D. R.

Ans.-No doubt the veterinarian in attendance understands the case, and I would advise you to do as he advises. If, as you suspect, the joint oil is escaping, it is not probable she will live. The wound needs to be kept clean by washing with warm water at least twice daily, then dressed with a five-per-centsolution of carbolic acid, or other disin-The wound would heal more fectant. quickly if the patient were quiet in the stable.

COW POX-HARD MILKER.-1. Give treatment for cow pox. 2. Cow is so hard to milk that a teat syphon has to F. H. be used.

Ans.-1. As the disease is contagious, no contact by milkers' hands, or otherwise, should be allowed between the udders of the diseased and healthy. Dress the affected cows' teats two or three times daily with the following ointment: Boracic acid, four drams; carbolic acid, twenty drops; vaseline, two ounces. 2 No successful method of dilating the orifices of the milk ducts to make milking easy has been discovered. Some claim to have had good results from inserting, after milking, a nice, smooth hardwood plug, constricted slightly in the center to prevent it from falling out or passing up wholly into the This is left in between milkings. My experience with such has not been satisfactory. A cutting operation is also unsatisfactory, and I think it wise to fit all such milkers as yours for the

CAPPED HOCK-TUMOR OR ABSCESS. -1. Last winter a yearling colt backed swiftly against the wall, which caused a capped hock. The puff is soft. 2. Last summer a lump, neither hard nor soft, appeared on my mare's shoulder. It is still there. Working her hard this spring W. A. R. had no effect on it.

Ans.-1. If there is considerable fluid in the sac, an operation by a veterinarian in necessary. It is not safe for an amateur to cut in this region. If the fluid be in small quantities, repeated blistering, in the ordinary way, with half a dram cantharides, one and a half drams biniodide of mercury, mixed with two ounces vaseline, will produce absorption. 2. This is either a tumor or an abscess. If the latter, it should be lanced, and the cavity flushed out daily with a five-per-cent. solution of carbolic acid until healed. If the former, it must e carefully dissected out, the skin stitched, except at the bottom, and then treated the same as for abscess. External applications are useless.

SHOULDER - SLIP OR SWEENY .- 1. Three-year-old colt, used to double plow in three-horse team, has gone lame in front. The shoulder joint seems to move outwards when he steps or puts weight on the leg. 2. Heifer got fast in the bush; she is reduced to a skeleton; is stiff, and does not eat well. F. M.

Ans.-1. This is sweeny or shoulder-The slipping motion of the shoulder that you mention gives it the latter name. In order to restore the animal to full usefulness, you will have to give him at least six months rest, and blister the point of the shoulder and also over the shoulder blade once monthly with the following: One and a half drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off, and rub the blister well in. Tie so that he cannot bite the parts. In twenty-four hours rub well again, and in twenty-four hours longer wash off and apply sweet oil. Let him out on level pasture, and oil every day until the scale comes off. Repeat blister every month, as long as necessary. 2. The heifer requires careful nursing rather than medicinal treatment. Put her in a comfortable box stall; feed on grass, bran, chopped oats, etc., in small quantities and often. If she will not eat, drench her with tored flaxseed, and give one dram each grotian, ginger, nux vomica, in a pint of cold Anter, as a drench three times daily.

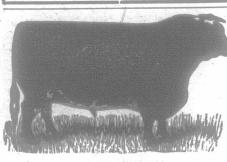
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FOR BARN WALLS AND FLOORS, HOUSES, SILOS, PIGPENS, HENHOUSES; AND SEWERS TILE, ABUTMENTS AND PIERS, FOR BRIDGES, GRANOLITHIC SIDEWALES; IN FACT, FOR ALL WORK THAT CAN BE DONE WITH CEMENT.

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WHOLESALE IN CAR LOTS ONLY.



Shorthorn Heifers For

9 imported heifers 21 home-bred heifers.

These heifers are Scotch, many of them in calf. Prices moderate.

ARTHUR JOHNSTON, Greenwood, Ontario

WE HAVE FOR SALE

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 numbers 75. Bull catalogue on application. of serviceable age and of present-day type.

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

HILLHURST FARM
(ESTABLISHED FORTY YEARS.) SHORTHORN herd numbers 30, with Imp. Broad Scotch (Sittyton Butterfly) in service.
Some choice young bulls and heifers for sale,
by Joy of Morning, Scottish Beau, and Lord
Mountstephen, from imported and Canadianbred dams of HAMPSHIRE 103 lambs all sold

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8 young bulls, 11 heifer calves, yearlings, two-year-SHORTHORNS. on the very best families represented. Prices moderate.

G. A. BBODIR, Bethesda, Ont,

Stouffville Station.

SHORTHORNS Present offerings: Roau Robin 29575, a Watt bull; Prince Charlie 5 412, a Russell bull Also a few good females For price and particulars write WALLACE, Woodland Farm. Mount Forest, Ont.

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

HIGH-BRED Shorthorn Cattle

AND LEICESTER SHEEP Present offerings: Young stock, either sex. For description, etc., write to WM. McINTOSH, BURGOYNE P. O.

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

Hawthorn Herd OF DEEP-MILKING SHORTHORNS. FOR SALE: Five young bulls, also a few females, by Scotch sires. Good ones. om

Wm. Grainger & Son, Londesboro, Ont. Shorthorns and Yorkshires

Present offerings: Young stock, either sex. For price and description write to Mapleton Park Farm. THAMESVILLE, ONT.

QUESTIONS AND ANSWERS. Miscellaneous.

HEIFER FAILS TO BREED.-Valuable heifer fails to breed; is two years old, and has never come in heat. Can you suggest a remedy? SUBSCRIBER. Ans.-No. Perhaps she was twinned with a bull, in which case the heifer generally fails to come in heat, and hence is barren.

BURSAL ENLARGEMENT. - Bull got hurt in train, went lame for a while, but got better. There is a puffy tumor, half the size of a goose egg, on the inner G. A. S. aspect of the hock.

Ans.-This is a bursal enlargement, resembling a thoroughpin in a horse. Such conditions are not considered serious in cattle, and are usually left alone. It is quite probable repeated blistering will reduce it. Blister in the ordinary way, so often described in these columns, once every month for several times. Enlargements of this kind are very hard, and tedious to remove.

BALDWINS WINTER - KILLED. - What would be the cause of my apple trees dying? Baldwins, in full bearing, are entirely dead, and a few fall varieties are partially gone. The bark peels off the trunks. All were well cared for, and pruned by an expert orchardist about New Years.

Ans.—This is simply a case of death from the extreme cold of last winter. In several other districts, north of the main line of the G. T. R., Baldwins and other varieties are killed, and in some parts we saw whole plantations of raspberries killed.

IMPROVING QUALITY OF MICK.—Can the quality of a cow's milk be improved by liberal feeding and good care, or simply the quantity increased? E. B.

Ans.—The quality of the milk may be improved; that is, the percentage of fat and solids increased, by an abrupt change in the ration, but the improvement will not be permanent. It may be laid down as a general rule that the quality of an individual cow's milk remains constant. In the fact, however, that the quality can be improved temporarily by a change in feeding, lies a serious objection to short-period tests for the making of records. It is also possible to get cream and milk more easily separable by judicious feeding-grass generally has this

SEROUS ABSCESS.-Filly has a puff, the size of a hen's egg, in the muscle, half way between the stifle and hock. It was caused by barbed-wire wound; has been present a year, and blistering will not remove it. It is quite soft.

Ans.—This tumor contains a fluid, either serum or pus, the former, I think. An operation is necessary to effect a cure. External applications are of little or no value. The tumor needs to be cut into at the lowest part, the contents allowed to escape, and the cavity flushed out daily afterwards with an antiseptic, as a five-per-cent: solution of carbolic acid, until healed. As there are some large blood vessels in this region, it would be wise to employ a veterinarian to operate.

