

**PAGES  
MISSING**

THE SPICE OF LIFE.

"I wish you'd turn to milk," she said. "And save me all this clutter." And Mooley winked the other eye. And turned instead to butt her.

"Did you see a man and a woman drive past here in a trap about an hour ago?" a detective asked Mrs. Blank. "Yes," answered Mrs. Blank. "Ah!" said the detective, "now we're getting on the right track. What kind of a horse was it?" "They were driving so fast I didn't notice that," replied Mrs. Blank. "But the woman had on a Scotch mohair and a jacket of turquoise blue (last year style), stitched lines, a white pique skirt with deep circular flounce, a satin straw hat, tilted and rather flat, trimmed with hydrangeas and loops of pale blue surah, and her hair was done up Pompadour. That's all I had time to see."

A large German woman held up a long line of people at the money-order window in the Boston post office the other day, and all because her memory went back on her. She wanted to send some money to her son, a sailor on a merchant steamer then in foreign waters, but when she presented the application at the window the clerk noticed that the address was lacking. "Well, where do you want to send it?" he asked. "We can't give you the money-order unless you know the name of the place." "Yah, dot's de trouble," she replied. "I didn't pring his letter and I can't remember der name of der town, but it's some place out by China, dot sounds like der noise an automobile makes." "The two clerks looked at each other dubiously. "What kind of a noise does an automobile make?" asked one. "Honk, honk," suggested the other. "Yah, dot's it!" exclaimed the woman. "Honk, Honk, dot's de place." "Fill it in Hong Kong," said the clerk, and she paid over her money with a smile of relief.

TEACHING THE JUDGE SENSE.

An amusing anecdote is told of the celebrated Chief Justice John Marshall. Returning one afternoon from his farm near Richmond, Va., to his home in that city, the hub of his wheel caught on a small sapling growing by the roadside. After striving unsuccessfully for some moments to extricate the wheel, he heard the sound of an axe in the woods, and saw a negro man approaching. Hailing him, he said: "If you will get that axe and cut down this tree, I'll give you a dollar." "I c'n git yer by 'thout no axe, ef dat's all yer want." "Yes, that's all," said the judge. The man simply backed the horse until the wheel was clear of the sapling and then brought the vehicle safely around it. "You don't charge a dollar for that, do you?" asked the astonished chief justice. "No, massa; but it's wuf a dollar to learn some folks sense." The quick-witted darkey got his dollar without further questioning.

Who Bides His Time.

Who bides his time, and day by day Faces defeat full patiently, And lolls a mirthful roundelay, However poor his fortunes be— He will not fail in any quail Of poverty—the paltry dime It will grow golden in his palm, Who bides his time.

Who bides his time—he tastes the sweet Of honey in the saltiest tear; And though he fares with slowest feet, Joy runs to meet him, drawing near; The birds are heralds of his cause; And like a never-ending rhyme, The roadsides bloom in his applause, Who bides his time.

Who bides his time, and fevers not In the hot race that none achieves, Shall wear cool-wreathen laurels, wrought With crimson berries in the leaves; And he shall reign a goodly king, And sway his hand o'er every clime, With peace writ on his signet ring, Who bides his time.

—James Whitcomb Riley.



For Roofing, Siding or Ceiling

POSITIVELY THE BEST AND MOST LASTING COVERING MADE.

Requires no painting. Economical and easy to put on; no previous experience necessary. Absolutely guaranteed. Brand new, clean stock. Bright as a dollar. Sheets are full size. Comes in Corrugated, "V" Crimped, Standing Seam or Plain Flat Sheets. Heavily galvanized on both sides with the most approved galvanizing material that will adhere forever. "Galvanized" means that the iron has been coated with liquid zinc, which makes it absolutely rust and weather-proof; not affected by heat or cold. Makes buildings warmer in Winter and cooler in Summer. Drains perfectly and does not soak. Does not taint rain water. Fire and lightning-proof. Makes your insurance cheaper. Sold direct from our own roofing factory—the largest in the world. Chicago House Wrecking Co. sells more roofing material than any other concern. We sell thousands of squares of "Galvanized Rust-Proof Iron" every week. Used in all climates. For every kind of building.

PAINTED STEEL ROOFING AT \$1.25 PER HUNDRED SQUARE FEET.

Also in stock a full line of painted Steel and Iron Roofing, Siding and Ceiling, all styles at prices from \$1.25 per 100 sq. ft. up. Fill in the coupon below. We will send you samples free of charge together with a vast amount of roofing information. On application we quote

ROOFING SUPPLIES OF EVERY KIND

FREE OUR 500-PAGE CATALOG NO. 645. It is full of information for the shrewd, careful and economical buyer. Lists thousands upon thousands of rare bargains. Price offers that command orders. Millions of dollars' worth of merchandise, bought at Sheriff's, Receivers' and other forced sales, are plainly described in this book. Send coupon below and get a copy free.

FREE BOOK OF PLANS. If you are going to build or improve, we will send you free, our book of plans, containing many illustrations and descriptions of modern residences, farm homes, barns, etc.

FREE BOOK OF BUILDING MATERIAL! It will put you in touch with the wonderful situation in the lumber market. Contains thousands of money saving offers.

FREE SPECIAL FURNITURE CATALOG! Showing Rugs and Linoleum in their natural colors and designs. We save you from 25 to 50 per cent.

We Buy Our Goods at Sheriff's, Receivers' and Manufacturers' Sales

CHICAGO HOUSE WRECKING COMPANY

35th and Iron Streets, Chicago, Ill. We Can Save You Money On Wire and Fencing.

FREE SAMPLE COUPON NO. 645. Kind of building, Size of Roof, If you want Siding or Ceiling give diagram and full dimensions, When do you expect to order, Name, P. O., State.

Advertisement for The Forest City Business and Shorthand College. Includes a 'CATALOGUE' illustration and text: 'FIRST, READ OUR FREE CATALOGUE THEN Decide on the Business College. We ask the privilege of sending you our intensely-interesting, handsomely-illustrated FREE CATALOGUE. In fact, you really owe it to yourself to get a copy and read it thoroughly before you select the Business College to attend.'

Advertisement for Pommel Slickers. Text: 'MADE FOR SERVICE IN THE ROUGHEST WEATHER AND GUARANTEED ABSOLUTELY WATERPROOF. TOWERS FISH BRAND POMMEL SLICKERS. This trade mark and the word TOWER on the buttons distinguish this high grade slicker from the just as good brands.'

Advertisement for Alma Ladies College. Text: 'Alma Ladies College. Has superior advantages in Music, Fine Art, Elocution and Physical Culture, Domestic Science, Business College Courses, Literary and Scientific Courses, also Public School Classes for young girls. Cheerful, wholesome, home-like. For Catalogue, address: "The Registrar," ALMA COLLEGE, St. Thomas, Ont.'

Advertisement for Carey's Roofing. Text: 'CAREY'S ROOFING. Put to the REAL test—the test of time—Carey's Roofing proves to be the ONLY composition Roofing worthy of consideration. NO COMPOSITION ROOFING equals Carey's Flexible Cement Roofing in PROVEN Durability—proven after practical use in all climates and under most trying conditions, covering a period of MANY years. After LONG TIME TESTS responsible users have testified again and again in this publication to the wonderful durability of Carey's Roofing; to the ease of its application (on steep or flat surfaces or over leaky shingles); to the satisfactory protection it affords against moisture, cold, heat and fire. Carefully look into Carey's proposition. Don't be fooled into buying a so-called "cheap roofing," which will not stand the test of time. Printed claims and guarantees won't keep the rain out. Carey's is a Standard Roofing—better than any other in materials used and in method of construction. Carey's Roofing is made to last, as old-time users convincingly testify. Write the factory direct for free sample and booklet, also for Evidence of Carey Durability, prices, and address of nearest distributing point. TORONTO. THE PHILIP CAREY COMPANY. MONTREAL. This picture shows the Dairy Barn of Geo. M. Kellogg, Pleasant Hill, Mo., which is covered with Carey's Roofing.'

Advertisement for The Modern Canner Co. Text: 'Every Grocer, Fruit and Vegetable Grower can save the money lost by overripeness, windfalls, by overloaded market, if he will install a Modern Canner. You should read our CATALOGUE. It's free. SIMPLE—any person can run it. SAFE—cannot explode. PORTABLE—move it anywhere. Comparatively nothing to get out of repair. THE MODERN CANNER CO. Canadian Branch, St. Jacob's, Ont.'

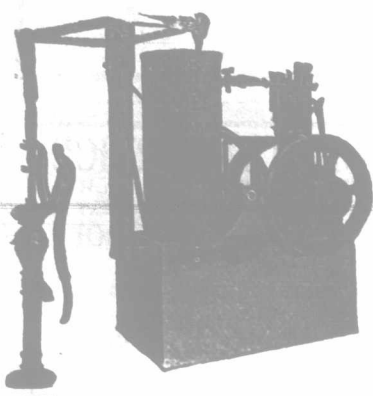
When Writing Advertisers Please Mention this Paper.

**1 + 1 = 2**  
**AND IT'S JUST THAT PLAIN THAT**  
**DE LAVAL CREAM**  
**SEPARATORS**

Are better in every possible way than any other system or Separator. The Reputation is the Recommendation

**HAVE IT DEMONSTRATED**

**The De Laval Separator Company**  
 173-177 William Street MONTREAL



**Make the Farm Pay!**

A FAIRBANKS-MORSE  
 JACK-OF-ALL-TRADES

**Gasoline Engine**

will pump water, saw wood, shell corn, run cream separator; in fact, furnish power for any purpose. Every farmer should have one. Cut out this advertisement and send it to

**The Canadian Fairbanks Co.,**  
 LIMITED.

Montreal, Toronto, St. John, Calgary,  
 Winnipeg, Vancouver.

Please send me (without cost to me) your catalogue E 101 and full information regarding your Gasoline Engine for farm use. F. A.

NAME.....  
 TOWN.....  
 PROVINCE.....

**PANDORA**

**RANGE**

**Train up a girl in the way she should bake, and when she is married she will not depart from it.**

"My mother taught me how to bake, and told me why she always used a McClary Range.

"Now I have a 'Pandora', and, as with mother, my troubles are few. After fire is started, I simply bring thermometer to desired heat and leave the oven in charge of the baking. It's built for faithful service.

"While housewives with other ranges are poking fire and changing dampers, I sit and read the 'Joy of Living'."

**McClary's**

22

London, Toronto, Montreal, Winnipeg, Vancouver, St. John, N.B., Hamilton, Calgary.



**THE SPICE OF LIFE.**

A breezy and unscrupling Western politician applied to the U. S. Secretary of State for a consulship at one of the Chinese ports.

"You may not be aware, Mr. Blank," said the Secretary, "that I never recommend to the President the appointment of a consul unless he speaks the language of the country to which he desires to go. Now, I suppose you do not speak Chinese."

The Westerner grinned cheerfully. "If, Mr. Secretary," said he, "you will ask me a question in Chinese, I shall be happy to answer it."

He got the appointment.

A halt is being called upon the custom of throwing rice at departing brides and bridegrooms. Pullman car conductors are complaining of the trouble it gives them. A unusual simile reminds us that Adam and Eve had no rice thrown at them on their honeymoon, and a physician denounces rice-throwing as dangerous to life. Very recently a bridegroom received a handful of rice in his ear, with the result that he had to spend his honeymoon in a hospital and undergo a serious and dangerous surgical operation. Old shoes are also dangerous missiles, and in the hands of an envious and revengeful rival they may easily prove mortal to the happy man or woman. In fact, it is not clear that rice and shoe throwing is a kind or elegant proceeding.

Courtesy is always proper, and always wise; and those who use uncourteous words cannot tell who will hear them. It is said that years ago, when political strife ran high between Mr. Gladstone and Disraeli—Lord Beaconsfield—the latter was walking one day on the terrace of Buckingham Palace in his easy coat and old slouch hat, when two ladies of a certain age and of most pronounced Gladstonian opinions, entered the gate.

Supposing him to be a keeper or gardener, or something of the sort, they enquired if he would show them over the place, which he at once undertook to do. While they were walking about, they overwhelmed him with questions as to the habits of his master, and one of them finally said:

"Do you think you could manage to get us a sight of the old beast himself?"

"Madam," said Lord Beaconsfield, "the old beast has the honor to wait upon you now."

The ladies fled. They had learned a lesson which ought to last them for a lifetime. We may learn it in a less mortifying school by reading the first epistle of Peter, third chapter and eighth verse.

**AN UNSELFISH HORSE.**

A doctor and a clergyman were exercising their horses one morning in a country lane when an argument arose between them as to which of the animals possessed the sweeter disposition.

"I'll wager that if their respective tempers could be tried," said the doctor, "mine would be far away the better."

"That's all nonsense," retorted the clergyman. "My mare has the best temper of any horse in the neighborhood."

"Well, here's a stone hedge; let us try their leaping capabilities," suggested the doctor.

"Right you are," agreed his friend.

The doctor's hunter quietly refused to jump, although put at it again and again. The clergyman's little mare also refused, but at the same time put back her ears and exhibited considerable ill-temper. When repeatedly urged to jump she finally accomplished a clever back jumping feat, which threw her master over the hedge. Strange to relate, the reverend gentleman was quite unhurt, and, scrambling to his feet, commenced to scrape the mud from his broadcloth, while the doctor laughingly remarked:

"Perhaps you are convinced now that any animal has a better disposition than yours?"

"Not at all," replied the clergyman. "My mare is such an unselfish little brute that, although unable to take the fence herself, she had no desire to keep me from going over. In fact, she facilitated the mode of my transit, while your horse displayed a dog-in-the-manger temperament by not going himself and not allowing you to go either."

**"EASTLAKE"**

**STEEL SHINGLES**

**FIRE, LIGHTNING, RUST AND STORM PROOF**

SIMCOE, ONT., April 9th, 1906.  
 "We have handled your 'Eastlake' Shingles for nearly a quarter of a century. They have been on the Court House, Free Library, and other public buildings in this town for 18 years. We have used very large quantities during the past 25 years, and they have always given first-class satisfaction, and have never required any repairs."  
 (Signed) MADDEX BROS.,  
 Tinsmiths and Hardware Merchants.

Write for Booklet.  
**The Metallic Roofing Co.,**  
 Limited, Manufacturers  
**TORONTO & WINNIPEG**  
 49

*The New Model* **Marlin**  
 No. 24

**Repeating Shotgun**

This new 6-shot model is the simplest, surest, and fastest 12-gauge repeater made. It has the solid top, side ejection and double extractors—special Marlin features of comfort and convenience. The closed-in breech keeps the action clean and the shells dry—keeps out rain, snow, dirt, leaves twigs and sand.

The new take-down construction allows you to take gun apart in ten seconds for cleaning or packing, yet the joint is always as firm and rigid as in a solid frame, non-take-down gun. The fat forearm fits your hand, and helps quick operation.

The full choked guns are guaranteed close-shooting, hard-hitting guns, and are unequalled for ducks, geese, foxes and all long-range work.

A circular giving large illustration, with full description of this handsome new gun, sent free on request or with complete 136-page catalog for 3 stamps.

**The Marlin Firearms Co.,**  
 113 Willow Street, NEW HAVEN, CONN.

A rural manufacturer duns his subscribers in the following novel manner: "All persons knowing themselves indebted to this concern are requested to call and settle. All these indebted to this concern and not knowing it, are requested to call and find out. Those knowing themselves to be indebted, and not wishing to call, are requested to stay at one place long enough for us to reach them."

**Black Watch**

**"Biggest and Best"**

Plug  
**Chewing Tobacco**

2012

# The Farmer's Advocate and Home Magazine

Persevere and  
Succeed.

Established  
1866.

Vol. XLIII.

LONDON, ONTARIO, OCTOBER 1, 1903.

No. 836.

## EDITORIAL

### TARIFF MUST NOT BE RAISED.

In view of the strong and well-organized influence exerted by the Canadian Manufacturers' Association for increased tariff protection generally, and particularly just now on behalf of the woollen and cotton industries, it behooves the agricultural class to examine very fully into the tariff question, and inform itself as to the probable effect of increase in tariff schedules that are already high enough. The duty on woollen goods entering Canada for ordinary use or wear, now ranges from 22½ up to 35 per cent, while the tariff on cotton goods is also considerable, varying according to the particular line of goods. In both woollens and cottons there are some materials admitted at less than the usual rates of duty when needed by manufacturers for conversion into more highly-finished products. In every reasonable way, therefore, textile manufacturing is assisted and promoted by our tariff; yet, so far from being satisfied, these industries cry lustily for increased protection.

There is no doubt that Canadian manufacturers have come to exaggerate the value of a tariff to themselves. They overlook the fact that while under a system of lower tariff they would receive less for their products, they would, on the other hand, be able to produce much more economically, and, moreover, the stimulus given to the basic industries of the country (agriculture, fishing, lumbering and mining) by decreased cost of living and of material, consequent upon tariff reduction, would provide a far larger and more prosperous home market for the manufacturer to exploit. The familiar argument that the Canadian farmer can be made prosperous by bolstering the Canadian manufacturer, while it contains some degree of force, is very much like putting the cart before the horse. The way to make the manufacturer prosperous is to make the farmer prosperous, and the way to do that is gradually to reduce the tariff to a minimum. The way to build a house is to lay the foundation first. A prosperous agriculture is the foundation on which Canadian development must be reared, though we have been and are willing to make reasonable sacrifices for the sake of building up a self-reliant country, with diversified industries and occupations.

The important question that presents itself is, How high a tariff on manufactured goods should we maintain. Extreme protectionists say put it high enough to prevent all imports of foreign goods that could be produced in Canada. Some would go the length of shutting out Southern vegetables, in order to encourage a hothouse industry in Canada, thus compelling consumers to pay for vegetables three or four times what they are worth. The out-and-out free-trader says throw down all tariff bars, build up a prosperous agriculture, and decrease the cost of living—and, consequently, labor—to a minimum, thereby affording a favorable field to manufacturing enterprise, without artificial means of limiting supply and advancing prices. Our own view was admirably expressed by a farmer the other day, who urged that the tariff should be so adjusted as to produce the maximum of customs revenue, which is a point somewhat lower than the present tariff schedule. Any established industry, he said, which cannot be made to pay under such degree of protection as is incidentally afforded by a revenue tariff, the country is better without. The whistle costs more than it is worth.

We commend this view to those who have been agitating for an increase in the woollen duties, which are already so high as to increase the cost

of woollen clothing from 25 to 40 per cent over and above a natural competitive rate. We entertain the kindest feelings towards the woollen industry, but if it cannot get along without this much protection, we had better improve its relative position by reducing the protection on some other lines of goods.

However, when the business depression has passed, the woollen industry will naturally revive. What most Canadian manufacturing businesses need is a little less protection and a little more self-reliance and resource. When the farmer finds that his business does not pay, he has to find some other way to make it pay. When he could no longer make a profit growing barley, he turned to butter and cheese. When the manufacturer finds himself in a similar predicament, he hies him to the Government to pray for more protection, thereby seeking further to increase the handicap on agriculture, and, in fact, on all other lines of business. This sort of thing must stop, else it will eventually lead us to the fiscal folly of our Republican neighbors. It is time to turn the tables and begin gradually reducing the degree of protection to manufacturing interests, so that each industry may stand on its own feet, and those that are not well managed or not well adapted to the country, may be gradually re-organized or weeded out. In the end, this will redound to the advantage, not only of the farmer, but of the country as a whole. Favoritism has had a long day. Let the farmer's and the consumer's voice be heard.

### TECHNICAL EDUCATION NEEDED.

Though unable to agree with the Canadian Manufacturers' Association in its resolution calling for higher tariff protection to Canadian industry, we do most heartily endorse and approve their demand for a general system of technical education, to the end that our artisans and captains of industry may be trained to a greater degree of proficiency. As President Roosevelt has very truly said, the keenest competition which American (and likewise Canadian) industry has to meet is not from the cheap-labor countries of Asia, but from those countries of the highest degree of industrial efficiency—Germany, for instance.

Urban as well as rural school education requires revolutionizing, and it must commence in the common school; so that, from the very beginning of his education, the manual and intellectual faculties of the child may be developed in consonance. School-gardening and nature study, manual training and, probably, domestic science, must be introduced into the lower forms of the public school. In the rural school, the emphasis will naturally fall on gardening and nature study; in town and city schools, manual training may properly receive the greater degree of attention.

With such a foundation laid in the common schools, the High Schools and colleges may continue the evolution of the child's faculties by weaving principles of agricultural science into the rural High-school curriculum; while in the city schools, those pupils with a bent for arts and trades may be offered a course of instruction that will develop them into proficient workmen, instead of heading them off from the occupations for which they were cut out, by stuffing them with an academic and purely bookish education, and finally graduating them into second or third-class teachers, doctors and lawyers. The problem of technical education is indeed a large and pressing one, calling for immediate attention and action, and the vote of \$5,000 offered by the Canadian Manufacturers' Association towards the expense of investigating and reporting upon the matter, is an act of generosity the fruits of which will reward the donors and their successors manifold.

### JUDGES AND JUDGING.

The principal autumn fairs are over for another year, and judges of the live-stock classes have been subjected to the usual amount of criticism of their work, in some cases favorably, in others otherwise. The sympathies of those who have had experience in this capacity are with the men who, with honest purpose, accept the responsibility of the position, submitting themselves to possible adverse criticism, while doing the work to the best of their ability, according to the merits of the animals brought before them for comparison and placing. And we are glad to believe that, with but very few exceptions, the work is, in this country, undertaken and prosecuted in the spirit of manly fairness and impartiality. Moreover, we are satisfied, from extended experience and observation, that in no other country is more capable, conscientious and impartial adjudication the rule than in Canada.

The statement that we have seen more glaring misjudgment performed by officiating judges at the Royal Show of England, and at principal fairs in the United States, than ever we have observed in Canada, may surprise some, but it is, nevertheless, our candid opinion. And just here we may state we are proud to believe that in no country is a higher sense of personal honor and fairness entertained by stockmen and farmers generally, and by judges particularly, than in our own Dominion. Nevertheless, we find the usual crop of complaints after the fairs each year, regarding alleged improper, incapable or unfair judging in one or more classes, and, we regret to say, in some instances, with apparently good reason for censure. While it may be possible that, occasionally, and, let us hope, rarely, judicial authority is entrusted to a man so devoid of principle as to be capable of prostituting his judgment and his honor in return for the influence of an exhibitor in securing his appointment to the position of judge of the class in which the exhibitor is interested, we are glad to believe that such instances are few and far between, and that the cause for complaint, where well founded, is more generally due to incompetence, weakness of character, lack of knowledge of the approved type of the classes of stock assigned him, or want of confidence in his own judgment on the part of the man appointed. And if any of these are present, it is not strange that mistakes are made, when we reflect that even the most experienced and capable of judges are liable to occasional lapses in rating large and close classes. The important point, therefore, to be observed and guarded is the appointment of only capable men, experienced in breeding or handling the breeds or classes of stock they are invited to pass judgment upon. And, from observation and report, there is, we regret to say, too good reason to conclude that, in some instances, in recent years, too little consideration has been given to the question of the character and qualifications of men nominated or appointed to the position, even for the larger and more important exhibitions in this country, while not a few complaints have been made of the general work of some of those appointed to officiate at local fairs, where, to save expense, one man, of limited experience and ability, is sometimes entrusted with the judging of several classes of stock, if not of the whole live-stock department, from horses to swine.

It is difficult to conceive of a person conscious of unfitness for the work consenting to accept so important and responsible a position as deciding on the merits of animals on which their owners may have spent much money and a whole year's work in their fitting and preparation, and who, from experience and training in the handling of the



**CLYDESDALE JUDGING AT TORONTO.**

Editor "The Farmer's Advocate":  
I have read with interest and, I must confess, a good deal of surprise, your criticisms on Mr. Jas. Weir's awards in the different classes of Clydesdales at the Canadian National Exhibition. You seem to think that the judge should follow the same stamp of horses right through, no matter whether they are set on a right foundation or not. A Clydesdale may be as round as a barrel (as you say), and have a fine arched neck, but than won't please an Old Country judge. Why not begin at the foundation? A Clydesdale, to begin with, must be right on the ground; he must have good open feet and well-sprung pasterns, otherwise he will be like the house built on the sand—he will not stand the everyday tear and wear of work. You are most severe upon Mr. Weir on his award of the male championship. I am quite sure that if Sir Marcus and Landsdowne were put up to public auction to-day in the Old Country, public opinion would most emphatically support Mr. Weir's award.

I have known Mr. Weir for a lifetime. He has acted as a judge of Clydesdales for at least thirty years, and to-day his services as a judge are in such requisition at the different shows that he is quite unable to accept them. This of itself is proof-positive that the breeders have implicit confidence in him as a judge.

Mr. Weir did not come to Canada to judge the exhibitors at the Toronto Exhibition; he came to give his awards to the various Clydesdales placed before him, and I am proud to think that my old friend has as much Scotch pluck within him as to give his awards according to his judgment, irrespective of anonymous letters or of your so-called adverse criticisms from the grand-stand.

I am quite sure I am expressing the sentiments of the exhibitors at Toronto, and also of all the breeders and lovers of Clydesdales in the Old Country, when I say, "Long may Mr. Weir continue to be in the future, as he has so worthily been in the past, a breeder and judge of our favorite Clydesdale."  
SCOTSMAN.  
Brant Co., Ont.

**WEANING FOALS.**

Foals, as a rule, had better be weaned at five to six months old. They should be used to being kept in a box stall with the dam part of each day for some time before weaning, and, while the mare is tied, some chopped oats and bran kept in a box or manger for the foal to nibble at. If the mare is needed for work, she may be returned to the foal twice or three times a day, and then less frequently each day, thus drying her gradually, or, as some prefer, the foal may be weaned by taking it away from its dam at once, for good and all, provided it has previously learned to eat and drink, in which case the mare should be kept far enough away to prevent her hearing the foal call, and milked twice a day at first, and later once a day, to avoid trouble from mam-

continued through the winter, the amount of grain and other feed being gradually increased as the foal grows older. Attention should be given to his hoofs, which will be liable to grow long and unshapely unless trimmed and rasped occasionally to keep them in good shape.

**LIVE STOCK.**

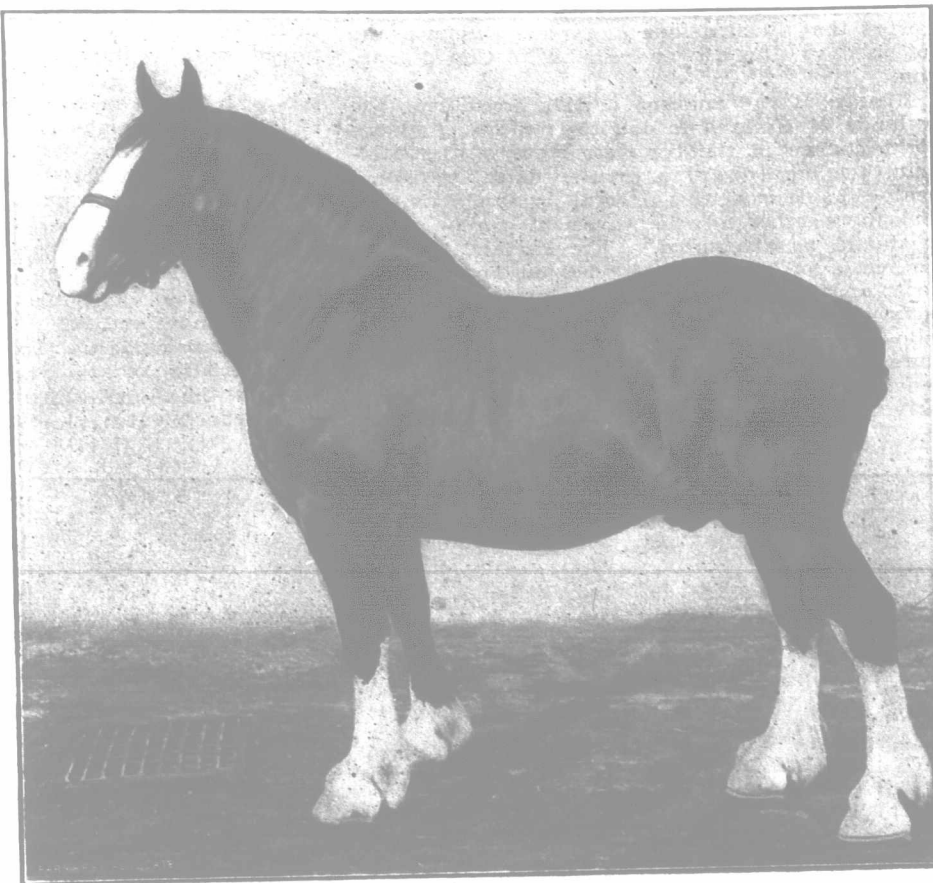
**SPECIALLY-TRAINED JUDGES.**

Ontario Farmers' Institute representatives have decided that something should be done to guarantee satisfactory judges at the live-stock exhibitions. The something is said to be an examination for those who feel qualified to act in that capacity, the test to be conducted by Professor Day, of the Ontario Agricultural College. Will such an examination render aspirants capable of passing judgment that will meet with the approval of even the majority of exhibitors, or of those who are interested in the placing of the ribbons? That it would be a move in the right direction, seems probable. The more training under expert tutelage, and the greater uniformity resulting in show-ring awards, the better for all concerned. But before reasonable satisfaction can be guaranteed, this uniformity of ideal and type must go beyond the men who pass judgment on the entries. The breeders must be acquainted with the breed characteristics and the particular type of the breed that is considered by expert judges to be best suited to conditions, and to the objects for which the animals are reared. Ideals arrived at, the next thing is to reproduce them in the living animal, and this is a perennial problem that taxes the most skillful conjurer with types. Until uniformity of type in the different breeds of the various classes of stock is agreed upon, difference of opinion is bound to exist at stock shows; and even when all breeders and exhibitors have common ideals, there will be room for difference of opinion in rating the candidates that approximate it.

It must be recognized, too, that absolute adherence to an arbitrary standard on the part of all its breeders might hamper the cause of stock improvement. Who knows, peradventure, just what is the best type for a purpose? Many a stock-breeder who departed from orthodox standards has proven a true friend of his breed by demonstrating a type of greater value and usefulness. Out of the chaos of conflicting opinions our highest ideals gradually evolve. However, it is well for every judge and breeder to be fully cognizant of what is the latest and best to date. And in this regard there is admittedly room for further improvement.

One breeder of Clydesdale horses selects the strong, rugged type, while a neighbor decides that the finer-boned, compact horse is the best; one Shorthorn man claims that the massive animal that develops into the greatest number of pounds of beef in the shortest time is the one he wants, while his brother breeder desires a strong beef type, with fairly-developed milking propensities; an enthusiast with Yorkshire hogs agrees that, to be in the front ranks, he must select the bacon type, but his fellow breeder chooses a type that he considers develops more rapidly, and makes greater returns in dollars and cents for the food consumed. Under such conditions, how can a judge please the mass? As a rule, the awards made by a recognized, competent judge are accepted by exhibitors without protest, but not infrequently the discussion at the ringside shows the trend of feeling among the prominent breeders, who, perhaps, know as much about the classes in question as the judge does.

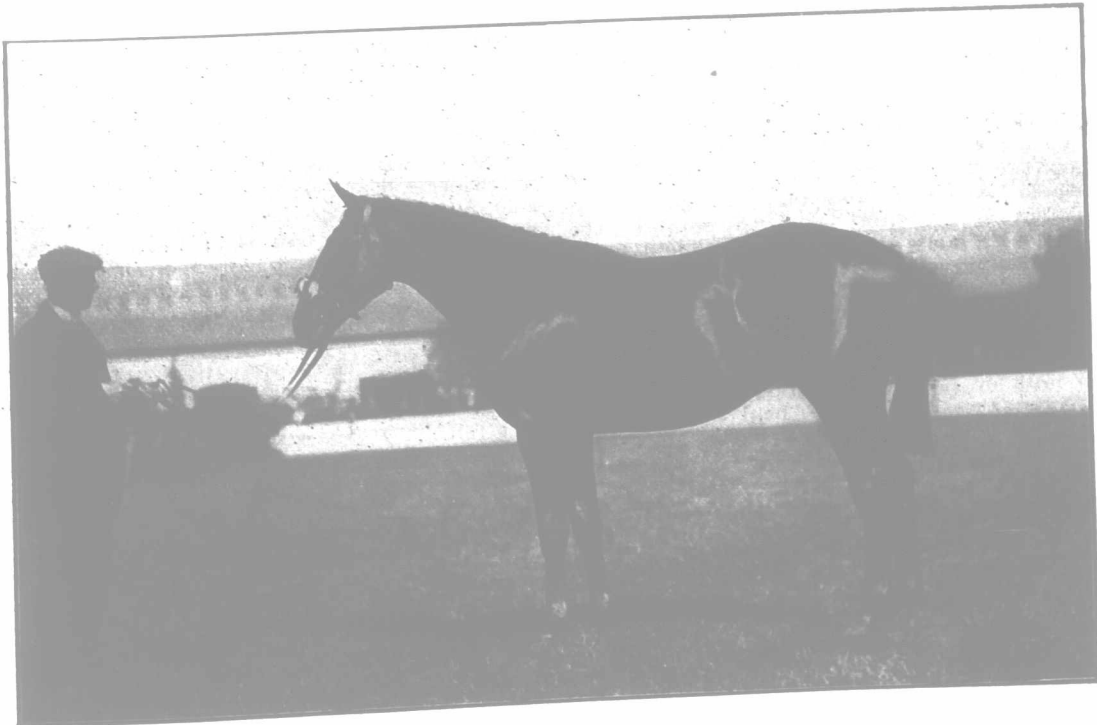
By all means train the judges, and if need be, have them stand examination. But, in addition, nothing must be left undone that will result in the development of greater uniformity of type among the breeders. To this end, agricultural colleges lend their best services not only in training regular students, but also those who attend the winter short courses in judging. To this end, the exhibitions themselves have contributed immensely, as is apparent to those who have watched for a generation or so the gradual approach towards uniformity in type. Exhibitions, however, are not perfect, being but human institutions, and it is unreasonable to expect that expert judging will be secured at all the local exhibitions in the countryside; but, in the main, steady progress in judicial knowledge and efficiency is registered from year to year. If an examination of judges will do anything to promote that improvement, well and good. The examination, if adopted, however, should be but the conclusion of a special course of training.



Sir Marcus (7790) (imp.).

Clydesdale stallion; bay; foaled 1903. Grand champion, Toronto and Chicago, 1907; first at Toronto, and champion at Western Fair, London, 1908. Imported and owned by Graham-Renfrew Co., Ltd., Bedford Park, Ont. Sire, Sir Simon, by Sir Everard.

mitis, till she is sufficiently dry to be safe. If there are two foals on the farm to be weaned, it is better to keep them together for company, as one is likely to worry from loneliness. After the fly season is over, it is good practice to allow the foal the run of a yard or paddock daily for exercise, and it should be fed regularly a fairly liberal ration of a mixture of chopped oats and bran, and, if available, a carrot or two, in addition to what good sweet clover hay it will clean up between meals. This treatment should be



Redshank.

Champion Hunter, Dublin Horse Show, 1908.

## CIRCUIT BREEDING OF MILKING SHORTHORNS

Editor "The Farmer's Advocate":

Since 1894, the writer, in connection with Prof. W. M. Hays, has had under consideration the problem of fixing or redeeming the milking qualities in Shorthorn cattle. The movement has slowly gathered strength, until, in the year 1897, it was put in formal shape through aid given by the United States Department of Agriculture, Bureau of Animal Industry. The plan is now formulated, and well under way.

It has been a more or less tedious problem to organize, owing to the wide distribution of the best cattle, and also owing to the fact that it is very difficult, at the present time, to find sires which are known to possess strong milking qualities. The methods employed in this work were as follows:

A thorough canvass of the State of Minnesota was made during the year 1907, and all promising Shorthorn cows were located. A personal inspection of each herd of promise was made by a representative of the Experiment Station. It was made a point to visit the herds at milking time, or at least at such a time that the representative could ascertain accurately the amount of milk given by different animals in the herd, and also something of the method of managing the herd.

From the records and reports thus obtained, eight or ten herds were selected as being good enough foundation stock for an experiment in animal breeding, which is probably of national importance. The eight or ten herds selected were scattered in various parts of the State, making the work of organizing more or less difficult. It was stipulated that no herd would be included which did not pass the tuberculin test. As a consequence, only five or six herds were eligible when the time came for organizing. The men who owned or were interested in the herds that passed the test were called together at the Minnesota Station in December, 1907, and organized into a Minnesota Co-operative Circuit Ass'n. for breeding Shorthorn cattle, with a President, Secretary and Treasurer. The President of the Association, together with the Professor of Animal Husbandry of the Minnesota Agricultural College, and the Animal Husbandman of the United States Department of Agriculture, form the Circuit Council, and a Circuit Superintendent is employed who has general supervision over the feeding and management of each herd in the circuit. He also keeps the milk and butter-fat records, and approximates the feed records, dealing with the members of the Association, and also with the Advisory Board.

The plan followed is to select carefully such individuals as possess the milking form and quality to a considerable extent. These cattle are grouped, stabled, and fed for milk production, largely. All cows must be milked, and a three-days' record per month secured by the Superintendent. This record includes the pounds of milk and the per cent. of butter-fat. Only cows which conform to a certain standard will be retained in the Circuit. So far, no distinction has been made between the Bates-bred and the Scotch-topped cattle, though the best milkers are usually found among the Bates-bred stock.

We are working only with animals registered in the American Shorthorn Herdbook. Special attention is given to securing sires that come from only milking strains. In fact, the strain of animals which we expect to develop will be built upon the performance of the individuals in each herd, and so far as possible upon the record of their ancestors. All records are under the supervision of the Circuit Superintendent, who is responsible to the Department of Agriculture and the State Experiment Station. For the time being, it may be necessary to sacrifice the beef-making qualities of the animals, in order to establish fully the milk yield, which we regard as the important consideration.

While the project appears, on the face of it, to be a movement toward developing the Shorthorn breed of cattle, that matter is one of secondary importance in the minds of the originators of the movement. The real experiment is to determine whether or not it is possible to organize a number of farmers and stock breeders in an effort to breed in one community or locality, or even one State, certain breeds of animals which have great public utility. I believe that any other breeds of stock that are valuable for certain localities can be just as well organized on the circuit plan, and to great mutual advantage. I believe that it is through such steps that the people of the United States and Canada will be able to develop the strains of stock which are more or less locally adapted, just as the people in Herefordshire, Devon, or Shropshire, have developed their valuable strains of animals in restricted localities.

There are many points of interest in connection with this work, which could be brought out, but I fear that I have already burdened you with too many details, and for those who desire further information, I would refer them to an article in the annual report of the American Breeders' Association, which gives a full description of the work, together with the articles of organization. This book can be obtained from

the American Breeders' Association, Washington, D. C., by becoming a member of the Association, which costs only two dollars. The volume is, in itself, well worth the price of membership.

ANDREW BOSS.

Minnesota Experiment Station.

## TRUE TYPE OF THE HOLSTEIN.

Considerable public comment appearing in the agricultural press upon the type of Holstein-Friesian cattle is very properly directing attention to the subject of the true type of the breed.

The breeder who, for one moment, in his pursuit of higher fat percentage in the milk, forgets type, is doing incalculable damage to the future of the breed.

The true type of the breed is very accurately delineated in the scale of points. It is to be regretted that illustrations of typical specimens are not used to illustrate and emphasize this description.

Change of environment of this breed from the lowlands of Holland is doubtless effecting a very slight change in the bony structure of the Holstein, tending toward a greater finish or refinement. Aside from this natural process, it is very doubtful whether any improvement can be made, or should be attempted. The Holland type is the result of centuries of selection and environment, and it has distinguished these cattle in all parts of the world. With it has come the marvellous and profitable production or yield, the characteristic tendencies of powerful digestion and perfect assimilation of food. These characteristics, derived from the Holstein, have been important

and the weight of the two-year-old bull, Oppendoes 7th, is 1,597 pounds. The weight of the imported cow, Texelaar, is 1,560 pounds. Lady Midwoud, 1,620 pounds; the four-year-old heifer, Oppendoes 3rd, 1,495 pounds; the three-year-old heifer, Texelaar 5th, 1,500 pounds; the two-year-old heifer, Texelaar 8th, 1,290 pounds; the yearling heifer, Zuider Zee 5th, 900 pounds; the bull calf, Duke of Belmont, nine months old, 710 lbs., and the heifer calf, Midwoud 8th, nine months old, 635 pounds—all raised in the ordinary way, without forcing, the young animals running in pasture from May until November.

Burton W. Potter, in 1906, published the results of his investigations as to the weight of sixty large-record cows, tested under the present Advanced Registry system, 1894 to 1906.

Mr. Potter summarizes thus: "Of the sixty cows, only thirteen weigh more than 1,500 pounds each, and only twenty-seven surpass the 1,400-pound mark. Only nine weigh less than 1,200 pounds, and the average weight of the whole number is 1,383 pounds, etc. Of the twenty-five bulls, not one weighs less than 1,800 pounds, and only five less than 2,000 pounds. Only three weigh more than 2,400 pounds, and the average weight of the whole number is 2,164 pounds."

Mr. S. Hoxie, in the pamphlet, "Holstein-Friesian Cattle," (1905), writing upon the size of cows, states: "In ordinary milking condition, at full age, they range in weight from 1,000 to 1,500 pounds."

With large size as the recognized predominant characteristic of the breed, aside from their beautiful black-and-white color markings in perfectly defined patches or spots, the next general

definition relates to the general conformation of the animal. There are three definite types, described as the milk-and-beef form, the milk form, and the beef-and-milk form.

The average form of this breed, and that towards which conscientious breeders are directing their efforts to maintain and improve, is the milk-and-beef form.

Mr. S. Hoxie thus admirably refers to the milk-and-beef type of the breed: "It is especially strong in all vital particulars. The bones are fine, compared with size, and the chine broad and strong, compared with the high and sharp chine of the extreme milk form. The loin and hips are broad and smooth, and the rump high and level, compared with the angularity usually shown in the milk form. The twist is roomy, and the

thighs and hocks well apart. Passing forward, the shoulders are smoother and more compact than in the milk form, but of lighter weight than in the beef form. The brisket is not so wide and low as in the beef form, and the chest is not so deep, but the width of the beef form through at the heart is closely retained. In the milk form, the abdomen is usually swung low, and the ribs are steep; but in the milk-and-beef form the ribs are wider sprung, and the abdomen more trimly held up, though no less capacious. The general appearance of the bull is strongly masculine, but that of the cow is no less feminine than in the milk form."

It may be further emphasized that the milk-and-beef form describes a cow of the wedge form, with shoulders moderately thick, deep and broad, crops well filled, barrel well rounded, loin and hips broad and full, and quarters straight, wide and full.

To this form of these cattle is due their extraordinary constitutional vigor or vital force, and it affects all their relations to their food, care and productions.

The future of the breed will be greatly endangered by those who, from one consideration or another, the combination of pedigrees to attain large average records or fat percentages, or by neglect of proper feed and care in the early life of the animal, are led to the mating of animals of other than those of large size, and possessing the milk-and-beef form. Neither the breeds of the Channel Islands nor the Ayrshire breed possess the form even remotely.

Bartleboro, Vt.

F. L. HOUGHTON.



Mina Princess.

Two-year-old Shorthorn heifer. First prize, senior champion, and reserve grand champion female, Canadian National Exhibition, Toronto, 1908. Owned and exhibited by J. A. Watt, Salem, Ont.

factors in the foundation stock of the Shorthorn and Ayrshire breeds, and of many of the Continental offshoots.

In America, it was the Holland type that, by its productive power, directed the attention of agriculturists towards this breed, and it is safe to assert that an examination of the great majority of remarkable yields will show, to those having means of access to photographs or descriptions, the close adherence to the Holland type in all these wonderful animals. Large size in the Holstein is the first thing to impress the casual observer, and its importance should never be disregarded.

In defining pure-bred Holstein cattle, this fact was duly set forth by the founders of the Herdbook Association, in these words, which should never be forgotten, no matter what may be the yield in milk or its fat percentage, viz.: "Pure-bred Holstein-Friesian shall be held to mean and refer to only those large, improved black-and-white cattle, etc." (Art. 4, Sec. 5, By-laws of H.-F. A. of A.)

Scientific investigation in this country, particularly in Wisconsin, has confirmed the wisdom of the early breeders in thus defining the type of the breed as "large," for the large cow of any breed is uniformly the more profitable.

An idea of the size of animals of this breed, at the time of Mr. Cheney's first importations, may be gained from the following quotation (Vol. 2, Holstein H.-B., page 19):

"The bull, Van Tromp, imported in the womb of Texelaar, is now six years old, and his girth is 8 feet 5 inches; length, 9 feet 2 inches; height, 5 feet 2 inches; weight, 2,720 pounds."

**KEEP MORE SHEEP.**

The constant demand and high market prices at present and for some time past prevailing for lambs and mutton, certainly makes the raising and feeding of sheep one of the most profitable branches of farming in Canada, taking into consideration comparative cost of production in labor, food and cash outlay, a statement which, judging from the scarcity of sheep in this country, few farmers appear to accept, though it challenges successful contradiction. Sheep will thrive and grow wool and mutton on pasturage on which cattle or other stock would fall or starve. Sheep help to keep the farm clean by eating weeds that other stock will not. In summer, sheep require practically no attendance, and in winter, an average of an hour each day of a man's time is sufficient to supply the wants of a flock of fifty sheep to keep them in thrifty condition, while, if fed for the meat market, weight may be added at considerably less cost of food and labor than in the case of any other class of stock, and the product, as a rule, sells for a higher price per pound than any other meat, while the fleece—an annual crop which no other stock produces—generally sells for nearly enough to pay for the winter's keep of the animal. The winter quarters of a sheep, as a rule, require cleaning out not more than twice during the winter, and, with occasional fresh bedding, the manure accumulated is of first-class value as a soil fertilizer. There is room on the farms of this country for many times the number of sheep now kept, without seriously lessening the crop acreage or the number of other stock maintained. There is no country in which sheep are less liable to disease of any sort than in Canada, and the complaint that dogs are a menace to sheep-raising, applies with no more force here than in other countries. Even in England, where sheep are many times more numerous to the square mile than here, dogs are in evidence in the same relation, and do damage in proportion, but farmers there do not abandon sheep-raising on that account. There are many flockmasters in this country who have kept large flocks for twenty to forty years without any serious loss from dogs, and, with reasonable caution, there is comparatively little danger of loss from that source.

Owing to the present temporary quarantine of thirty days imposed by the United States against sheep from Canada, trade with that country, which has been our best market for breeding stock, is being checked for a time, but there is every reason to believe that it will be only for a comparatively short time, as our sheep are needed for that market, and are popular with breeders and feeders in that country on account of their healthfulness and thrift, and the present is an uncommonly favorable opportunity for Canadian farmers to found a flock or add to existing flocks, as most of the breeders of pure-bred sheep are heavily stocked, and are prepared to dispose of surplus stock at moderate prices, as our advertising columns indicate. Those who buy early in the season will have the advantage of first choice, which may mean a good deal in some cases. Farmers who have grade flocks will have a good chance this fall to secure a good pure-bred ram to mate with their ewes, and may add a few pure-bred ewes to form the foundation of a pedigree flock which will in a few years replace the grades and prove a profitable investment.

**THE FARM.**

**THE WHEAT FIELDS OF THE PRESENT AND FUTURE.**

The wheat-growing country on this continent is extending northward. In 1890, the United States was producing eighteen bushels of wheat to Canada's one. Now the ratio is six to one. Within the next quarter of a century, the available wheat-growing land of the Canadian Northwest will be taken up—not occupied, perhaps, but no longer a part of the public domain. We have vast wheat-growing areas in this country yet, and the next twenty-five years will not witness their entire appropriation; but within that time, at the present rate of increase in acreage, as much land as can be safely put to the crop will be growing wheat. This continent is approaching the maximum, so far as acreage is concerned.

In South America, the wheat-growing areas lie between the 30th and 40th degrees of South latitude, chiefly in the Argentine Republic, though Uruguay, and, to some small extent, Brazil and Chili, are exporters of wheat. The Argentine came into world prominence in 1890, by producing a thirty-million-bushel wheat crop. Previous to that year flour had been imported from the States. In 1900 the crop was estimated at 105,000,000 bushels. Since that year it has fluctuated somewhat with, however, a good increase on the whole. In 1901 the crop produced amounted to 156,000,000 bushels. Wheat growing is in a backward condition in the country. Little time is spent in preparing the land, and, as a result, acre yields are low and decreasing. Some improvements in

farming methods are being introduced, but it will take a good long time before new ideas can be worked into general adoption. The Argentine may increase her wheat-producing acreage to some considerable extent still, and has plenty of scope for increasing the acre yield and quality of the product.

In Europe, the largest wheat-producer, of course, is Russia. Russia, in 1907, produced a crop of 455,000,000 bushels. This was less than the average yield, the crop for several years previous standing over 550,000,000 bushels. France comes second, with a crop, for the same year, of 375,000,000 bushels; Austria-Hungary third, with 185,000,000; Italy fourth, with 178,000,000, and Germany a modest fifth with 128,000,000 bushels. Then Spain drops in with an even 100,000,000, and Great Britain heads the list of smaller wheat-producers with a total of about 53,000,000 bushels.

Coming to Asia, the British Indian Empire, with a yield running annually well over the 300,000,000 mark, heads the list. Asiatic Russia, in 1907, produced 56,000,000 bushels of wheat. Turkey and Japan supply the remainder required to bring the wheat produced on the Continent of Asia in 1907 up to 447,518,000 bushels. Japan, it is interesting to note, has more than doubled her wheat output since 1903.

Algeria, Egypt, and Tunis, in the order named, are the chief African wheat-growing states. The Egyptian output for years has stood at 12,000,000 bushels per annum. Algeria produces something like 30,000,000. The British colonies in the south produce a bare 2,000,000; Natal less than is produced on a large Western farm, viz., 6,000 to 8,000 bushels.

The Australasian Continent is a rather indifferent wheat-producer. Drouth sometimes cuts down the yield almost to nothing. In 1903, barely 12,000,000 bushels were grown in the six states of Australia. The next year, 76,488,000 bushels were grown. The yield has been fairly average ever since, running to 68,185,000 bushels in 1907. Including New Zealand, where the crop last year was about twenty per cent. off, Australasia produced 73,967,000 bushels of wheat.

The world's total wheat yield in 1907, by continents, was:

North America .....	740,693,000
South America .....	178,636,000
Europe .....	1,616,086,000
Asia .....	447,518,000
Africa .....	51,626,000
Australasia .....	73,967,000
<b>Grand total .....</b>	<b>3,108,526,000</b>

This total is just 326,875,000 bushels less than the total of 1906, and the lowest for quite a number of years previously.

Ever since the world began, wheat has been steadily discovering and conquering new worlds. Time and again in the ages past, men have made up their minds that such and such a point marked the limit of wheat-growing; that henceforth the king of cereals would mark time only, and bread-eaters would be obliged to look about them for a substitute for their favorite grain. We have had croakers in our own age prophesying the same kind of thing, and, while thinking men must admit that the wild land of the world available for increased wheat production is becoming circumscribed, it is difficult yet to foresee where the limit on our own continent is to be reached, or how large the areas are in other parts of the world where wheat-growing may be profitably carried on.

A large area of agricultural land, yet untouched, lies in Northern Asia, or Siberia, as the Russian Empire there is called. The wheat-growing possibilities of the vast area lying between the Ural Mountains and the Pacific Ocean, are as yet unknown. Immigration for some years has been pouring into the country from the West, and the agricultural exports from it are steadily increasing.

It is estimated that the world, taking it all over, could just about double its present annual wheat yield if all the land available for use in growing this cereal were called into use—that is, the land already producing wheat—and the uncultivated lands that might be brought under cultivation. It is estimated that the yield from every acre of that land could be doubled, in some cases trebled, by proper methods of cropping and cultivation, and that there is opportunity in sight for increasing by fourfold the annual supply of the king of cereals. Against this increased supply there must be charged up a possible doubling, trebling, or increasing by fourfold, the army of wheat-bread-eaters. Figure the matter out along whatever line you will, and it comes back to about the same thing. The world, for as far back as history records, was producing, except in famine years, about as much meat as was required for human consumption, and generally a little over to spare. There are no indications at present to show that it will not go on doing it indefinitely, or for so long, at least, as most of us now alive need bother ourselves about.—[Farmer's Advocate and Home Journal.

**THE DAIRY.**

A trio of Massachusetts buttermakers have formed a company for the manufacture of glue. A number of kinds of glue and pastes of different consistency, and applicable in a number of useful ways, may be manufactured as a milk product.

The United States Agricultural Department reports that there are 19,000,000 cows in the United States, and that they produce nearly 68,000,000,000 pounds of milk annually. From this milk is manufactured 1,650,000,000 pounds of butter and 300,000,000 pounds of cheese.

More creameries fail through lack of proper management than from any other cause. Dairying has grown to such dimensions in these days, competition among creameries has become so keen, that only well-informed men can succeed in it. Indifference to the changes that are constantly taking place, unprogressiveness, getting behind in method or equipment, will sooner or later affect a creamery's business disastrously. The dairy science is developing. A man nowadays who makes butter, or manages a creamery, has to know a lot more about his business than the operator of twenty years ago knew; has to be informed in matters which the maker of that period never dreamed of.

**COMPARISON OF FEEDS IN DAIRY STABLE.**

The twentieth annual report of the Vermont Agricultural Experiment Station shows the experts in dairying to have acquired a habit of figuring out the cost of operations to the exact cent. The shrewd Yankee farmers of this small State, where good land is somewhat scarce, speaking comparatively, have studied the profit and loss side of dairying, perhaps, better than it has been done in any other section of America. As dairying is the main agricultural feature of the State, we are not surprised to see such a large part of the Annual Report dealing with cows and cow-products. The dairy features are divided into two parts, "Stock-feeding" and "Dairy Husbandry."

**FEEDING DAIRY COWS.**

Rations containing the same amount of digestible nutrients do not, as a result of three years' trial, produce the same amount of milk and butter. That is to say, if two rations are compared, containing the same amounts of digestible fat, carbohydrates and protein, and having approximately the same nutritive ratios, but the nutrients being obtained from different sources, it does not follow that the same results in milk flow or butter production will be obtained. This emphasizes the common-sense view of balanced rations, which is, that they are to be taken as guides in the practical feeding of cows, but they need to be mixed with a liberal amount of common or cow sense.

"Medium" and "narrow" rations gave an increase of from 2 to 11 per cent. in milk production, as compared with "wide" rations, though the quality of the milk was unchanged. The "wide" rations were 1:9 and 10; the "narrow," 1:5.8 and 6. For the benefit of those not familiar with these terms, we may say that a "narrow" ration is one in which the heat-producers (fat and carbohydrates) are not in too great excess of the muscle-formers (protein, etc.). For instance, a ration in which there is but 4 or 5 pounds heat-formers to 1 pound of muscle-formers is called "narrow," and is written 1:4 or 1:5. On the other hand, when we have 8, 9 or 10 pounds heat-formers for 1 pound of muscle-formers, the ration is called "wide," and is written 1:8, 1:9, or 1:10. A ration of 1:6 or 1:6.5 would be classed "medium."

There was no connection, so far as could be ascertained, between protein content of the food and casein in the milk produced.

So far as could be observed, gluten meal containing 29 per cent. protein, made as much and as good milk as did gluten meal containing 36 per cent. protein. It would seem that the chemist has not yet got his digestion methods "tracking" exactly with cow methods of digestion.

Buckwheat middlings made cheaper milk and butter than did cottonseed, linseed, or corn-and-bran rations. The quality of the butter seemed somewhat impaired when they (buckwheat middlings) were fed in large quantities.

When comparing light meal, such as bran, with heavy meal, like linseed, the conclusion reached was that the light meal is often as good, according to weight, as the heavy meal, but the milk from bran-fed cows was more difficult to cream by deep-setting methods.

Comparing six of the station herd of cows fed on meal while at pasture, with cows in twenty herds owned by farmers in the State, and to which no meal was fed when on grass, the results indicated a larger flow of milk in the spring and one better maintained in the fall, where cows received meal during the pasture season.

The Station set about to answer the question,



"How much grain can be fed with profit to cows?" This is a practical question which every feeder of dairy cows needs to ask, especially when grain meal of all kinds is so expensive as at present. The amounts fed daily per cow varied from two to four, eight and twelve pounds. The conclusion reached is: "Twelve pounds is excessive and unwise; 10 pounds may rarely pay its cost over a lesser amount; two pounds is too little, even with a full amount of roughage; four pounds, when roughage is good and plentiful, is likely to yield net returns nearly equal to those afforded by an eight-pound ration, and to prove the better, if skim-milk and manurial values are disregarded; but its residual effect on after-production may be unsatisfactory. When all the different factors are taken into consideration, from 6 to 8 pounds daily seem most advisable."

The addition of corn silage to a hay ration for cows produced seven per cent. more milk and butter, and the quality of the product was maintained. By substituting silage for one-third of the hay ration, the earning power of each cow was increased 12-3 cents daily.

Peas, vetches and oats made as good silage for milk production as did corn. The addition of soy beans to corn silage did not appear to increase the quality of the silage nor add to the yields of milk and butter when fed to cows.

Fresh fodder corn was not equal to corn silage made the previous year, when fed to cows early in September. Eleven cows shrank 5 per cent. in butter yield when fed the fodder corn, while nine similar cows gained 8 per cent. in butter production on corn silage.

Corn silage proved superior to potatoes for feeding cows. The effect upon the quality of butter by feeding potatoes was unfavorable.

Pumpkins are recommended for cows in the fall and early winter. Two and one-half tons of pumpkins are equal to one ton of corn silage. No harmful effects on cows or butter resulted from feeding pumpkins.

Grooming cows should tend to better the keeping quality of milk and the grade of butter, but does not seem to add to the milk flow or its fat content.

Water below 40 degrees was drunk as freely as that which was warmer. Less water was drunk when the barn temperature was about 50 degrees than when either higher or lower.

No change in quantity or quality of the milk given by eight cows during two seasons was noted when watered twice a day, as compared with water at will.

No advantage was found in warming water for cows during two winters. A net loss of 14 cents in 90 days occurred the second year, over and above the expense of warming the water.

#### DAIRY HUSBANDRY.

**Variations in Fat Percentage of Milk.**—Over 400 cows on early pasturage, from May 6th to June 6th, gave milk with highest and lowest fat percentages as follows: 3.63 and 4.03. A herd of thirteen cows, during the same time, varied from 3.63 to 4.62 per cent.; on successive days, 3.75 and 4.29 per cent., 3.88 and 4.62 per cent., were noted. Is it any wonder that tests at creamery and cheesery sometimes vary from one month to another. We receive a great many inquiries about this question of variation in the percentage of fat in milk and cream. Hardly any other question is so perplexing to the average farmer. He cannot understand why there should be variation in his tests. If he will but look around him, he will see that VARIATION is a great law of nature. The milk from cows is no exception to the rule.

**Monthly Variations During a Lactation Period.**—As a result of the study of a number of lactations, the Station concludes:

1. All cows shrink in milk flow as the lactation period advances. If farrow, almost no change in quality ensues from calving to drying off, provided they remain farrow. If in calf, the milk increases in quality as it decreases in quantity. This increase is very slight for six months, but becomes pronounced just before drying off.
2. Cows calving in the spring give more milk for three months after calving than those calving in the fall. This situation is reversed from the 7th to 9th months. Fall cows show smaller variations in milk flow than cows calving in the spring.
3. For a few weeks after calving milk is very variable in quality, being usually thinnest just after calving, and slightly richer during the next two weeks.
4. The spring cow rapidly increases the fat content of her milk, beginning about five months after calving; the summer cow starts in about the third month, while the fall cow maintains a fairly even quality throughout lactation, seldom improving it more than 0.5 per cent. The solids not fat content is most uniform, month by month, in the fall cow's milk, that of the milk of spring cows lessening somewhat in the summer time.
5. The fall cow held out better than the spring cow, and, as a rule, gave larger yields.
6. Most cows give about the same quality of milk year after year, beginning at the first calving.

There is no general tendency for it to become either richer or poorer as the cow grows older.

7. Until seven years old, the general trend of the milk flow was upward, and, after the ninth year, downward. In the case of a study of 99 cows, comprehending 427 years of bovine life, the majority of the cows tended to decrease the percentage of total solids, fat, and solids not fat, as the cows advanced in years. (The author notes that this is not in accord with results got in previous studies, but says the differences are in no case large, comparing one year with another.)

8. Stripper milk is richer in fat and solids not fat, as compared with the average of milk given by cows in calf.

9. In a herd already giving a good quality of milk, the farmer is confined to selection as his method of increasing the richness of milk, breeding being used to preserve what has been gained by care, feed, and selection.

10. No poorer milk results from pasture feeding, even when the flow is considerably augmented.

11. Fatigue tends to lessen the flow temporarily, and to affect the quality for one or two milkings. The folly of testing milk before a cow has become accustomed to her new surroundings is clear.

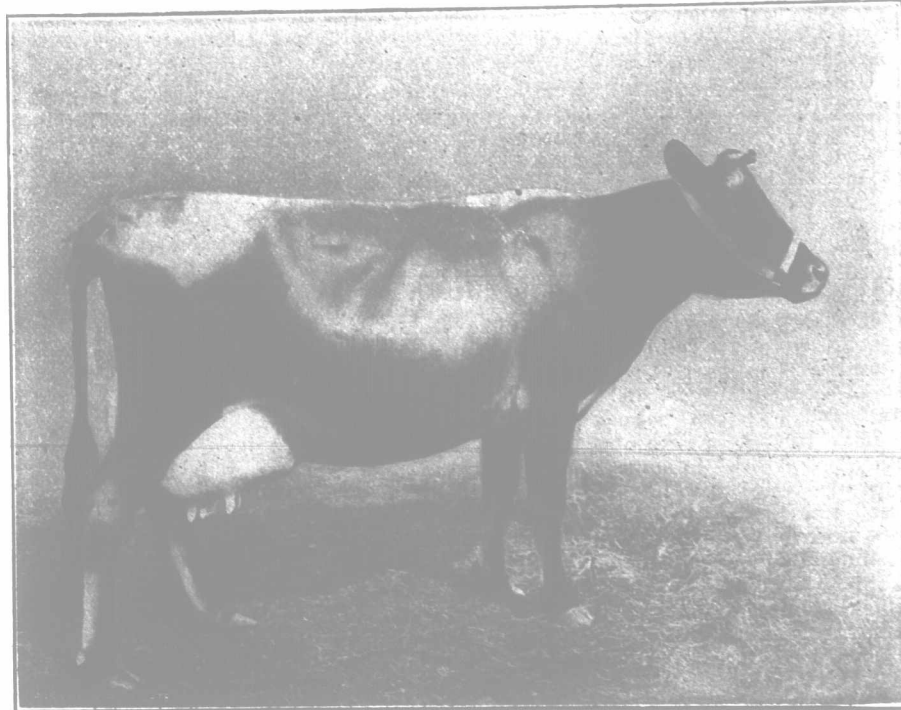
12. Milking three times a day did not pay as a regular practice, but might increase the flow temporarily, as compared with twice milking in 24 hours.

#### CREAMING MILK.

As a result of extensive tests comparing ordinary deep setting with adding hot and cold water to milk for creaming purposes, there was no advantage in varying the usual method of creaming in deep cans. The addition of one-fifth part ice-water to cold deep-set milk, was followed by poorer creaming and churning.

#### CHURNING EXPERIMENTS.

One hundred and twenty churnings seemed to warrant the following conclusions:



Brampton Primrose (imp.).

Jersey cow; four years old; bred on the Island of Jersey. Winner of first prize, senior and grand championship as best Jersey female, any age, at Canadian National Exhibition, Toronto, and Western Fair, London, Sept., 1908. Imported and owned by B. H. Bull & Son, Brampton, Ont.

1. The per cent. of fat in butter appears lessened by thinning the cream, by lengthening the time of churning, by increasing churning temperature, by increased acidity of cream, and by churning deep-setting, as compared with separator cream. The fat percentages of sweet and sour cream butter were closely alike.
2. The percentage of curd in butter did not seem affected by the length of time, or the varying temperatures of churning. The sweet-cream butters contained more curd than those made from sour cream, and the deep-setting butters more than did the separator-made goods.
3. The churnings were most exhaustive with thick and ripened cream at low temperatures, while varying acidities, length of churning and methods of cream separation showed little effect.
4. The conditions most favorable for exhaustive churning of a firm butter of high fat content are: A thick cream containing 10 to 16 per cent. of the original milk, ripened cream, unless churning at 51 degrees, or below; a low-churning temperature.

**Aerating Milk.**—As a result of several tests, it was found that aerating milk, without cooling, did not make the milk keep any longer. When

aeration and cooling were combined, the milk kept sweet for one-eighth longer time.

A larger surplus and a higher price per pound of fat is recommended for cream patrons who deliver cream at a whole-milk creamery. The extra "surplus" averages 3 per cent., and the extra price one-half a cent per pound of butter.

As a result of tests of cows made at fall fairs during two years, the author concludes: "The effect of worry and confusion on the milk flow is variable. Some cows made more at home; others seemed stimulated by excitement and nervousness, and made a better showing at the fair grounds. Nervous excitement tended, however, to lessen the quantity of milk ingredients, and variously to affect quality. The true butter test of a cow can hardly be made at a great fair as well as at home."

In comparing cows having well-balanced, fairly well-balanced and ill-balanced udders, the general results in milk flow agreed with the udder formation; i. e., those with well-balanced udders milked best, as a rule, and those with ill-balanced udders milked poorest.

Forty-six per cent. of the milk solids and fat were produced from the fore quarters of the udders of five cows, and 54 per cent. from the hind quarters.

Comparing score-card judgments with milk and butter records, the writer concludes: "The high-scoring, show-ring cows were really, in the long run, little if any better producers than their less-well-equipped sisters."

We wonder when the folly of the score-card, as applied to milk cows, will be fully realized.

H. H. D.

## GARDEN & ORCHARD

### MARKET FOR EARLY APPLES.

Ontario's early apples can be marketed at profitable prices in Great Britain. According to A. McNeill, Chief of the Fruit Division, Ottawa,

the efforts to encourage the shipments of this early crop have given results that should attract the attention of all who have apples of the early varieties, such as Astrachan, Duchess and Gravenstein. With a view to stimulating an interest in this way of disposing of the fruit, the Department guaranteed the freight on cold-storage chambers to London. The chambers were filled, and the returns were such as to show a possibility of a permanent market for all of Ontario's early apples. If this market were developed, the result would be that our apple-shipping season would be lengthened by at least three weeks, opening the second week in August, instead of the early part or middle of September, and placing on the market a fruit crop formerly practically wasted. It is pointed out by Mr. McNeill that all fruit

that was properly packed and in good condition on leaving, arrived in such condition to guarantee profitable prices. In some cases, where carelessness was the rule, and particularly where the fruit was packed in barrels, the apples were in bad condition. A warmer season and softer apples means that greater care must be exercised in picking and packing, as well as in the method of shipping. The ideal method was outlined as follows: Pick the apples when they are mature; put them in a cold room; pack at a low temperature; transfer them to a refrigerator car; have them reach the steamer at a temperature between 40 and 45 degrees; put them into cold storage on the steamer at a temperature of about 35 degrees.

As regards prices, it was claimed that the returns were entirely satisfactory for fruit properly handled. In barrels, good quality brought as high as 16 shillings, some lower grade went as low as 9 shillings. Some sent to Glasgow brought as high as 19 shillings. In boxes of 40 pounds, the prices ranged from 6 to 8 shillings.

Pears, also, have been shipped across the ocean in large quantities, and the prospects point to a permanent trade in that fruit as well. The

difference between handling the common grades of the... returns, but, with pears, only... wanted. Bartletts are known as... land. Duchess is a favorite... of fine quality; Clapp's... known, and are good shippers.

**TOMATO-GROWING UNPROFITABLE.**

That tomato-growing does not pay in the London district, is the conclusion of many members of the branch of the Ontario Vegetable-growers' Association at that city. For three successive seasons the crop has been a failure. This season blight has taken the profit from the tomato crop. Last year, frost did the damage.

This branch of the Provincial organization has gained rapidly in strength since its affiliation, two years ago. There are now over fifty members doing good work, and laboring with a view to make the growing of vegetables assume the position it should hold. As yet, nothing definite has been done to perfect a system of co-operation in selling, but arrangements are being made that will benefit the producers. The growers express a hope that Wednesday afternoon closing of retail shops may not come into general effect, as it would injure the sales of Tuesday's collections, particularly the tender products.

The officers who have charge of the local association are: C. W. Baker, President; B. Bristow, Secretary; and Wm. Bartlett, Jr., press agent.

**FRUIT NOTES FROM THE KOOTENAY.**

(Special correspondence.)

The season of 1908 has been a year of progress and development, as far as fruit-growing is concerned. More trees were planted than in any previous spring. All of the nurseries were sold out of most of the leading varieties early in the season. Some of the newcomers and inexperienced growers have not paid as much attention as they should to the needs of the young growing trees, but they are fast learning that this is absolutely essential. As Farmer Vincent used to say: "Trees are like children; in the beginning they give us a great deal of trouble and worry, but in the end we are proud of them."

The energy and enthusiasm of the fruit-growers was evidenced early in the spring, by the reorganization of the Kootenay Fruit-growers' Association. They secured a practical fruitman of many years' experience from Hood River, Oregon, to act as manager, signing a three-year contract with him at a high salary, and although for several reasons, that we will touch on later, their operations have not been singularly successful from a financial standpoint, yet they are full of hope, and determined that with a big pull, a strong pull, and a pull all together, they may overcome the difficulties of selling and transportation that now lie in the way.

The strawberry crop, the first fruit crop on the market, was a heavy one. For several reasons it was not as remunerative to the grower as in some former years. The Hood River crop was late, and that threw the berries of Hood River and Kootenay on the market at about the same time. Commission men also complained that the depressed financial conditions on the prairie had a bad effect upon the market. Pickers were hard to obtain, and, as a result, some of the berries became too ripe to ship, and as a consequence were thrown on the local market, causing a glut. The berries shipped through the association netted about \$1.60 a crate. One grower placed letters in the crates as he sent them out, requesting the consumer to write and let him know what kind of condition the berries were received in, and what he had to pay for them. He received seven replies, all stating that the berries were delivered in good condition, prices ranging from \$3.25 to \$3.50 a crate in Winnipeg. Thus the producer only got half the retail price—a rather big leak. Some growers have become rather discouraged, while some of the, perhaps, shrewder ones, have intimated their intention of doubling their area in strawberries, affirming that if handled right they are extremely profitable. And, indeed, this is amply proved by the well-known success of O. J. Wiggen, the Creston strawberry king, who last year sold \$4,300 off four acres.