BLACKBIRDS TAKING CORN.-Would you inform me of the best way to keep blackbirds from taking corn, both before and after it is up? Crows do not bother.

Ans.-If the common methods, scarecrows, guns, stringing twine across corners of the field, etc., fail, perhaps it would be a good plan to entice them away by scattering corn on some waste land a mile or two away in the direction from which you expect the birds to come. If the hirds are nesting in the vicinity, they might be frightened away by destroying some of their nests; but as these are frequently built high up in the trees, it would be difficult to get at them; besides the blackbird destroys a large number of injurious insects. Perhaps even with all their thieving, they do more good than harm.



TO

BURDOCK BLOOD BITTERS.

As a spring medicine it has no equal.

It purifies and enriches the blood. Acts on the Kidneys, Liver, Stomach and Bowels. Cleanses and invigorates the entire system from the crown of the head to the soles of the feet.

Don't be sick, weak, tired, worn and weary.

THIS SPRING

TAKE

Burdock Blood

AND KEEP WELL

BREEDERS OF

GRUIGKSHANK SHORTHORNS AND SHROPSHIRE



We offer for this season a selection from a splendid bunch of show rams, yearlings and two year-olds. Also a select lot of yearling ewes, mostly sired by the imported Mansell ram, "Royal Dreamer." om Station and Post Office, Brooklin, Ont.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep.



HERD prize and sweep stake at Toronte Industrial Exhibition, three years in succession. Herd headed by the Herd headed by ine Bruce Mayflower bull, Prince Sunbeam, imp. Present crop of calves sired by Imp. Wander-er's Last, sold for \$2,005. High - class Shorthorm of all ages for sale. Also prisewinning Lincolns. Apply

T. E. ROBSON, ILDERTON, ONT.

H. J. Davis. Woodstock, Ont.

Breeder and Importer of SHORTHORNS AND YORKSHIRES.



A fine lot of imported and Canadian-bred heifers, with calves at foot by Bapton Chancellor, imp, for sale at reasonable prices; of the best Scotch families. Also some good yearling heifers, nicely bred.

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furnace.

Just about the meanest thing a furnace can have is a dinky little door. Ever have one? Hit the edge as often as the hole? One has to be an expert stoker to shovel coal into some furnaces. If you're not an expert you'll get as much on the floor as in the

DOUBLE

FEED-DOORS

The Sunshine turnace is equipped with a good, big door.

(HP) PRINCE SURBANCE

You can put your shovel in and drop the coal just where it is wanted-no trouble, no taking aim, no missing, no scattering, or Everything about the Sunshine furnace is on the same scale

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TROUT CREEK



SPECIAL OFFERING:

Two imp. bulls with superior breeding and individual merit. Also a few imported Scotch heifers and home-bred bulls and heifers. Send for Catalogue.

JAMES SMITH, W. D. FLATT, Hamilton, Ont. Manager.

GROVE

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 Exhibition. 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.

family. One imported and four superior young noncomplete 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 om cows and heifers.

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



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

I cure to rtay cured, Contagious Blood Poison, Kidney and Sladder Troubles, Nervous Debility, and allied troubles. My Bladder Troubles, Nervous Debility, and allied troubles. My 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.

Cortainty of Gure Guarantee to cure you or refund your money. So What I have done for others I can do for you. My your money. So What I have done for others I can do for you. My charge for a per manent cure will be reasonable and no moore than you will be willing to pay for benefits conferred. I GAN than you will be willing to pay for benefits conferred. I GAN than you will be willing to pay for benefits and honestopinion of your plain envelopes actentifie and honestopinion of your plain envelopes.

. B. A. TRACTUCK, M. D., 255 Tillotsen Building, 84 Dearborn Street, CHICAGO.

GOSSIP.

Miss Ida M. Tarbell, the writer, was talking at her home in New York about

"I have been reading," she said, John Forster's 'Life of Dickens,' and the book has reminded me of Mr. Forster's bodyservant, Henry. Dickens described Henry during his last visit to America.

"The man, it seems, was devoted to his master. From one year's end to the other, he never needed a reprimand.

"It was, therefore, surprising one night when Forster was entertaining several writers at dinner, to see the scrupulous Henry make error after error. He upset a plate of soup and Forster uttered a cry of alarm. He forgot to serve the sauce for the fish, and his master said, 'Why, Henry!' Altogether, he made the excellent dinner seem a slovenly and poor repast.

When, at the end, he had upset the port and walnuts on the table, Henry leaned over Forster's chair and said in a tremulous voice:

' Please, sir, can you spare me now? My house has been on fire for last two

THE COMBINATION HORSE.

This useful sort of a horse is spoken of in the Drover's Journal as follows:

With the improvement of the public roads, horse-back riding in the country is giving way to locomotion in carriages. A combination horse is almost indispensable to every farm and more than fills the sphere of the general-purpose horse. The combination gaited saddler and harness horse possesses the size of a general-purpose animal, with increased qualities. Weighing around 1,100 to 1,200 pounds, the gaited saddler possesses weight and substance to perform almost any kind of work on the fa.rm.

The combination performer is usually an animal of great beauty of conformation, combined with superior intelligence. The canter, the pace, fox trot, single foot, trot and high-park gait are equine accomplishments that require a high degree of intelligence, and horse sense denotes docility and safety of control. At the horse shows one of the most attractive exhibits is the equestrain class. The gracefulness of motion, the promptness of shifting from one gait to another and the intelligence of the saddle horses always command interested attention. To all the varied accomplishments of a gaited horse are added perfect manners in harness, with square-gaited trotting action, to realize the commercial combination horse. Such an animal on the farm fills the possible functions of a generalpurpose horse, in addition to easy gaits under the saddle.

One of the most useful equines on the farm is the combination horse. Like a thing of beauty, it is a joy forever. Well mannered, intelligent and docile, it is always at the service of any member of the household, either to harness or to saddle. In moving herds of cattle or sheep, or executing errands, the combination horse would be almost indispensable on a farm.

A combination horse is worth \$150 to \$500 and upwards, according to its excellence in quality and perfection of educated gaits. High-class blue ribbon combination horses have sold at extravagant prices. They trace largely to Thoroughbred strains, commingled with crosses of harness-bred horses. The inheritance of gait is so impressive that the foal usually paces at birth. With the natural gaits inherited the foals are easily educated to walk, single foot, fox trot, canter, and move at a square trot. Foals designed for combination purposes are trained at an early age. They are worked under the saddle and broken to harness in their two-year-old form, being mannered by a light trainer. As threeyear-olds they are capable of performing much useful service, and if intended for the market their commercial value is increased by early education and develop-

Father and Daughter

Were Great Sufferers from Kidney Disease and Pains in the Back-Now Unite in Praise of

Dr. Chase's Kidney-Liver Pills.

Those who are best acquainted with the merits of Dr. Chase's Kidney-Liver Pills do not wonder at their immense popularity as a family medicine.

In thousands of cases they have cured where physicians and ordinary medicines have failed. This is the test by which they have been proven.

Here is a letter we have just received from Prince Edward Island:

Miss Kate Doyle, lot 1, post office, P. E. I., states: "About three years ago my father was seized with a severe form of Kidney disease, which caused him much suffering, as well as anxiety lest the ailment should become chronic or prove We immediately obtained Dr. Chase's Kidney-Liver Pills and he began at once to improve under this treatment, the symptoms gradually disappearing, until he became quite well again. then we always keep these pills in the house for use in the case of sickness of this kind.