Cherries were a fair crop, and good prices prevailed. The production of peaches is not large enough to be considered commercially as yet. Plums, prunes and apples are a good crop. The B. C. Fruit and Produce Exchange reports having received a large apple order from Australia, but intimate they will not be able to supply more than about thirty cars. Of this amount the Grand Forks district will supply fifteen cars, being guaranteed \$1.15 per box, f.o.b. Grand Forks.

A large number of settlers have come in from the prairie and from the British Isles; also a few from Washington, Oregon and California. The latter maintain that land can be procured more cheaply in British Columbia, and the better market facilities also appeal strongly. Outside small fruits, the home market is not yet nearly supplied. Nelson wholesalers imported last year forty thousand boxes of apples alone.

The migrating of a large colony of Doukhobors, under the leadership and direction of Peter Veregin, from Saskatchewan to Kootenay, has been the subject of a good deal of both favorable and unfavorable com-

ment. They have located on the east side of the Hood River, near Waterloo. Many citizens have expressed themselves as being desirous of in every way to discourage immigration, but that people of that colony are wanted. However, the Doukhobors have quietly to work, already have a lot of land cleared, and expect to have one hundred and fifty acres ready for planting next spring. In view of the aggressive and industrious way they are conducting themselves—and, as so far they do not appear to have conspired the fashion plates of the days of our first parents—public sentiment is regarding them in a new light. Peter Veregin intimated to your correspondent that as soon as arrangements could be made, he proposed bringing out a large number more—about seven thousand in all. The great difficulty is to get enough good land in one place upon which to locate the colony.

**APPLE PRICES.**

Shippers of early apples are meeting with success in their consignments to Great Britain this season. The Duchess, and one or two other varieties, have sold exceedingly well. Some Duchess recently sold in Liverpool and Glasgow at 16s. to 20s., and Gravensteins and Alexanders at 20s. to 26s. per bbl. At these prices there is good money for the shipper.

Because of these successful sales with early fruit, growers are advancing their ideas in regard to prices for winter varieties. The crop of early apples, however, is large, and there are large quantities to be marketed yet, and until these are well out of the way holders may not be able to realize their expectations regarding winter apples. The latter crop is not large, but it is of very good quality, and will turn out a large percentage of No. 1's. For the finest Spies and Kings, some of the co-operative associations are looking for \$3.00 per bbl. f.o.b. It is reported that some sales have been made at this figure, but it is doubtful whether this price will be reached for large quantities, though it is possible that if the associations can hold their fruit for a while they may be able to reach the figure, and more for choice quality. Just now from \$2 to \$2.25 per bbl. would be a fair price for the general run of firsts and seconds. Growers in the Lake Erie belt began picking Greenings two weeks ago, and in a few weeks more the winter-apple season will be in full blast.

Apple buyers are not so keen in making contracts ahead this year for fruit on the tree. The grower had considerably the best of it last season. The buyer is evidently seeing to it that he does not come out so well this year. There has been some buying, however, and many orchards have been contracted for at about 75c. for early and \$1.00 to \$1.25 per bbl. for winter fruit on the tree. This kind of buying is confined to the individual grower. The co-operative associations pick, pack and prepare their own fruit for shipment, and get all there is in it. Taking one season with another, this is the better plan, even for the individual grower.

**POULTRY.**

It is doubtful whether a strain of 200-egg hens will ever be developed and the ability permanently established. The further one goes in attempting to raise production the harder it is to score an additional notch of progress. The late Prof. Gowell undertook a large order. However, the average farmer's flock might better its production by several dozen eggs a year without necessarily overtaxing the limit of its vitality, and the trap-nest system should be an aid towards improvement.

In an egg-laying competition it may be very clearly demonstrated that by careful breeding very high averages can be reached in a few years of careful breeding and selection, and that these high averages may be maintained for several years. Beyond that the competitions as yet have nothing to teach us. But beyond that the competitions if continued will probably teach within a few years what experienced breeders know—that it is extremely rare for these high averages to be maintained for more than a very few years. Experienced breeders know this just as well as they know the other. They know that in every character of a fowl fixed quality is hard to keep—and especially so in matters which make a drain upon vitality.—[Farm Poultry.

**ORGANIZATION OF LOCAL POULTRY ASSOCIATIONS IN ONTARIO.**

We have been favored by A. P. Westervelt, Director, Live-stock Branch, Department of Agriculture, Toronto, with the subjoined copy of regulations providing for the organization of poultry associations in the local districts in Ontario, and for the amount of the grant paid to these societies out of the appropriation made for this purpose by the Legislature.

**ORGANIZATION OF LOCAL POULTRY ASSOCIATIONS.**

The local poultry associations which have received a grant during the past year shall be recognized as such by the Minister of Agriculture, and shall each receive an annual grant of fifty dollars (\$50.00), if complying

with the regulations appended. If these regulations have not been fully complied with by any association, a lesser grant may be made to that association, the amount to be decided by the Minister of Agriculture. In addition, a local poultry association may be organized under these regulations in any electoral district in the Province, where an association is not at the time recognized by the Minister of Agriculture, and shall receive under the following regulations an annual grant of twenty-five dollars (\$25.00); but where there is more than one electoral district in a county, the annual grant shall be fifty dollars (\$50.00), during such time as there is only one recognized local poultry association in the county. Where an association fails to comply with the regulations during any calendar year, a new association may be formed to represent that district.

**REGULATIONS.**

- (1) Application for recognition must be made through the Director of the Live-stock Branch to the Minister of Agriculture. With the application must be sent a copy of the constitution of the association, the minutes of the organization meeting, and the list of officers and directors.
- (2) Each association must hold a poultry show between October and February, inclusive, for which it is financially responsible.
- (3) The poultry show must consist of at least 300 bona-fide entries, and the prizes offered, \$200, exclusive of pigeons and pet stock.
- (4) Proper accommodation, to include cooping, must be supplied for holding the show; also accommodation for lectures, in or convenient to the exhibition room.
- (5) A lecturer will be supplied by the Department of Agriculture, to speak on practical poultry subjects, and the local association must use every reasonable means to properly advertise and interest the public in these lectures, which must consist of at least two sessions.
- (6) There must be sent to the Director of the Live-stock Branch, Ontario Department of Agriculture, application for a lecturer at least two months prior to the date of holding the show, and there must also be submitted at the same time a copy of the proposed classification for the exhibition. Within one month after holding the show there shall be forwarded to him a full report, showing all receipts, expenditures, number of entries in each class, names of judges, and a general report of the exhibition and meetings.

**THE FARM BULLETIN.**

**SCHOOL AND TARIFF QUESTIONS.**

Editor "The Farmer's Advocate":

The feeling seems to be gaining ground throughout the older Provinces of the Dominion that our public schools are mainly responsible for the human drift to the towns and cities; that rural public schools should teach the country children to be farmers, and that the town schools should educate our future men of all other professions. Now, it seems to me that there is already a dividing line between farmers and those of other modes of living, and if the above ideas were acted upon the division would become more deeply marked. Our public-school system should be so arranged that a child would have a foundation for any profession, and then let him follow such courses of study as will enable him to succeed in his chosen profession. This plan would stimulate each industry, by bringing in fresh blood, and would enable every person from either town or country to follow his or her own bent.

It should be the aim of our legislators to place all industries on an equal footing, so that people of suitable natures would be drawn to their choice, no matter where their birth took place.

In the manifesto of the executive of the Dominion Grange, published in "The Farmer's Advocate," it is stated that we pay an average duty of 27% on all manufactured articles, in order to help establish home manufacturing, and they are now after more, and always will be, until the farmer wakes from his lethargy and calls a halt. This duty business is what is sapping the heart out of our farming profession. It enables the manufacturer to pay wages that could not be considered by a farmer. It also attracts the cleverest of our young men to the manufacturing centers, where a few brains can make a competence, and also a fortune, with less labor than could be done on a farm. To balance things up, the manufacturer, who has made his fortune, may on his death bed, leave an endowment to some agricultural college, to educate the farmer's sons and daughters in the mysteries of agricultural science. But we never hear of the manufacturer's sons attending any college to improve their methods.

Now, I have nothing to say against educating the farmer for his calling; the more the better. Free rural-mail delivery will help a great deal. Farmers' institutes, fall fairs, agricultural colleges, nature study in our schools, and last, but not least, our agricultural press—each is doing its duty in that direction. But they cannot place the farming profession where it ought to be under present circumstances. Let us elect members to Parliament who will try to remove these duties gradually, in as short a time as possible. Let schools or colleges be placed in the country to educate our manufacturing element, so that they may progress on their own exertions. My reader will no doubt be

smiling now, but I put in some time in our high schools, and it was a recognized fact that the hayseed soared to the top of the merit list.

If these duties were removed the farmer would have no trouble to engage and pay hired help by the year, as that is the only method of retaining suitable help on the farm. More people could make a living on the land; therefore, they would require more manufactured articles, so that the manufacturer would find himself in the same position as the Post-office Department after reducing the postage to one penny; there would be a stronger tendency for moneyed men to invest in farm lands, and to operate the same; educated men would find more remuneration for their labors; and, in fact, it would lead to mutual progress of all industries.

A NOTTAWASAGA FARMER.

[Note.—The best-informed opinion is not in favor of teaching agriculture as a subject in the rural public schools, nor of teaching any particular occupation in the common schools of the city. A broad foundation of general training, serviceable in any walk of life, is needed in both town and country schools, but this education should not be entirely bookish. It should educate the hand as well as the head; should inculcate a noble regard for the dignity of manual labor, and should incidentally acquaint the pupils with an understanding appreciation of the fundamental principles of natural and physical science. It should, in short, be just such a broad fundamental education as will help to prepare the pupil, without prejudice, for whatever occupation he may be naturally adapted to. The charge against the present educational system is that it alienates the sympathies of many from agriculture and manual toil, and turns an undue proportion into the professions and the "white-shirt jobs." School gardening, nature study, manual training, and the other reforms advocated will hinder no boy, and will open to many a new field of opportunity and delight.—Editor.]

## AGRICULTURE AND MILITARY DRILL IN THE SCHOOLS.

Editor "The Farmer's Advocate":

Having noticed for some time the great crowd of our fair sons and daughters of Canada marching direct from our advanced schools of learning and flocking to the cities and towns looking for positions that will surely be filled and overcrowded, I believe it is about time that some changes should be made in our educational methods. Canada's destiny as a progressive nation must be attained along the path of agriculture. Most of our boys and girls must be retained on the farm. How are we best to accomplish this much-desired object? There is no doubt that children do consider in their younger days what vocation they intend to follow when they grow up to manhood or womanhood; hence it becomes us to devise some plan to so train the child that it may look on the farm with anticipation of greater pleasure and advantages than can be attained in any other business. Assuming that the children as they are seated in their respective seats at school and also in their respective homes, form their minds as to their future careers, they should be persuaded early in life to work with the soil, say by the planting of a small vegetable garden. Each child should have its own plot, and should be allowed to market its production, and make some pocket money for himself or herself. This plan may enthrall and encourage the young boy or girl to look to the farm as a desirable place to live. Another plan to influence the young mind to contemplate the pleasures of farm life would be to have beautiful pictures of important farm scenes, such as tillage, seeding and harvest operations; or a fine field of corn, with someone picking a few nice ears for dinner; also fruit trees, heavily laden with choicest fruit. All teachers should be compelled to perfect their certificates to take a course at the

agricultural college, so they would be competent to explain all about the growth of plants, etc., to the children. This and other plans could be introduced to mould their plastic aspirations towards an appreciation of and interest in farm life. Other important means could be mentioned, such as the erecting of special buildings, and fitting them up as a first-class domestic science apartment, where the children could be taught all kinds of cooking, baking, sewing and knitting—especially the young girls. Here is the greatest lack in the equipment of thousands of young women, who cannot make and prepare anything in the way of appetizing victuals. If the boys and girls are taught early in life how to make themselves useful on the farm or in the kitchen, they will surely be more useful to themselves, as well as being considered by others of some worth. Some modification of our educational policy must be brought about in the near future if Canada is to retain her name and fame as a very progressive agricultural country.

Agriculture being the mainstay of Canada, along with such other industries as mining, manufacture, lumbering, etc., it is up to us, as true Canadians, to formulate a policy to protect and defend those interests. How can we so protect Canadian interests with the greatest economy without spending millions of dollars in preparation of this defence? I propose that we accede to the proposition to teach military drill in our public schools. I would urge on every lover of our fair country to also endorse this suggestion of the Canadian Minister of Militia for the following reasons: Canada is possessed of a great wealth of natural resources; her land area is even larger than the whole of the United States, not including Alaska; there is room here in Canada for a large population, which makes the need more pressing to examine and determine what will be the best advantage of the Dominion.

Temiskaming, Ont. NEIL A. EDWARDS.

## Central Canada Exhibition a Success.

If large crowds and a gradually-increasing interest throughout the week count for anything, the Central Canada Exhibition, held at Ottawa, September 18th to 26th, set a new high-water mark in the history of the Association. It has been learned that at least everything in drawing crowds does not depend on a huge covered stand and night performance. There are many things that would have tended to make the fair even more successful, but the damage done by fire cannot be repaired in a season, when other necessary buildings are being constructed. The new structure for ladies' fancywork and fine arts is a credit to the grounds.

With the surplus from the enormous receipts of this year, great improvements are promised for next year. The first move will be to provide a modern grand-stand, instead of the bleachers that have been used since fire did away with the old stand. A change in size, as well as location, of the Horticultural Building also is urgent. Then, it would not be out of place to build capacious covered stands near the cattle-judging rings. Large crowds are interested in the dairy breeds, and these were obliged to stand in the sun or lie on the grass in a most sweltering heat. But the weather was propitious. The shower of Wednesday night would have been more welcome two or three days sooner, but the crowds came on Tuesday and Wednesday, despite the smoke and fog.

It was a well-balanced show in most respects. If any feature stood out too prominently, it was the howling side-show artists and game-of-chance men. They were present from east and west and south. Poultry, dairy products and Ayrshire cattle were noticeably strong. Sheep, and some classes of horses, were the weakest parts of a fair live-stock display. In Shorthorns, it was a battle between Senators Edwards and Drummond. In Clydesdales, the competition was mainly between Smith & Richardson, of Columbus, and Robert Ness, of Howick. George Pepper, of Toronto, was to the front with high-steppers and jumpers. A string of two hundred ponies from across the line were a center of attraction.

The management deserve special praise for the smoothness with which the programme was carried out. The secretary, E. McMahon, and the president, T. C. Bate, were, as usual, always on hand with a smile to attend to the wants of all. The troubles of the cattle, sheep and swine men were looked after by R. S. Cameron, of Cumberland, the superintendent in charge. Despite the large number of entries and the great number of rings in operation at once, plans were laid and carried out to get over the work in remarkably quick time.

### DAIRY CATTLE.

#### AYRSHIRES.

As in previous years, the center of attraction in the live-stock exhibit at the Central Canada Exhibition of 1908, was the Ayrshire ring. The champions of the summer and fall shows were there, to form one of the greatest lots of Ayrshire cattle ever got together on the continent. Those from the stables of Robert Hunter & Sons, of Maxville, Ont.; R. R. Ness, of Howick, Que., and Alex. Hume & Co., Menie, Ont., were suffi-

cient to make a creditable show in themselves. But there were high-class specimens, including grand champions, from Sherbrooke Fair, from such breeders as Senator Owens, of Montebello, Que.; Hector Gordon, P. D. McArthur, and J. W. Logan, of Howick, Que., and R. C. Clark, of Hammond, Ont. Some of these had not very large herds, but what was lacking in numbers was made up in quality. The Howick men have made purchases that give them a nucleus which in time should result in herds fit to win in any show-ring.

No one breeder can flatter himself with the idea he had a monopoly of the prizes; none need go away discouraged. Hunter, Ness and Hume struggled hard for first place in prizes taken. Ness' multi-champion, Barcheskie King's Own, sired by Imperial Chief, and grandson of the great Prince Imperial, left the other breeders with a slight handicap in the male classes. In the female sections, however, Hunter and Hume, perhaps, more than held their own, Hunter receiving the award for female any age, and also for herd consisting of a bull and four females over 1 year. Ness had a close second in the herd, but, although the bull had quality and depth of body that made him the best of the lot, one or two of the cows were not of the highest order. The prevailing feeling was that Ness should have replaced one of the cows by his fine three-year-old.

The task of selecting winners from such strong classes fell to W. W. Ballantyne, of Stratford. He did his work well. Others would not have made the same placing in every case, but in many classes there were at least three, any one of which would look well in first place, and large classes of six or eight did not comprise one that was unworthy of a prize.

In the class for aged bulls, it was a foregone conclusion that Ness would win with Barcheskie King's Own. Hunter had second on Lessnessock Oyama's Guarantee, and Gordon third with Auchebraim Abram. Both were fine specimens. Two-year-old bulls had fine entries, Logan winning with Netherhall Good Time, a strong candidate, unbeaten during a trip West last summer, and grand champion in Quebec. The second award went to McArthur's Netherhall Milkman, which stood first at Toronto, and put up strong argument for the sweepstakes. Hunter's third-prize bull was Lessnessock Purward Lily. Ness' winner in yearlings stood third at Toronto. Howie's Crusader won 2nd for Hunter. In bull calves, Hume received first for seniors on Pride of the Hall, and the same standing in juniors on White Goods. Both are sired by Lessnessock Royal Monarch, whose prepotency is shown in much of the young stock exhibited by this breeder.

The call for cows four years old and upwards brought out eight, most of which were of high quality. There were six prizes, Hunter getting first and third, and Ness the other four. Hunter's winner, Dalbible Grace, was grand champion. At Toronto she was top as dry cow. She had calved, and was first and grand champion at London. The second-prize cow, Denty 9th of Auchebraim, was also second at Toronto. This is the cow that was purchased at a long figure at Chicago last fall. She is not fresh enough to do her best in the ring. Castle Mans Violet stood

third, and was second at London, and fourth at Toronto. Six cows in the class for three years and upwards, Canadian-bred, were a high compliment to home breeding. Pride of Hume Farm won for Hume, although some preferred McArthur's Flossy of Cherry Bank. The third-prize cow is showing the strain of the strenuous life of a dairy cow. Logan's Barcheskie Blythe-Kate, second in the three-year class, was female champion at Sherbrooke. Gordon's Southwick Meg was first, the same place as given her at Sherbrooke in the two-year class. Hume's Clerkland Kate, winner of second, was first at Toronto and London. Some were surprised at the awards in yearling heifers, when Gordon was given the red card on Stonehouse Pansy. She was first at Sherbrooke, but, although possessing excellent udder and fine conformation, might not inappropriately have gone second to Ness' Nellie Burns 5th of Burnside, the bearer of premier distinction at Toronto. Burnside Pearl 3rd, in third place, had Pearl of Burnside, a record-of-performance cow, as dam, and Ness' representative in the six months' dairy test at the Pan-American, as granddam. Eva of Cherry Bank was the best dry cow, while Ness had a beautiful pair of winners in the class for two-year heifers not in milk. The awards were:

Bull, 3 years and upwards.—1, Ness; 2, Hunter; 3, Gordon; 4, Owens. Bull, 2 years.—1, Logan; 2, McArthur; 3, Hunter; 4, Ness. Bull, 1 year.—1 and 3, Ness; 2, Hunter. Bull calf over 6 mos. and under 1 year.—1, Hume; 2, Ness; 3, Owens; 4, Hunter. Bull calf under 6 months.—1 and 2, Hume; 3, Clark; 4, Owens. Bull, any age.—Ness. Cow, four years and upwards.—1 and 3, Hunter; 2, 4, 5 and 6, Ness. Cow, 3 years.—1, Ness; 2, Logan; 3, Hume; 4, Hunter. Cow, 3 years and upwards, Canadian-bred.—1 and 3, Hume; 2, McArthur; 4, Hunter; 5, Owens. Heifer, 2 years, in milk.—1, Gordon; 2 and 3, Hume; 4, Ness; 5 and 6, Hunter. Heifer, 1 year.—1, Gordon; 2 and 3, Ness; 4 and 6, Hunter; 5, Hume. Heifer calf over 6 months and under 1 year.—1, Hunter; 2, 3, 4 and 5, Ness; 6, Hume. Heifer calf under 6 months.—1, Hume; 2, Clark; 3, Hunter; 4, Owens. Dry cow, three years and upwards.—1, McArthur; 2, Ness; 3, Clark; 4, Gordon. Dry heifer, 2 years old.—1 and 2, Ness; 3, Gordon; 4, Owens. Female, any age.—Hunter. Bull and three of his progeny.—1, Ness; 2, Owens; 3, Hume. Cow and two of her progeny.—1, Ness; 2, Hume; 3, Owens. Herd, 1 bull and four females over one year.—1, Hunter; 2, Ness; 3, Gordon; 4, Hume; 5, Owens. Herd, 1 bull and four females, under 2 years, bred and owned by exhibitor.—1, Ness; 2, Owens; 3, Clark.

### HOLSTEINS.

Although only two breeders, Brown Bros., of Lyn, and J. H. Caldwell, of Fallowfield, Ont., competed in the Holstein classes, cattle of superior quality were the rule. When it came to the aged-cow class, the seven strong frames, with capacious and well-set udders, show the points about which Holstein enthusiasts boast. They included four cows from Brown Bros.' herd, which has broken many records in the performance test. The one awarded the red card has a remarkably strong constitution, and shows evidence of being

a heavy producer. The second prize cow won the sweepstakes at Toronto a year ago. Judging was done by J. W. Richardson, of Cataraugus, Ont. Awards:

Bull, 3 years and up.—1, Caldwell; 2, Brown; Bull, 2 years.—1, Caldwell; Bull, 1 year.—1, Brown; Bull calf over six months and under 1 year.—1, Caldwell; Bull calf under 6 months.—1, 2 and 3, Brown; 4, Caldwell; Bull, any age.—Caldwell; Cow, 4 years and upwards.—1, 2, 3 and 5, Brown; 4, Caldwell; Cow, 3 years.—1, Caldwell; 2, Brown; Heifer, 2 years.—1 and 3, Caldwell; 2, Brown; Heifer, 1 year, in milk.—1 and 2, Brown; Heifer, 1 year.—1, Brown; 2 and 3, Caldwell; Heifer calf, over 6 months and under 1 year.—1, Brown; 2, Caldwell; Heifer calf under 6 months.—1, 3 and 4, Brown; 2, Caldwell; Female, any age.—Brown; Herd, 1 bull and 4 females, over 1 year.—1, Brown; 2, Caldwell; Herd, 1 bull and 4 females, under 2 years, bred and owned by exhibitor.—1, Brown; 2, Caldwell

#### JERSEYS.

For the third time in as many weeks, representatives of the fawn breed from the Channel Islands, owned by three of Canada's most prominent Jersey breeders, fought for supremacy. Animals from each of the stables owned by D. Duncan, of Don; B. H. Bull & Son, of Brampton, and Wm. McKenzie, of Toronto, had many admirers. The top prizes were pretty evenly distributed, while, of the total, Duncan took 17 cards, Bull & Son 15, and McKenzie 6. McKenzie got the grand-championship award for bull any age on Pearl of Kirkfield; Bull & Son, the grand championship for female any age on Brampton Primrose, and Duncan the award for herd consisting of 1 bull and 4 females over 1 year.

The cards were placed by Geo. Latsch, of Freeport, Ont., as follows:

Bull, 3 years and upwards.—1, McKenzie; 2, Bull; 3, Duncan; Bull, 2 years.—1, Duncan; 2, Bull; Bull, 1 year.—1, Bull; 2 and 3, Duncan; Bull calf, over 6 months and under 1 year.—1 and 3, Duncan; 2, Bull; Bull calf under 6 months.—1, Bull; 2, Duncan; 3, McKenzie; Best bull, any age.—McKenzie; Cow, 4 years and upwards.—1 and 4, Bull; 2 and 3, Duncan; Cow, 3 years.—1, Duncan; 2, McKenzie; 3 and 4, Bull; Heifer, 2 years.—1 and 2, Bull; 3 and 4, Duncan; Heifer, 1 year.—1 and 2, McKenzie; 3, Bull; Heifer calf, over 6 months and under 1 year.—1 and 2, Duncan; 3, Bull; Heifer calf, under 6 months.—1, Bull; 2 and 3, Duncan; Female, any age.—Bull; Herd, 1 bull and four females.—Duncan.

#### GUERNSEYS.

No competition was found in the Guernsey classes, all the animals being owned by Guy Carr, of Compton, Que. Many of the sections were fairly well filled. The stock, though typical of the breed, were not in sufficiently high condition for the show-ring. Only the young stock was fitted, a few of the older ones being in such condition as not to be good missionaries in inducing dairy farmers to discard the sleek, plump Ayrshires, the big, strong-framed Holsteins, or the sweet, attractive Jerseys, in their favor.

#### CANADIAN CATTLE.

The tiny cattle known as Race Canadienne, registered in the French-Canadian Herdbook, were present in goodly numbers. They were owned by A. Denis, of St. Norbert, Que., and A. Touin, of Repentigny, Que. Awards, made by L. Lavalle, of St. Guillaume, Que., show the prizes to be fairly well divided. In the females, Touin was in the lead, but Denis got the red card for best herd.

#### GRADE DAIRY CATTLE.

The popularity of the Holsteins for crossing with other breeds in Eastern Ontario, would seem to be indicated by the fact that only Holstein grades appeared in the class for dairy grades. The prizes went to J. H. Caldwell, of Fallowfield, and R. Hern, of Billings Bridge. Three great strong milk-producers were entered in aged-cow class, Caldwell getting first and third, and Hern second. In other sections, Caldwell had four firsts and a third, while Hern had two seconds and a third. Caldwell won sweepstakes for best female any age, and was first with herd of four females.

#### BEEF CATTLE.

##### SHORTHORNS.

In numbers, the Shorthorns were greatly below what was expected. The competitors included only three breeders: W. C. Edwards & Co., of Rockland; Sir Geo. Drummond, of Beaconsfield, Que., and Wm. A. Wallace, of Kars, Ont. It was a battle royal between the Senators, with Senator Edwards on top with bulls, and Senator Drummond in the lead in most of the female classes. The placing of Drummond's herd over Edwards' came as a surprise to many of the ring-side spectators. The latter's bull had won the red card, and few had counted on Drummond's excellent aged cow and a good heifer being of such strength to outdo Edwards' very fine herd. The strength to outdo Edwards' very fine herd. The classes comprised representatives of two or, some classes, three competitors. Awards were made by R. Sangster, of Lancaster, Ont.

The cards were placed as follows:

Bull, 3 years and upwards.—1, Edwards, on Bertie's Hero; 2, Drummond, on Gold Cup; Bull, 2 years.—1, Edwards, on Goldie's Prince; 2, Wallace; Bull, 1 year.—1, Edwards, on Royal Lavender; 2, Wallace; Bull calf under 1 year.—1, Edwards; 2 and 3, Drummond; Bull, any age.—Edwards, on Bertie's Hero; Cow, 3 years and upwards.—1, Drummond, on Queen Ideal; 2, Edwards, on Pine Grove Clipper; 3, Drummond, on Lavender 4th; Heifer, 2 years.—1, Edwards, on Pine Grove Mildred 13th; 2, Drummond, on Proud Duchess 11th; 3, Wallace; Heifer, 1 year.—1, Drummond; 2 and 3, Edwards; Heifer calf, under 1 year.—1 and 2, Edwards; 3, Drummond; Female, any age.—Drummond, on Queen Ideal; Herd, consisting of one bull and four females, over 1 year.—Drummond, on Gold Cup and Queen Ideal, Lavender 4th, and Proud Duchess 11th.

#### HEREFORDS.

The white-faced beef cattle were only seven in number, but the quality was there. H. D. Smith, of Hamilton, was the exhibitor. Bourton Ingle-side, the first-prize aged bull, stood first at London and second at Toronto. Amy IV., the best cow, also was winner at London, and second at Toronto. The cards were placed by N. Sangster.

#### POLLED ANGUS.

Awards in Aberdeen-Angus were made by N. Sangster. All the entries belonged to Jas. Bowman, of Guelph. Chief among the winners were the aged bull, Lord Val II., and Magnificent (imp.), an excellent yearling, first at Toronto and London, and third at the Royal Show, at Newcastle. Mr. Bowman's herd comprised sixteen choice animals.

#### GALLOWAYS.

There were seventeen representatives of the Galloway breed. D. McCrae, of Guelph, was the sole exhibitor, and they were worthy specimens. His aged bull, Berwick, is a superior animal. He stood first at Toronto and London. In the cow class, Miss Mary A. deserves special mention. She was also first at London.

#### SHEEP.

The exhibit of sheep, in point of numbers, was rather disappointing this year, due, to a great extent, to the failure of several of the Western importers and breeders to get a through passage for their exhibit, owing to some misunderstanding with the railway companies. The long-wools had not a single representative; the medium-wools being represented by Southdowns, Shropshires and Hampshires only, the Southdowns being in the majority, from the well-known and high-class flocks of Sir George Drummond, of Beaconsfield, Que., and George Allan, of Paris, Ont. In the section for ram 2 shears and over, the awards were: 1, Drummond; 2, Allan; Shearing ram—1 and 2, Drummond; 3, Allan; Ram lamb—1 and 2, Drummond; 2, Allan; Ewe, two shears and over—1 and 2, Drummond; 3, Allan; Shearing ewe—1, Allan; 2 and 3, Drummond; Ewe lamb—1, 2 and 3, Drummond.

#### SHROPSHIRE.

This popular breed was represented by J. Lloyd-Jones, of Burford, Ont., and W. A. Wallace, of Kars, Ont., Jones having a particularly high-class lot, in proper fit, and won all the firsts. The awards were: Ram, two shears and over—1, Jones; 2, Wallace; Shearing ram—1 and 2, Jones; Ram lamb—1, Jones; 2 and 3, Wallace; Ewe, two shears and over—1, Jones; 2 and 3, Wallace; Shearing ewe—1, Jones; 2 and 3, Wallace; Ewe lamb—1, Jones; 2, Wallace. For flock prize, only Wallace competed, and was awarded the diploma.

#### HAMPSHIRE.

Only Allan came forward with entries in this breed. The lot exhibited were highly creditable, and were awarded all the premiums.

#### FAT SHEEP.

As in the preceding class, Allan alone had entries.

Mr. Hanmer, of Brantford, handed out the awards with a despatch that showed a thorough knowledge of the art of sheep-judging.

#### SWINE.

The swine exhibit was one of the best seen at Ottawa for several years, the long row of pens being well filled, and the quality of animals shown in the various classes exceedingly high, representing to a great extent the herds out for competition at Toronto and London. J. E. Brethour, of Burford, Ont., placed the awards, in his usual masterly way, showing a thorough knowledge and understanding of his work.

#### YORKSHIRES.

This great and popular bacon breed were brought out by P. O. Collins, of Bowesville, Ont.; J. W. Featherston & Son, of Streetsville, Ont.; J. H. McConnell, of Aylmer, Que., and A. H. Foster, of Twin Elm, Ont. The Streetsville herd showed considerably better fitting, having lately run the gauntlet at Toronto and London; while the Bowesville herd, which, by the way, is one of

the largest and best in Eastern Ontario, were shown in breeding condition, without any special fitting, which handicapped them considerably.

The rating in the various classes was as follows: Boar over two years—1, Collins; 2 and 3, Featherston; Boar over 14 months and under two years—1, Featherston; 2, Collins; 3, Foster; Boar over six and under 12 months—1 and 2, Featherston; 3, McConnell; Boar under six months—1 and 2, Featherston; 3, Collins; Sow over two years—1 and 3, Featherston; 2, Collins; Sow over one and under two years—1 and 2, Featherston; 3, Collins; Sow over six and under twelve months—1 and 2, Featherston; 3, McConnell; Sow under six months—1 and 3, Featherston; 2, Foster; Litter of pigs—1, Foster; 2, McConnell; 3, Collins; Herd—Featherston.

#### BERKSHIRES.

The Berkshires, though not so numerous as we have seen in some former years, were a highly creditable lot, particularly the Brantford exhibit of T. A. Cox, brought out in the pink of condition, and winning all the firsts; the other exhibitors being W. A. Wallace, of Kars, Ont.; W. H. McConnell, of Aylmer, Que., and a single entry from D. Douglas & Sons, of Mitchell, Ont.

Boar, two years and over—The Toronto grand champion, in the entry of T. A. Cox, again won first; 2, Douglas; 3, W. A. Wallace; Boar over twelve months and under two years—1, Cox; 2, Wallace; Boar over six and under twelve months—1 and 2, Cox; 3, Wallace; Boar under six months—1 and 2, Cox; Sow over two years—1 and 2, Cox; 3, Wallace; Sow over one and under two years—1, 2, 3, Cox; Sow over six and under twelve months—1 and 2, Cox; Sow under six months—1 and 2, Cox; Litter of pigs—1, McConnell; 2, Wallace; Diploma—Cox.

#### TAMWORTHS.

The greatest that has been, was the opinion of very many on looking over the splendid exhibit of Tamworth swine, represented by two of the leading breeders of this great bacon breed in Canada, D. Douglas & Sons, of Mitchell, Ont., and R. O. Morrow & Son, of Hilton, Ont. The wonderful condition and fitting in which they were brought out showed the handicraft of the exhibitors' art.

Boar, two years and over—1, Douglas; 2 and 3, Morrow; Boar, one year and under two—1 and 2, Douglas; 3, Morrow; Boar over six and under twelve months—1, Morrow; 2 and 3, Douglas; Boar under six months—1, Morrow; 2 and 3, Douglas; Sow, two years and over—1, Morrow; 2 and 3, Douglas; Sow over one and under two years—1, 2, 3, Douglas; Sow over six and under twelve months—1 and 2, Douglas; 3, Morrow; Sow under six months—1 and 3, Douglas; 2, Morrow; Litter of pigs—1 and 3, Douglas; 2, Morrow; Herd—Douglas.

#### CHESTER WHITES.

Though Chester Whites are popular in Eastern Ontario and Quebec, only one breeder, Mr. L. H. Caldwell, of Manotick, Ont., came out for competition with the famous Bornholm herd of D. DeCourcy, of Bornholm, Ont. This was unfortunate, but probably the fame of the Bornholm herd had something to do with it.

Boar, two years and over—1, DeCourcy; Boar over one and under two years—1, DeCourcy; Boar over six and under twelve months—1, DeCourcy; 2, Caldwell; Boar under six months—1 and 2, DeCourcy; Sow over two years—1, DeCourcy; Sow over one and under two years—1 and 2, DeCourcy; Sow over six and under twelve months—1, Caldwell; 2 and 3, DeCourcy; Sow under six months—1, Caldwell; 2 and 3, DeCourcy; Herd—DeCourcy.

#### HORSES.

In the breeding classes of horses, the entry at Ottawa this year was considerably below the average numerically, very many of the old familiar faces of exhibitors of past years being conspicuous by their absence, the Clydesdale and mixed class of Belgian, Percheron and Suffolk Punch being decidedly the best filled. The Shire, Hackney, Thoroughbred, Standard-bred and Carriage or Coach classes had very few entries, as did also the French-Canadian classes; nevertheless, what was lacking in numbers was, in nearly every class, made up in quality, a condition very satisfactory, inasmuch as it shows the increased interest being taken by breeders and exhibitors, particularly of Eastern Ontario and Quebec, in bringing out their animals in a condition and of a quality fit to compete against all comers. In this respect, it is pleasing to note a decided improvement, year by year. The plan in vogue, of placarding all the stables with a notice of the various classes, and the hours in which they are to appear in the ring, works admirably, no time being lost, whatever, in waiting for the various classes to be on hand, although we still think the old plan of running through the various sections of any breed continuously much to be preferred to the heterogeneous mixing of all the classes, as practiced at present both at this show and at Toronto, and we are very sure it would be much more appreciated by the public generally.

#### CLYDESDALES.

The Clydesdales were not out in so great num-

bers as in some former years, consequently the entries in most of the classes were small, but the interest manifested by the large crowds continually at the ring-side, and the criticism heard, in the usual, good-natured way, was evidence that the people generally are alive to the importance of the great horse-breeding industry of Canada. Mr. W. F. Kydd, of Simcoe, Ont., the well-known expert judge, placed the awards in a way that brought forth many expressions of praise for the impartiality and consistency with which he performed his work. In the class for imported Clydesdales, the principal exhibitors were the well-known firms of Smith & Richardson, Columbus, Ont., and R. Ness & Son, of Howick, Que. Also, a number were out for honors from the late importation of C. W. Barber, of Gatineau Point, Que. Other exhibitors in this class were, Adam Scharf, of Cumming's Bridge, Ont.; W. Allin, of Aylmer Road, Ont.; Senator Owens, of Montebello, Que., and T. B. Macaulay, of Hudson Heights, Que. In the class for stallions four years and over, the entries were all from the Columbus stable, first prize going to the intensely flashy and beautiful-going son of Marcellus, President Roosevelt, a horse of striking appearance and grand, smooth conformation; second going to the grand, good horse, Sir Henry, a son of the great sire, Prince Thomas; third to Duke of Walton, by Sir Everett, with mighty little to choose between him and Sir Henry, both being horses of splendid style, quality and action. The class for stallions 3 years old brought out entries from Smith & Richardson, R. Ness & Son, and C. W. Barber, five lining up before the critical eye of Judge Kydd. It did not take long for the talent to decide that an easy winner was to be seen in Inheritor, from the Columbus stable, a rare, nice-quality horse that moved beautifully, a credit to his illustrious sire, Hiawatha. It took the judge considerable time to decide just where to place the other ribbons, but finally second was placed on Esperston, by Baron Loudon, the entry of C. W. Barber; third going to the same stable on Baron Edward, by Baron's Pride; fourth to R. Ness & Son on Baron Brown, by Baron Hood. In stallions two years old, four came out at the call of time, a lot that, with the exception of an easy first, it was dollars to doughnuts where the other ribbons would go. First went to Dunure Peeble, a sweet-turned colt, on a faultless bottom, from the Columbus stable; second going to the same stable on Dunure Acknowledgment; third to C. W. Barber on Ascot Pride. In stallions one year old, three exceptionally good colts were lined up—two from the Columbus stable, the other from the Howick stable of R. Ness & Son. First prize, as before, was easy to pick, on account of an excess of quality, particularly at the bottom, and a decided superiority in the strength of stile. He was found in Dunure Wallace, from the Columbus lot, a get of the noted Baron o' Buchlyvie; second was from the Ness stable, in Indomitable, by the great Benedict; third from the Columbus stable, in Huntley Pride, by Ruby Pride. The latter two are colts with a vast amount of substance and character. In stallions, the championship went to President Roosevelt, and rightly so.

In brood mares and foals, four pairs came out—two from the stable of Senator Owens, one from the Columbus stable, and one from the stable of W. Allin. Here, too, as in all the preceding classes, quality, combined with a smooth, drafty conformation, coupled with true, straight action, counted much with the judge, which was found for first honors to Floshead Princess, from the Columbus stable, as did also first in foal, and the gold medal for best mare and foal. Second went to Senator Owens on Kyle Rosie, a mare of great substance and a splendid bottom, her foal getting third. Third went to W. Allin, on Nellie Meridian, another big, good kind, her foal getting second. Filly, 3 years old.—Only two were out for honors here, both the property of Adam Scharf, and a right good pair they were, with a splendidly-blended combination of size, quality, character and action. First went to Maggie Patterson; second to Lady Brown. Filly, 2 years old—Only two were out. An easy first was found in the big, splendid filly, Amulet, from the Ness stable, a filly with great size, character and much quality. This filly was finally awarded the female championship, a decision that gave universal satisfaction. Second went to the entry of C. W. Barber, a new arrival, and consequently not in fit. Filly, one year old—Ness again won first, and Allin second.

#### CLYDESDALES, CANADIAN-BRED.

It was certainly very pleasing to note the high-class quality and character of many of the entries in this class, and more so from the fact that, with the exception of a single entry, all the exhibitors were Eastern Ontario and Quebec farmers, notably, D. Boyd, Kars, Ont.; McDougal Bros., Ormstown, Que.; W. R. McLatchie, Gatineau Point, Que.; W. H. McIntyre, Kemptville, Ont.; Adam Scharf, Cumming's Bridge, Ont.; C. R. McCurdy, Hazeldean, Ont.; J. H. Wallace, North Gore, Ont., and Smith & Richardson, Columbus, Ont.

Stallion 4 years and over brought out three

entires—a massive, smooth lot. First went to Stanley Prince 2nd, by Stanley Prince (imp.), the entry of D. Boyd; second to Togo, by McLaws (imp.), the entry of McDougall Bros.; third to King Edward, a full brother to Togo, also owned by McDougall Bros. Stallion, 3 years old—Only two came forward, Royal Montrose, by Stanley Prince 2nd, the entry of W. R. McLatchie, and Highland James, by Bucephalus (imp.), the entry of Smith & Richardson. The prizes were awarded in the order named, Royal Montrose calling forth a deal of praise from the judge for his superb form and finish, which he rightly deserved, for he is certainly a right good sort. Stallion, 2 years old—Only one entry came forward in this class, Goldfield, by Ardlethen Premier (imp.), the property of W. H. McIntyre.

Brood mare and foal, had also a single entry, from Adam Scharf, in Hattie McIntosh, by McIntosh (imp.). Filly, 2 years old—An outstanding winner—for size, at any rate—was found in Pretty Queen, the entry of J. R. McCurdy. She is a filly of great substance, smooth to a turn, and stands on an extra good bottom. Second went to Royal Lady, the entry of W. R. McLatchie. She was a filly very much after the type of the first-prize one, with lots of size and character. Third went to Lady Glenlivet, from the Columbus stable. This filly, from her intensely smooth mould and exceedingly flashy quality, was the choice of many, but the judge thought differently. The first-prize one, Pretty Queen, was finally awarded the championship. Filly, 1 year old—There were only two entries, that of McDougall Bros, which was awarded first, and the entry of J. H. Wallace, which was placed second.

In the stallion classes there were two championships, one for horses owned in the County of Carleton only, which was won by Stanley Prince 2nd; the other for best stallion outside the County of Carleton, which went to Royal Montrose.

#### SHIRES.

It is very evident that this great English draft breed of horses has gained little favor in the Ottawa Valley or Province of Quebec, as there was only a single entry, and that in the class for stallions four years old or over. He was Moomoor Royal (imp.), by Royal William, the entry of Dr. G. W. Bell, V. S., of Kingston. He is a horse of commanding appearance and great substance, a credit to the breed and his owner.

#### PERCHERON, BELGIAN, AND SUFFOLK PUNCH.

This mixed class brought out a larger entry than we remember ever seeing at Ottawa or elsewhere in Canada, from the well-known importing firms of J. Crouch & Son, Lafayette, Ind.; R. Ness & Son, Howick, Que.; and B. Beaulieu, St. Jerome, Que.

Stallions, 4 years and over—All the prizes went to Percherons. First to J. Crouch & Son on No. 33; second to F. H. Wilson, of Manotick, Ont., on Rocket, and third to R. Ness & Son. Stallion, 3 years old—All the prizes went to J. Crouch & Son; first on the Percheron, No. 40; second on the Belgian, No. 66; third on the Belgian, No. 90. Stallion, 2 years old—In this class, all the entries were from the stud of B. Beaulieu, five in number, and all Belgians. He, of course, was awarded all the premiums. The championship went to Crouch & Son on No. 33.

#### FRENCH-CANADIANS.

This popular general-purpose Quebec breed were shown by Arsene Denis, of St. Norbert, Que.; Louis Thoin, of Repentigny, Que., and Senator Owens, of Montebello, Que., and were judged by Mr. L. Laval. In the class for stallion four years and over, first went to Denis on Prince Royal; second and third to Senator Owens. Stallion, 3 years old—First went to the single entry of A. Denis, on Major. Brood mare and foal—Another single entry from Louis Thoin, which was awarded first and gold medal. Filly, 3 years old, also went to Thoin on a single entry. Gold medal for best stallion went to A. Denis, on Prince Royal.

#### HACKNEYS.

Hackneys made a poor showing. The entries were few, and the quality not as good as we are accustomed to seeing at this great show. The exhibitors were, T. B. McCaulay, Hudson Heights; A. Chartier, of St. Paul l'Ermitte, Que.; J. J. Black, Winchester, Ont.; H. McGuire, Ottawa, and T. A. Cox, Brantford. For stallion 4 years and over, first went to the entry of J. J. Black; second to the entry of H. McGuire. Stallion, 1 year old—First went to T. A. Cox; second to A. Chartier. Brood mare and foal—First went to the entry of A. Chartier. Three-year-old filly—First went to the entry of T. B. McCaulay.

#### CARRIAGE OR COACH.

Carriage or Coach were principally in the hands of J. Crouch & Son and R. Ness & Son. Some exceedingly high-class animals were brought out for honors. In the class for stallions four years old and upwards, first went to the Indiana firm on a royal type of imported German Coach

stallion; second to Ness on an imported French Coach stallion; third reverting to the Indiana stable. Stallion, 3 years old, went first and second to J. Crouch & Son; third to Ness.

#### STANDARD-BREDS.

This greatest of all road breeds of horses was fairly well represented, nearly every section of the class having one or more representatives. The breeding animals were principally from the stables of C. P. Stewart, Aylmer, Que.; R. W. Stewart, of the same place, and J. J. Black, of Winchester. Honors were pretty evenly divided, the aged-stallion award going to R. W. Stewart on Polar Chimes.

#### HARNESS AND SADDLE CLASSES.

The harness and saddle classes were well filled with an exceptionally high-class lot of animals. The strongest exhibitor being Mr. Geo. Pepper, of Toronto, whose invincible string carried off the honors wherever shown. Mr. T. A. Cox, of Brantford, another Western Ontario exhibitor, had things pretty much his own way in several classes. These, together with Eastern entries, made up the best show of this class seen here for several years.

#### GENERAL-PURPOSE AND AGRICULTURAL CLASSES.

The general-purpose and agricultural classes were exceedingly well filled, and the quality of animals shown in these classes was a decided improvement over former years.

W. H. Gibson, of Beaconsfield, Que., assisted by John Bright, of Myrtle, Ont., placed the ribbons in the light-horse classes, to the satisfaction of all concerned.

#### POULTRY EXHIBIT.

Never have Ottawa Fair visitors had the privilege of seeing poultry of higher quality. Ducks, geese and turkeys were surprisingly strong. White Wyandottes and White Plymouth Rocks, too, were in evidence. The absence of names on the prize cards prevents a detailed list of winners at present.

The prizes for turkeys, geese and ducks went largely to Taylor Bros., of Dewittville, Que., who had birds of size and quality. White Wyandottes were well represented by Hintonburg Poultry Yards, of Ottawa; R. W. Vout, of Brockville; R. J. Hunt, of Ottawa South; George Higman, of Ottawa. R. E. Blakely, of Ottawa, had some fine Buff Wyandottes. The awards for White Plymouth Rocks showed Jos. Fortier, of St. Scholastique, Que., to have a good share. Fortier and Hintonburg Poultry Yards took many cards in Barred Rocks. A. W. E. Hellyer, of Ottawa South, was strong in Buff Orpingtons, while John A. Belford, of Ottawa, had White Orpingtons and Black Orpingtons. C. C. Cornish, of Ottawa, had the large Brahmas, and Morley Peaker, of Ottawa, Cochins. Prizes for Game fowl went chiefly to James Snetzinger, of Farmer's Corners; E. H. Benjamin, of Ottawa, and F. Orrelle, of Ottawa. Most of the Black Minorcas belonged to Geo. C. Hume, of Ottawa, and Hintonburg Poultry Yards. The prizes for White Leghorns went to D. McKellar, of Hawkesbury; S. Crouch, of Billings' Bridge, and J. A. Belford, while Geo. Steele, of Perth, and Snetzinger had the major share in Brown Leghorns.

#### AGRICULTURAL PRODUCTS.

The display of products of the soil, though not large, was highly creditable. The grains, grasses, field roots, fruits, vegetables and flowers were free from blemish, and of Ottawa Valley quality, while the exhibit of the Dominion Seed Branch, in charge of T. G. Raynor, and that of the Central Experimental Farm, in charge of W. T. Macoun, were educational. There were samples of sound oats and frozen oats, that could not be distinguished as to quality from external examination, thus showing the importance of germination tests. Cross-sections of the oat-kernel showed the characteristic blackening due to frost. Clovers and grasses contaminated with weed seeds, particularly Black Medick, in red clover and alfalfa, were interesting. Boxes of soil, with growing plants from low-grade and high-grade grains and grasses, showed the value of the higher grades. Perhaps the most remarkable feature of the exhibit was a variety of corn, cross-bred from White Cap Yellow Dent and North Dakota White Flint, which has been grown for five years by T. C. Bate, of Maniwaki, Que., 100 miles north of Ottawa. It is claimed to be ready for ensilage ninety days after planting. Weeds, weed seeds, and germination testers, formed an important part of the display.

The Experimental Farm exhibit was attractive and rich in appearance. Neatly-arranged bunches of grains formed the major part of the background. Then, there were fruits and vegetables of all kinds and crosses. Apples, seedling apples, crabs, plums, grapes, tomatoes and potatoes were most in evidence.

One card said the best potatoes were: Early—Rochester, Rose, Early Ohio, Early White Prize, Irish Cobbler, Burpee's Extra Early. Main Crop—Carmen No. 1, Dooley, Dalmeny Beauty, Money-maker.

Apples named for the Ontario Agricultural Society. Summer—Yellow Transparent, Canada Red, Red Duchess. Autumn—Langford Beauty, St. Lawrence, Wealthy, Alexander. Early Winter—McIntosh, Fameuse, Wolf River. Winter—Milwaukee, Baxter, Golden Russett, Scott's Winter.

In vegetables, many prizes went to Wm. Triggs, of Billings' Bridge. Wm. Naismith, of Falkenburg, had his collection from Muskoka soil, and carried off most of the money in potatoes. Apples were few in numbers, perhaps on account of scarcity of room and scanty prizes, but the quality was good. Grapes, pears and plums, too, were high-class.

**BUTTER AND CHEESE.**

The Central Canada Exhibition once more has seen a great collection of butter and cheese. The judges were, J. W. Mitchell, of Kingston, and Instructor J. H. Echlin. There were 21 white and 25 colored cheese, with scores showing only fractional differences. In butter there were 14 lots in the creamery tubs, 6 in creamery prints, 18 in dairy tubs, and 20 in dairy prints. Quebec butter-makers ran away with the prizes, but Ontario cheese men stood on top.

The winners in butter were: Creamery, two tubs, boxes, or firkins, not less than 50 pounds—1, St. Valentine Creamery, St. Valentine, Que., 96; 2, W. H. Stewart, Frontier, Que., 95; 3, John Anderson, Renfrew, 94; 4, W. H. Stewart, Hemmingford, Que., 94; 5, A. W. Sorenson, Cowansville, Que., 93.

Creamery, prints or fancy packages, not less than 10 pounds—1, W. H. Stewart, 95; 2, St. Valentine Creamery, 95; 3, Wm. Waddell, Kerwood, 94.

Dairy, two tubs, boxes, firkins or crocks, not less than 10 pounds—1, Miss M. A. Tucker, Smith's Falls, 95; 2, Miss F. E. Caldwell, Manotick, 94; 3, Alex. Meldrum, Wyman, Que., 93.

Dairy, package or basket of prints, not less than 10 pounds—1, Miss M. A. Tucker, Smith's Falls, 95; 2, W. H. Stewart, Frontier, Que., 95; 3, Mrs. P. Dumas, Maryland, Que., 94.

The awards in cheese were: Colored, two factory—1, G. Hugh, Beachburg, 96; 2, L. Brown, Metcalfe, 96; 3, Alfred Park, Westmeath, 95; 4, A. S. Walker, North Cote, 95; 5, L. Tallman, Jockvale, 94.

White, two factory—1, A. Park, Westmeath, 95; 2, L. Tallman, Jockvale, 95; 3, T. J. Hicks, North Gower, 94; 4, W. F. Gerow, Napanee, 94; 5, A. E. Keays, Lanark, 94.

**ST. THOMAS HORSE SHOW.**

The third annual exhibition of the St. Thomas Horse Show Association, held in the Granite Rink, in the City of St. Thomas, Ontario, on Sept. 22nd and 23rd, proved a very successful affair. The weather was all that could be desired for such a function, the display of horses in most classes of high-class excellence, and the attendance fairly satisfactory, though not as large as the interest of the show would warrant. The district around St. Thomas is noted for its high-class horses of the lighter class, and many good heavy horses are also found there, but more of the farmers than do should enter the competition, in order to add to the interest of the show, and they would doubtless find it a good place to make sales, as dealers and fanciers are generally on the lookout for desirable animals on such occasions. In the classes for saddle and driving horses, single, and in matched pairs, the display was exceedingly creditable to local exhibitors, while the contributions of entries from the noted stables of Hon. Adam Beck and Mrs. Beck, of London, and of Miss K. L. Wilks, of Galt, caused the display in those classes to assume the character of a show of national interest and importance. In addition to these, the presence of a selection from the noted stud of Graham-Renfrew Co., of Bedford Park, Toronto, placed on exhibition, and not for competition, greatly added to the interest and enthusiasm of the show. These included the Toronto and Chicago grand champion Clydesdale and Hackney stallions, Sir Marcus and Brigham Radiant; the champion Hackney Pony stallion, Plymouth Horace, a full brother to the champion pony of England; and the Toronto champion Clydesdale and Hackney mares, Thorncliffe Duchess 3rd and Saxon Queen, which, when paraded in the arena during each session of the show, created great enthusiasm, the ponderous Clydesdales carrying quality with size, and the beautiful and stylish Hackneys showing marvellous action, while the pony put up a splendid showing of knee and hock action, combined with speed. The limits of space permit a reference only to a few leading features of the competition.

In the class for single-harness mare or gelding over 15.2, an outstanding winner in a class of nine high-class entries was found in Miss Wilks' five-year-old Black Princess, a magnificent mare in type and action, standing 16 hands; Mrs. Adam Beck's grand bay mare, Lady Norfolk, 8 years old, 15.2 1/2 hands, with high-class action and fine conformation, being second, while T. Rockey, of Springfield, was third with Don, and J. Carruthers, of Tillsonburg, fourth, with Olmeda, both excellent horses.

For single-harness horse 15.2 and under, Miss Wilks won with the beautiful and stylish Evangee, a brown mare 6 years old, 15.1 1/2 hands; Sinclair & Leeson, Aylmer, being second with Jingle Bells, and W. E. Parker, St. Thomas, third, with Maud.

In a strong class for pairs of heavy-harness horses over 15.2, Miss Wilks was again first with a magnificent team, consisting of Black Princess and Allablaze, a chestnut mare 6 years old, and 16 hands, the pair matching admirably in size and action, while complete in conformation and stylish in appearance. Mrs. Peck's splendid pair of bays, Lady Norfolk and Lord Norfolk, 7 and 8 years old, and 15.2 1/2 hands, with grand action, made the competition exceedingly keen, and were placed second, the third award going to a very fine team shown by G. T. Rockey, and fourth to W. E. Lumley, of St. Thomas, for an excellent pair.

Miss Wilks was also first in the class for single roadsters, with the beautiful bay mare, Rhea W., 15 1/2 hands, and for pair of roadsters, Rhea W. and Mary Vincent; W. J. Cowan, of Winnipeg, being second, and R. J. Young, of London, third.

In the hurdle-jumping competitions, in which a number of local horses took part, with very creditable work, the entries from the Beck stables made the best records, except in the first evening trials, in which the grey gelding, Prince Royal, owned by I. W. McPherson, of St. Thomas, won the first award, amid enthusiastic applause.

In the class for combination horses, saddle and harness, Miss Wilks won with Lady Bird, second going to I. W. McPherson for Prince Royal, third to A. M. Smith, London, for Chateau Belle, and fourth to G. W. Davey, St. Thomas.

For heavy-draft team, and for agricultural team, D. McGibbon, of Shedden, was the winner. For Hackney stallions, Dr. C. K. Geary, of St. Thomas, won with Connaught's Heir. For Thoroughbred stallion, F. Donley, St. Thomas, won with Cricklade. For Hackney brood mare with foal by her side, Geo. A. Campbell, of Middlemarch, won with Jubilee Dixie; and for heavy-draft brood mare, A. F. McNiven, of St. Thomas, was first with Rose of Powmill. For Shire stallion, 4 years or over, R. D. Ferguson, Port Stanley, won with Bay Prince, 5 years, 16.2.

The musical ride, by the Elgin Riding Club, was an interesting feature of the show, and decidedly creditable, considering that only a few weeks' practice had been available.

The show was admirably managed, reflecting much credit on the officers, R. D. Ferguson, President; C. P. Geary, Vice-President; Walter Kingmill, Secretary; W. Wallace Bruce, Assistant Secretary, and upon the Executive and Directors. The judges were W. H. Millman, Toronto; Robert Graham, Bedford Park, and Seward Carey, Buffalo, N. Y.

**PEDIGREES MUST BE GENUINE.**

Cases of suspicious work on the part of breeders in different parts of the country, in recording pedigrees, are being investigated by the Record Committee who supervise the National Live-stock Records. At a meeting of that committee, held in Ottawa during fair week, it was decided to take severe measures in dealing with these cases. All were unanimous in their determination to keep the records clean. Several pedigrees have already been cancelled.

The Record Committee consists as follows: Robt. Miller, of Stouffville, Chairman; Hon. John Dryden, of Brooklin, Ont.; Robt. Graham, of Bedford Park, Ont.; Wm. Smith, of Columbus, Ont.; J. M. Gardhouse, of Weston, Ont.; Robt. Ness, of Howick, Que.; J. E. Brethour, of Bedford, Ont.; and John W. Brant, of Ottawa, Secretary. Dr. J. G. Rutherford, Live-stock Commissioner, was also present.

The clause in the Live-stock Pedigree Act dealing with the matter reads: "Any person who signs a false pedigree, intended for registration, or who presents or causes another person to present a false pedigree for registration by the Association, shall, upon summary conviction, upon information laid within two years from the commission of the offence, be liable to a penalty not less than \$100 and not exceeding \$500 for each false pedigree so signed or presented, together with the costs of the prosecution."

It is advisable for breeders to exercise strict care in connection with their private records, so that they may be sure there are no mistakes.

**FAIR DATES FOR 1908.**

Oct. 8th and 9th.—Kilsyth Agricultural Society, Kilsyth.  
Nov. 28th to Dec. 10th.—International Live-stock Exposition, Chicago.  
Nov. 30th to Dec. 3rd.—Maritime Winter Fair, Amherst, N. S.  
Dec. 2nd to 10th.—National Dairy Show, Chicago.  
Dec. 7th to 11th.—Ontario Provincial Winter Fair, Guelph.

Dr. Saunders, Director of Government Experimental Farms, has concluded a tour of Vancouver Island, with the object of selecting a site for an experimental farm.

**VEGETABLES FROM ABITIBI**

Abitibi Lake is some 350 miles north of Toronto, as the crow flies. There, on the banks of the Black River, the Government has selected a site for an experimental farm, to test the agricultural possibilities of the great clay belt of the north. The Department of Physics at the O. A. College has equipped a meteorological station at the farm. The weather observations are sent down monthly. With the last report, Prof. W. H. Day received samples of potatoes, cucumbers and tomatoes grown there. They are all fine specimens, says the Guelph Mercury, and demonstrate that vegetables can be successfully grown there.

Mr. W. McLaren, the observer, says: "The seeds were planted at the end of May, with exception of the tomatoes, which were planted later in June. We had ripe tomatoes to-day, September 13th. We have also had lettuce, peas, beans and parsley."

**COMPARISON OF TEMPERATURES.**

	—Guelph—		—Abitibi—	
	Max.	Min.	Max.	Min.
May .....	83	29	82	17
June .....	86	40	93	26
July .....	89	50	95	30
August .....	83	43	89	34
September .....			84	24

\*11th; †3rd.

From the above table it will be noted: (1) Abitibi had frost in every month but August, the July frost not being sufficient to do any damage. Season without killing frost, from June 11th to September 3rd, 85 days. Guelph has 145 days free from killing frost.

(2) At Abitibi maximums are higher and minimums lower than at Guelph, i.e., Abitibi climate is much more extreme. It had higher maximums in June, July and August than had Guelph.

**CANADIAN BOUNTIES AND TARIFF BENEFITS.**

The amount of bounties paid by the Government of Canada last year is given as follows in a recently-issued official return:—

On iron and steel .....	\$2,368,140
On lead, smelted .....	51,001
On binder twine .....	42,000
On petroleum .....	391,217
<b>Total .....</b>	<b>\$2,752,358</b>

"This represents (says the Montreal Gazette) a considerable sum to be paid by the people generally in aid of the proprietors of a few industries. When that meaning is fully appreciated it will be difficult to maintain the payments. Those concerned would do well not to count on many renewals of the grants." And yet the above sum paid directly in bounties is a mere bagatelle compared with the fifty to one hundred million dollars paid annually as an indirect premium to Canadian manufacturers, in the form of enhanced prices to home consumers on goods made in Canada. Because the subvention afforded by the tariff is indirect, and is not ordinarily distinguished from the intrinsic competitive value of the goods, the consumer does not realize its degree. It is when we consult statistics and think in totals, that we realize the burden of a high protective tariff. Whether appreciated or not, the burden exists nevertheless, and an awakening public opinion is becoming seized of the facts in the case.

**INCREASED PRIZES FOR E. L. S. AND P. SHOW.**

The annual meeting of the Eastern Ontario Live-stock and Poultry Show was held in Ottawa on September 23rd. Mr. Peter White, the well-known stockman, of Pembroke, Ont., was elected President, and N. F. Wilson, Cumberland, Vice-President. It was decided to hold the next show at Ottawa, on January 18th to 22nd, 1909. The principal changes made in the rules and regulations governing the show are as follows:

1. That competition in the live-stock department shall be open.
2. That the age of beef cattle shall be computed to the first of September.
3. That the dairy test shall continue for three days, instead of two, the test to start at 5 o'clock Saturday morning previous to the show.

Large increases were made in the amount of prizes offered in different departments. The total amount of cash offered for competition at the next show is over \$7,000. This is divided among the departments for beef cattle, dairy cattle, sheep, swine, seeds and poultry. To emphasize the value of the prizes offered at this show, it might be noted that a single steer can win \$90. A wether or a barrow could each carry of \$20. The classification is so large and the prize-money is divided up sufficiently to allow any well-fitted animal to win a generous share.

The million-dollar packing plant of J. Y. Griffin & Co., Edmonton, Alta., was formally opened on Sept. 15th, and killing operations started immediately, several hundred hogs being in the yards for slaughter at the start. A party from Chicago came up to see the opening, including some of the Swifts, and others of Chicago packing fame. The Edmonton establishment will handle cattle and sheep, in addition to hogs.

**SHEEP FOR INTERNATIONAL EXHIBITION.**

It is hereby ordered, that from November 20th to December 5th, 1908, Canadian sheep may be imported into the United States, for exhibition purposes at the International Live-stock Exposition, to be held at Chicago, Ill., from November 28th to December 10th, 1908, without being subject to the 30-days quarantine, provided they pass a satisfactory inspection at the port of entry, and are accompanied by an affidavit of the owner or importer, and a certificate issued by a Canadian official veterinarian, as required by amendment 8 to B. A. I. order 142, amending regulation 41 of the regulations for the inspection and quarantine of horses, cattle, sheep and other ruminants, and swine imported into the United States, and provided, further, that the sheep which are not sold to remain in the United States shall be returned immediately to Canada at the close of said exposition.

The Department must be notified by the owner or importer, through the office of its veterinary inspector in charge at Chicago, of any Canadian sheep which are to remain in the United States for breeding purposes, and such sheep will be maintained in quarantine at the exposition grounds, under the supervision of an inspector of this Department, who shall issue a certificate before shipment to destination is allowed.

The thirty days of quarantine will be counted from the date of entry into the United States.

All Canadian sheep intended for this exposition must be shipped directly to the exposition grounds, and must not be unloaded in any public stock-yards.

JAMES WILSON,  
Secretary of Agriculture.

**CHANGE IN DATE OF ONTARIO HORTICULTURAL EXHIBITION.**

The dates for the holding of the fifth Ontario Horticultural convention, in the St. Lawrence Arena, Toronto, Ont., originally announced for November 10th to 14th, have been moved forward one day, to permit of the opening being held on the evening of Thanksgiving Day, November 9th.

**NEW SHEEP RECORDS.**

The Record Committee of the National Record Board, at a meeting in Ottawa during the Central Canada Exhibition, decided to take steps to form Canadian Records in connection with the Dominion Sheep-breeders' Association, for Cheviot, Highland Black Face and Suffolk sheep.

**FIGHT FIRE WITH FIRE.**

Editor "The Farmer's Advocate":

In a late issue, Mr. V. Dewitt Rowell comes to the defence of Miss Eunice Watts. He tells us that war is caused by ignorance, superstition, selfishness, pseudo-patriotism, and mistaken zeal. The main causes of war he entirely ignores; they are pride, ambition and covetousness. All the great wars of the last half century have been caused by these, as, for instance, Russia wanted to get Constantinople, hence the Crimean war; she aimed to get Manchuria, hence the Russo-Japan war. The U. S. Government coveted Cuba, hence the Spanish war. Kruger wished to become lord paramount of South Africa, hence the Boer war. It is vain for socialists, anarchists and others to pass resolutions in favor of peace. When a powerful nation like the United States or Russia decides on going to war, Hague Conference resolutions don't count. You must meet them with weapons (swords, pistols, guns and bayonets) similar to their own.

WILLIAM BOYLE,  
York Co., N. B.

**GOSSIP.**

Messrs. Dunnet Bros., Clanbrassil, Ont., advertise for sale Leicester shearing rams, ram lambs, shearing ewes, ewe lambs, and one two-year-old ram, bred from imported stock, in good condition, and at reasonable prices.

At the Lanark, Scotland, annual show and sale of Blackfaced Highland sheep, on September 8th, five shearing rams of that breed, belonging to Mr. M. G. Hamilton, Woolfords, sold at auction for an average of £62 each, two selling for 100 and 105 guineas each, while a 4-year-old ram sold for £90.

At an auction sale on August 27th, of imported and American-bred Shropshire and Oxford sheep, owned by Geo. McKerrow, of Wisconsin, on the State Fair grounds, at Des Moines, Iowa, imported Shropshire rams sold at from \$40 to \$187.50 each, and imported ewes at \$30 to \$100, yearling American-bred rams at \$20 to \$32.50, American-bred ewes at \$17 to \$22.50, and two imported Oxford Down rams at \$100 and \$105 each.

At the dispersal sale on Sept. 10th, of the Shorthorn herd of Mr. Sydney Hill, at Langford, near Bristol, England, very satisfactory prices were realized, the entire herd of 46 head selling for an average of a little over £92 (\$460). Mr. Duthie paid 210 guineas for Princess Royal 85th. Capt. Gordon took Lavender Wreath 2nd at 205 guineas, and Lord Winterstoke paid 250 guineas for Lavender Queen, and half a score others brought from 115 to 155 guineas each.

**DEATH OF HENRY STEWART.**

Dr. Henry Stewart, widely known as the author of "The Shepherd's Manual," the "Domestic Sheep," and several other works on agriculture and stock-raising, died at his home in Franklin, North Carolina, on August 17th, in the 80th year of his age. He was a native of New York. He wrote largely for the agricultural press on sheep, and was for years interested in feeding and marketing sheep and lambs.

**SALE DATES CLAIMED.**

Oct. 1st.—Joseph Akitt, Inglewood, Ont.; Shorthorns.  
Oct. 7th.—R. Corley, Belgrave, Ont.; Shorthorns.  
Oct. 20th.—David Clow, Whitechurch, Ont.; Shorthorns.  
Nov. 4th.—A. E. Meyer, Guelph; J. Watt & Son, Salem, and J. Gordon Gibb, St. Catharines, Ont.; Shorthorns, at Guelph.

**CHANGES IN FAIR DATES.**

The following are the corrected dates of fairs announced by the Ontario Department of Agriculture:

Queensville.....	Oct. 6 and 7
Tara.....	Oct. 6 and 7
Wallaceburg.....	Oct. 7 and 8
Forest.....	Oct. 1
Kemptville.....	Oct. 2
Kilsyth.....	Oct. 8 and 9

**NEW CANADIAN RACING ASSOCIATION.**

At a meeting in Toronto, on Sept. 21st, of presidents of the jockey clubs racing in Ontario and Quebec, with Mr. Seagram, President of the Ontario Jockey Club, in the chair, the question of the organization of a Canadian Racing Association, which will assume control of the turf in the Dominion, was discussed. The gentlemen present, it is reported, were entirely of one accord as to the many benefits which would result from such a union. Many details were practically agreed upon, and the actual work of capitalization will be completed at a meeting to be held in the latter part of October, subsequent to the close of the racing season.

One of the drawbacks of the horse business is the heavy risk incurred from accident, sickness and disease. The well-known firm of horse importers and breeders, Graham Bros., Claremont, Ont., had the misfortune this season to lose one of the best stallions of an importation of eighteen, purchased by Thos. Graham, in Scotland. The splendid five-year-old stallion, General Vasey, arrived safely at Montreal, but contracted a cold on the journey up, which settled on his lungs, and developed pneumonia, from which he died September 2nd. Fortunately, he was insured for \$2,000 with the Yorkshire Insurance Co., Ltd., of York, Eng., thus mitigating what would otherwise have been a very heavy loss.

**TRADE TOPIC.**

The attention of our readers is called to the advertisement of Cooper's Fluid, for the destruction of ticks on sheep, lice on cattle, horses or dogs, and for the cure of ringworm, mange and sores. All sheep should be treated for ticks, either by dipping or pouring, before winter sets in. Cooper's Fluid cleans the skin and promotes the growth of wool, as well as destroying all lice and ticks which, if neglected, may give much trouble and seriously hinder the thrift of the flock during the winter and spring. Cooper's Fluid is easily prepared for use, requiring only the addition of water, when it is ready for immediate use. The Fluid should be kept constantly on hand on every stock farm for use when needed for any of the purposes above indicated. Send for free booklet and give it a trial. This old and reliable English firm also manufacture spraying fluids for fruit trees and vegetables, which have been used in Canada with much satisfaction. They also sell a fumigating fluid for destroying wireworms and other insect pests in the soil. This is called Apterite.

**POIGNANT WIT.**

Sir Richard Bethell, afterward Lord Westbury, with a suave voice and a stately manner, nevertheless had a way of hearing down the foe with almost savage wit. Once, in court, he had to follow a barrister who had delivered his remarks in very loud tones. "Now that the noise in court has subsided," murmured Bethell, "I will tell your honor in two sentences the gist of the case."

**QUESTIONS AND ANSWERS.**

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.  
2nd.—Questions should be clearly stated and plainly written on one side of the paper only, and must be accompanied by the full name and address of the writer.  
3rd.—In Veterinary questions the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.  
4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

**Miscellaneous.****BLOODY MILK.**

Cow, 14 years old, a good milker, gives bloody milk from one quarter; has continued for three weeks or more. W. B.

Ans.—This may be due to accidental injury or to congenital weakness of the tissues of the udder. Bathe the afflicted quarter long and often with cold water, then rub well with camphorated oil, and give one ounce tincture of iron in a pint of cold water twice daily until blood ceases to flow.