"For some time I suffered from pains in the small of the back and accompanying ills, and though I was treated by a doctor at considerable expense, I could obtain no lasting benefit until I used Dr. Chase's Kidney-Liver Pills, which seemed to be exactly suited to my ailment. Father and I are greatly pleased with the excellent medicine and wish to recommend it to others."

Dr. Chase's Kidney-Liver Pills, one pill a dose, 25 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto. To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box of his remedies.

Sunnyside JAMES GIBB, Brooksdale, Ontario. Breeder of high-class SHORTHORN OAT-TLE (imp.) "Brave Ythan" at head of herd. Stock for sale.

MAPLE LODGE STOCK FARM, 1854

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. om A. W. SMITH, MAPLE LODGE, ONT.

SHORTHORNS

Some extra good young bulls for sale. Catalogue. JOHN CLANCY, Manager.

H. OARGILL & SON, ONTARIO. OARGILL.

DOUGLAS & SONS. STRATHROY STATION & P. O., BREEDERS Shorthorns and Clydesdales 85 Shorthorns to select from. Present effering:
14 young bulls of splendid quality and serviceable
age, and cows and helfers of all ages. Also one (imp.)
stallion and two brood mares.
Farm 1 mile north of town.

OAK LANE STOOK FARM. Shorthorns Cotswolds Yorkshires and Barred Rock Fowls. Imported and Canadian bred Shorthorns.
Open to take orders for N.-W. trade.
Write for prices. Satisfaction guaranteed.

MACVILLE. GOODFELLOW BROS., .M.

Shorthorns and Clydesdales.

We are now offering an extra good lot of young bulls, home-bred and imported; also stallions, and a few young mares which are in foal,

JOHN MILLER & SONS Claremont Sta., C.P.R. om Brougham P.O.

GOSSIP.

A rather dignified young woman entered a florist's shop on Madison avenue. shrill voice, resembling that of an old woman, greeted her with:

"Shut the door! Don't you know it's cold ? "

Much embarrassed, she looked about for-the speaker, saying: "Excuse me, but the wind blew so hard I could scarcely close the door."

Then, to her great astonishment, she found she had been conversing with a Angered at the bird for deceiving her so, she turned her back to the cage and was intent upon examining some flowers. Suddenly the same voice, or what seemed to be, said to her:

"What can I do for you, miss?" "If you hold your tongue I shall be gratified above all things," replied the young woman, turning around as she spoke, and discovering the florist's

The Secretary of the Clydesdale Association in Britain describes the Clydesdale thus, in answer to the question, "What are the principal points of a The Clydesdale is a Clydesdale ? ": The underlying idea in judging Clydesdales is that the points of greatest value in a street horse should have chief emphasis put upon them. The part of a horse engaged in street traffic most susceptible to wear and disease is the feet; therefore, the formation of foot least liable to disease on concussion with the paving stones must ever be the primary consideration in selecting Clydesdale. No foot, no horse, is the essential point. Next comes the formation of pastern and fetlock joint. The formation which is best adapted to lessen concussion in bringing the foot in contact with the pavement is the best formation of pastern. This is the oblique or sloping pastern. If a horse has a specially good foot he may be forgiven a little steepness of pastern, but if the foot be at all inclined to weakness, a sloping pastern is imperative. The hind pasterns should not be too long and weak, like those of a dog, and the obliqueness in front should be in the pastern, and not in the leg. In other words, a horse should not be calf-kneed. The bones of both fore and hind legs should be flat and thin. A Clydesdale's legs should, in respect of bone, be shaped like a razor, with a nice silken fringe coming out of the thin edge. This kind of bone wears best, and is most free from grease and "fogginess." Hard. thin, flat, clean bones are essential in a Clydesdale. The fore legs should be set well under the shoulder, not like those of a bulldog, on the outside of the shoulder The hind legs should be set closely together, the points of the hocks turned inward to each other; it is an unpardonable fault when they are set the other way. It follows that the thighs should be well developed with muscle, and not open. The quarters should, if possible, be long and deep, the back short and strong, and ribs sprung like the hoops of a barrel. The shoulders should be laid well back, like those of a Thoroughbred, and the withers should be high and full of muscle. The head should be broad at the muzzle, flat in front, but dish-faced rather than "Roman-nosed"; the eye should be bright and clear, and the forehead broad and exhibiting intelligence. The Clydesdale should be a good walker, and a horse should always be suspected which his owner persists in exhibiting to purchasers, or otherwise, only at a trotting gait. A draft horse does not need to trot at his work; he is wanted to walk with a long, swinging pace, and should be examined for that mainly. He should be trotted to test his soundness. Clydesdale stallion at maturity should stand not less than 16.2 hands up to 17 or 17.1 hands, on short legs. His weight when in good hard condition on the season should, at these heights, be from 2,000 to 2,200 pounds. A mare at maturity should stand not less than 16 hands, up to 16.3 hands. She may be a little longer in the body than a stallion, but the length should be below, and not in the back, and should not indicate weakness of loin. She should weigh, ac

cording to condition, anywhere from

1,700 pounds to 2,000 pounds, and, like

the stallion, she "should be a big one

lying 'down.'"



SCIENTIFIC SUMMER FEEDING

SCIENTIFIC SUMMER FEEDING

Upper Canard, Kings Co., N. 8.

Upper Canard, Kings Co., N. 8.

Dear Siras:—About Eeb. 4th I received a 50 cent package of "International Stock Food" from you. I commenced feeding it about Feb. 10th to two Durham calves. I putifith their middlings you. I commenced feeding it about Feb. 10th to two Durham calves. I putifith their middlings you. I commenced feeding it about Feb. 10th to two Durham calves. I putifith their middlings you. I commenced feeding it as a say "International Stock Food" will make calves (dry) twive per day. In reference to it I can say "International Stock Food" will make calves grow very, very rapidly; it makes them very active and bright. Calves callfor it as a make calves grow very, very rapidly; it makes them very active and bright. Calves callfor it as a make calves grow very, very rapidly; it makes them very active and bright. Calves callfor it as a make calves grow very, very rapidly; it makes them very active and bright. Calves and got the same nuch. My calves did better while feeding it than they had been doing before, and got the same nuch. My calves did better while feeding it than they had been doing before, and got the same office as they did before feeding "International Stock Food." I think "International Stock Food." FRED. M. DICKEY.

Frod "is just the thing.

Beware of imitations and substitutes. We have thousands of testimonials like this on file in our office, and we will pay you \$1000 cash if they are not genuine.

"INTERNATIONAL STOCK FOOD"—3 FEEDS FOR ONE CENT—is a purely medicinal, vegetable preparation, composed of roots, herbs, seeds, barks, etc., and is fed to stock in small quantities, in addition to the regular grain feed, for the purpose of aiding digestion and insuring perfect assimilation. It is entirely harmless, even if taken into the human system, and is prepared by a practical stockman, who is a thorough master of scientific stock feeding.

Extra Profits are made by feeding "INTERNATIONAL STOCK FOOD" to Colts, Calves and Pigs d

nmer season. It will make your young stock grow rapidly and keep them healthy and vigorous.

A \$3000.00 STOCK BOOK FREE

It Contains 183 Large Engravings.

The cover of this book is a beautiful live stock picture printed in six brilliant colors and without any advertising on it. The book is 6½ inches wide by 8½ inches long, and cost our engraving department over \$3000 to produce. It gives history, illustrations and descriptions of the various breeds of horses, sheep, cattle, hogs, goats and poultry. It contains an UP-TO-DATE VETERIMARY DEPARTMENT, which treats of the ordinary diseases to which stock are subject, and tells you how to cure them. This department alone will save you hundreds of dollars.