**STATIONARY ENGINEERING.**

Is there any school in Canada at which to learn stationary engineering by mail (or by attending the school in person)? Or where and how do you learn?

W. T.  
Ans.—We do not know of any school in Canada that teaches stationary engineering by mail. The International Correspondence School of Scranton, Pa., does so. We believe that Francis A. Corns, 190 Spadina avenue, Toronto, prepares candidates to undergo examination for certificates. WM. B. VARLEY, Secretary to the Department of Agriculture, Toronto.

**MIXED GRAIN CROP CURED AS HAY.**

I have sown 12 acres of peas, barley and oats for hay. When in flower I mowed and allowed it to lie for one day, then raked and made small cocks, then in a few days I put 4 in 1, then put the two large ones in one. After a good rest to sweat, I carted into four round stacks, then I took the outside two and made a square mow. By so doing I save threshing and loss by rats and sparrows. It is now cutting out the color of bronze and beautiful.

1. How do you like my method?  
2. How many pounds will it weigh per square foot?  
3. What is its value compared with good hay?

G. T.  
Ans.—1. No doubt our inquirer has succeeded in securing a very good quality of fodder, but a larger quantity of as good, or better quality, would have been obtained with much less trouble in curing by cutting in the milk stage, and curing as hay, coiling once, and then, after it had sweat well, drawing together and building into a well-made stack.

2. The weight per cubic foot is problematical and a guess is hardly worth while.  
3. Its value per ton will likely be approximately that of good mixed hay.

**HOMEMADE VERMICIDE.**

Would your chemist be good enough to give me some idea as to the manufacturing of the patent vermin-killers that are so successful in keeping poultry clean? Some of them act by fumigation or volatilizing, but are very expensive, and no doubt could be cheaply made by one who knew on what lines to work.

B. C.

W. S.

Ans.—Many of the best patent vermin-killers that are used so successfully in keeping fowl clean are proprietary mixtures which we have never analyzed, and of which we know very little regarding their composition. Where liquid substances can be put on the inside of the building, any of the coal-tar products may be used successfully. For application to the fowl, a mixture, made of 25 lbs. plaster of Paris, one pound gasoline and one pound of crude carbolic acid, has been used by our own Poultry Department with good results. The gasoline is first mixed with the plaster of Paris and the carbolic acid worked in afterwards. The mixing is usually done with the hand, a glove being worn for protection. When the mixture is properly made it will be in the form of a fine, dusty powder, which may be rubbed in among the feathers with comparative ease. To get the best results it should be well rubbed in, so that it may come in contact with the vermin which are to be destroyed. R. HARCOURT.

O. A. C., Guelph.

**CIDER VINEGAR.**

What should be put in apple cider to make it sharp for vinegar? I have a barrel full, a year old; it is nice and clear, but not sharp or sour enough. Then I have another barrel full that is very dark. How could I make it clear?

A CONSTANT READER.

Ans.—To the cider stock add about one-fourth its volume of old vinegar, if it can be procured; next add a little "mother of vinegar." If this is not at hand a fairly pure culture may be made by exposing, in a shallow, uncovered crock or wooden pail, a mixture of one-half old vinegar and one-half hard cider. Keep in a place at a temperature of about 80 degrees Fahr., and in three or four days the surface should become covered with a gelatinous cap, which is the "mother." Take a little of this off with a wooden spoon or stick, and lay upon the surface of the cider without stirring it in. It will grow until it covers the surface, and should not be broken as long as fermentation continues, in the right temperature, a space of from four to six weeks. The vinegar should then be drawn off, strained through flannel, bunged tightly, and kept in a cool place until needed.

For the turbid vinegar, you might try pouring in a pint of a solution of half a pound of isinglass in one quart of water. When settled, rack off and store in tight vessels.

**MANY THOUSANDS**  
of people are using the  
**SAVINGS BANK DEPARTMENT**  
of the  
**Bank of Toronto**  
for their spare money.

**BECAUSE—**  
Their money is safe in this Bank.  
The account is profitable to them by reason of the interest earned.  
It helps them to store away for future days the surplus money of to-day.

**SHOULD YOU** not also have a Savings Account in this Bank?

**ASSETS, \$37,000,000.**

**MARKETS.**

**TORONTO.**

**LIVE STOCK.**

The total receipts of live stock at the two markets last week were 329 carloads, containing 4,663 cattle, 5,349 hogs, 7,113 sheep and lambs, 262 calves, and 75 horses.

The quality of fat cattle generally was the worst of the season—that is, there were fewer good, well-finished animals in both the butchers' and export classes. Trade was dull all week. Several dealers, having bought heavily the week before, were not anxious unless they got them at lower prices, which they did. Prices generally were 15c. to 25c. per cwt. lower; in fact, exporters were more than that.

At West Toronto, Ont., on Monday, Sept. 28, receipts numbered 756 cattle, quality fair; trade dull; prices easy. Export steers, \$4.50 to \$5, but only one load at latter price, bulk selling at \$4.50 to \$4.75. Milch cows, \$35 to \$65; calves, \$3 to \$6.75 per cwt.; sheep, \$3.25 to \$3.50; lambs, \$4 to \$4.50 per cwt.; hogs, lower, at \$6.75, fed and watered, and \$6.50, at country points, f. o. b. cars.

Exporters.—Export steers, best quality, sold last week from \$4.75 to \$5; medium 1,200-lb. steers, \$4.25 to \$4.50; export bulls, \$3.50 to \$4. It would take an extra quality load of exporters to bring \$5, as the British markets are in bad shape at present, which has caused several of the Toronto dealers severe losses on recent shipments.

Butchers.—Prime picked heifers and steers sold at \$4.50 to \$4.75; loads of good, \$4.15 to \$4.40; medium, \$3.75 to \$4; common, \$3.25 to \$3.60; canners, \$1 to \$2.50; bologna hams, \$2 to \$2.40.

Stockers and Feeders.—Dry weather in the country has been a serious handicap to this branch of the market for the past month. Many farmers who contemplated putting in feeding cattle have been discouraged. Last week there has been a little more doing, as some of the dealers in distillery cattle commenced to buy a few bulls and some heavy, rough steers. Steers, 900 to 1,000 lbs., \$3.25 to \$3.60; bulls, 1,100 to 1,200 lbs., \$2.25 to \$2.50 and \$2.60; stockers, 500 to 800, sold from \$2.25 to \$3 per cwt.

Milkers and Springers.—The demand for milkers and springers was greater than for some time. Prices ranged from \$30 to \$65 each, and more would have found ready sale.

Veal Calves.—Receipts light. Prices ranged from \$3 to \$6.50 per cwt.

Sheep and Lambs.—Receipts large and prices lower, as follows: Export ewes, \$3.50 to \$3.75; rams, \$2.50 to \$3; lambs, \$4 to \$4.50 per cwt.

Hogs.—The market at the latter end of last week was, if anything, firmer, and \$7.10 was paid for selects, fed and watered, and \$6.85 f. o. b. cars at country points.

**BREADSTUFFS.**

Wheat.—The market is reported as be-

ing a little easier. No. 2 white, 92c. bid; No. 2 red, 91c. bid; No. 2 mixed, 90c. bid. Manitoba—No. 1 northern, \$1.04c.; No. 2 northern, \$1.02, at Georgian Bay ports.

Rye.—78c. buyers' quotations.

Peas.—No. 2, buyers, 90c. bid.

Oats.—No. 2 white, 49c. new, bid; No. 2 mixed, 39c.

Barley.—No. 2, 59c. to 60c.; No. 3X, 58c.; No. 3, 55c.

Corn.—No. 2 yellow, 87c., Toronto freights.

Bran.—Searce, \$21 to \$22, in bags, outside.

Shorts.—Market strong, at \$24, in bags, outside.

Flour.—Ontario, 90 per cent. patent, sales \$3.50, for export; Manitoba patent, special brands, \$6; second patents, \$5.40; strong bakers', \$5.30.

**COUNTRY PRODUCE.**

Butter.—Receipts continue large, notwithstanding the drying up of pastures. Market steady at unchanged prices. Creamery pound rolls, 25c. to 26c.; separator dairy, 24c.; store lots, 21c. to 22c.

Cheese.—Market firm. Large, 13c. to 14c.; twins, 13c. to 14c.

Honey.—Extracted sold at 9c. to 10c.; combs, per dozen sections, \$2 to \$2.50, for choice quality.

Eggs.—Market unchanged, at 20c. to 21c.

Beans.—Market, about steady. Primes, \$2 to \$2.10; hand picked, \$2.10 to \$2.15.

Potatoes.—Receipts are largely from the Maritime Provinces. Car lots of "Irish Cobblers" sell at 65c. to 70c. per bag, on track at Toronto.

Poultry.—Prices for live poultry are quoted as follows: Chickens, 10c. to 12c. per lb.; turkeys, 14c. to 15c. per lb.; fowl, 7c. to 8c. per lb.

Hay.—Market firm. Car lots of baled, on track at Toronto, \$11 to \$11.50.

Straw.—Market easy. Car lots of baled, at \$6 to \$6.50.

**HIDES AND WOOL.**

The E. T. Carter Co., 85 Front street, Toronto, wholesale dealers, report paying the following prices: No. 1 inspected steers, 60 lbs. and upwards, 10c.; No. 2 inspected steers, 60 lbs. and upwards, 9c.; No. 1 inspected cows, 9c.; No. 2 inspected cows, 8c.; calf skins, city, 12c.; calf skins, country, 11c. to 12c.; horse hides, No. 1, \$2.75; horse hair, per lb., 28c.; tallow, per lb., 5c. to 6c.; sheep skins, 90c.; wool, unwashed, 8c.; washed, 13c. to 15c.; lamb skins, 35c. to 40c.; pelts, 20c. to 40c. each.

**SEED MARKET.**

The Wm. Rennie Co. report trade dull, little business being transacted, at the following prices: Alsike, No. 1 quality, \$7 to \$7.50; alsike, No. 2, \$6.50 to \$6.75; red clover, bushel, \$5 to \$5.50; timothy, bushel, \$1.30 to \$1.60.

**FRUIT MARKET.**

Receipts materially fell off during last week in peaches and plums. Trade was generally dull. Apples are plentiful and cheap, selling at \$1 to \$2 per bbl.; tomatoes, 15c. basket; pears, 35c. to 50c.; cantaloupes, case, 40c. to 75c.; plums, 40c. to 75c.; peaches, 50c. to \$1.25; gherkins, 25c. to \$1; grapes, 15c. to 30c. per basket.

**CHEESE BOARD PRICES.**

Brockville, Ont., 12c.; no sales. Kingston, Ont., 12 3-16c. to 12c. Van-kleeck Hill, Ont., 12 5-16c. Alexandria, Ont., 12 5-16c. Russell, Ont., 12c. bid; no sales. Belleville, Ont., 12c. to 12 7-16c. Winchester, Ont., 12c. bid; no sales on board. Listowel, Ont., 12c. bid for September white; no sales. Ottawa, Ont., 12c. Victoriaville, Que., 12c. to 12c. Picton, Ont., 12c. Iroquois, Ont., 12c. Napanee, Ont., 12 5-16c. Cornwall, Ont., 12 5-16c. London, Ont., 12c. bid; no sales. Cowansville, Que., butter, 24c. and 25c.; cheese, 12 3-16c. and 12c. St. Hyacinthe, Que., butter, 25c.; cheese, 12 3-16c.

**BRITISH CATTLE MARKET.**

Liverpool.—John Rogers & Co. quote: United States steers, 11c. to 12c.; Canadians, 10c. to 11c.; ranchers, 9c. to 10c.; cows and heifers, 9c. to 10c.; bulls, 8c. to 9c.

**MONTREAL.**

Live Stock.—Exports of live stock from the port of Montreal for the week ending September 19, were: 4,423 cattle and 139 sheep, against 3,160 cattle and 209 sheep the previous week.

Conditions last week were all favorable to lower prices on the local market, and a decline of 1/4c. to 1/2c. more was experienced. The long-continued drouth and the high price for feed have been influencing farmers to sell their stock, notwithstanding its poor condition. Some good distillery cattle, weighing as high as 1,200 lbs., sold at 4c. to 4 1/2c., choicest offerings bringing 4c. to 4 1/2c. Good sold at 4c. to 4 1/2c., medium at 3 1/2c. to 3 3/4c., and lower grades as low as 2c. per lb. Sheep and lambs held steady, at 3 1/2c. for choice export sheep and 3 1/4c. to 3 1/2c. for lower grades, lambs selling at 4c. to 4 1/2c. Owing partly to higher cables on bacon, but principally to a shortage of hogs throughout the country, the market for hogs advanced 1/4c. to 1/2c. per lb., select stock, weighed off cars, selling at 7 1/2c. per lb.

Horses.—Demand for horses has kept up well of late. Lumbermen and farmers have been wanting good animals for some weeks past, and, while demand from the latter is now falling off, a demand from the city is springing up. Offerings from the country are possibly a little freer just now than they were for some time previously, possibly because of the drouth and the dearth of feed. Prices held about steady, as follows: Heavy draft, 1,500 to 1,700 lbs., \$250 to \$300 each; light draft, 1,400 to 1,500 lbs., \$225 to \$250; good blocks, 1,300 to 1,400 lbs., \$200 to \$225; small or inferior, 1,000 to 1,100 lbs., \$100 to \$150; broken-down horses, \$50 to \$75, and choice saddle or carriage animals, \$300 to \$500 each.

Provisions.—The market for dressed hogs has experienced considerable firmness of late, and prices advanced as much as 1/4c. per lb., in some cases, in sympathy with the market for live. There has been a general advance in the market for provisions, barreled pork, bacon, hams, and pure lard all being higher. Hams, 12c. per lb. for those weighing 25 lbs. and over; 13c. for 18 to 25 lb. hams; 14c. per lb. for 8 to 18 lbs. Bacon advanced about 1/4c., at 12c. to 16c. per lb. for smoked bacon, 13c. for green flanks, 12c. for boneless and long clear light, and 11c. for long clear heavy. Pork was \$1.50 per bbl. up, at \$23.50 to \$26 per bbl., according to quality, while pure lard was 1/4c. up, at 13c. to 14c. per lb., compound continuing steady, at 8c. to 9c. per lb.

Potatoes.—The market appeared to be pretty well cleaned up of stock and prices were fairly steady to firm. Merchants were complaining of the length of time it takes to get the goods brought in by car from New Brunswick. It would appear that there were last week some twenty-five cars somewhere along the route, but they were not arriving promptly. Green Mountains are now being quoted at 70c. to 75c. per 90 lbs., carloads, on track, jobbing prices being about a cent per lb., and smaller lots, such as single bags, being 90c. for 80 lbs.

Honey.—Pound sections of white clover comb, 14c. to 15c. each; buckwheat, 12c. to 13c. each; strained honey, 10c. to 11c. per lb. for white, and 9c. for dark.

Eggs.—Dealers last week were quoting 18c. to 18 1/2c. per doz., country points, for straight-gathered, and 20c. to 21c. in Montreal. No. 1 candled stock sold at 20c., selects 24c., and boilers at 27c. per dozen.

Butter.—Choice creamery is a rather scarce article just now. The volume of the make shows the effect of lack of nourishing pasture. Prices last week were 24c. to 24 1/2c., in large lots, and 24 1/2c. to 25c. for limited quantities, a few packages at a time costing as high as 25 1/2c. On Saturday, butter advanced sharply in the Townships, and consequently here, to 25c. or 25 1/2c. wholesale, and a cent more in small lots.

Cheese.—Shipments from port are well sustained, having amounted to 69,000 boxes for the week ending 19th, as against 59,000 the corresponding week of 1907. Prices have been gradually stiffening in the country, owing probably to the effect of drouth upon production. Ontarios, 12c.; Easterns, 12c. to 12 1/2c.

Oats.—Prices were lower, being 46c. to

46 1/2c. per bushel for No. 2, Manitobas or Ontarios, carloads, in store; 45c. to 45 1/2c. for No. 3, and 45c. for rejected or for No. 4.

Hay.—Supply and demand light; prices firm, at \$12 to \$12.50 per ton for No. 1 timothy, \$11 to \$11.50 for No. 2 extra, while No. 2 ordinary is \$10 to \$10.50, clover mixed \$9 to \$9.50, and clover \$7 to \$7.50.

Flour.—Manitoba spring wheat patents \$6 per bbl., in bags; seconds, \$5.50; Ontario patents, \$5 to \$5.10, and straight rollers, \$4.40 to \$4.50.

Mill Feed.—Notwithstanding the poor pastures, the demand for bran does not appear to have increased much, prices for either Ontarios or Manitobas being about \$21 to \$22 per ton, in bags. Shorts are in very active demand, and have been selling at \$25 to \$26 per ton.

**CHICAGO.**

Cattle.—Steers, \$4.40 to \$7.60; cows, \$3.25 to \$5.25; heifers, \$3 to \$4.25; bulls, \$2.50 to \$5.50; calves, \$3.50 to \$5.00; stockers and feeders, \$2.60 to \$4.50. Hogs.—Choice heavy, \$7.40 to \$7.45; hams, \$7.30 to \$7.45; light mixed, \$6.50 to \$7; choice light, \$7 to \$7.25; packing, \$6.80 to \$7.10; pigs, \$3.75 to \$7.25; bulk of sales, \$6.80 to \$7.10. Sheep.—\$3.50 to \$4.50; yearlings, \$3.85 to \$4.25; lambs, \$3.50 to \$5.50.

**BUFFALO.**

Cattle.—Prime steers, \$6 to \$6.50. Veals.—\$6 to \$9.50. Hogs.—Heavy, \$7.40 to \$7.65; mixed, \$7.20 to \$7.65; Yorkers, \$6.50 to \$7.25; dairies, \$6.25 to \$7; grassers, \$6 to \$6.90. Sheep and Lambs.—Ewes, \$3.50 to \$3.65.

**GOSSIP.**

The Secretary of the East Peterborough Agricultural Society, Norwood, Ont., requests us to note that their exhibition is to be held Oct. 13th and 14th.

The auctioneers retained for the auction sale of the Shorthorn herd of Mr. R. Corley, of Belgrave, Ont., to take place on Oct. 7th, are Capt. T. E. Robson, James Henderson and Frank McConnell.

The attention of breeders of Jersey cattle and of dairymen and others interested, is called to the advertisement in this paper of the auction sale, to take place on Oct. 17th, of the entire herd of Jerseys belonging to Mr. W. F. Nickle, of Kingston, Ont.

Mr. Arthur F. O'Neil, Maple Grove, Middlesex County, Ont., advertising with regret his entire herd of registered Herefords to be sold by auction, on Tuesday, October 20th, states that the herd was established twelve years ago, and since that time has been steadily increased and improved by judicious purchases from the leading herds of the United States, until at present the herd is of the best of breeding, coupled with individual merit, strict attention having at all times been paid to the selection of herd bulls, so the younger things in the herd will, on examination of extended pedigree, be found to be of the choicest of breeding. The herd, in field condition, will compare favorably with any of the leading herds of the beef breeds in Canada. Contained in it are 17 matrons, some well gone in calf, or with calves at foot. In this lot are many of show-yard honors. In yearling heifers, eight in number, will be found some choice foundation stock for a new herd, being sired by a son of the champion, Protector. In bulls, nine in number, are bulls for the farmer and breeder, some of which, by breeding and merit, are worthy to head any registered herd. This sale coming unexpectedly as it is, I do not expect any fancy prices, but am satisfied to accept values the public wish to place on my cattle. To further lessen my work I will sell, at the close of the cattle sale, four young mares, bred and safe in foal to Imp. Celtic Prince [12901], a son of the champion, Everlasting; six colts, two years and under, will be found safe investments.





## Life, Literature and Education.

[Contributions on all subjects of popular interest are always welcome in this Department.]

### ITEMS OF INTEREST.

A banquet at which five hundred people will be present is to be given by the Mendelssohn Choir in honor of the visit of the famous Sheffield Choir to Toronto in November. The latter, which will tour Canada, has been pronounced by the great leader, Nikisch, as "the finest body of singers in the world." It is under the leadership of Fr. Coward, who is regarded as the "master chorus-master" of Great Britain.

A colossal bronze statue, the first to be erected to Queen Alexandra, has been unveiled at the London Hospital, of which the Queen is President. One of the relief panels of the pedestal represents the opening of the Pinsen Light Department of the hospital by Her Majesty.

The Arthur's Pass Tunnel through the Alpine Range, South Island, New Zealand, whose construction was recently begun, will, when completed, rank fifth among engineering feats of that nature in the world. It will be 5½ miles long, 15½ feet high, and 14 feet wide at the rail, and will cost \$3,000,000. The four tunnels which come first in magnitude rank as follows: Simplon, 12½ miles long; St. Gothard, 9½ miles; Mont Cenis, 7½ miles; and Arlberg, 6½ miles.

A unique department of Oxford University is Ruskin College, founded in 1899, with the aim of training and developing the intellect of those who are or will be leaders of working-class opinion, and giving an all-round education in citizenship. In spite of satire and ridicule, the institution has prospered. Last year its students numbered 54, and, as no more could be accommodated without larger apartments, a building fund has recently been started, with the object of erecting a new edifice, devoted especially to this branch of the University. The average age of the students so far has been 24. Most of those who attend are from the working classes, and the majority, after spending the year prescribed by the course, go back to their trades again.

The King is said to greatly prefer "plain, breezy men, who admit him to the common humanities," to those who continually remind him of his splendid isolation. Consequently, he is very fond of John Burns, and is not at all ashamed to express his liking for the eminent labor leader. Pointing to a chair in a smoking-room of Windsor Castle not long ago, he said to a guest, "Do you see that chair? John Burns sat there." The remark was taken as an evidence of the King's humor, yet, reading between the lines, the ring of sincerity may be discerned. By just such human nature touches, Edward VII. so conspicuously does much to endear himself to the people of Britain.

to whom he is by no means the cold aristocrat, but good, as well as wise, King "Ted."

The old theory that the earth is a spherical body, flattened at the poles, which we have all been religiously taught at school, bids fair to go the way of the majority of theories. Some time ago, Lowthian Green, basing his conclusions on the distribution of the continents, advanced his opinion that the earth is not a "globe" at all, but a tetrahedron, or sort of four-faced pyramid, bearing the continents at its apices, the oceans on its faces. At the time, the theory met only with ridicule, but of late years, geologists, basing their conclusions in turn on the results of polar explorations, have been rather generally accepting it. To prove absolutely the truth of the theory, however, it has been held that a fourth apex and a fourth face (three apices and three faces being already known) must be discovered, and the opinion is now launched by Abbé Th. Moreaux, Director of the Bourges Observatory, that this necessary fourth continent will be found within the Antarctic Circle. Should his prognostication in regard to that quarter prove true, further Antarctic exploration may render necessary some startling changes in the pages of the modern geography.

### A NOVA SCOTIA EDUCATIONIST ON SPELLING REFORM.

Spelling reformers are not yet asleep, notwithstanding the fact that comparatively little has been heard from them for the space of a year or so. While a few leading journals, such as the New York Independent, have quietly adopted such improvements as seemed to them most immediately necessary, and are every week publishing "tho," "thru," "prest," "drest," (why not walkt?), it is to be divined that conditions of a more tumultuous order are going on away down in the cauldron which the Simplified Spelling Board is still brewing. At least, once in a while there comes a bubbling-over, and then, from one of the Board, or one of their sympathizers, we hear that things are being done and hopes are not permitted to flag.

Among others, Mr. A. H. Mackay, LL. D., F. R. S. C., Superintendent of Education for that most progressive little Province, educationally, Nova Scotia, has recently spoken. In a paper read in New York City, he enumerates again, and with an emphasis that comes only of conviction, the reasons which to him appear most patent for bringing about a change, and that as soon as possible.

The economic aspect of the question has especially impressed him—the great waste of time spent in mastering an arbitrary system. At least twenty-five per cent. of the time and effort in the elementary school, he estimates, is spent in "memorizing the unnecessary and improper irregularities of words."

With the theory that language must grow naturally, and that the form of a word should give some clue as to its "story," he has little sympathy. "What is the use of those orthographic excrescences," he asks, "these blunders of the method which

we are yet striving to perpetuate to the millions who accurately acquire them at such a cost of time, effort, money, and morals? Why! They show some incident in the history of the word. Not the whole history, of course, only an incident. The majority of our words are acknowledged to serve their purpose well enough without any fantastic, functionless relic appended to them. But 100,000,000 little boys and girls are forced to engrave all these curious irregularities on the fleshy tablets of their hearts when they are too young to know their meaning, so that one in a thousand of them who may afterwards become embryo philologists may have the delectable pleasure of being kept conscious, every time he sees the 'me' at the end of 'program,' that the word came from the French. Why the poor word should be made to carry a memorial of its residence in France, is not explained.

Written language is an instrument. There is no advantage in making it, also, a clumsy walking advertisement of a fact which one in a thousand only can understand, and which, when understood, is generally more distracting than edifying, and which, moreover, can be as effectively known and remembered without this clumsy primitive device.

"Our modern man with the hoe polishes the handle instead of leaving patches of bark and splinters of knot to keep him every instant in mind of the aboriginal hoe handle, plucked, without a polishing tool, from the forest. The man with the smooth hoe handle is the modern reformer. He keeps the history of the hoe handles, too—in his library, not on his hoe handle."

With less time spent on spelling, the writer points out, more might be given to pronunciation. "Expression in written and spoken speech would then utilize some of the time saved from the old, barbaric orthography."

Mr. Mackay is confident that the time will come when phonetic spelling will be universally recognized, even, although, in the meantime, there must be a period of transition, perhaps lasting for several generations, in which the two systems, the old and the new, must stand.

In connection with this subject, there is one question which "The Farmer's Advocate" would like to ask: Are words phonetically spelled to one person also phonetically spelled to another?

For instance, may not one child spell "through" "thru," and another "throo"? As such examples may be multiplied indefinitely, is it not possible that a phonetic system must of necessity be almost as arbitrary as the old one? Or, under the proposed regime, will mistakes in spelling not "count," so that each child may spell as he chooses? We are not, of course, questioning the advantage of a moderate measure of reform, such as dropping the "me" from "programme," etc., but the more drastic steps, such as those suggested by the Advisory Board.

Until the above queries are answered in full, and by those who have an opportunity of experimenting with children in regard to the question, we feel that we can not take any definite

stand; hence, we shall be glad to receive letters from school teachers or others who can offer definite examples to substantiate whatever opinions they may hold. Let us hear from you.

### THE DELIGHTS OF MOTORING.

The following, from British "Nation," shows that the motor nuisance is appreciated at its full value across the sea, as well as in America:

The following is a record of the chief outrages committed by motors in the course of the week. A Birmingham lady, aged sixty-five, was knocked down by a motor car and killed. She came from behind a tramcar and "hesitated" in crossing. A young cyclist of twenty-eight was crushed by a car, and, though he "managed to crawl" out from underneath it, was badly injured, and died. A Mrs. Hicks, of Penzance, about to mount one motor car, was knocked down by another and killed, in sight of her husband and family, after receiving terrible injuries. A motor car, driven through Warton, knocked down a Mr. Fairweather, an old Manchester merchant, broke his ribs, and "drove rapidly away." The motor was said to have been stolen. A child of eight, playing in the roadway near Netherfield, was run over and taken unconscious to Nottingham Hospital. A correspondent of the Glasgow Herald, sitting in a garden in the Highlands, and hearing an "awful smash and grating of motor-car wheels," saw a boy cyclist "lying on the road covered with blood," and his cycle "smashed up" on one of the wheels of the motor car. One of the ladies in the car said that "the boy had no right to run into their car," which, the correspondent states, gave no warning of its approach. The people who last week ran down and slew a Carmarthenshire laborer, and then drove away from his body, have not yet been discovered.

### THIS IDEAL GIRL OUGHT TO SUIT

Editor "The Farmer's Advocate":

Having read with pleasure the article, "The Girl Question From a Young Man's Standpoint," from the pen of "Pensons," I think it would be well to hear what our young people regard as their ideal man and woman.

I believe, in "starting life," and that, before choosing "a companion for life," a young man should have an ideal, and should look for a lady as near that ideal as it is possible for a human being to be. It is, I believe, a hard thing to find a woman or man in whom we can find no fault, as there was only one spotless One who ever trod this earth.

To be ideal, a young lady must have deep religious principles, and without these she cannot be ideal. A young lady who has "The Man of Galilee" as her ideal, will come very near that ideal. I think a young man who is a Christian could never live happily with one who is not such as himself; and I would go further and say that it is a hard thing for two people of different denominations to live happily together, as they have different principles, and they will either have to smother their convictions or fight it out. One of

the most absurd things I ever heard is hearing a child of a farmer's father is an Episcopalian or a Methodist, and my mother is a Methodist or Congregationalist." There is nothing, I believe, which will make a row in an otherwise happy married life like a difference in religious faith. How can two walk together unless they be agreed. As for a young lady to marry a young man to reform him, I can only say this: "If a young man will not reform in 'courting days,' he will not do so when tied to 'apron strings,' and vice versa.

Then, a young lady, to be ideal, ought, I think, to be a good house-keeper. Most men are not able to keep servants, and so their wives need to be able to bake and mend. In this day, I believe, it is the fashion for mothers to do the drudgery, while Polly, Norah and Betty entertain Mr. Slicker in the parlor. This is a mistake, and I think that young ladies would get better, stronger and more manly men if they would help mother more. Any young woman ought to know how to make a good substantial meal. In my short life I have seen a lot of young ladies who could not make a decent cup of tea, and, as for their pies, if you tossed them over the house, they would remain intact. On the other hand, I have met young ladies who could cook a meal fit for His Majesty. An old story is told of a lady who was advising another lady how to cure her husband of the blues, frowns, etc., and the recipe was, "Feed the brute." A very good recipe, as most men like, after coming in from the cold barn, woods or shop, to be able to sit right down (not half an hour later) to a good tasty meal. A young lady ought, also, to know how to sew, for, if she ever gets a farmer, mechanic or laborer as a husband, she will certainly have to know how to sew and mend properly. If she is able to cook and mend well, she is on the high road to being a first-class house-keeper.

Then, a girl must be neat in appearance. How often you see a young woman, Sunday night, in her silk and satin and "Merry Widow," and you remark, "What a neat young lady!" But lo and behold, you see the same person Monday into the washing, and you will find her with hair done up in papers, an old loose waist on, and a dress you would think Noah's wife had worn, or an old apron all tattered and torn! It is on Monday (wash-day) that you can tell the neat woman. I heard a very excellent authority once say, "If you wish to find the neat woman, leave one of your gloves on the piano on Sunday night, and then call for it Monday morning at 8.30 or 9.00; and if she appears with a neat house dress on, and her hair nicely done up, with, perchance, a bow or flower, make a bid for that young lady, for she is one in a hundred." I can never see a prettier sight than a farmer's daughter, at the close of the day, in her neat muslin dress and sunbonnet, feeding the chickens, ducks or turkeys. A young lady looks a great deal better in a neat, well-fitting dress and bonnet than when she is dressed in her "Merry Widow," with a botanist's studio on top; her peek-a-boo waist and stockings; her beautiful silk skirt, and neat little Oxfords, made on purpose to show off her neat and pretty feet. This may be a little overdrawn, but it shows that it is easy for a young lady to attain neatness.

To sum it all up, an ideal young lady is, in my humble opinion, one who is a Christian, a good house-keeper, and neat in appearance. Her price is above rubies. She will certainly be hard to find, and harder still to win; but what costs little, is not worth having.

Now, just a word on the other side of the question. If we expect a good woman to think anything of us, we must prove ourselves worthy. No true young lady cares for a "white-handed Willie" or a "sport"

for a maid, not only to keep down the base in man, but to teach high thought and amiable words, and courtliness, and the desire of fame, and love of truth, and all that makes a man.

Many girls seem to covet the attentions of young men who are noted flirts, and those known as "quite a ladies' man," and often speak of the type of man who is my ideal as "slow," while the remark, "Oh, he's altogether too particular," comes often from young and rosy lips; and occasionally that young man grows pessimistic, and thinks to himself that all girls are the same, and becomes sure that he will never meet his ideal, because he thinks he has placed his ideal too high. I wish that man could but know the admiration he awakens in the hearts of many women. I could never, never love any man who, I know, had lavished his affection and caresses on every girl he admired. The man I admire most is the one who would be a true friend to a girl, ready to do anything in the world for her, and accept, in return, the same staunch friendship. Every woman admires a manly man. I think I find my ideal in the man who could keep the oath which "King Arthur" made the knights of The Round Table swear: "To speak no slander, no, nor listen to it. To honor his own word as if his God's. To live sweet lives in purest chastity. To love one maiden only, cleave to her, and worship her by years of noble deeds, until they won her."

**"YOUNG MEN ARE TO A GREAT EXTENT WHAT YOUNG WOMEN MAKE THEM."**

[Do the young men believe this?—Ed.]

Editor "The Farmer's Advocate": There are so many different kinds of young men that it is difficult to define the qualities one admires most in a young man. They are all mothers' sons, and I feel sure, if we always looked at them in this light, their good qualities would be magnified tenfold, and great allowance would be made for what seems to us their shortcomings.

Young men are, to a great extent, what young women make them. Every gentleman is gallant to ladies, and most of them act in the way which seems to be most pleasing to the ladies they associate with; but the man who is sure to win the respect of every woman is the one who is indifferent to all the wiles and artificial airs of the fair, would-be captivators; whose vanity is not flattered by effusive attentions, but who is sure to recognize true gold when he finds it, and is worthy of the truest, purest and noblest love which he may call forth from the heart of the woman he loves. For, indeed, I know of no more subtle master under heaven than is the maiden's passion

for a maid, not only to keep down the base in man, but to teach high thought and amiable words, and courtliness, and the desire of fame, and love of truth, and all that makes a man.

Many girls seem to covet the attentions of young men who are noted flirts, and those known as "quite a ladies' man," and often speak of the type of man who is my ideal as "slow," while the remark, "Oh, he's altogether too particular," comes often from young and rosy lips; and occasionally that young man grows pessimistic, and thinks to himself that all girls are the same, and becomes sure that he will never meet his ideal, because he thinks he has placed his ideal too high. I wish that man could but know the admiration he awakens in the hearts of many women. I could never, never love any man who, I know, had lavished his affection and caresses on every girl he admired. The man I admire most is the one who would be a true friend to a girl, ready to do anything in the world for her, and accept, in return, the same staunch friendship. Every woman admires a manly man. I think I find my ideal in the man who could keep the oath which "King Arthur" made the knights of The Round Table swear: "To speak no slander, no, nor listen to it. To honor his own word as if his God's. To live sweet lives in purest chastity. To love one maiden only, cleave to her, and worship her by years of noble deeds, until they won her."

I am afraid I am like many others who place their ideals too high, but if our ideals are high we are more apt to live up to them, and in this way come nearer being as we would like to be than if our standard were lower.

"ELAINE."

Editor "The Farmer's Advocate": Speaking of young men in general, I do not think we have many brave "Lochinvars" at the present time, or knights of old. But, to be manly, and a noble character, a young man must be a Christian, one who will not follow the crowd, but stand out alone, if need be, abiding always by his principles, and thus developing depth of character. Also, I would expect my ideal to be honorable, refined, kind, and sympathetic—one who would be a companion.

**"QUALITIES A YOUNG MAN SHOULD POSSESS."**

I would expect, too, that he would be intellectual, having self-respect, and that he be always courteous. In my estimation, if a young man possessed these qualities, I believe he would come very near my standard of manhood.

"CLO."

**SOMETHING ABOUT OUR INDIAN WARDS.**

II.

It has been said that the Indians are a dying race, a statement which has as often been contradicted. Mrs. Newnham, the wife of the Bishop of Saskatchewan, tells us that in the last five years there has been an increase of 283 in that diocese alone, and her testimony is "That the Indian, when kept apart from contaminating intercourse, is, as a rule, a moral and law-abiding man. After twelve years' of experience amongst them, I can honestly say that, comparing them with the average white man, whose advantages and privileges have been greater, they stand high in their standards of morality, and, as Christians, they are much more earnest and sincere."

There are, we are told, amongst Indians of the Yukon, many "faithful and valiant souls," and, of the Indians amidst whom he so long lived and labored, the late revered Bishop Whipple testified, "There are to be found some of the noblest types of humanity."

Of the natives in the district known as Metlakatla, the scene of the labors of Bishop Ridley, it is said, "That the girls trained in the Industrial School turn out admirably; it can easily be told where an Indian got his wife by the way she keeps house. The Indians here, as elsewhere, are much the same as white people—some good, some bad, but, on the whole, they are a law-abiding people."

I wonder if we Canadians really do realize the immense debt of gratitude we owe to those noble men and women who, in striving to enlighten the Canadian Indian, have to isolate themselves and their families from the comforts and advantages of civilization?

**EDUCATE THE CHILDREN.**

The general opinion, as the result of long experience, seems to be that, in the earlier stages of missionary work, the Indian parents were too fixed in their ways to be trained to anything better than their camp-life; but the children being more imitative and receptive, their ambition could be aroused and their interest sustained, as they saw the benefits which accrued as the direct result of the labor of their own hands. In illustration of a rapidly-growing power to grasp the value of what is taught them at some of their schools, I will quote sentences from some of their own little essays.

No. 1, a girl in Standard 4, says: "I am going to write about the good bread we are having. We ought to be thankful to our baker-boys and their teacher for giving us such nice bread."

No. 2, an Indian lad, says: "We



"Scotland Forever!" The Charge of the Scots Greys at Waterloo. From a painting by Lady Butler. Exhibited at the Canadian National Exhibition, Toronto, 1908.

all like to work on the farm, but a boy must have a good education to make a really good farmer."

No. 3: "Mr. L. was down cutting hay for the last few weeks. I would like to be as big as he is, so that I could go and ride around on a mower."

No. 4 notes: "We have over 140 tons of hay stacked. We mixed salt with it to preserve it. Making hay gives a fellow a good appetite. I am glad to get back to school again; still, I like to work on the farm."

No. 5, a girl, says: "All the boys and girls are trying to get on the honor roll. I wonder who will come out first at our next examination." Whilst No. 6, evidently proud of their school-providings, writes: "We have new books, pens, copy-books and slate-cloths."

Says No. 7: "We have our hay finished. We hauled it three miles. Mr. H. looks well pleased when he gazes on the stacks. They are just about 200 yards from the stables. It is not a good thing in this country to have the hay out of sight."

No. 8, after proudly telling of improvements around their school (Battleford), records: "Mrs. B. is teaching us how to sing. All our boys and girls speak out. The boys raise their caps when they meet ladies, and we never forget to salute. Mr. L. is taking great pains with us, and the little fellows are looking better after buttons and laces every day."

Now, I would ask our readers if these Indian children do not compare favorably with the pupils of our own schools, and whether it be not worth while to afford them every possible opportunity for their fuller development? The question is often asked by members of many congregations, "Why should missions cost so much more than formerly?" and the simple reason given in reply is that the work has grown, and keeps on growing. "A live church must make increasing demands for the support of its missions. It would cost less to bury an army than to keep it in active service. The Church is an army, the army of the Living God, and missions are the aggressive arm of the service, the advance-guard of the army. To make that arm efficient, should be the unhesitating duty of the church."

A missionary in the far Northwest thus wisely sums up the position: "It seems to me," he writes, "that the solution of the whole problem is not asking questions about results or counting heads, but for Christian people to take up the matter in dead earnest, and to double the number of workers, so that, while some carry on the educational work locally, others may, by itinerating, reach the scattered Indians of the forest and prairie."

Do not let us forget that the first "Big Teaching Wigwam," the Shingwauk Home, near the Sault Ste. Marie, was built at the earnest request of an Indian chief of that name, and that it was his faith in the promise of the treaty commissioners, which made old Chief Mune-dooshane, on the Nepigon Lake, so long and patiently wait for the advent of teachers to civilize and evangelize his people, and the cry still comes to us from other Indians in other parts of the Dominion, "Come over and help us," and this it is our bounden duty, as well as our privilege, to do. H. A. B.

#### JOHN ANDERSON, MY JO.

John Anderson my jo, John,  
When we were first acquaint,  
Your locks were like the raven,  
Your bonnie brow was bent;  
But now your brow is beld, John,  
Your locks are like the snaw,  
But blessings on your frosty pow,  
John Anderson my jo!

John Anderson my jo, John,  
We clamb the hill thegither,  
And monie a canty day, John,  
We've had wi' ane anither;  
Now we maun totter down, John,  
But hand in hand we'll go,  
And sleep thegither at the foot,  
John Anderson my jo!

—Robert Burns.

## The Quiet Hour.

### ENTHUSIASTIC LIVING.

Whosoever will save his life shall lose it: and whosoever will lose his life for My sake shall find it.—S. Matt. xvi. : 25.

Could we but crush that ever-craving lust

For bliss, which kills all bliss, and lose our Life—

Our barren unit-life—to find again

A thousand lives in those for whom we die—

So were we men and women! and should hold

Our rightful rank in God's great Universe,

Wherein, in heaven and earth, by will or nature

Nought lives for Self!

All spend themselves for others! And shall man,

Earth's rosy blossom—image of his God—

Whose twofold being is the mystic knot

Which couples Earth and Heaven—doubly bound

As being both worm and angel, to that service

By which both worms and Angels hold their life—

Shall he, whose every breath is debt on debt.

Refuse, without some hope of further wage

Which he calls Heaven, to be what God has made him?

No! let him show himself the creature's lord

By freewill gift of that Self-sacrifice

Which they, perforce, by Nature's law must suffer.

—Kingsley.

All the Universe, as Kingsley says, is preaching the same strange doctrine, the doctrine plainly stated by our Lord in the text given above. From God Himself, who pours out His life ceaselessly in the service of all creation; from the angels, who never tire of ministering; from the glorious sun, running a race of life-giving service; down to the plants and insects which feed the life of others by their death, we find the law of self-sacrifice everywhere. But most of all do we see the beauty of this law of pouring out life for others, when we look at it from the Christian's standpoint. Our business in life, if we are really trying to copy our Master, must be to help others at any cost to ourselves. It would have been strange, indeed, if Infinite Love had not drawn Him irresistibly down from heaven to suffer with and for mankind. Do we not recognize it as the natural and right use of riches and talents, when they are poured out enthusiastically for the good of humanity and the glory of God? A man who hoards up wealth is losing all the good of his money—he might just as well be collecting a pile of pebbles. A man who spends it in selfish pleasure is sure to find life unsatisfactory—he is wasting it instead of living it to the full. Every seed that falls into the ground gains a fuller life through death; unless it gives out its life it "abideth alone." Without the sacrifice of seed no one can get a harvest at all, and he that soweth bountifully will in the long run reap bountifully, while he that soweth sparingly and grudgingly need not be surprised if the crop is poor and scanty. This principle holds good in the spiritual as well as in the natural field. Did you ever notice that the happiest people around you are almost always the most unselfish, while the discontented grumblers are like children who are on the watch to secure the biggest piece of cake or candy? They may think that they are unhappy because they can't get exactly what they want, but the trouble is that they have aimed wrongly—at attempting to save their life, they are losing it. A forced or grudging sacrifice is poor and colorless, it must be enthusiastic to fill each day with gladness. Long ago a prince with a few rough soldiers sought shelter from the intense

cold of Russia in a ruined shed. The prince was unused to hardships, and—so the story goes—those rough men took off their cloaks and laid them over him as he slept. When morning came he woke, warm and rested, but he found his faithful soldiers had indeed been faithful unto death, giving their lives for him. I don't know whether the story is true, but it seems to me to be splendid. To give life in order to save another life always seems the right and noble thing, even though the life sacrificed may be apparently worth far more than the one saved.

There is one great difference between the sacrifice of seed grain and the noble enthusiasm of self-sacrifice for others. The first is done deliberately, with an eye to the future harvest, while the second is poor indeed if it is done for reward in this life or in the next. "If ye lend to them of whom ye hope to receive, what thank have ye? for sinners also lend to sinners, to receive as much again." The disciples showed how little they understood their Master's example when, after mentioning things they had given up for His sake, they asked, "What shall we have therefore?" If a man tries to buy Heaven with earthly gold, he may be wise and prudent, but his bargain can hardly be considered noble, any more than Jacob's compact to give the tenth of everything if God would bless him. The widow of Zarephath was surely not acting from interested motives when she shared her last morsel with a hungry stranger—although he did promise that she should lose nothing by her kindness. Yet that sublime act of self-sacrifice was the direct means of preserving her own and her son's life all through the days of famine. If she had not given the means of subsistence away, she would soon have starved to death. By being willing to lose her life she saved it, even in this world. But God does not always make such a return as this. Indulgent mothers only educate their sons in selfishness when they instantly reward them for every generous act. The children soon learn to expect it, feel injured if no notice is taken of their sacrifice, and entirely lose the true spirit and joy of giving. David was certainly right when he declared that he would not offer to God a gift which cost him nothing. Children should be encouraged to give their own coppers in Sunday school or church, rather than receive them just for that purpose. The son of an Irish clergyman once asked his father for money for a miserable, ragged child who was begging at the door. The father explained that he could not do anything, as he already had so many of his own people to help. "However," he said, "if you like to go without your own dinner and give it to the child, you may." The boy adopted this plan, and declares that it was the best lesson about charity that he ever had in his life—it was a true giving of himself.

"The Holy Supper is kept, indeed,  
In whatso we share with another's need;  
Not what we give, but what we share,  
For the Gift without the Giver is bare;  
Who gives himself, with his alms feeds three—  
Himself, his hungering neighbor, and Me."

And no one can tell how far a little act of self-sacrifice may reach, nor how many people it may inspire to do likewise. For instance, a few weeks ago a young Jewish boy of 13 years old earned a quarter by scrubbing some floors for us. Soon after his mother was calling on me, and she told me how Israel had hurried to a store with his money and bought bread and milk; then he had called in his brothers and sisters to have a feast. Of course, if the little chap had dreamed that his kindly deed would become known to many thousands of people, and would rouse them to do something worth while, it would not have been a beautiful act at all. The beauty of it lay in its quiet inconspicuousness. And we all have chances every day to offer to God some little gift that costs us something, and that the world knows nothing about. Robertson says: "The most trifling act which is marked by selflessness to others is nobler in God's sight than the most brilliant accomplishment of genius. To reach a few

Sunday-school children, week after week, commonplace, simple truths—persevering in spite of dullness and mean capacities—is a more glorious occupation than the highest meditations or creations of genius which edify or instruct only our own solitary soul." Who can tell how far a light may shine? A writer says that one day she was on her way down town when a pale little face looked from a fourth-story window opposite, and a child's pleading voice said: "Please don't forget to light your fire to-night." There was a sick child, in a bare little room, who was alone all day and got lonely as the dark came on. Every night he watched for the light in the room opposite, and when it failed to appear he found the darkness very dreary. It is apt to be so in life. Those who are enthusiastically trying to brighten one little spot always send good cheer farther than they know. A city missionary said once of a man who was very useful in getting warmly into touch with people: "He isn't much of a man if you measure him some ways, but he's worth a hundred dollars a year as kindling-wood in a prayer-meeting." In this connection I wish to thank the writer of the letter given below for her kindly encouragement. HOPE.

Dear Hope,—After reading your lovely piece on "Shut-in with God," I felt constrained to write to you as soon as I got strong enough to do so. It suited me so much, and I felt such a oneness in spirit with you, and sympathy with you in your affliction, having passed through a severe illness just a little while before. I truly felt myself "shut-in with God," who was very near to me all the time. He has said "When thou passeth through the waters I will be with you, and through the floods, they shall not overflow thee," and "My God shall supply all your need," and He did, in providing a skillful doctor and good nursing. I am sure, dear Hope, you and I can praise His dear name together. I hope you may be spared a long time to write for the Quiet Hour. I enjoy reading your pieces from time to time in "The Farmer's Advocate"—words of counsel, of reproof, of encouragement, and of comfort.

I thank my God for giving you ability, wisdom and willingness to keep on your way, and may you still have strength to do His will unto the end, and then you will hear the Master's "Well done, good and faithful servant." This will be enough recompense, and more, for all we have passed through in this world and done for Him, for we cannot conceive the joy it will be. H. W.

#### LAMENT OF THE EX-FARMER.

I wish I'd never left the farm,  
To please my wife I done it;  
She said "Twould do our darters harm  
Ef they wuz raised upon it;  
They'd grow up frowsy, rough and wild,  
And marry some simple Harry,  
While in the town a well-bred child  
Would hev' some chance to marry."

And now we're here shet up like sparrows  
In a golden canary's cage,  
When I'd much rather be a follerin' the  
harrow  
In a field perfumed with sage;  
I miss the cow bell's tinkle and lowin'  
for their calves;  
I miss the young colt's whinner for its  
mother in the shafts;  
At night in my dreams I wander back  
to the dear old farm,  
And shout to my horses yonder  
Much to my wife's alarm.

The girls say the boys keep laffin',  
An' call us the hayseed gang,  
Cause I won't give up my farm talk,  
And take to their city twang;  
I cud show them a heap of money  
Made by the same green seeds,  
And it twasn't by playin' neither,  
But by pullin' up the weeds.

Some folks may like the city—they're  
welcome to their fill,—  
But I hate the tarnaal bustle, and sounds  
that are never still;  
I miss the crows acallin', and the rustling  
of the corn,  
So I am going back to the farm again,  
to the home where I was born.  
Quebec. JUANITA.

## The Ingle Nook.

The other day I came across some pictures which interested me much, the more especially since they brought to mind very vividly my old man of the Ste. Irene (Trixy always calls him "my" old man) and his wife with the green owls. I don't know whether you read the screed telling about these old folk or not, but I am taking it for granted that you did, and that you will, consequently, be interested in the pictures, which I have had reproduced—the Metropolitan Life of New York, the tallest building in the world, of whose construction my old man had charge; and some of the other New York skyscrapers, which give an idea of what he out-did in construction work.

When the Singer Building was in process of construction, it was generally felt that the limit had been reached; men would be satisfied with no further effort to live in the clouds. . . . But no; before its last brick was put in, the construction gangs were already at work at the Metropolitan, which, now that it is completed, is 90 feet higher than the Singer Building, measuring from crest to base, 700 feet; with a weight of 85,000 tons, and a floor space of 25 acres, almost three times greater than that of the Singer Building.

This great edifice is wholly given up to offices, of which the most favored are high up from the ground, where the air is purer, and the roar of the city below comes only as a deadened murmur, and where, if the business man chooses to stop for a moment's rest, he can go to a window and look far and wide, over the sea of roofs if the day be clear, or downward upon a bank of cloud, if it be lowering and foggy—for these great buildings often stand, like towering mountains, with their heads above the clouds.

From the very top of the Metropolitan Life, where a gale always seems to be blowing, no matter how still and lifeless the air below, a magnificent panorama of city and hill and ocean extends, covering a circle of 72 miles in diameter, while elevations can be seen to a much greater distance. Looking directly downward, the older buildings appear like band-boxes, the people like specks, and the trolley cars like ants crawling along thread-like passengers.

And yet grasping companies and ambitious engineers are not satisfied. Already the construction of another skyscraper, the New York Equitable, which, when completed, will measure, including the flagstaff, 909 feet from the pavement, is under way. Land in New York seems, in short, to be so valuable, that the tendency to build straight upward, and so squeeze from the air the money's worth that has gone into "per foot frontage," bids fair to run into sheer dissipation, if it has not already done so.

It is interesting to read about these things, edifying, too, perhaps, since afterwards we may be constrained to thank our lucky stars that we live in a place where skyscrapers are unknown, where "grass grows and water runs," and good solid earth spreads out for the walking on. . . . A far stretch from the Metropolitan Life to counting our blessings, perhaps—but a natural one. . . . D. D.

### OUR SCRAP BAG.

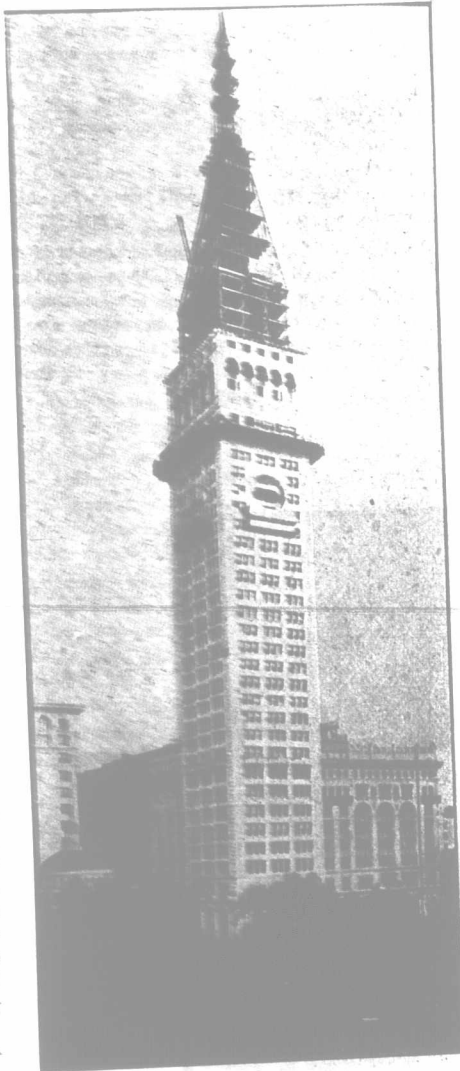
Have you ever made a shirtwaist box? I made one last week, and would not be without it now for five times its cost. You simply take a box large enough to hold your shirtwaists without crushing them, line it inside with cambric, and cover it outside with print or cretonne. Make the lid strong by nailing cleats on the under side, pad it on top with wadding, cover, and tack a frill all around the edge. I tacked on all of the cover and frill with brass-headed tacks, and found the work quickly and easily done. As soon as I have time I am going to make another one for shoes, and a longer one for white and cotton skirts. The boxes answer admirably for window seats, or for placing at the foot of a bed, and are really pretty, as well as useful. Try one.

### Marks on Blackboard.

Dear Dame Durden.—I am an interested reader of "The Ingle Nook," and now

take the post of erasing if you could tell me of some successful way to erase marks made by chalk or ink, from a slate blackboard. . . . PERPLEXED.

I have not been able to find any specific remedy for such an unusual treatment of blackboards. Have you tried gasoline, or ketch cleanser? Oxalic acid is a stain remover of ink stains, but I am not sure what its action would be on the slate; when applied to cotton, repeated washings are necessary to keep it from eating the fabric. You might try a little of it, very cautiously, if the other remedies fail.



The Metropolitan Life Tower.

The highest building in the world; fifty stories high.



Some of New York's Skyscrapers.

From the Singer Building, showing the docks and the United States Express Building.

### Re Painting Walls.

Dear Dame Durden.—I don't write to you very often, perhaps not as often as I ought, simply because of lack of time. To-day, however, I am a little under the weather, and not in a mood for hus-

banding, and as the threshing is over, and one or two other hustling jobs, I thought I would take the time and give you a little of my experience in house painting for the benefit of "A Young Wife." Well, I think painters are like poets, "born, and not made"; although, by taking pains and by persevering, one can work wonders. I tell our folks that I take after my mother in one respect, and that is by covering up all unsightly places with a coat of paint. She was always sending for a little bit of white lead or lampblack, or linseed oil, or some such thing, and I was generally the messenger. Well, Dame, I don't exactly agree with you concerning the ready-mixed paints. They may do for the really inexperienced, who only want to do a very little painting, but for "A Young Wife," who, I presume, is born with the really artistic ideas (she shows it in that she wants to mix her own), I would say let her mix them. Of mixed paints, however, which I have used, I can recommend the Elephant brand and the Sherwin-Williams ready-mixed paints. Of the others I cannot speak, except that I have used some which I did not like. Nowadays I always mix my own. For a dining-room I think that nothing beats cream for the walls, with pale blue or green for the ceiling. Cream is a good all-round color, for looks and standing and everything. I found out by experience what you said about putting on a darker shade of the same color first. If there are any dark stains or unsightly marks on the wall, they will generally shine through if not thus treated. An old woman who thought she knew it all, was giving me her experience in painting. She said, "You cannot paint a light color over a darker, you have always to paint a darker shade on top." I did not say anything, I knew it would be of no use, but painting is not like dyeing. I painted a dining-room this summer, and gave it four coats of cream paint before I was suited with it; two are not enough unless it has been done before.

For "A Young Wife's" benefit, I would say, buy your white lead, the quantity depends on what you are going to paint; a small pail holds 25 pounds, and looks about the size of a gallon pail. It is cheaper buying a pail, but you can get half a pail, or a few pounds. Put some in a can to mix it, and a painter told me to use one cupful of turpentine to two of oil. I always use the boiled linseed oil; raw oil is more for use out of doors, and takes longer to dry. Experience, however, will tell you when to add a little more oil or a little more turpentine. If the paint is sticky or greasy add a little more turpentine. You can get the mer-

ochre, I think it was spruce ochre that I used. If you want blue or green, or whatever color you want, get that in a powder, and don't put in much at once. You can make it darker, if it is not dark enough at first, but you cannot take it out if it is too dark. After you get your paint mixed, it is best to strain it, but it will do without. It is a nasty job straining it. I think the nicest color for kitchens is a nice drab or slate, made by mixing white lead and lampblack, just a trifle of the black, or a variation can be made by adding a teaspoonful or so of Indian or Venetian red.

Do you remember, Dame, the lecture we heard at Guelph by Prof. Evans on color? (I sat beside you, you know.) The three primary colors are red, blue and yellow; all other colors come by mixing those. Red and yellow makes orange; red and blue makes purple; blue and yellow makes green, etc.

The room which I did this summer was a dining-room. I kalsomined the ceiling white, as I was pressed for time. I painted the walls cream and grained the woodwork and doors in dark oak. The walls below the chair-back board were somewhat broken, so I papered them with paper like the enclosed sample, called fiber veneer. It is excellent, and after it gets a coat of size and varnish can hardly be told from the real wainscoting. It is also nice for other things, such as covering boxes, shelves, etc., and can be got in many different patterns. I have never used a stencil for borders, but think it would be quite simple if one had a pattern.

Now, "Young Wife," whatever you do get the best materials; it pays in the end. If you want to do any varnishing, get the best carriage varnish from a reliable dealer. Our dining-room has been done 14 years, and looks about as good as ever. I generally put a little varnish in the last coat of paint, but it will do very well without. For the floor, I would just use paint. I tried some varnish stain last spring, but it was so greasy looking that we scrubbed it off again. We only did a little bit, but that was enough. One woman I know used varnish stain at \$1.50 for a small can. I think it was good. Wishing you all success. AMATEUR.

I just want to tell you, Amateur, how much I have enjoyed your letter, especially, perhaps, the little private bit. Let me congratulate you on having your daughter settled so near you.

Yes, I remember Prof. Evans' lecture very well. . . . If I am at the Guelph Convention this year again, won't you please come and speak to me? It is a great pleasure, indeed, to meet the Chatterers personally.

I am sure "A Young Wife" will appreciate your hints on painting very much. We think the enclosed sample very pretty for wainscoting.

### MODERN FICTION.

For some time members of the Continued-story Club (composed of women, who carry in their heads from one month to another heroines and heroes, left in all sorts of hazardous and perilous circumstances till the next month's magazine is due), have been watching, with eagerness, for the appearance of Appleton's, that they might get another instalment of "The Younger Set," a story as lurid as a sunset painted by an amateur. The agony ended with this month's dose, and the hero and heroine were united in the following closing paragraph:

"She stood waiting as he came up through the purple gloom of the moorland, the stars' brilliancy silvering her—waiting—yielding in pallid silence to his arms, crushed in them, looking into his eyes, dumb, wordless. Then, slowly, the pale sacrament changed, as the wild rose tint crept into her face; her arms clung to his shoulders, higher, tightened around his neck. And from her lips, she gave into his keeping, soul and body, guiltless as God gave them, to have and to hold beyond such incidents as death and the eternity that no man clings to save in the arms of such as she."

And how, in the name of all that's holy, can a husband expect his wife to get up and fry liver and eggs, and wipe the baby's nose, in a spirit of contentment, after reading stuff like that?— [Atchison Globe.]

## The Young People's Department.

### LIFE.

Give me a taste of life!

Not the tang of a seasoned wine;  
Not the drug of an unearned bread;  
Not the grape of an untilled vine.  
The life that is really life;  
That comes from no fount afar,  
But the springs from the toil and strife,  
In the world of things as they are.

Give me the whole of life!

The joy, the hope, and the pain,  
The struggle whose end is strength,  
The loss that is infinite gain;  
Not the drought of a cloudless sky,  
Not the rust of a fruitless rest,  
Give me the sun and the storm,  
The calm and the white sea-crest.

Give me the best of life!

To live in the world with God,  
Where the seed that is sown and dies  
Lifts a harvest over the sod.  
Where beauty and truth are one,  
Where the right must have its way,  
Where the storm clouds part for stars,  
And the starlight heralds the day.

Give me the life of toil!

The muscle and mind to dare,  
No luxury's lap for my head,  
No idly won wealth to share;  
Whether by pick or plane,  
Whether by tongue or pen,  
Let me not live in vain;  
Let me do a man's work among men.  
—George B. Cleaves, in Youth's Companion.

### A LITTLE DEED OF LOVE.

Some years ago, in England, horses were continually slipping in winter on the icy pavement of a steep hill, up which loaded wagons and carts were constantly moving. Yet no one seemed to think of any better remedy than to beat and curse the animals as they tugged and pulled and slipped on the hard earth, except a poor old woman, who lived at the foot of the hill. It hurt her so, to see the poor horses slip and fall on the slippery pavement, that every morning, old and feeble as she was, she climbed the hill and emptied her ash-pan, and such ashes as she could collect from her neighbors, on the smoothest parts.

At first the drivers paid very little attention to what she did, but after a little, they began to appreciate her kindness; to be ashamed of their own cruelty, and to listen to her requests, that they would be more gentle with their beasts.

The town officials heard of the old lady's work, and soon set to work leveling the hill and relaying the pavement. Prominent men came to know what the old woman had done, and it suggested to them an organization for doing such work as the old lady had inaugurated. All this made the drivers so grateful that they went among their employers and others with a subscription paper and raised a fund which bought the old lady a comfortable annuity for life. So one poor old woman and her ash-pan not only kept the poor overloaded horses from falling, and stopped the blows and curses of their drivers, but made every animal in the city more comfortable, improved and beautified the city itself, and excited an epoch of good feeling and kindness, the end of which no one can tell.

Reading this little story reminds me of something I heard not long ago, of the beginnings of the Creche, or Day Nursery in East Toronto. A poor woman, whose husband was dead, was obliged to go out and work for her living by the day, and she was in a predicament as to what she should do with her little children while she was out. A kind neighbor offered to take care of them for a few cents to pay the cost of their meals during the day. By-and-bye other women in the same difficulty came to this kind woman, and she took in their children, too. After a while she had to hire a larger house to hold them all, and get someone to help her. Some rich ladies heard of what she was doing, and offered her the thing on a permanent basis. The Day Nursery is one of the most

useful institutions in the city. It is the possessor of a large house and garden, where hundreds of women leave their children to be cared for every day, for the small price of ten cents out of their day's wage. Ladies who want work done can always get a woman by telephoning to the Nursery, and women in want of work can hear of it there. The institution also collects second-hand clothing, which the women may buy at a small price, at what is called a Rummage Sale. And all this has come out of the thoughtful kindness of one poor woman. C. D.

### LOOKING BACKWARD.

(Kansas City Star.)

Can't you imagine in the days  
When Shakespeare wooed and wed,  
The dames of Stratford when they met,  
Their market baskets down they set,  
And ere they went their separate ways,  
Such things as follow said:

"Have you heard?" "What?" "Anne Hathaway  
Is very soon to marry!"  
"Why, no, forsooth! Who is he, pray?"  
"She's going to throw herself away  
On young Will Shakespeare, so they say,  
Unless all plays miscarry."



Flemish Lace Maker.

This work is somewhat similar to the "pillow work" which may be seen in process of making each year at Toronto Exhibition.

"What, that poor, foolish rhymester lad!  
He never can support her."

"Yes, doesn't it seem almost sad?  
Because we know she might have had  
One of true worth. It seems too bad  
When betters came to court her."

"They say some years the elder she,"  
"And he's not worth his salt,  
As any one with eyes can see."

"Well, if young folks will foolish be  
At least they can't blame you and me—  
It's surely not our fault."

Yes, don't you suppose such things were  
said

When young Will Shakespeare wooed  
and wed?

### POST CARD COLLECTING.

Several requests have come to me to print names of collectors in this column, and I want to explain why I have not done so. I tried it last year, and the collectors soon found themselves overloaded with cards, so that it was almost impossible to return them. So I don't think it advisable to try it again.

Dear Cousin Dorothy,—I have often thought of joining the Y. P. D., but I have not done so, as you see. I live on a farm with my parents, two sisters and one brother. We are in a very pretty part of the country in West Durham. We can see for miles around, for we live on a hill.

Have very many of the members had poor luck with their flower gardens this year? The sweet peas seem to be blighted; they have been scarce this year around here. The chickens are the worst enemies to my flower garden. I think a Fowl Protection Society is needed around here, when I see a hen in the garden digging away so contentedly! Did you ever have your garden destroyed?

I think I would like to correspond with "Fay," as we are about the same height. I am five feet four inches. I do not know whether we are the same size or not. Are there any of the members who like sewing? I like that better than making pie crust. I will close now for this time for fear you will not wish me to write again. VIOLET.

As "Violet" has enclosed a letter for "Fay," I shall be glad if that popular young lady will send me her address, which I have mislaid. I expect a good many would have a word to say about chickens in the garden. C. D.

## Current Events.

An outbreak of cholera in Russia is causing many deaths.

The largest grain elevator in the world is to be built in Milwaukee.

Another turbine steamer is to be built to ply between Toronto and Hamilton.

The new Lieut.-Governor of Ontario, Hon. J. M. Gibson, of Hamilton, was sworn in last week.

The Chicago Great Western Railway will soon pass under the control of the C. P. R.

The first regular train for the West on the National Transcontinental Railway left Winnipeg on September 22nd.

By the wreck of the Star of Bengal, on the Alaskan coast, within the past fortnight, 110 lives were lost.

One hundred thousand idle steel workers returned to work on October 1st in the great iron and steel works in the United States.

Five thousand men were engaged night and day in the Adirondacks last week fighting forest fires which covered 50,000 acres of land.

The Right Rev. James Carmichael, Lord Bishop of the Anglican Church in Montreal, died last week at his home in that city. He was the author of several books, and a noted student of natural history.

Mr. William Lyon Mackenzie King's successor as Deputy Minister of Labor, a position which Mr. King resigned to run as Liberal candidate for Waterloo, will be Mr. F. Acland, the present secretary of the Department.

A movement to apply the electoral principle to the House of Lords is under consideration of the committee chosen to study measures for the reform of that illustrious Chamber. The report will recommend that the House be strengthened by the addition of representative Commoners eminent in various walks of public life, these to be elected for one term of Parliament only.

### A LOVER OF HORSES.

Are you sure you're a lover of horses,  
my boy?

You declare that you love a good  
horse—

But unless you've a heart for his pain  
and his joy,

Your assertion I cannot endorse.

You are proud of his beauty of color and  
form,

Of his coat with its satiny gloss—  
For affection he shows does your own  
answer warm?

Or would gold compensate for his loss?

When he speeds, while the wind fans your  
cheeks cool and fresh,

With the world gazing on to admire,  
Do you know he's a creature of sensitive  
flesh—

Like yourself he may suffer or tire?

When he speeds, while the wind fans your  
cheeks cool and fresh,

With the world gazing on to admire,  
Do you know he's a creature of sensitive  
flesh—

Like yourself he may suffer or tire?

When he speeds, while the wind fans your  
cheeks cool and fresh,

With the world gazing on to admire,  
Do you know he's a creature of sensitive  
flesh—

Like yourself he may suffer or tire?

When he speeds, while the wind fans your  
cheeks cool and fresh,

With the world gazing on to admire,  
Do you know he's a creature of sensitive  
flesh—

Like yourself he may suffer or tire?

When he speeds, while the wind fans your  
cheeks cool and fresh,

With the world gazing on to admire,  
Do you know he's a creature of sensitive  
flesh—

Like yourself he may suffer or tire?

—I. F. Layton.

### CONDITIONAL RECONCILIATION.

An old Scotch woman was lying seriously ill, so ill, in fact, that the minister had been called in. The good man was impressing upon her that if she bore any ill-will towards any one she should forgive in case the end should come, and she then mentioned that she and her neighbor had been bitter enemies for some time. The neighbor was brought in, and the old woman said: "I'm pretty badly, Mrs. B., and I think we should be making up our differences in case the worst should happen." The neighbor was much affected, and the minister was glad to witness the full reconciliation of the two women. At length, the neighbor rose to take her departure, and just as she was going out at the door the old woman in bed raised herself up and shouted: "Mrs. B.—" "Yes, what is it, Mrs. G.?" "Well, in case I should get better, of course, it is understood that things will just be on the same old footing!"

Teacher—Jimmie, correct this sentence,  
our teacher am in sight.

Janine—Our teacher am in sight.

About the House.

SEASONABLE RECIPES.

**Apple Cheese.**—Take 4 lbs. apples, pared, cored, and divided into quarters; add 2 lbs. sugar, the grated rind of one lemon and the juice of two, and a teaspoonful essence of ginger. Put a cupful of water into the stewpan and let the apples stew gently until they are reduced to a thick pulp, stirring them from time to time. Let it cook an hour after beginning to boil, or more if the apples do not appear to be thoroughly pulped and the juice boiled away. When ready pour into jelly glasses, cover with paraffine, put on the covers and keep in a dry, cool place.

**Apple Fritters.**—Put into a small bowl  $\frac{1}{2}$  cup flour, and add to it the well-beaten yolk of one egg, and  $\frac{1}{4}$  cup cold water. Beat thoroughly; then stir in  $\frac{1}{4}$  tablespoon melted butter, last of all folding in carefully the stiffly beaten white of the egg. Stand on ice two or three hours. Just before time to serve the fritters peel three large, sour apples, and remove the cores with a corer. Cut the apples in round slices,  $\frac{1}{8}$  inch thick, dip one by one with a fork into batter, and drop into deep, very hot fat. When one side is a golden-brown turn, and remove as soon as the other side is the same color. Drain on soft paper, dredge with powdered sugar and serve. Do not put too many into the fat at once, or the cooking will be too slow, and they will "soak fat." In turning them also be careful not to puncture with a fork or they will be heavy.

**Preserved Apples.**—Pare, quarter and core, or take out the cores, leaving the apples in shape. Allow for each pound  $\frac{1}{2}$  lb. sugar, a teaspoon powdered ginger, tied in a bag, and enough water to cover the apples. Make the syrup, then take it from the fire. When just lukewarm put in the apples, let reheat rather slowly, and simmer until the apples are transparent. Before sealing add a little essence of lemon.

**Tomato Sauce.**—Cook 1 gallon ripe tomatoes and five pods red pepper. Strain, and stir in 2 ozs. black pepper,  $\frac{1}{2}$  oz. white mustard seed,  $\frac{1}{2}$  oz. allspice, and 1 pint vinegar. Boil slowly three or four hours, and bottle while hot, corking tightly. This will keep for years.