We will mail you this book, absolutely free, postage prepaid, together with a large colored lithograph of DAN PATCH. This Dan Patch lithograph is printed in six brilliant colors, and is worthy of a place

Write us at once and answer the following questions:

1. WHERE DID YOU READ THIS ADVERTISEMENT!

2. HOW MANY HEAD OF STOCK HAVE YOU!

INTERNATIONAL STOCK FOOD

=TORONTO, CAN.=

Capital paid in, \$2,000,000.

Largest Stock Food Factories in the world.



DAN PATCH 1:561/. World's Eats" International Stock Food "every day.

G. PETTIT FREEMAN, ONT., Importers and Breeders of

Shorthorns

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

Shorthorns and Berkshires for sale—calves at foot or in calf. Some very heavy milkers in herd. Berkshires—Young sows 7 and 9 months old; choicely bred and of bacon type. These must be sold quick. Prices reasonable. F. MARTINDALE & SON, York P. O., Ont. Caledonia Station. Caledonia Station.

Scotch - bred Shorthorns 5 bulls from 12 to 20 months old, of good Scotch breeding, size and quality, at let-live prices. Also everal females, re's and roans. L. K. Weber, Hawkesville, Ont., Waterloo Co.

Shorthorns and LEIGESTERS. Present offering: Young bulls, cows and beiers of the best Scotch families. Also a number heifers of the best Scorch families. Also a number of Leicesters of both sexes now for sale at reasonable prices. Address
W. A. DOUGLAS, Tuscarora P. O., Ont.
Station—Caledonia, Ont.

TWO SHORTHORN BULL CALVES FOR SALE AT THE

GLENAVON STOCK FARM. They are from good milking strains. Write or call.

W. B. ROBERTS, PROP., SPARTA, ONT. Station-St. Thomas. C.P.R., G.T.R., M.C.R.

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.

GEDARDALE FARM. For Sale, two richly-bred bulls, 9 months and two years old, one sired by Lord Gloucester 26995, the other by Royal Standard 27134; also some ows in calf, and heifers, all good Scotch blood DR. T. S. SPROULE, Markdale P. O. and Station. o

SHORTHORNS and SHROPSHIRES. Present offerings: First-class young Shorthorns, mostly heifers. For price and particulars write to GEORGE RAIKES, BARRIE, ONT.

IMPORTED SHORTHORNS AND CLYDESDALES

15 imported Scotch Shorthorn heifers, all no imported score snorthorn heiters, 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 A1 quality.

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

Mr. Arthur Johnston, of Greenwood, Ont., changes his advertisement of Shorthorns in this issue, and reports as fol-"We have succeeded in selling our young bulls down to two-a very choice red and a very fine roan-both fit for immediate service. We are making a heifer specialty of the present month, and can assure our customers that we have never offered a finer lot of young things, of various ages. We purpose to sell as many as we can in June and July; but we are bound to sell thirty head within the next three months, and we propose to offer them at prices that will induce our customers to buy them. Several of the two-year-old heifers are due to calve in September and October, to the imported two-year-old bull, Cyclone, which we are fitting for the Toronto Industrial Exhibition, and we think it will take a good one to beat him.'

At the second public sale of Holstein cattle, held by the Breeders' Consignment Sale Company, Syracuse, N.Y., June 2nd and 3rd, a high quality of stock was offered, for which the six gentlemen composing the company are to be congratu lated; and the prices realized are evidence that the cattle were duly appreciated. In all 172 animals were offered, bringing a total of \$31,055, with an average of \$180. The highest price, \$1,200, was made for the imported cow, Pietje 22nd, six years old, purchased by Woodcrest Farm, Rifton, N. Y. The four months-old heifer calf, Aaggie Cornecopia Pauline Liliath, daughter of the champion cow of the world, sold for \$1,000 to Geo. E. Tarbell, New York; 21 others brought from \$300 to \$500 each.

In the dairy test at the Bath and West of England Show, at Swansea, last month, 19 cows competed for the English Jersey Cattle Society's prizes for the greatest amount of butter obtained by the test of the churn from one day's milk; the period of lactation also being taken into account. The cows were divided into two classes, over and under 900 lbs., and consisted of the following breeds: 15 Jerseys, 1 Guernsey, 1 Kerry, 1 South Devon, and 1 cross-bred; of these, 4 Jerseys, the Devon and the cross-bred weighed over 900 lbs., and in this class, Dr. Watson's Jersey cow, Guenon's Lady, won first prize and gold medal; yielding, 210 days after calving, 32 lbs. milk, and 2 lbs. 9 ozs. butter; ratio, 19.21 lbs. The first prize, in the class under 900 lbs., and silver medal, went to Lord Rothschild's Syren 3rd (Jersey), who gave, 71 days after calving, 44 lbs. milk, and 2 lbs. 71 ozs. butter; ratio, 17.89 lbs.

BARREN COW CURE

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

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

Shorthorns, Cotswolds, Berkshires FOR SALE.

Bull and heifer calves from one to nine months; also cows and heifers. Barred Rock eggs, Hawkins

& Thompson strain, 75c. 15; \$2.00 for 50; \$3.50 for 100. F. BONNYCASTLE & SON.

Campbellford P. O., Ontario, 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 Al breeding. Stations: Meadowvale or Streetsville Junction, C. P. R., and Brampton, G. T. R. Visitors welcomed. S. J. PEARSON, SON & CO., Meadowvale P.O. and Telegraph.

SCOTCH

Twelve blocky, sappy young bulls, 10 to 14 months old, reds and roans, sired by the Princess Royal bull, Imp. Prince of the Forest = 40409 =, and out of high-class Scotch and Scotch-topped cows. Also ten thick-fleshed heifers, in calf to Imp. Prince of the Forest, placed at head of herd at cost of \$650 Come and see, or write for prices.

J. & E. CHINNICK, Chatham, Ont. CHAS. RANKIN, WYEBRIDGE, ONT.

IMPORTER AND BREEDER OF SHORTHORN CATTLE and

OXFORD DOWN SHEEP.

Herd headed by Pride of Scotland (imp.).
FOR SALE—Females and bulls of all ages, from noted Scotch families. WILLOW BANK STOCK FARM

Established 1855. SHORTHORNS AND LEICESTERS A grand lot of young stock for sale, rich in the blood of Scotch Booth and Bates families. Rosicrucian of Dalmeny 45220 (imp.) at head of herd. We breed the best to the best Leicester sheep of rare breeding and quality. Address:

JAS. DOUGLASS, Proprietor, P. O. and station, Caledonia, Ont.

ABORTION RETENTION OF PLACENTA and Failure to Breed

Kellogg's Condition Powder is a positive cure for these diseases. Prevents scours is 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.

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

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Ogilvie's Ayrshires

A herd of 85 head, composed of cows and heifers, prizewinners at the leading shows. The cows are imported from the best Scottish herds. Imported Douglasdale, champion at the Pan-American Exhibition, and imported Black Prince, champion at the Pan-American Exhibi-head the herd. Choice stock of both sexes for sale.

Robert Hunter, Manager, Lachine Rapids, Que.
One mile from electric care. Farm near Montreal.

GOSSIP.

Prince of Archers, Bruce of Heatherwick's stock bull for some time, has been sold to Jno. Ross, of Meikle Tarrel He was a son of the great Scottish Archer, out of Primrose 3rd, by Norseman. The following note we made on his appearance when looking him over a couple of years ago: roan, well-covered with flesh, deep and thick through the heart, and with a good touch, a bit wide at the hooks, and a little spare back of them."