**Tomato Preserve.**—Use 4 lbs. green tomatoes to 3 lbs. of sugar, and 3 sliced lemons. Slice the tomatoes and lemons in a granite kettle and cover with the sugar. Let stand several hours, then cook very slowly until the juice is thick. While boiling add ginger root to taste.

**Ripe Tomato Pickle.**—Choose small, firm, ripe tomatoes. Prick each with a pin and place in a stone jar with about 30 nasturtium seeds to every quart of tomatoes, scattering the seeds. Cover with cold vinegar. They will be ready for use in about two weeks.

**Catsup.**—1 peck green tomatoes and  $\frac{1}{2}$  peck white onions chopped, 3 ozs. white mustard, and 1 oz. each allspice and cloves,  $\frac{1}{2}$  pint mixed mustard, 1 oz. pepper and celery seed each, 1 lb. brown sugar. Sprinkle tomatoes and onions with salt and let stand three hours. Drain a little; put in a kettle, adding the other ingredients; cover with vinegar; set on fire and boil slowly for one hour.

**Ripe Tomato Soy.**—Take  $\frac{1}{2}$  bushel of ripe tomatoes, skin and cut them in slices. Sprinkle the bottom of the vessel into which they are put with salt, then put in layers of tomatoes and salt (a sprinkling of the latter) until the vessel is full. Cover the top with a thick layer of sliced onions; let stand three days, turn into the cooking kettle, set over the fire, and let boil very slowly for several hours, stirring occasionally to prevent sticking. Take from the fire and let stand overnight. In the morning put through a sieve; add two pods red peppers chopped fine,  $\frac{1}{2}$  oz. ground cloves, 1 oz. each of allspice and black pepper. Return to the kettle, set over a slow fire and let boil until very thick and smooth. Seal in small jars.

**Spanish Tomato.**—1 small onion; 1 small, green pepper; 1 tablespoon butter; 5 tomatoes; 3 crackers; salt to taste. Chop the onion and the pepper very fine; peel and slice the tomatoes, and roll the crackers. Place the tomatoes in a baking dish; sprinkle over them the salt,

and the butter, and the rolled cracker in the middle, and in the top with the butter cut in pieces. Bake slowly one hour.

**Spiced Plum.**—Wash a syrup, allowing a pound of sugar to each pound of fruit, and a scanty pint of vinegar to every 3 lbs. sugar. To each peck of plums allow 1 tablespoon ground cinnamon, 1 tablespoon cloves, 1 tablespoon mace and 1 tablespoon allspice. Prick each plum, add the spices to the syrup, and pour the latter, boiling hot, over the fruit. Let stand three days, then skim out the plums, boil down the syrup until quite thick, and pour it again boiling hot over the plums. Seal.

**Spiced Grapes.**—Pulp 7 lbs. grapes, put pulps into a kettle with just enough water to keep them from sticking, and simmer until it will go through a sieve easily to remove the seeds. Add the strained pulp to the skins, with  $\frac{1}{2}$  pint strong vinegar,  $3\frac{1}{2}$  lbs. sugar, 1 tablespoon ground cloves and 2 of cinnamon. Boil until thick, and put in jelly glasses.

HELPFUL HINTS.

A good vinegar may be made from peach or apple parings. Fill a jar half full of parings, add  $\frac{1}{2}$  cup molasses, fill up with clean soft water, tie a cloth over the jar and set it in the sun, or in a warm place. It will ferment first, then turn to vinegar.

Before washing new tins rub the seams with lard to prevent rust.

Glycerine is good to remove coffee or tea stains. First soak in cold water, then spread with glycerine and leave all night. The stain should then disappear in the laundering.

To remove ink stains from white goods, put salt on the stain, then wet with vinegar, and rub. Repeat until the stain is removed, then rinse in a clear water. Soaking in buttermilk is also effective.

To clean pots and kettles which have had food burned on them: Fill with cold water, to which is added a good handful of washing soda. Set on the back of the range, and after two or three days it will wash as clean as new, without scraping the enamel off. Tin may be treated in the same way.

Touching soft corns with turpentine every day is said to remove them. Apply with a burnt match, and do not let the turpentine run on to the adjoining skin.

Grease spots can be removed from almost any fabric by sponging them with ammonia and hot water. Weak ammonia water is also good for freshening rugs and carpets. Sweep the carpet, then rub over with a cloth wrung out of the water.

A white plume may be cleaned by using gasoline and flour. Make a paste of flour and gasoline in a dish, and wash the plume in it, then rinse in clean paste and hang up to dry. When quite dry the flour will shake off. Curl afterwards with a dull knife.

Clean white fur with flour. Rub in well, then shake out of the window, repeating until clean. Hot corn meal is also good.

ASPIRATIONS OF YOUTH.

Higher, higher will we climb  
Up the mount of glory,  
That our names may live through time  
In our country's story;  
Happy when her welfare calls,  
He who conquers, he who falls.

Deeper, deeper let us toil  
In the mines of knowledge;  
Nature's wealth and Learning's spoil  
Win from school and college;  
Delve we there for richer gems  
Than the stars of diadems.

Onward, onward may we press  
Through the path of duty;  
Virtue is true happiness,  
Excellence true beauty;  
Minds are of celestial birth,  
Make we then a heaven of earth.

Closer, closer let us knit  
Hearts and hands together,  
Where our fireside-comforts sit  
In the wildest weather;—  
O' they wander wide who roam  
For the joys of life from home!  
—James Montgomery.

"THE FARMER'S ADVOCATE" FASHIONS.



6117 Child's Caps 2, 4 and 6 years.

There is no head covering prettier for the small child than the close-fitting cap. This season there will be several styles worn, the little Dutch cap, that is always so comfortable and attractive, and also the more fancy Normandy caps, and those with full crowns and fancy rolled-back revers. All three styles are shown in the illustration, being made variously of silk and of silk combined with embroidery and heavy lace, but bengaline, satin, cashmere and a variety of materials of the sort are used for children's caps, and all are appropriate, while the brim and the revers of the two more fancy ones can be made of almost any material that may be liked. Just now heavy lace over silk, or the material embroidered, is much liked, but later bands of fur will be both warm and pretty. The trimming of rosettes is a favorite one, and is always satisfactory, and ties can be either of the ribbon or the material.

The plain cap is made with brim and crown and serves also as a foundation for the Normandy and the fancy caps. The full crown of each other cap is arranged over the plain one on indicated lines, and the revers of the fancy cap is joined to the front edge.

The quantity of material required for the medium size (4 years) is  $\frac{1}{2}$  yard 21,  $\frac{1}{2}$  yard either 36 or 44 inches wide for any cap, with  $\frac{1}{2}$  yard 18 inches wide for the trimming and crown of the Normandy cap or the revers of the fancy cap, 3 yards of ribbon for rosettes, 1  $\frac{1}{2}$  yards for ties.

The above patterns will be sent to any subscriber at the very low price of ten cents.

Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

"GO AWAY! DON'T BOTHER ME."

An answer to "where is my boy to-night?"

Aren't there a good many fathers who see little or nothing of their children and never fancy that they are to blame for that rather disagreeable fact. Business takes them away early. Business brings them home, if not late, yet weary and worried. They seem to fancy that they must not be bothered with "the bairns." The mother has to look after all that. To play with the little folks would be infra dig. Even to talk with them is scarcely to be thought of. "Father is tired"; "father is busy"; "father has to go out"; "father must see a party"; "father wants to sleep after supper"; "Oh, go away! don't bother." Is this sort of way the right way? Is it likely to make home bright, and dear, and attractive, with by-and-bye blessed memories of it in after years as the "dearest, sweetest, earthly spot, the spot called home?" Scarcely. The first William Pitt, then Prime Minister of England, could find time to romp with his children, and was not a bit ashamed when caught on his hands and knees with both his boys on his back. Of course not. Why should he? Unless, to be sure, a fool or a prig had looked in at the moment. —Sel.

HOTEL ELECTRICALLY HEATED.

A bureau of information which takes note of electrical progress, announces that the first hotel in the world heated by electricity is the Eagle, of Grand Rapids, Mich. Electrical apparatus for cooking, curling hair, ironing and performing other useful offices have long been in service. Many trolley cars, too, are warmed by the current which propels them, suitable devices for the purpose being secreted under the seats. But the idea of supplying radiators, which would take the place of steam radiators in a house or hotel, is a rather new one. The radiators in the Eagle are said to be luminous—that is, they give light as well as heat. Already twenty-seven rooms for guests are equipped with them. The other rooms in the hotel, including the offices, parlors, cafe and barber shop, will be electrically heated with the same type of radiator as soon as possible.

The electric heat will be controlled from the office as well as in the rooms, and it is predicted, after a careful test, that the new source of heat will mean a considerable saving to the proprietor. With electric heat, only those rooms occupied need be heated, and the warmth from the luminous radiators is instantaneous. When a guest wants accommodations, the clerk assigns him a room, and while he is waiting for the elevator, a turn of the switch starts the radiator, and the room is soon warmed. This economy of heat is the greatest feature of the electric installation. The principal advantages of electric heat will be in the fall and spring, or on cold, damp days during the summer. It will not be necessary to keep a steam-heating plant running, and guests can keep their rooms at any desired temperature.

The electric-luminous radiator consists of an ornamental frame fitted with a polished copper reflector at the back, and with three or more large cylindrical incandescent heating bulbs. These bulbs differ from the ordinary incandescent lamps for lighting, being designed to transform the electrical energy into heat, accompanied by a cheerful glow. There is every benefit of an open fire, with none of the dangers or drawbacks. In many cases the radiators are installed permanently in the fireplace.—Ex.

RULES FOR HEALTH.

Don't worry.  
Don't hurry. Too swift arrives as tardy as too slow.  
Simplify! Simplify! Simplify!  
Be regular. Be systematic. "Order is heaven's first law."  
Don't overeat. Don't starve. "Let your moderation be known to all men."  
Sleep and rest abundantly. Sleep is "nature's sweet restorer."  
Court the fresh air day and night. Learn how to breathe. The "breath of life" is in the air.  
Leave a margin of nervous energy for to-morrow. Don't spend faster than you make.

Be cheerful. "A light heart lives long."  
Work like a man, but don't be worked to death.

Avoid passion and excitement. A moment's anger may cause life-long misery. "Seek peace and pursue it."

Think only healthful thoughts. "As a man thinketh in his heart so is he." Forget yourself in living for others.

Look for the good in everybody and everything. You will find what you habitually look for.

So live in body, soul and spirit that you will radiate health. Health is contagious as well as disease.

Don't carry the whole earth on your shoulders, still less the universe. Trust the Eternal.

Finally—learn to wait in the "patience of hope."  
"God is in His world."

A GRACEFUL WITHDRAWAL.

"Do you know who that old man is talking to our hostess?" asked Mrs. Blunderer of the lady sitting beside her.  
"That," answered the woman coldly, "is my son."  
"Oh," gasped Mrs. Blunderer in confusion, "he's a good deal older than you are, is he not?"—Lippincott's.

**BABY'S**  
The Best Thing In the Home  
—except the baby.  
"Baby's Own" is the nicest, purest and safest soap you can use.  
Best for baby—best for you.  
**ALBERT SOAPS, LTD.**  
4 MFRS.  
MONTREAL

**OWN SOAP**

**Marks, Blemishes, Ailments and Diseases OF THE SKIN.**



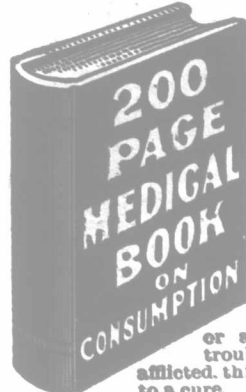
We make a specialty of all skin, scalp, hair and complexional troubles. It is not any longer necessary to "outgrow" a pimpled and blotched face, suffer the tortures of eczema, have a muddy, discolored complexion, a skin marked by smallpox pittings or disfigured by

**SUPERFLUOUS HAIR**

Moles, Warts, Red Veins, etc. We cure and remove these, and many other skin affections and disfigurements. If afflicted with any of these, write us fully and we will advise you, without expense. Hairs, Moles, Warts and Veins can only be permanently removed at our offices. Booklet "F" sent on request.

**HISCOTT DERMATOLOGICAL INSTITUTE** Estab. 1892.  
61 College St., Toronto, Ont.

**Consumption Book**



**FREE**

This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

Write at once to the Yeckerman Consumption Remedy Co., 725 Rose Street, Kalamazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.



**DEHORN YOUR CATTLE**  
Wonderful how it improves them. Heifers develop into better milkers. Steers fatten quicker.

**KEYSTONE DEHORNER**  
does it. Cuts clean—hurts little—does not bruise flesh or crush bone. Write for free booklet.  
**R. H. McKenna,**  
Late of Pictou, Ont.  
219 Robert St. Toronto

**LEARN TO MAKE MIRRORS!**

No capital. Big profits. Easy home work for anyone. Send 2c. stamp for particulars. Address:

**S. C. ROBINSON,** 1181  
386 Queen West. Toronto, Ontario.

Advocate Advertisers Reap Results.

**ONE BULLET'S WORK.**

So you're taking the census, master? There's three of us living still, My wife, an' I, an' our only son, that folks call Whispering Bill; But Bill couldn't tell ye his name, sir, an' so it's harly worth giving, For ye see a bullet killed his mind, an' left his body living.

Sit down for a minute, master; you see Bill was only fifteen At the time o' the War, an' as likely a boy as ever this world has seen; An' what with the news o' battles lost, the speeches an' all the noise, I guess every farm in the neighborhood lost a part of its crop of boys.

'Twas harvest-time when Bill left home; every stalk in the fields o' rye Seemed to stand tiptoe to see him off an' wave him a fond good-bye; His sweetheart was here with some other girls—the saucy little miss! An' pretending she wanted to whisper 'n his ear, she gave him a rousing kiss.

Oh, he was a han'some fellow, an' tender an' brave an' smart, An' tho' he was bigger than I was, the boy had a woman's heart. I couldn't control my feelings, but I tried with all my might, An' his mother an' me stood a-crying till Bill was out o' sight.

His mother she often told him, when she knew he was going away, That God would take care o' him, maybe, if he didn't forget to pray; An' on the bloodiest battle-fields, when bullets whizzed in the air, An' Bill was a-fighting desperit, he used to whisper a prayer.

Oh, his comrades have often told me that Bill never flinched a bit When every second a gap in the ranks told where a ball had hit. An' one night when the field was covered with the awful harvest of war, They found my boy 'mongst the martyrs of the cause he was fighting for.

His fingers were clutched in the dewy grass—Oh, no, sir, he wasn't dead, But he lay sort of helpless an' crazy with a rifle-ball in his head; An' if Bill had really died that night I'd give all I've got worth giving; For ye see the bullet had killed his mind an' left his body living.

An officer wrote an' told us how the boy had been hurt in the fight, But he said that the doctors reckoned that they could bring him around all right. An' then we heard from a neighbor, disabled at Malvern Hill, That he thought in the course of a week or so he'd be coming home with Bill.

We was that anxious to see him we'd sit up and talk at nights 'Till the break of day had dimmed the stars an' put out the northern lights; We waited and watched for a month or more, an' the summer was nearly past. When a letter came one day that said they'd started for home at last.

I'll never forget the day Bill came—'twas harvest-time again— An' the air blown over the yellow fields was sweet with the scent of the grain; The dooryard was full o' the neighbors who had come to share our joy, An' all of us sent up a mighty cheer at the sight of that soldier boy.

An' all of a sudden somebody said: "Alas! don't the boy know his mother?" An' Bill stood a-whispering fearful like, an' staring from one to another: "Don't be afraid, Bill," said he to himself, as he stood in his coat of blue, "Why, God'll take care of you, Bill, God'll take care of you."

He seemed to be loading an' firm' a gun, and to act like a man who hears The awful roar of the battle-field sounding in his ears; I saw that the bullet had touched his brain an' somehow made it blind, With the picture of war before his eyes an' the fear of death in his mind.

I grasped his hand, an' says I to Bill, "Don't 'ee remember me? I'm yer father—don't 'ee know me? How frightened ye seem to be!" But the boy kept a-whispering to himself, as if 'twas all he knew, God'll take care of you, Bill; God'll take care of you."

He's never known us since that day, nor his sweetheart, an' never will; Father an' mother an' sweetheart are all the same to Bill. And many's the time his mother sits up the whole night through, An' smooths his head an' says, "Yes, Bill, God will take care of you."

Unfortunate? Yes, but we can't complain. It's a living death more sad, When the body clings to a life of shame an' the soul has gone to the bad; An' Bill is out of the reach of harm and danger of every kind, We only take care of his body, but God takes care of his mind.

—[Independent.]

**LONGEVITY AND WORK.**

The records of centenarians show that the full exercise of the various powers, mental and bodily, is conducive to great age, so that there need be no fear of entering heartily, actively, and with full interest and energy into the assigned work of life, physical or mental, provided one does not put more continued strain on one's resources of strength than they can bear without protest. Work, enjoyed as it should be, promotes health of body, and, especially if stimulated by other motives than personal ambition and gain, engenders that cheerful and placid frame of mind which is one of the adjuncts of centenarianism. The inhabitants of almost any rural district will be found to point with pride to the number of hale and hearty octogenarians, nonagenarians, and centenarians living among them as an evidence of their healthy environment and hygienic lives, while every rich city furnishes innumerable examples of unfortunate people going to unhonored early graves through idleness and indulgence and the perverted and unhealthy ways of living and killing time that idleness induces. The normal human brain and muscular system are able to expend a prodigious amount of energy without suffering any permanent deterioration, provided the strain is not kept up for such a time that the centers of energy become exhausted and impaired. Men and women should learn to know just how much energy they can expend without causing harmful effects to their systems, and then they should endeavor always to remain well within the limits imposed by their individual organization and endowment of recuperative force.—[Circle.]

**KEEP TROUBLES TO YOURSELF.**

Do not tell your troubles this year, because the fewer people who know of the things that have handicapped you the better it is for you. You will then be spared the influence of the unfortunate suggestions which your hard-luck stories make upon other people's minds.

Then, again, every time you repeat the story of your misfortunes, your troubles, your trials, your failures, you etch the dark picture a little deeper in your own mind; make a little more real to you what you ought to erase forever. What cannot be cured should be erased forever. What cannot help us, what can only hinder, should be forgotten, discarded once for all.

Many people hang on to their old troubles; they cling to their old sorrows and misfortunes, and their failures, their past sufferings, until they become a terrible drag, a clog, a fearful handicap to their progress.

The only thing to do with a bad piece of work, with an unfortunate mistake, with a sad experience, is to let it go, wipe it out, get rid of it forever.

It is wonderful what a strange fascination one's mistakes, failures and unfortunate experiences have for most people. I know people who seem to take a morbid delight in sitting for hours and thinking over the terrible things that have happened to them; rehearsing their old troubles, their misfortunes, their mistakes. A wound which is constantly probed never heals.—[Success for January.]

**Windsor Table Salt**

—sparkling in its whiteness—looks as pure as it tastes. Fine and pure.

The Windsor savour is peculiarly delicate and lasting.

Ask your grocer for it.

**Dispersion Sale**

The entire "MARTELLO" herd of

**REGISTERED JERSEY CATTLE**

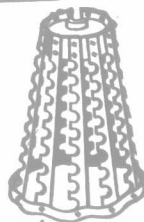
will be sold BY AUCTION, WITHOUT RESERVE, at the barns, 675 Princess St., KINGSTON, ONT., on

Sat., Oct. 17, '08

At 2 p. m. EXCELLENT INDIVIDUALS. BEST STRAINS.

**W. F. Nickle, Kingston, Ont.,** OWNER.

William Murray, Kingston, Ont., Auctioneer.



This Cylinder shows why the "Eureka" Root Cutter

is the best on the market. See how it is designed. Grooved knives, with the teeth on one blade opposite the teeth on the next. Instead of slicing or pulping, the "Eureka" turns out roots in shreds—thin narrow strips—suitable for any kind of feeding. The "Eureka" shreds from one to two bushels a minute, and turns so easily that a child can operate it. The sloping form of the cylinder makes the machine a self-cleaner. Write for catalogue which explains fully. 7

The Eureka Planter Co. LIMITED Woodstock, Ont.



**ABSORBINE**

Removes Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from any Bruise or Strain, Cures Spavin Lameness, Allays Pain. Does not blister, remove the hair or lay the horse up. \$2.00 a bottle, delivered. Book 1 D free.

**ABSORBINE, JR.** (mankind \$1.00 bottle.) For Synovitis, Strains, Gouty or Rheumatic Deposits, Varicose Veins, Varicocele, Hydrocele, Allays pain. Book free. **W. F. YOUNG, P.D.F., 73 Monmouth St., Springfield, Mass.** LARSEN, SOHNS & CO., Montreal, Canadian Agents.

**Imported Clydesdale Mare**

**BESS ORR (12700), Vol. 29, p. 517-8.**

Dark bay; 4 years old; is in foal to Baron's Luck, one of the best pedigreed horses in Canada. Also Little Bess; 9 years old; a lady's driver; sired by Chestnut Joe; easily handled; not afraid of anything, and a beauty. For particulars and prices write or call on

**ED. ULLYOT, ST. MARY'S, ONT. BROWN SWISS CATTLE**

FRENCH-CANADIAN HORSES

We are offering for sale cattle of both sexes and almost any age; the greatest dual-purpose bred alive. Horses of all ages. Stallions, mares and fillies. The best stud in Quebec. Write us for prices. We represent exactly as the animal is.

**C. E. STANDISH, Ayer's Cliff P.O. Quebec.** Treebarth Farm.



If everything else in the house did its share of the work as well as

### "Black Knight" Stove Polish

very few women would complain of the housework "Black Knight" does away with the everlasting rubbing and polishing. It shines quickly and the hottest fire can't dull its bright, fresh polish. Always ready for use for Stoves, Grates and other Ironwork. It's the best polish and the biggest can for the money.

Send dealer's name and 10c for full size can if you can't get "Black Knight" in your town.

The F. F. DALLEY CO. LIMITED. HAMILTON, Ont.

GOES LIKE SIXTY  
SELLS LIKE SIXTY  
**\$65**  
GILSON  
GASOLINE  
ENGINE  
For Pumping, Cream  
Separators, Churns, Wash  
Machines, etc. FREE TRIAL.  
Ask for catalog—all sizes.

GILSON MFG. CO., 150 York St., Guelph, Ont.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock. TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

**FOR SALE**—2 small farms, about 20 acres each; right at St. Mary's Junction. Good buildings on each. Soil good; will grow anything. Owner having sale of farm, stock and implements on Oct. 20, 1908. All trains stop at the Junction. Ed. Ulyot, St. Mary's, Ont.

**WANTED**—Persons to grow mushrooms for us during fall and winter months. Waste space in cellar or outhouse can be made to yield \$15 to \$25 per week. Send for illustrated booklet. The Montreal Supply Co., Montreal.

**WANTED**—A first-class farm hand. One good with horses and cattle, and able to milk. Yearly engagement. Good wages to first-class man. No other need apply. Henry Stead, Wilton Grove, Ont.

**WANTED**—Position as working farm manager. Excellent references. F. Allen, Dunganon Farm, Cobourg, Ont.

That the royal road to learning is full of strange pitfalls is shown by some of the definitions and statements given by school children—some of whom are well along the way. The following are bonafide samples coming under the knowledge of one teacher: About the time Columbus was cursing around among the West Indies. Jackson's campaign in the Valley was the greatest piece of millinery work ever known. The Valkyrie were the Choosers of the Slain, and the Valhalla the Haulers of the Slain. The eldest son of the King of France is called The Dolphin. The Duke of Clarence, according to his usual custom, was killed in battle. Heathen are paragons (pagans) that wash up idle things. The Indians call their women squabs.

#### MON COUSINE LOUIS.

I born a fergaire's girl, me,  
I levee in Canada,  
On my grande beeg, tain ma fadder and  
me,  
Hout d'ouder side of de Hottawee.

Ma boudiers d'ye come one, two tree;  
but I ham de honley girl,  
And oh, ma gracious, dere proud of me,  
Dey tink ham one grande swell!

Dey say Marie cut one dash one day;  
Well, mabee, we'll see, a dummo;  
I tink I ham stay with mon fadder al-  
ways,  
Ham not very hole for marriare you  
know.

But das not what I want tell you jes'  
now,  
Not part o' dis storee at all;  
But cousine Louis come veeset us here  
Some tam las' year hon de fall.

He come from Paris, way hout in hole  
France,  
Hout de councree know noting at all;  
For learn about dat he have one grande  
chance,  
Dat tam las' year hon de fall.

Dat snow he come down so cole an' so  
fas',  
De hice he come plentee halso;  
Louis he tink he'll go for some walk,  
Not know he come fall you know.

He like himself better dan de Habitant,  
He laff an' call dem hall green;  
When he fall hon de hice and crack his  
jaw  
He not laff so very much den.

One day he walk by de reever side,  
And meet one grande beeg bear,  
Mon frere dress up in an hole bear hide,  
But Louis he get scare.

He ron for de Chateau so fas' has he  
can,  
Nevare stop to look behin';  
And mon frere Camille he laff and laff,  
Like he goin' to lose his mind.

Louis say such councree he nevare did  
see,  
He'll go home by very first train;  
I tink he'll not come back for long time,  
To laff at de Habitant farmaire again.  
Quebec. JUANITA.

#### THE TRAMP FLOWER.

Betty grew within a garden,  
Long ago;  
Tended by old-fashioned fingers,  
Trained just so.  
Fairest of the flowers they thought her,  
Lovers for their ladies sought her,  
And for love and money bought her,  
Lady Bet.

Fair and fine was pretty Betty,  
Long ago;  
In her perfumed gown of lacework,  
Made for show.  
Freshest dew from heaven kissed her,  
Ne'er a balmy zephyr missed her,  
Sunbeams hastened to assist her,  
Dainty Bet.

But their fickle fancies wavered,  
Long ago;  
And a rival flower won them,  
Ah, the woe!  
Fashion's cruel whim dethroned her,  
Robbed her of the prestige loaned her;  
Old-time friends in vain bemoaned her,  
Pretty Bet.

Thrust from out her native garden,  
Long ago;  
Betty crept upon the highway,  
There to grow.  
Now she nods from every corner,  
Wildness has of beauty shorn her,  
Till the passing children scorn her,  
Gypsy Bet.

She that was so fine and dainty,  
Long ago;  
Tended by old-fashioned fingers,  
Trained just so.  
Grazing kine have tramped and maimed  
her,  
Long neglect has paled and shamed her,  
And the vulgar youth have named her  
Bouncing Bet.  
—Ainslee.



## The Favorite

AND THE BEST VALUE FOR THE MONEY  
OF THEM ALL IS TOLTON'S

### NO. 1 DOUBLE ROOT CUTTER

#### POINTS OF MERIT:

1. To change from pulping to slicing is but the work of a moment.
2. There are two separate wheels, one for pulping and the other for slicing.
3. The united force of both wheels is always used in doing the work in either capacity.
4. The hopper is between the wheels, and does not choke.

THE ONLY DOUBLE ROOT CUTTER MANUFACTURED. Fitted with Roller Bearings, Steel Shafting, and all that is latest and best in principle, material and construction. SEND FOR DESCRIPTIVE CIRCULAR AND PRICES.

Tolton Bros., Ltd., Guelph, Ont.

Earn \$75 to \$150 per month as Brakeman or Fireman.

Just study an hour a day for 8 or 10 weeks and we guarantee to assist you to a position on any railway in Canada. Hundreds of men wanted in the next few months. If you want the above salary, ask for our booklet.

The Dominion Railway School, Dept. C., Winnipeg, Man.

## Learn Dressmaking By Mail

In your spare time at home, on cash or instalment plan. Our course teaches how to cut, fit, and put together any garment from the plainest shirt waist suit to the most elaborate dress. We have been in business ten years, taught over eight thousand pupils and guarantee to give five hundred dollars to anyone between the age of fourteen and forty-five we cannot teach. A few dollars can be spent for no better purpose as it lasts a life time, also the whole family can learn from one course. Don't waste months in dressmaking shops when you can learn more in a few days in your own home than you would in months at such places. Write for particulars. Address: SANDERS DRESS CUTTING SCHOOL, 31 Erie St., Stratford, Ontario, Canada

#### CATNIP AT THE MENAGERIE.

People who live in the country know well the herb called catnip. We have seen it produce exactly the effect described here on a pet cat that lived in the city, where it could not get the plant. Some time ago an armful of fresh catnip was picked and taken to Lincoln Park to try its effect on the animals there. So far as is known, catnip does not grow in the native homes of these animals, so it was the first time they had ever smelled it.

The scent of the plant filled the whole place, and as soon as it had reached the parrots' corner the two gaudily-attired macaws set up a note that drowned thought, and made for the side of the cage, poking their beaks and claws through. When the catnip was brought near them, they became nearly frantic. They were given some, and devoured it, stem, leaf and blossom, with an avidity commensurate with the noise of their voices.

The keeper and the catnip-carrier then made for the cage of Billy, the African leopard. Before the front of his cage was reached he had bounded from the shelf whereon he lay, apparently asleep, and stood expectant. A double handful of catnip was passed through to the floor of the den. Never was the prey of this African dweller in his wild state pounced upon more rapidly or with more absolute savage enjoyment. First Billy ate a mouthful of the catnip, then he lay flat on his back and wriggled through the green mass until his black-spotted yellow hide was filled with the odor. Then Billy sat on a bunch of the catnip, caught a leaf-laden stem up in either paw and rubbed his cheeks, chin, nose, eyes and head. He ate an additional mouthful or two, and then jumped back to his shelf, where he lay, the very picture of contentment.

In the tiger's cage there is a very young, but full-grown animal. When this great, surly beast inhaled the first sniff of the catnip, he began to mew like a kitten. Prior to this, the softest note of his voice had been one which put the roar of the big-maned South American lion to shame. That vicious tiger and his kindly dispositioned mate fairly revelled in the liberal allowance of the plant which was thrust into her cage. They rolled about in it, and played together like six-weeks-old kittens. They mewed and purred, tossed it about, ate of it, and after getting about as liberal a dose as had Billy, the

leopard, they likewise leaped to their respective shelves, and blinked lazily at the sun.

The big lion, Major, was either too dignified or too lazy to pay more than passing attention to the bunch of catnip which fell to his lot. He ate a mouthful or two of it, licked his chops in a "that's not half bad" way, and then went back to his nap. The three baby lions quarrelled over their allowance, and ate it every bit.—[Chicago Times-Herald.

Some folks can't mind their business;  
The reason is, you'll find  
They either have no business  
Or else they have no mind.

Maud—She is a woman who has suffered a good deal for her belief.  
Ethel—Dear me! What is her belief?  
Maud—She believes that she can wear No. 3 shoes on No. 6 feet.—Tit-Bits.

Mr. Subbubs—Do you expect any visitors to-night, my dear? Mrs. Subbubs—Well, considering that Bridget's going to leave, Willie's got the measles, the cellar is flooded, and the grocer hasn't called for two days—yes, I do.

After taking anti-fat treatment for a week, an obese person received a bill.  
"But, doctor," he protested, "I haven't lost an ounce. The bill is too big."  
"The bill," the doctor informed him, curtly, "is part of the treatment."

At a dinner given by the Marquis of Rute, among the guests was a well-known duke, who, in full Highland dress, had his piper standing behind his chair. At dessert a very handsome and valuable snuff-box belonging to another of the guests was handed round. When the time came to return it to its owner, the snuff-box could not be found anywhere, though a very thorough search was made. The duke was specially anxious about it, but with no result. Some months afterwards the duke again donned the kilt for another public ceremony—the first time he had worn it since the above dinner—and happening to put his hand into his sporran, he, to his utmost astonishment, found there the snuff-box we were all looking for! "Did you not see me put it away in my sporran?" "Yes, your grace," replied the piper, "I did, but I thoct ye wushed tar keep it."



## THE THIRTEEN SUPERSTITION.

Matthew Arnold's Challenge — Wagner's Pet Number.

People who smile with a superior air at the notion that thirteen is an unlucky number will have to revise their incredulous attitude, for science—American science, it is true—says they are wrong, and that what they scornfully call "superstition" is based on fact. Professor Sherman Davis, of the University of Indiana, delivered an address recently in which he told them that thirteen is the age at which 85 per cent. of boys begin to learn evil, the age from which the ruin of men dates. He based his assertion upon a critical examination of 2,000 men, asking them when they first contracted such petty vices as smoking cigarettes? And of these 2,000, 85 per cent. answered him with the fatal word, "Thirteen!"

## DA VINCI'S GREAT PICTURE.

Statistics compiled by actuaries are said to show that of any thirteen persons assembled accidentally, or without any selection, one should be dead within the year. In other words, taking the population of the world as a basis for calculation, one in every thirteen persons dies each year. The death rate varies, of course, according to age, climate and sanitary conditions, so that the "superstition" of thirteen might not apply if the population of any one country alone were considered. This, I think, goes a long way to explode the superstition, though the fact is quoted in its support. The origin of this superstition is lost in the chaos of prehistoric days. The commonly held belief is that it originated from the Last Supper, at which Christ and His twelve Apostles sat on the eve of His betrayal and crucifixion. The popular conception of this scene is due largely to Leonardo da Vinci's wonderful picture on the wall of the refectory of the Dominican Convent of Santa Marie delle Grazie, in Milan, which has been reproduced so many thousands of times that there is scarcely a gallery in the world in which a copy of it does not hang. But this idea is erroneous, for the superstition was ancient long before the Last Supper was eaten. The superstition that it is unlucky to spill salt, probably equally ancient, is also expressed in this picture, wherein Da Vinci has painted Judas Iscariot in the act of spilling the salt.

## IN THE FAR EAST.

In the Norse mythology there is a story that the twelve major gods were seated at supper when Loki, the god of mischief, entered—butt in, as it were—and made the thirteenth at table. He quarrelled with Baldur, god of peace, and shot him with a mistletoe arrow. But we must go even further back in time than the Norse mythology, for in the Far East, in the myths of the ancient Hindoos, it is related that it is unlucky to sit thirteen at table. There can have been no possible connection between the myths of these so far separated regions, and we may even have to go back to the Garden of Eden, as we have to do for the superstition that Friday is an unlucky day on which to undertake any enterprise or begin any journey. Christians have always imagined that this belief was to be referred to the fact that Christ was crucified on a Friday, but long before the time of Christ tradition had it that Adam and Eve ate the forbidden fruit, and were driven from paradise on a Friday.

## IN MODERN HOTELS.

The survival of the thirteen superstition in all lands is remarkable. The church tried once to extirpate it. In the chapel of the Tridinium Pauperum, adjoining the Church of St. Gregory, on the Coelian Hill, in Rome, is a marble table with an inscription recounting that Pope Gregory the Great was in the habit of entertaining twelve poor men at breakfast every morning, and that on one occasion Christ appeared and shared their meal, making thirteen at table, and that, therefore, henceforth thirteen was a lucky number. If this had any effect, that effect has quite passed away in the minds of the superstitious. In modern days there are many striking instances of the prevalence of the superstition. There are many hotels which have no rooms numbered thirteen. In Germany it is said that more than 500 hotels omit this fateful figure. In Ber-

lin the number thirteen is omitted from all new streets. In Berne, Paris, and other European cities, thirteen as a house number has nearly always been changed to 11a or 11 $\frac{1}{2}$ . Bismarck had the thirteen superstition in its most virulent form. Last year when the French Cabinet was reorganized the official announcement was deferred a day, solely, it is said, to avoid announcing it on the thirteenth day of the month. When this was told to the Pope, his holiness smiled and remarked: "Evidently being a free thinker does not exclude superstition."