A good story is told of the Venerable Archbishop of Rupert's Land, though not by any means at his expense. He was driving with a clergyman in Manitoba, whose diction is by no means as good as we trust his views are. On reaching their destination, the clergyman asked His Grace to hold the reins while he got the "alter" out of the back of the carriage. "Do you generally use a portable altar in the country districts?" asked Dr. Machray. "Oh! no, Your Grace," was "I didn't mean the haltar the reply. for the church. I meant the 'alter for the 'oss." Truly the English language "as she is spoke" is a mystery.

THERE'S AYE A SOMETHING. Ye think the warld's turned upside down An' scunner at yer ain auld toun, But gin ye tramp the country roun' There's aye a something.

There's ifs an' buts when ane wad read That sting like some ill-natured weed; Gin ye escape, yer charmed indeed, That dreaded something.

Ye strive an' plan an' lie awake, An' think nae harm can overtake; Next morn' ye find oot yer mistake, There's aye a something.

Ye meditate an' wonder why Ilk pot o' ointment hes its fly, If in the happy by an' by There maun be something.

There's aye a thorn wi' every rose, An' wee bit grits amang the brose; An' ne'er a chiel but sadly knows There's aye a something

Sae dinna fash yer heid, ye fool, But tak a seat in wisdom's school, An' learn this guid auld-fashioned rule, There's ave a something

Be weel content wi' what ye hae, An' dinna look sae sad an' wae; Dae what ye like, gang whaur ye may, There's aye a something.

-H. Isabel Graham.

During the reign of Emperor Napoleon I., at a dinner in Paris, the conversation turned upon, the Emperor and his Government. One of the company remarked that he was a great man, but was too fond of war. When the party person who had made that observation:
"Sir," said he, "I am sorry for it, but must request you to go with me to the police."
"Sir," said he, "I am sorry for it, but the police." broke up a gentleman who was present requested to speak in private to the person who had made that observation: I must request you to go with me to the police." "Why?" said the other, in the greatest apparent alarm, "I have said nothing against the Emperor but what everyone must acknowledge—that he is too fond of war. There can be no harm in that." "With that I have nothing to do. You must go with me to the police." The other now began to show the strongest symptoms of fear; he entreated the police agent in the most pathetic language to have compassion on him. The other, however, stood unmoved by all his solicitation, when suddenly the man rose from his knees and burst into a laugh, to the utter astonishment of the informer: "You think you have caught me," said he. "You are a spy of the police; so am I, and I was put over you to see whether you would do your duty."

JERSEY CATTLE & Reg'd COTSWOLD SHFEP
Some very fine heifers, all ages; 2 bull calves,
14 months and 8 months. Also some very fine
ewes. WILLIAM WILLIS & SON, om
Pine Ridge Farm. Newmarket, Ont.

JERSEYS For quick buyers, we are going to the natural increase of our herd and so many heifers coming into milk, we make the above effer. Stock of all ages. State what you want and write to-day to B. H. BULL & SON, om O. P. R. and G. T. R., Brampton, Ont.

Special Offering in JERSEYS Mid-day, 3 years old, fresh; 1 cow, Miss Midget, 3 years old, in calf; 1 bull, not akin to cows, 18 months old; 1 bull, not akin to cows, 16 months old. Special prices if taken at once, either one or more. For particulars write

W, W. EVERITT

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 Pletertje and Johanna Rue 4th Lad. Write for prices.

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

FOW SALE.—Sir Pietertje Josephine Keyes, No.2095, Vol. 5, H.-F. Asso. of Canada; calved April 12, 1901. His dam, Maggie Keyes. 26\(\frac{1}{2}\) lbs. butter in 7 days, 19,434\(\frac{1}{2}\) lbs. milk in a year as a 3-year-old, the largest ever made at that age except by her own dam—82\(\frac{1}{2}\) lbs. milk in a day. Maggie Keyes was by Keyes 6th, and out of Koningen Van Friesland 5th. Also a few bull calves sired by the above bull.

O J. A. CASKEY, Madoc, Ont.

HOLSTEINS, TAMWORTHS, COTSWOLDS Present offering: Bull calf, 8 mos., won 4 first prizes.
Litter 8-months old pigs, and younger ones; choice animals. Ram and ewe lambs and two 2-shear rams; perfect covering. E. O. M. O. T. C. C. R. o. Hilton, Out., Brighton Sta., G. T. R.

SPECIAL OFFER-BULL CALVES out of lock and Merjorie, one of the best Silver King cows in herd. These calves will be sold at very

low prices, quality considered.

ISALEIGH GRANGE FARM,
J. N. Greenshields, 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 Cherub, 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. C. H. SNIDER. Attendiffe P. O. Can ship via M. C.R. or G.T.R. at Dunnville, or C.P.R. Smithville.

SPRING BURNSTOCK FARM. Morth Williamsburg,
H. J. WHITTEKER & SON, PROPS.
Breeders of Ayrshire cattle, Oxford Down sheep. Berkshire pigs, Toulouse geese and Buff Orpington fowls. Prices reasonable.

HIGH-OLASS AYRSHIRE CATTLE
For Size: Both sexes; bulls and helier calves from
2 to 9 months old; cowe and heliers all ages. Famons priswinners bred from this herd, including
Tom Brown and White Floss, sweepstakes prisewiners et Chicago. DAVID BENNING & SON, "Glenhurst." Williamstowh, Ont.

SPRING BROOK AYRSHIRES are bred for profit.
Heavy milkers, high testers, have good udders and large teats. Orders booked for bull calves. W. F. Stephen, Spring Brook Farm, Trout River, Que. Carr's Crossing, G.T.R., 1 mile; Huntingdon, N.Y.C., 5 miles.

AYRSHIRES FOR SALE. Four yearling bulls and 6 heifers, and spring calves of both sexes, all sired by Minto (10490). Bred by A. Hume, Menie P. O., Ont. F. W. TAYLOR, Wellman's Corners, Ont.

AYRSHIRES From winners in the dairy test five years in succession. Dairy-

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 en commission; quotations given, and all enquiries answered

Address: MOWBRAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.

Cables-Sheepcote, London. Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.

Present offering: Lambs of either sex. For prices, etc., write to JOHN COUSINS & SONS, Buena Vista Farm. O Harriston, Ont.

GOSSIP.

LINCOLN AS A CROSS-EXAMINER.

In order to illustrate his remarks, Francis I.. Wellman, in his new book, "The Art of Cross-Examination," quotes a simple but instructive example of crossexamination from Judge J. W. Donovan's "Tact in Court." The example is doubly interesting in that it occurred in the course of Abraham Lincoln's first appearance for the defense in a murder

Grayson was charged with shooting Lockwood at a camp-meeting, on the evening of August 9, 18-, and with running away from the scene of the killing, which was witnessed by Sovine. The proof was so strong that, even with an excellent previous character, Grayson came very near being lynched on two occasions soon after his indictment for

The mother of the accused, after failing to secure older counsel, finally engaged young Abraham Lincoln, as he was then called, and the trial came on to an early hearing. No objection was made to the jury, and no cross-examination of witnesses, save the last and only important one, who swore that he knew the parties, saw the shot fired by Grayson, saw him run away, and picked up the deceased, who died instantly.

The evidence of guilt and identity was morally certain. The attendance was large, the interest intense. Grayson's mother began to wonder why Abraham remained silent so long, and why he didn't do something! The people finally rested. The tall lawyer (Lincoln) stood up and eyed the strong witness in silence, without books or notes, and slowly began his defense by these questions

Lincoln-And you were with Lockwood just before and saw the shooting?

Witness-Yes. Lincoln-And you stood very near to them?

Witness-No; about twenty feet away. Lincoln-May it not have been ten feet? Witness-No, it was twenty feet or

Lincoln-In the open field? Witness-No, in the timber.

Lincoln-What kind of timber? Witness-Beech timber.

Lincoln-Leaves on it are rather thick in August!

Witness-Rather. Lincoln-And you think this pistol was

the one used?

Witness-It looks like it.

Lincoln-You could see defendant shoot -see how the barrel hung, and all about

Witness-Yes. Lincoln-How near was this to the meeting-place?

Witness-Three-quarters of a mile away. Lincoln-Where were the lights? Witness-Up by the minister's stand.

Lincoln-Three-quarters of a mile away? Witness-Yes-I answered ye twiste. Lincoln-Did you not see a candle there, with Lockwood or Grayson?

Witness-No; what would we want a candle for?

Lincoln-How, then, did you see the

shooting? Witness-By moonlight! (Defiantly.)

Lincoln-You saw this shooting at ten o'clock at night-in beech timber, threequarters of a mile from the lights-saw the pistol barrel-saw the man fire-saw it twenty feet away-saw it all by moon-Saw it nearly a mile from the camp-lights?

Witness-Yes, I told you so before. The interest was now so intense that men leaned forward to catch the smallest syllable. Then the lawyer drew out a blue-covered almanac from his side coat pocket-opened it slowly-offered it in evidence-showed it to the jury and court -read from a page with careful delibera-

tion, that the moon on that night was unseen, and only arose at one o'clock the next morning. Following this climax, Mr. Lincoln

moved the arrest of the perjured witness as the real murderer, saying: Nothing but a motive to clear himself could have induced him to swear away so falsely the life of one who never did him harm! With such determined emphasis did Lincoln present his showing that the court ordered Sovine arrested, and under the strain of excitement he broke down and confessed to being the one who fired the fatal shot himself, but denied it was intentional.



60 Dorset Sheep and Lambs of choice breeding. For particulars write to B. H. HARDING, Thorndale, Ontario

COTSWOLDS Shearling ram, shearling ewes. Ram lambs and ewe lambs from 450-lb. ram, winner of silver medal, Toronto.

ELGIN F. PARK, Box 21, Burgessville, Ont.

Lincoln Sheep and Shorthorn Cattle

Choice Lincoln Lambs of both sexes. Several car-loads choice yearling rams and two carloads of one and two-year-old ewes, ready for Sept. and Oct. delivery. Also some choice young bulls, cows and heifers, which will make good herd foundations.

F. H. NEIL, PROP. Telegraph and R.R. Station, o LUCAN, ONT.

Linden Oxfords. A fine bunch of yearling rams, imported and home-bred; also early ram lambs fit for show.

R. J. HINE, Dutton, Elgin County, Ont.

SHROPSHIRE shearling rams, shearling owes, ram and ewe lambs of choice breeding. Prices right. GEO. HINDMARSH, Alisa Oratg, Ont.

The Burford Flock of Shropshires won eleven the International. Choice yearlings and lambs, both sexes, by the famous Mansell ram, or lambs by Silver Medal ram at Toronto. 100 ewes bred to the above rams. LLOYD-JOMES 2208., Surfers, Oat.

FAIRVIEW SHROPSHIRES.

Fairview is now the home of more high-class rams and ewes than ever since the flock was founded. The flock has produced more winners than any other. Twenty-three years' close experience accounts for its, with nothing but the best being sitways mated, Extra good values offered for summer shipments.

JOHN CAMPBELL, Fairview Farm, Woodville, 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.

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. "MODEL FARM"

SHROPSHIRES

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 wool 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.

TRADE TOPICS.

Fargone-What is reciprocity? Why, suppose I kissed you and you kissed me in return; that would be reciprocity.

Miss Willin-Why, that isn't bad at all, and I always thought it was something dreadful.

A young Scotch minister, with an exalted opinion of his forensic powers, said one morning to his man in the kirk: "I don't think, John, I need put the gown on; it's only an incumbrance, though some folk seem to think it makes a preacher more impressive.

Verger John-Aye, aye, sir, that's just it; it makes ye mair impressive, an' ye need it, sir, ye need it.

Church-Don't you dislike to smell that odor from those automobiles?

Gotham-No, I like to smell it. "You do?"

"I certainly do. You know, you can't smell the odor until the machine has gone by."

"I know it." "Well, if the machine has gone by and you can smell at all, you're pretty sure that you haven't been struck.

HARNESS that is kept constantly repaired and is occasionally dressed with leather preservative will undoubtedly last twice as long as a set that never receives such a dressing. But dressing may preserve, or merely add to appear-Obviously the dressing to use is one that combines both these qualities. Such a harness preparation and all other stable requisites are made by S. & H. Harris, London, England, and sold in Canada by B. & S. H. Thompson, Montreal. Note their offering. Ask for Harris Harness requisites, and take no other make. There is none "just as good."

CANADIAN CORDAGE AND MANU-FACTURING CO. -The attention of our readers is directed to an announcement made elsewhere in this issue by the Canadian Cordage and Manufacturing Company, of Peterboro, Ont. The tremendous success and rapid growth this company has enjoyed under the able management of Mr. A. L. Sykes has attracted attention, not only from coast to coast in Canada, but in the United States as well, where its products have enormous sales. Its magnificent plant at Peterboro is unquestionably as complete as any in the world. It is notably well equipped with apparatus for the reducing of the cost of production-the very latest economies being utilized in transforming the raw material into the finished article, ready for shipment. Five hundred horse power is required-electric power being transmitted from the Otonabee River, five 270 spindles that run the miles awaymake their binder twine and cordage. Six tons of rope and 15 tons of binder twine is the daily output. The cordage consists of all kinds of manilla and sisal rope, oil-well cables, power transmission rope, rope for hay-fork purposes and slings, and all the multifarious kinds that are used on shipboard. The specialty amongst all the kinds of binder twine the company manufactures is their Royal brand, the splendid qualities of which are so widely known throughout Canada. The factory at Peterboro includes also a complete tar-house, where tar rope, lath and shingle yarn is manu-The company has railway factured. switches running right into their plant. It has, in fact, every facility for expeditiously handling the factory's large daily production.

NEW ROUTE TO THE SOUTHWEST VIA THE Chicago, Milwaukee & St. Paul Rai way.

The Southwest Limited, Chicago to Kansas City, runs via the new Short Line of the Chicago, Milwaukee & St. Paul Railway, and offers a new route to the Southwest, and excellence in service and equipment not obtainable elsewhere. One of the reasons for this is the fact that the Chicago, Milwaukee & St. Paul Railway owns and operates all of the sleeping, dining, library and other cars on these trains. This is the time to go to the Southwest, and this is the way. Descriptive folder free.

THE FARMERS ADVOCATE



on the farm, we don't believe you'd hesitate a day before buying one. Our books about the Empire Way of running the dairy are free. They point the way to bigger profits. Send in your name.

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

ZENOLEUM

Famous OOAL-TAR Carbollo Dip. For general use on live-stock. Send for "Piggles' Troubles' and "Zenoleum Veterinary Advisor" and learn its uses and what prominent stockmen say about it. Books mailed free. All druggists, or one gal, express paid, \$1.50; 5 gal., freight paid, \$6.55. ZENNER DISINFECTANT CO. 113 Bates St., Detroit, Mich.

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,"

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 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 Boay, "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.

Maple Cliff Dairy and Stock Farm. R. REID & CO., PROPS.

TOR SALE: A number of imported Tamworth sows, one of them in pig to Darfield Grandee (imp.); also two boars imported in dam. Two Berkshire boars fit for ervice.

ONTARIO HINTONSURG.

Five Tamworth Boars

READY FOR SERVICE. These boars are well bred and of grand quality. One yearling and 4 under year; sired by Imp. British King. Write at once for price.

C. Hallman BREBLAU, WATERLOO CO., ONT.

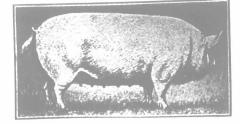
AMWORTHS

30 head from 2 to 5 mos. old, registered. Write for particulars and prices. o D. J. GIBSON, Newcastle, Ontario.

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.

Improved Yorkshires



Over three hundred for sale. The last three years Over three hundred for sale. The last three years our herd has won ninety per cent. of the first prises 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 D. C. FLATT & SON, MILLGROVE, ONT.

GOSSIP.

Bishop W. A. Candler was once advocating a more liberal loosing of the purse strings, and told his audience that several years ago he sent an article to a paper in which he said: "We pray too loud and work too 'little.'' compositor, consciously or unconsciously, perpetrated a little joke, for when the article appeared it read: "We bray too loud and work too little." "I let it go at that," said the Bishop. "The fact is, I believe the printer was right, and I never ventured to correct him.

All who desire to be informed officially concerning the Holstein-Friesian cattle, their history, characteristics, records and development and registration under the fostering care of the Holstein-Friesian Association of America, should address F. L. Houghton, Secretary, Brattleboro, Vt., for a copy of a revised pamphlet recently issued and entitled "Holstein-Friesian Cattle." This pamphlet was compiled with painstaking care and thoroughness by S. Hoxie, Superintendent Advanced Registry, and presents a very strong brief of the claims of the black-and-white Holland Dairy cattle.

COOPER'S JERSEY SALE. A grand success was the auction sale, on May 30th, of T. S. Cooper's imported Jersey cattle, at his Lindon Grove Farm, at Coopersburg, Pa. As a judge and fitter of cattle for show or sale, Mr. Cooper is unsurpassed, and the animals offered on this occasion were in splendid fix; the cows presenting magnificent udders. The attendance was very large, and buyers came from long distances. The 91 head sold, brought \$44,460, an average of \$488. highest price, \$3,600, was made for the cow, Blue Belle, purchased by Howard Willetts, Gedney Farms, White Plains, N. Y. The next highest price, \$2,350, was realized for the cow, Flying Fox's Proclamation; Dr. C. E. Still, Kirkville, Mo., being the purchaser. Six females sold for \$1,000 to \$3,600 each; 32 for \$500 to \$1,000, and 47 at \$400 to \$500 each. Eight of the get of Agatha's Flying Fox, average age nine months, brought an average of \$292; one yearling selling for \$600. Mr. Willetts bought eight head at the sale for a total of \$7,065. Nineteen of the get of Flying Fox sold for an average of \$635.77. Considering the fact that Mr. Cooper offered no highly-priced aged, bull this year, the sale must be considered a phenomenal one.

Buena Vista Farm, the property of John Cousins & Sons, is located a few miles from Harriston, Ont. This firm is very well known as breeders of pure-bred Shorthorn cattle, Oxford sheep and Yorkshire hogs. They still pin their faith to the dairy Shorthorns, having cows in their herd that have produced 14 lbs. butter in a week. Their cows all have the appearance of being heavy milkers. King Cobb, a Nonpareil, bred by Arthur Johnston. Greenwood, heads the herd, and has proved himself a good stock He is a lengthy, deep-flanked getter. bull. The Yorkshires are all from the famous Oak Lodge breeding; Oak Lodge Fame and Oak Lodge Baroness, with Oak Lodge Provost as a sire, have laid the foundation for a choice herd; young sows from the above also being kept as breeders. The Oxford flock numbers 125 head, with Hampton Hero 4th (imp.) at the head, a ram of Hobbs' breeding, and judging from his general make-up, as well as from the quality of the lambs in the flock, he is one of the choicest stock rams we know of in this breed. He is not only a high-class stock getter, but he is a show ram as well, having won champion honors in England and has been a winner of first prizes all over the United States. He is low-down, compact, and especially strong in the bone, with plenty of size. The ewe flock is from imported foundation, mostly Arkell's (England). Imported rams have been used in the flock almost continuously. The flock is in the hands of men that know what they want, and they will have the best.



AND NERVE PILLS WEAK PEOPLE.

AND THOSE TROUBLED WITH

Palpitation, Throbbing or Irregular Beating of the Heart, Dizziness, Shortness of Breath, Distress after Exertion, Smothering Feeling, Spasms or Pain through the Breast and Heart, Morbid Condition of the Mind, Partial Paralysis, Sleeplessness, Nervousness, Anemia, General Debility, After-Effects of Grippe, Loss of Appetite, etc.

Remember Milburn's Heart and Nerve Pills cure the worst cases after other remedies fail.

Laxa-Liver Pills oure Constipation. 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 hargain prices if taken soon. Write C. & J. CARRUTHERS, Cobourg, Ont. Six sows to farrow this

YORKSHIRES. YORKSHIRES. Six sows to farrow this month to imported boars.
Orders booked for pigs at weaning. EGGS—
M. B. and W. H. turkey, \$2.50 per setting. B and W. Rock, B. Orpington, B. Wyandotte, and Rouen duck eggs, \$1. T. J. COLE, Box 188. Bowmanville, Ontario. LARGE YORKSHIRES

GLENBURN HERD—upwards of 100 fine spring pigs, sired by imported Holywell Hewson. Also a few 6 month s'boars. Prices reasonable.

DAVID BARB, Jr., BENFREW,ONT. Chester White Swine between four and five months old; either sex; good bacon type. Sires and dame were prizewinners at Toronto and London fairs. Write or prices.

Sunnyside Stock Farm, Glanworth, Ont.

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Fin SALE 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; pedigrees and safe delivery guaranteed. Address

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YORKSHIRES FOR

From the pioneer herd of the Province of Quebec. Both sexes and all ages. Satisfaction guaranteed on all mail orders. Also Pekin Duck Fggs for sale. \$1.00 a setting, or \$1.75 for two settings. Address,

A. GILMORE & SONS, Athelstan, Que. Railroad stations: Athelstan, N. Y. C.; Huntingdon, G. T. R. PINE GROVE FAR DEND OF LARGE ENGLISH YORKSHIRES,

The oldest established registered herd in America. Having sold all boars and sows that were fit for breeding, we are now booking orders for spring pigs. Having a good number of imported sows and boars, also several choice home-bred sows, we are able to mate pairs and trios no akin. Satisfaction guaranteed in all mail orders. Joseph Featherston Som, Streetsville P. O., Ont. C. P. R. station, Streetsville; G.T. R. station, Clarkson.

SEPASHIRUS AND YURKSHIRUS, To Sale—Boars fit for service; sows in farrow and ready to breed, and younger stock, all of the ideal bacon type, Pairs not akin. JOHN BOYES, Jr., Rosebank Farm. om Churchill. Ont. FOR SALE:

Yorkshires and Holsteins Best type and quality. Young stock constantly on hand, Prices right, R. HONEY, Brickley P. O., instead of Warkworth, REGISTERED SHORTHORN BULL

ready for service; Chester White Boars, ready for service; also Dorset Sheep, various ages. Write to B. H. HARDING, Mapleview Farm, THORNDALE, 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: Address: WILLIAM WILSON, Box 191, Brampton, Ont.

Oak Lodge I

are the recognized type of the ideal bacon hog, and are the profitable kind from a feeder's standpoint. A large number of pigs at different ages now on hand for sale. We can supply high-class exhibition stock. Write for prices.

J. E. BRETHOUR.



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

ESPLEN, FRAME & CO.,

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to use not only the BEST, but the CHEAPEST WOVEN WIRE FENCING.



American Field and Hog Fence.

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Hinge Joints and Tension Curves. om

Any farmer can stretch 300 rods of our American Fence in one day. Don't buy a fence that it takes you all summer to build. If your dealer doesn't handle our fence, write to us. Farmers and railroads from Halifax to Vancouver are using it.

MADE The Canadian Steel and Wire Co., Ltd., HAMILTON. See our exhibits at the Dominion Exposition, Winnipeg. Also Fair at Brandon.

To Any Weak Man I Can't Cure.



I have perfected a new Belt, better and stronger than I have ever made before - a Belt which will transform the weakest, puniest specimen of "half-man" into a perfect cyclone of strength, and I want every man to use it. I want a test case. Therefore I offer \$1,000 in gold to any

weak man who will use this Belt under my direction for four months, and then show by examination of any reputable physician that he is not

cured sound and well. This is especially directed to men who have doctored for years without benefit. I want men with Rheumatism. Pains in the Back, Weak Kidneys, Sciatica, Lumbago, Varicocele, Locomotor Ataxia, Torpid Liver, Indigestion and Dyspepsia, All of these troubles in chronic form I can cure with this new Belt even after all other treatments have failed. To every weak, debilitated man who wears this new Electric Belt I give my attachment WITHOUT CHARGE.

This attachment is made for the purpose of treating all special ailments of men, and assures a cure of all waste of strength and nervous debility. Its current is invigorating and wonderful in power.

If you can, come and see me, and I will show you my new Belt and prove to you that it is a wonderful device. You can feel the glowing current of life that flows into the weakened nerves. I will show you letters from your own neighbors telling how I cured them. I have over 50,000 testimonials in the past 21 years.

Stomach Troub e and Weak Back Cured.

Di. McLaughlin,
Duar Sir: I am delighted with the results obtained from the use of your
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If you are sceptical all I ask is reasonable security for the price of the Belt and you can use it and

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I have a nicely illustrated book which every man should read. I will send it closely sealed free. Consultation is free. If you can call do so.

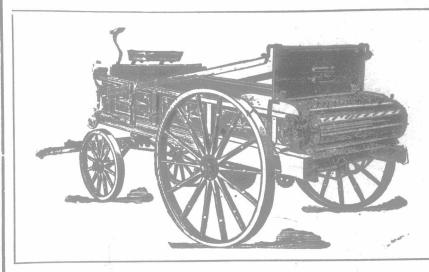
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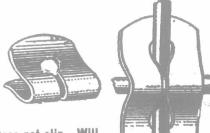
Dear Siy,—The Kemp 20th Century Manure Spreader I bought from you last year is doing all you claimed for it, in all kinds of manure. It not only saves labor, but it distributes the manure so evenly that it covers more ground. I consider the Spreader one of the most essential of farm implements where there is much manure to handle.

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Does not slip. Will not kink the wires.

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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 We also make a splendid line of ORNAMENTAL FENCES and GATES.
Send for catalogue.
Agents wanted.

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The life of any wire fence is the life of its smallest wire. The ideal is made of large (No. 9) hard steel galvanized wire throughout, making it the most durable and the strongest.

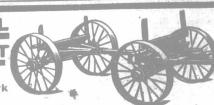
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H. F. ANDERSON & CO., Winnipeg, Agents for Maniboba and the M.-W. T., always carry a full stock of our "Handy Wagons," but to cave time order whosis direct from factory.

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have unique mechanical advantages, including oiling arrangements so well designed as to save half the oil usually required by machines of this kind. The result is that the Melotte takes six or seven times as long to run down as long to run down as cothers, and it has been found necessary to supply a brake. This is now a feature of all Melotte: Cream Separators—and of no others. For close skimming the Melotte is unex-

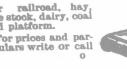
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Standard Scales

For railroad, hay, live stock, dairy, coal and platform. For prices and par ticulars write or cal



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In school, if you have the time to spare from home.
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We have special booklets dealing with this line of work and want to place them in your bands.
When you write, address

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TORONTO, ONT. W. H. Shaw, - President.

About 60/ acres; 10 miles from Hamilton; 35/ acres cleared, 110 uncleared; soil, clay and clay loam, with clay subsoil; watered by creek. Two sets of buildings. This farm is admirably adapted for stock. For prices and terms apply THE

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On Summer Days

and nights you can enjoy to the full the varied entertainment furnished by the

Berliner Gram=0=pho

It will play for you, sing for you or talk for you. Amuse the children with a genuine old-time minstrel show; sing one of the ballads of the home land that bring back pleasant memories to the old folks; steel show; sing one of the ballads of the home land that bring back pleasant memories to the old folks; it will provide music for the young folks to dance to or give the lovers of classical music a selection from one of the masters, played by a master of the instrument.

The Berliner Gram-o-phone reproduces all instruments and the human voice with perfect exactness and purity of tone and note. The only flat disc instrument ever invented and bearing the name of its instrument. There are several worthless imitations offered to the public either "free" or in connection with some "scheme" or other. Who "invented" them is kept secret.

Berliner Records are maroon-colored and will wear ten times as long as any others. There are thousands to choose from, and the genuine have the "dog on the back."

Berliner Gram-o-phones and Records are sold and used the world over by royalty, musicians and by Berliner Gram-o-phones and Records are sold and used the world over by royalty, musicians and by every family that needs an entertainer that is always ready to suit the mood of the moment—grave or every family that needs an entertainer that is always ready to suit the mood of the moment—grave or every family that needs an entertainer and lowest payment plan of "one dollar down and fifty cents a week, or less than seven cents a day"—the simplest and lowest payment plan ever offered. Read the coupon and send it in to-day. You will have entertainment not only for all summer, but at all Read the coupon and send it in to-day. You will have an instrument that is guaranteed for 5 years—the seasons for your family and friends. You will have an instrument that is guaranteed for sale by 1,800 agents in Canada, from any of whom you can get 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.

Go to your nearest agent. If you cannot exchange them conveniently, return direct to us with order, prepaid and free from all charges.

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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
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The BERLINFR 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 clodstream Guards, the Grenadier Guards, Godfrey's, Sousa's cially for the Gram-o-phone), and other famous American and European Bands, Civil (Collary only for the Gram-o-phone), and other famous American and European Bands, Civil (Collary only for the Gram-o-phone), and other famous American and European Bands, Civil (Collary only for the Gram-o-phone), and other famous American and European Bands, Civil (Collary only for the Gram-o-phone), The Bapipes, Clarinet, Piccolo, Flute, etc. The latest Songs, as well as the old-time Bapipes, Clarinet, Piccolo, Flute, etc. The latest Songs, as well as Coon-Songs, Gram-o-phone Commistrels and Comic Ditties. Plays Waltzes, Polkas, Two Step, Schottische, Canada, Limited, 231, Quadrille, Lancers, Jigs and Reels, for dancing—Never tires. 'D' TO-DAY The Berliner Gram-o-phone Company, of Canada, Limited, 2316-19 St. Catherine Street, Montreal, Canada:

Enclosed find one dollar in part payment on the Standard Berliner Gram-o-phone, type A, complete, with 16 inch Japanned concert hon 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. of Canada, Limited,

2315 St. Catherine Street MONTREAL,

Express Office.

F. A. L Also send free of charge the



also add a beauty and attractiveness which wood and plaster fail to gaze.

The expense and annoyance of constant repairing is done away with.

Our could one and raterest you. It's yours for the asking.

THE PEDLAR PEOPLE, Oshawa, Ontario.

SANITARY

is an absolute necessity for the home. It implies pure air, an even distribution of heat, well-ventilated bedrooms, and the absence of dirt and dust. How to secure this by using our Hecla Furnace is described in our booklet, "About Beating," which will be mailed upon request.

Clare Bros. & Co., Limited,

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

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