## MATTHEW ARNOLD'S CHALLENGE.

The Turks have almost expunged the word "thirteenth" from their vocabulary; the Italians never use it in making up their lotteries; in Paris and other European cities there are men known as "quatorzies," well recognized in society, whose business it is to be ready to go to any house to dinner in order to make up fourteen at table. The following anecdote is related in the biography of Sir John Millais, the famous artist. He gave a dinner in honor of Matthew Arnold, in August, 1885, and one of the guests called attention to the fact that there were thirteen at the table, and expressed some fear. Matthew Arnold laughed at such superstition and said: "The idea is that whoever leaves the table first will die within a year; so, with the permission of the ladies, we will cheat the fates for once, I and these five strong lads (indicating Edgar Dawson and E— S—) will rise together, and I think our united constitutions will be able to withstand the assault of the reaper." Six months later, Matthew Arnold, in the prime of life, died suddenly of heart disease. A few days later E— S— was found dead in bed, a revolver at his side. Edgar Dawson, the third of the trio, sailed from Australia on February 18th, 1886, on the steamer Quetta, which foundered off the coast of New Guinea, and not a single soul was saved.

## WAGNER'S PET NUMBER.

Thirteen was Richard Wagner's pet number. He was born in 1813; he had thirteen letters in his name; he composed thirteen operas; "Tannhauser" was finished on March 13th; he left Bayreuth on September 13th, and died on February 13th. The pontificate of Leo XIII. was one of the grandest and longest in the history of the Church. Alfonso XIII., though the Philippines and the West Indies were lost to Spain early in his reign, has escaped assassins, is happily married, and the father of a fine, healthy son, and bids fair to have a great and prosperous reign.—[T. P.'s Weekly.]

## BRAW LADDIES.

A short while ago there was started a movement to have the kilts of a certain one of the British "Highland" regiments discarded in favor of ordinary trousers. It was objected that the men would be discontented at this change, and the colonel gave orders that a census of the regiment be taken, in order to ascertain the wishes of the men themselves. The colonel is a descendant of a long line of Scotch lairds, and strives earnestly to uphold the old traditions.

The sergeant who took the census of the regiment finally appeared with his report.

"All the men, with the exception of three, are in favor of the change, sir," he said.

"Indeed!" the colonel said. "Tell me the names of these three true clansmen. They shall be promoted."

The sergeant read from his list.

"They are, sir," he said, "Patrick Doolan, Hans Steinbrenner and Moses Ikestein."

One afternoon Mrs. Murphy appeared at the settlement house, all dressed up in her best bonnet and shawl. A huge black and blue spot disfigured one side of her face, however, and one eye was nearly closed. "Why, Mrs. Murphy, what is the matter?" cried one of the teachers; and then, realizing that she might have asked a tactless question, she hastily turned it off, by saying, "Well, cheer up, you might be worse off." "Sure an' I might," responded the indignant Mrs. Murphy. "I might not be married at all!"

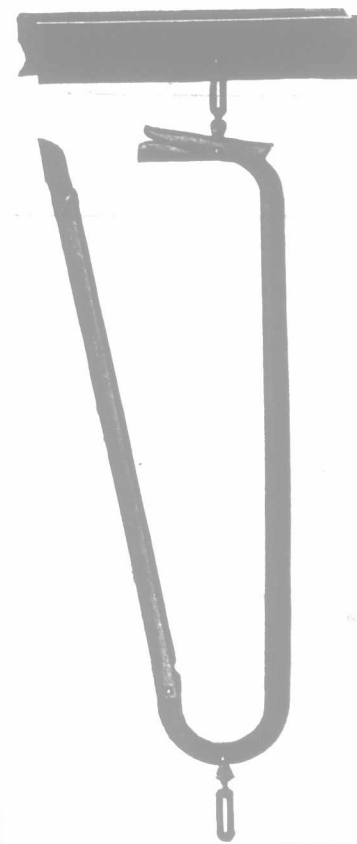


## Personal To Rheumatics

I want a letter from every man and woman in Canada afflicted with Rheumatism, Lumbago or Stomachic, giving me their name and address, so I can send each one **Free a One Dollar Bottle** of my Rheumatic Remedy. I want to convince every Rheumatic sufferer at my expense that my Rheumatic Remedy does what thousands of so-called remedies have failed to accomplish—**PERMANENTLY CURES RHEUMATISM.** I know it does. I am sure of it, before giving me a penny profit. You cannot know it and be sure of it, before giving me a penny profit. You cannot cure Rheumatism out through the feet or skin with plasters or cunning metal contrivances. You cannot **escape** it out with mental science, You or magnetism. You cannot **escape** it out with mental science. You must **Drive it Out.** It is in the blood and you must **Go After it and Get it.** This is just what Kuhn's Rheumatic Remedy does and that's why it cures Rheumatism. **Rheumatism is Uric Acid and Uric Acid is Uric Acid.** My Remedy cures the sharp, shooting pains, the dull, aching muscles, the hot, throbbing, swollen limbs, and cramped, stiffened, useless joints, and **cures them quickly.**

**I CAN PROVE IT ALL TO YOU**  
If you will only let me do it. I will prove much to you. If you will only write and ask my Company to send you a dollar bottle **FREE** according to the following offer. I don't care what form of Rheumatism you have or how long you have had it. I don't care what other remedies you have used. If you have not used mine you don't know what a real Rheumatic Remedy will do. *A. W. Kuhn*  
**Read our offer below and write to us immediately.**

**A FULL-SIZED \$1.00 BOTTLE FREE!**  
We want you to try Kuhn's Rheumatic Remedy, to have for yourself that Rheumatism can be cured and we want no profit on the trial. A fair test is all we ask. If you find it is curing your Rheumatism or Neuralgia, order more to complete your cure and thus give us a profit. If it does not help you, that is all right. We do not send a small sample vial, containing only a trifling amount and of no practical value, but a full-sized bottle, selling regularly at drug stores for **One Dollar Each.** This bottle is heavy and we must pay postage to carry it to your door. You must send us 25 cents to pay postage, mailing case and packing and this full-sized \$1.00 bottle will be promptly sent you free, everything prepaid and **Duty Free.** There will be nothing to pay on receipt or later. Don't wait until your **Heart-Valves** are injured by Rheumatic Poison, but send today and get a Dollar Bottle free. Only one bottle free to a family and only to those who send 25c for charges. **Address KUHN REMEDY CO., DEPT. M. & M. & NORTH AVES., CHICAGO**

RUSH'S PATENT  
U - BAR

STRONG AND SAFE.

If you only knew the advantages of our Patent U-Bar Stanchions, you would not do without them. We have had more experience with Stanchions than anyone else in Canada, and believe that we have the only durable and satisfactory construction on the market. Our Stanchions provide more freedom than chains, and require very little framework in a stable. Samples sent for examination. Ask for our offer.

**METAL SHINGLE & SIDING CO., LIMITED,**  
PRESTON, ONTARIO.

## STANCHION

## COOPER'S FLUID

For dipping SHEEP. For washing CATTLE, HORSES and DOGS.  
Cures Mange and Ringworm. Cures Maggot wounds in Sheep.  
Cures Ulcers, Sore Udders, etc.

APPROVED BY THE BOARD OF AGRICULTURE FOR GREAT BRITAIN.  
COOPER'S WORM TABLETS a sure cure for worms in  
CATTLE, HORSES and SHEEP.

Write for free Booklet P.

**WM. COOPER & NEPHEWS, TORONTO, ONTARIO.**  
506-507 MANNING CHAMBERS.

## SUNNY SIDE HEREFORDS AT AUCTION



Owing to failing health, Arthur F. O'Neil, Maple Grove, Ont., will sell on **TUESDAY, OCT. 20TH,** his entire herd of **40 HEAD OF REG. HEREFORDS,** including the herd bull, Morning Star, imp.; 31 females and 8 bulls; 4 young grade Clyde fillies; 6 colts 2 years and under. Terms: 11 months on bankable paper, or 6% per annum off for cash. Morning trains will be met day of sale at Lucan, G. T. R., and Denfield, L. H. & B. Catalogue on application. Lunch 11:30 a. m. Sale 12:30 p. m. sharp.

Capt. T. E. Robson, London, Ont. } Auct.  
Jas. Stanley, Lucan, Ont. }

**A. F. O'Neil, Maple Grove, Ont.**

**PERFECTION Seed & Grain Separator**  
(Patented 1901)  
The best and latest mill for cleaning and grading all kinds of Seed and Grain.  
See nearest Agent or write for Catalogue to  
**THE TEMPLIN MFG. CO., FERCUS, ONTARIO**

**Boo Spavin**  
Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.  
**Fleming's Spavin Cure (Liquid)** is a special remedy for soft and semi-solid blemishes—Boo Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be limited. Easy to use, only a little required, and your money back if it ever fails.  
**Fleming's Vest-Pocket Veterinary Adviser** describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.  
**FLEMING BROS., Chemists,**  
33 Church Street, Toronto, Ontario

**SAVE THE HORSE'S SPAVIN CURE**  
REG. TRADE MARK  
 

A. H. EUBANK, President, W. B. STRATFORD, Sec. and Treas., The Farmers' Association Cotton Warehouse, No. 1 Montgomery, Ala. July 21, 08. While you have not solicited a testimonial, yet in justice to your "Save The Horse" I take pleasure in advising it has cured my horse of "bone spavin" that did not yield to any other treatment, also one of the best veterinarians had him in charge 30 days, during which time he was fired for complaint but still remained lame—W. B. Stratford, Cherryvale, Kansas—My horse was afflicted by thoroughpin one of the worst I ever saw, was told there was no cure for it I had it opened it came back again and seemed to grow larger I drove him just the same and used your medicine, the thoroughpin is now completely removed—E. S. Strickler, a bottle, with written binding guarantee. Send for copy, booklet and letters from business men and trainers on every kind of case. Permanently cures Bone and Bog Spavin, Thoroughpin, Ragbone (except low), Curb, Splint, Capped Hock, Win'tup, Shoe Bleb, Injured Tendons and all Lameness. No scar or loss of hair. Horse works as usual. Dealers or Express paid.  
**Troy Chemical Co., 148 Van Horn St., Toronto, Ont.; and Binghamton, N. Y.**

**WOMEN CURED AT HOME!**  
Women's disorders always yield, from the very beginning of the treatment, to the mild but effective action of **Orange Lily**. Within two or three days after commencing its use the improvement becomes noticeable, and this improvement continues until the patient is completely cured. **Orange Lily** is an applied or local treatment, and acts directly on the womanly organs, removing the congestion, toning and strengthening the nerves, and restoring perfect circulation in the diseased parts. In order to convince all suffering women of the value of this remedy, I will send a 35-cent box, enough for ten days' treatment, absolutely FREE to each lady sending me her address.  
**MRS. F. V. CURRAH, WINDSOR, ONTARIO.**



**CLYDESDALES**  
One 1,750-lb. 8-year-old mare in foal. One 5-year-old mare and one 3-year-old mare.  
**SHORTHORNS**  
Two right good yearling bulls left yet, and a lot of heifers cheap. Write, or come and see them.  
**JAMES McARTHUR, Gobles, Ontario.**

**RHEUMATISM.**  
The Best and Safest Cure for GOUT, RHEUMATISM, SCIATICA, LUMBAGO, is **BLAIR'S GOUT & RHEUMATIC PILLS**  
All Druggists, at 40c. and \$1 per box

**Stuff Beautiful Birds**  
Learn by mail to stuff and mount all kinds of birds, animals, fish and game heads; make rugs, tan skins. Mount your own specimens and make money preserving for others. Intensely fascinating; highly profitable. Men, women and boys learn easily and quickly. Success guaranteed or no tuition. Write today for our wonderful FREE book "How to Learn to Mount Birds and Animals."  
**N. W. School of Taxidermy, Box 48F, Omaha, Neb.**

**POWER LOT**  
A Story of "Down East"

BY SARAH McLEAN GREENE.

(Rights of publication secured by the Wm. W. Eld Co., Limited, London, Ont.)

CHAPTER XX.—Continued.

"Well, well!"  
"You know some things thar' whar' you come from, an' you been roun' the worl' eatin' yer lysters on the half-shell an' smokin' yer Havanas down in the cabin s'loon, but I been roun' the worl' watchin' out from the herric'n deck, with the rain hiss'n' at me an' the salt bitin' me, until I know purty well what's up in any 'arthly latitude whar' I happen ter be drivin' my craft f'r the time bein'." That's me."  
"I believe you."  
"Now they ain't no harm goin' ter happen ter Rob Hilton by way of bindin' of him ter anybody 't 'tain't best p'rhaps f'r him ter be bound to, an' that anyways don't want him. Meanwhiles you let 'im dig his crap o' pertaters. That's my 'dvice. F'r though he don't reckon on it, mebbe he's a-workin' in a holt on the proud sperrit o' that ar high-toned, scholarly Ma'y Stingaree, that 'ud sure make him toe the mark to every spellin' match that's comin' to him in this worl'. The' ain't nothin' tunes up the melodium of love in a case like hern like a big, slow-ponderin', easy-laughin', slap-the-whole-menagery-in-the-mouth and die-for-ye cuss like Rob Hilton."

"Impossible."  
"Nothin' ain't impossible from the herric'n deck. This 'ere old worl' c'n kick up more cyclones to the squar' inch an' s'prise more folks to the squar' minute than any other worl' I ever see."

"True."  
"An' ef the' is anythin' drorin' her towards him, it's jest that good, set-up-straight-in-meetin', none-o'-the-preserves-thank-ye, small-piece-of-pie-f'r-me-please way in which he is a-regardin' his obligations to Cuby a Tee-bo. See? As f'r Cuby, she's a good gal, though she's a wild one an' a gay one, she is, an' her mettle is up ter somethin' tough 't knows how ter sail a boat. D' ye ketch on?"

"No."  
"Wal', she wants Jim, that's who she wants."  
"He seems a decent sort of fellow."  
"Decent sort o' feller?" By the Great Nor'easter, what are you a-lookin' f'r? Why, Jim Turbine an' me c'd run this whole contentment of we was only giv' a fa'r post o' observation an' c'd find some chairs our size to set in. I reckon you don't know all the' is ter be knowed about Jim Turbine an' me."

The doctor was silent.  
"Jim Turbine c'n go out on a sea 't spells dead-man to ary other mortal, an' beat it home through the hell-racket o' the elerments smokin' his pipe at sundown, wishin' 't the wind 'ud breeze up so 't there'd be somethin' doin'." That's me an' Jim. He c'n make a fool o' himself ev'ry day in the week, like he's been a-doin' readin' books an' drulin' at the mouth about the 'beauties o' natur', an' all sech, tell he's got a natur', an' he wants somethin' high-toneder 'n what his bringin' up 'll allow him; but jest wait tell the gale strikes him fa'r abeam an' he'll reel 'round an' right up on an even keel ev'ry time. Ef he ever does git drowned, he won't git drowned—he'll show up somewhar'. An' that's me an' Jim, an' he d-d to ye."

Captain Belcher refilled his pipe, his cowhide boots swaying freely in sympathy with the perils of his present method of transit: a jolt of unusual violence, over a stump, separated him for a space from his affarated him for a space from his affinity with the log; he descended, however, precisely in his former chosen seat, uninterrupted in his attention to his pipe and wholly unperturbed.

But the doctor, as a result of the catastrophe, sat down abruptly in the road, where he contemplated in some bewilderment for the moment, his unexpected change of base.

"Shall I stop 'em?" Captain Belcher called back to him cheerfully, "or c'n ye jump on while the train's movin'?"

"I won't board the train again, thank you. I need exercise," replied Doctor Margate dryly, as he rose. "I'll walk back home."

"Hold on," yelled the captain, himself descending and shouting and belaboring a halt on his oxen; "I want a word with ye 'fore ye go. Ye're a man o' straight good sense, an' I respect ye. I've been hove off myself by a stump lesser size n' that."

"I haven't been in training, you see," replied the doctor, with no trace of vexation in his manner or his tone.

"No, ye ain't had the 'dvantages a man like you ought ter had," said Belcher, standing regally thoughtful, the veteran of many scars, of well-sustained shipwreck, and of a hide seemingly impregnable at last to all save added windburn. "Ye'd rate along o' me an' Jim ef ye'd had harf a chance in the worl'." He meditated, and in spite of the dictates of sound reason and common sense against such unconscionable boasting, the doctor admired him, and was more than half inclined to take him at his own estimation.

"The question is," said Belcher, at last, withdrawing his gaze from a profound contemplation of the distant Bay of Fundy, "be you a-goin' ter keep yer mouth shet?"

"Not in the least, if I see fit to open it," replied Doctor Margate.

"That's the talk," exclaimed Belcher, approvingly, "but be ye goin' ter see fit ter keep it shet—that's the question. Come now, as the gospil says, an' let's figger this out tergether. Do you want ter tell Rob Hilton—ter-morrer, f'r instance—that the's nothin' bindin' of him here? F'r he ain't got no notion 't thar' 's any chance for him along o' Ma'y Sting'ree, no more 'n I have of ally-natin' the 'fections o' the wife o' the Old Man in the Moon."

"That settles it."  
"An' I doubt ef Ma'y Sting'ree has took the idee inter her head one bit yit, either. No sir—it's me 't has figgered out this match."

"Not you and Jim?"  
"Jim's sore—sore as a bile. He wusships the groun' Ma'y treads on. But he ain't f'r her. Jim's got many a wil' sea yit ter sail afore he dies. Ef Jim goes ter homin', it ought ter be with some mid-ocean bird o' his own breed. Jim thinks he'd like ter get civilerized and live ashore, but he wouldn't—them ol' whitecaps out thar' 'ud call him, an' he'd ruffle his feathers an' stretch his neck, an' off he'd go. Hohum, it's tough on Jim; but he won't go under; ye needn't ter werry 'bout Jim."

"I won't. I am more concerned about the match you propose to make between Miss Stingaree and Rob Hilton."

"Easy, easy! Whar' thar' 's a woman in the calkerlation, the's no knowin' when ye may look out an' find yer weather-vane 's clean blowed off the barn. Easy now. But you let Rob bide an' keep on workin' f'r a while. He couldn't git Cuby ef he tried. An' he won't git put in no box, now I promise ye, ef that'll do. I promise ye."

"Well."  
"An' you'll keep yer mouth shet about any little frolick anybody mou't 'a played? I ain't sayin' who. You'll lay low tell the storm's over, an' the flyin' jib's run up, an' all's well some way 'r another, won't ye? That's what I want ter know."

"Why, yes, under the circumstances, and considering that you promise to make it all clear as daylight at the auspicious moment, I think I may safely say I will leave that for the present to your judgment—and your conscience. But the

**Warranted to Give Satisfaction.**  
**Gombault's Caustic Balsam**  
  
**Has Imitators But No Competitors.**  
A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lamenesses from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.  
As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address  
**The Lawrence-Williams Co., Toronto, Ont.**

**Radiol**  
**RADIOL TREATMENT**  
Preserves the life of a horse's legs. Completely removes by radiation all soft swellings that disfigure and lame a horse, as Sprained Tendons, Windgalls, Bog Spavins, Capped Elbows, Big Leg, Enlarged Glands, etc.  
No Blister; No Laying Up; No Hair Removed.  
RADIOL TREATMENT fixes down a worn horse's legs, and is a certain cure for puffing joints and Sprains. Prevents Filled Legs.  
An intelligent use of the "RADIOL LEO WASH" counteracts that daily wear and tear of the legs unavoidable with the horse in constant work, whether training, racing or on the road.  
One flask of "Radiol" will make a gallon of valuable leg wash.  
Carlowrie, Uddington, Eng., July 28, 1908.  
Sire.—Kindly forward on receipt of P. O. enclosed another bottle of "RADIOL." I have been using it with great success on a Hackney mare with a very bad windgal that the vet. had given up. Yours truly, Thos. Prentiss.  
WRITE FOR ILLUSTRATED BOOKLET AND USES OF "RADIOL." Ask your chemist for "RADIOL." Price \$2 a large flask, or express paid from.  
Canadian Agent:  
**Thos. Reid, 9 Nicholas St., Montreal.**  
Manufactured by The Radiol Co., 212 Westminster Bridge Road, London, England.

**Don't Throw Away MEND IT**  
USE COLLETTE'S PATENT PATENT mend all leaks in all utensils—tin, brass, copper, galvanized, hot water pipes, etc. No solder, cement or rivet. Anyone can use them; fit any surface. Send for sample pag. 10c. Complete pkg. assorted sizes, 50c. postpaid. Agents wanted.  
**Collette Mfg. Co., Dept. 33, Collingwood, Ontario.**

**3 HACKNEY MARES FOR SALE**  
**O. Sorby, Guelph, Ont.**

Clydesdales, Shorthorns, At Kinellar Lodge we have for sale two 3-yr. Cotswolds & Berkshires old Clydesdale fillies, both reg.; a big, good pair. Several choice Shorthorn heifers. Nine shearing Cotswold ewes and nine shearing rams. This year's lambs, both sexes. And young Berkshire sows. John I. Salsden, Markham, Ont., P. O. and station.

**Dr. Bell's Veterinary Medical Wonder** cures inflammation of lungs, bowels and kidneys. The 20th-century wonder. Agents wanted in every county. Write for terms.  
**DR. BELL, V. S., Kingston, Ont.**

**For Sale! Percheron and French Draft** Stallions, mares and colts.  
**Duroc Jersey Swine, both sexes.**  
**JACOB STEINMAN, NEW HAMBURG, ONT.**  
Only a stone's throw from G. T. R. depot.

Every man owning a horse should have one of the **VETERINARY BOOKS GIVEN AWAY FREE** by the Tuttle Ellixir Co. It treats of all the ailments of the horse, and enables you to cure these ailments yourself. Write for it to-day. **IT'S FREE.**  
**Tuttle's Ellixir Co., 66 Beverly St., Boston, Mass.**

## Twentieth Century Dictionary

A MIRACLE OF SCHOLARSHIP THAT WILL SUPERSEDE ALL INEXPENSIVE WORKS.

EVERY Canadian home should have this comprehensive and up-to-date book of words. Edited by Rev. Thos. Davidson, assistant editor Chambers' Encyclopædia. Replete with information for every user of the English language. Cloth bound, and copiously illustrated. Over 1,200 pages.

### How to Secure a Copy of This Invaluable Work.

Send us **TWO NEW SUBSCRIBERS** to "THE FARMER'S ADVOCATE AND HOME MAGAZINE," accompanied by \$3, and the Dictionary will be mailed you, post free.



## THE UNION STOCK-YARDS Horse Exchange

WEST TORONTO, CANADA.

Auction sales of Horses, Carriages and Harness every Monday and Wednesday. Private sales every day. Come and see this new Horse Exchange. It will interest you. Also the quarter-mile track for showing and exercising.

HERBERT SMITH, Manager. (Late Grand's Repository.)

## LARGEST IMPORTATION OF CLYDESDALES, HACKNEYS AND PERCHERONS OF THE YEAR.



My latest importation has just arrived home. I have now on hand for sale: 20 Clydesdale stallions from 1 to 5 years of age; 25 Clydesdale fillies from 1 to 4 years of age; 12 Hackney stallions from 2 to 8 years of age; 12 Hackney fillies, all young, and 4 Percheron stallions 3 and 4 years of age. A total of 73 head, with size, quality and action, and bred in the purple. Largest selection in Canada. Will be sold right, and on terms to suit.

T. H. HASSARD, MILLBROOK, ONT.

## Shires, Shorthorns and Lincolns

At present we are offering a very choice consignment of imported stallions, mares and fillies received from the great Shire stud of R. Moore & Sons, Beeston Fields, Nottingham, England. They are a grand lot, and will be sold at right prices. In Shorthorns we have a number of choice young bulls, three of them show animals; also an excellent lot of females—all ages.

JOHN GARDHOUSE & SONS, Highfield, Ontario. Toronto, 14 miles; Weston, 3½ miles.



Long-distance phone.



## CLYDESDALES

At Columbus, Ont., the home of the winners, this year's importation just arrived. The pick of Scotland's best. For size, style, conformation, quality and royal breeding, they eclipse any former importation we ever made. Look them up in our barn on Exhibition Grounds. Over 30 head to select from.

SMITH & RICHARDSON, COLUMBUS, ONT.

## IMPORTED CLYDESDALE FILLIES

Young imp. mares in foal or foal by side. One Clyde and one Hackney stallion. They are the best that can be purchased. Write or come and see them. Terms reasonable. Stouffville, G.T.R. Gormley, C.N.R.

G. A. BRODIE, Bethesda, Ont.



## Clydesdales

high-class (imp.) mares, for sale right.

Imported and Canadian-bred. Our mares all are bred to Acme (imp.), the 8th best breeding horse in Scotland in 1907. Four male foals and one filly, all from

R. M. HOLBY, Sta. & P.O. Manchester, Ont., G.T.R.; Myrtle, Ont., C.P.R.

IMP. CLYDESDALE STALLIONS AND FILLIES.—Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit. JOHN A. BOAG & SON, Queensville P. O. Ont.; Newmarket Sta., G. T. R. Telegraph and telephone one-half mile from farm. Metropolitan Street Ry. from Toronto crosses the farm.

IMPORTED CLYDESDALES, SHORTHORNS AND SHROPSHIRE! I have on hand several Clydesdale stallions, as choice a lot as ever crossed the ocean. Missie, Stamford, Claret and Gem of Balcchin Shorthorns; up-to-date in type and quality. 50 imported Shropshires, 30 ewe and 30 ram lambs from imported stock. Look me up at Toronto Exhibition horse barns. THOS. L. MERCER, MARKDALE, ONT., P. O. AND STA.

## ONTARIO VETERINARY COLLEGE, TEMPERANCE STREET, TORONTO, CANADA.

Established 1862. Taken over by the Provincial Government of Ontario in 1908. Affiliated with the University of Toronto, under the control of the Department of Agriculture of Ontario. College opens early in October, 1908. Course of study extends through three college years. FEES, \$40 PER SESSION. CATALOGUE ON APPLICATION. E. A. A. GRANGE, V. S., M. S., Principal

## Imported Clydesdales

the price and terms are right.

I have still on hand 1 stallion, black, rising 4 yrs., by Carthusian, a Toronto winner; 1 rising 2 yrs., by Baron's Pride; 1 rising 2 yrs., by Danure Castle; 4 fillies, a Toronto first and second prizewinner among them. Every one of these is an extra good animal, and

T. D. ELLIOTT, Bolton, Ont.

## Clydesdales and Hackneys

best we ever brought out. For an extra choice filly, either imported or Canadian-bred, look up our stable on the grounds. HODGKINSON & TISDALE, BEAVERTON, ONTARIO. G. T. R. and C. N. R. Long-distance phone.

Our entry at Toronto Exhibition of Clydesdales and Hackneys is certainly the best selection of young HACKNEYS broken to harness, well worth the attention of the best buyers. A grand selection of pedigree BERKSHIRE BOARS and SOWS at moderate prices. Also 70 choice SHROPSHIRE RAM and EWE LAMBS, all bred from imported ewes, and sired by the best imported rams.

JAS. J. BROWN, Manager, BRANTFORD, CANADA

## Oak Park Stock Farm Co., Ltd.,

have at present for sale a choice selection of young HACKNEYS broken to harness, well worth the attention of the best buyers. A grand selection of pedigree BERKSHIRE BOARS and SOWS at moderate prices. Also 70 choice SHROPSHIRE RAM and EWE LAMBS, all bred from imported ewes, and sired by the best imported rams.

time must come soon, Captain Belcher."

"Easy! easy! This is goin' ter be a tejus mess o' ropes, mebbly, an' we got ter keep both eyes shet whilst we squint with one and wink with t'other. Wal', I'm sorry ye ain't goin' ter stay long enough ter come 'round an' git acquainted with my folks, Doctor."

"But at least I congratulate myself, Captain Belcher, on having become acquainted with you."

"Wal', I won't deny that ye'll find me thirty-six inches ter the yard, with plenty over ter 'low f'r shrinkage, ev'ry time. Come 'n see us ag'in. Do. Sorry our ways in this worl' did n' lie par'lel, Doctor," concluded Captain Belcher, with a splendid, dismissing, commiserating wave of the hand.

(To be continued.)

## QUESTIONS AND ANSWERS. Miscellaneous.

### ECZEMA.

Driving mare has a skin disease. On the shoulders and sides small boils or lumps appear, with great itching, which causes her to rub and bite herself. Also rubs her mane and root of her tail. Mare otherwise feels well and eats well.

A. C. W. H.

Ans.—It is eczema. Purge her with 8 drams aloes and 2 drams ginger. Follow up with one ounce Fowler's solution of arsenic night and morning for two weeks; then cease a week and repeat if necessary. Give her body a good washing with strong, warm soft-soap suds; rub with cloths until dry. Then dress twice daily with corrosive sublimate, 20 grains to a quart of water, taking care to get the dressing on to the skin.

### JUDGING LEGHORNS AND PLYMOUTH ROCKS.

Please give me the particular points on judging a Leghorn hen and cockerel; also the Buff Rocks.

R. C. F.

Ans.—Your correspondent will find nearly all points, etc., fully described in the American Standard of Perfection. This book is copyrighted and may not be quoted. In a general way I might say that White Leghorns require to be snow-white in color, or as near it as one can get. A great deal in judging Leghorns depends upon the shape or form. This is very difficult to describe, but can be easily seen in the cuts in the Standard. The ear-lobe should be pure white, combs of the single-comb varieties should be straight on the male and turned or lopped on the female. There should be five serrations in each comb, but additional serrations are not so serious a defect as most people are inclined to believe; that is, shape and color are more important than one or two extra serrations on the comb. It is desirable also that the tail should not be carried above right angles. Legs and beak, of course, should be yellow in color. The general appearance of a Leghorn is neat and attractive. They are sprightly and active.

In judging Plymouth Rocks—the Buff variety, of course—the shape is to be taken into consideration; that is, you want true Plymouth Rock shape, and in color you want golden-buff, absolutely free from white or black, if you can get it. It is not often you can get a Buff bird that is neither white nor black in the plumage. The buff color that is desirable is between a lemon color and a cinnamon, what is termed "golden-buff." In Buff Rocks the comb is much smaller than in the Leghorns. The legs are yellow and free of feathers.

W. R. GRAHAM.

### RINGBONE ON COLT.

I have a yearling colt that has ringbones. Would you advise me to have them fired or blistered, and what would be best to use, and how?

A. S. E.

Ans.—Firing and blistering, performed by a competent veterinarian, is the treatment recommended for ringbone, though sometimes in colts repeated blistering will suffice. Take 2 drams each biniodide of mercury and cantharides and mix with 2 ounces vaseline. Clip the hair off the parts, and tie so that he cannot bite them, rub well daily for two days, and the third day wash off and apply sweet oil. Let head loose now. Oil every

day until the scale comes off, then tie up and blister again. Blister once monthly as long as necessary, or until it may be concluded to call upon the veterinarian.

### MARE HAS SORE NECK.

Mare has very sore neck on top, and is very teasy when being harnessed. Please tell me what to do to heal it.

R. A. Y.

Ans.—In a leading American exchange last winter we noticed that several teamsters recommended a deer-skin pad, sewed to the flap at the top of the collar, this to insure its staying in place. One correspondent claimed that aside from the cushion effect, it contained a healing oil. Some horsemen like the zinc pad, while others find it of little or no use. Of course, it goes without saying, that the collar should be carefully fitted to the horse's neck, and kept soft and clean. Buckle the collar tight enough at the top that it will not work back and forth across the neck, but not so tight as to pinch the neck. There should be room at the bottom to pass the hand between the collar and horse's neck. Adjust the harness snugly, and do not have the draft too low on the collar. For the treatment of sores some recommend vaseline, some a mixture of turpentine and lard, while others object to anything greasy, because of its tendency to collect the dust. One horseman recommends first keeping sores clean with warm water and castile soap, then dusting boracic acid on the sores twice a day with a pepper box, or using one ounce each, sulphate of zinc and sugar of lead, in a pint of water. Others use blue-stone for the same purpose. We shall be pleased to hear from readers who have had experience in preventing and curing injuries to horses' necks and shoulders.

### GOSSIP.

Four-year-old Harry was spending the day with his aunt. Dinner was late, and the child began to grow restless. "Auntie," he said, finally, "does God know everything?" "Yes, dear," answered his aunt. "Every little thing?" he persisted. "Yes, every little thing," was the reply. "Well, then," he said, in a tone of conviction, "God knows I'm hungry."

Henry Clews, the banker and author, was talking at the Union Club in New York about a certain financier. "No wonder the man is so successful," said Mr. Clews. "He is the most suspicious fellow I ever heard of. In fact, he reminds me of a Staffordshire farmer my father used to tell of. This farmer, whenever he bought a flock of sheep, examined each sheep closely to make sure that it had no cotton in it."

In our report of the Canadian National Exhibition, the wrong Mr. Gibson was mentioned as judge of Hackneys and certain other classes of horses. In writing, the particulars as to name and address were casually noted from the official catalogue, which erroneously gave the name of Mr. Richard Gibson, of Delaware, Ont. It was, instead, his brother, W. H. Gibson, of Beaconsfield, Que., who has previously acted in this capacity at Toronto with excellent satisfaction.


### OUTWITTED THE LANDLORD.

When recently leasing a house in a fashionable suburb of Philadelphia, the lessee failed to examine closely the terms of the lease. After a time, his landlord called and reminded him that he was bound to do all the outside painting at certain intervals. The tenant protested in vain; so he engaged painters and ordered them to paint the whole front of the house red, white and blue—in stripes. When it was finished the neighborhood rose up in arms, and the landlord was frantic. The tenant politely explained that there was nothing in the lease about the color, so he intended to finish the job by painting the back of the house green, with large, yellow spots. The landlord saw that he had met his match and within a few days the tenant had a new lease in which the landlord undertook to do all the outside painting.

### Makes His Own Stock Food.

One pound package of Barnes English Compound makes ten pounds of stock food, by mixing it with three pounds of linseed meal and six pounds of corn meal. As a conditioner and flesh producer has no equal. Postpaid on receipt of 50 cents—money order or stamps. Address:

S. G. AMSDEN,  
Box 668. Windsor, Ont.



## Lump Jaw

The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy.

FLEMING BROS., Chemists,  
75 Church Street, Toronto, Ontario.

### Herefords

We have some choice females for sale—all ages—of the right sort; also a few young bulls fit for service. Correspond with us. We can please you. J. A. LOVERING, Coldwater, Ont., P. O. and station.

### Aberdeen-Angus

For sale: The right sort, some of them by Klondyke, imp. Drumbo station.

WALTER HALL,  
Washington, Ontario.

### Aberdeen-Angus Cattle,

SUFFOLK DOWN SHEEP. If you require either of these breeds, write:

JAMES BOWMAN, Elm Park, Guelph, Ont.

### MILK-FEVER OUTFITS,

Dehorners, Test Syphons, Slitters, Dilators, etc. Received only award World's Fairs, Chicago, St. Louis. Write for illustrated catalogue. Haussmann & Dunn Co., 392 So. Clark St., Chicago.

### Scotch Shorthorns

We now offer four heifer calves 10 and 11 months old. All reds. Bred from imp. sire and dams. Will be sold right. C. RANKIN & SONS, Wyebridge P.O., Ont. Wyevale Sta.

### Brownlee Shorthorns

Three young bulls left yet, 14 to 16 months. Will sell at a bargain. Also a few heifers. Very reasonable. Good milking strains.

C. P. R. station. D. BROWN, AYR, ONT.

The following conversation is said to have taken place in a Boston elevator:

Old Lady—Don't you ever feel sick going up and down in this elevator all day?

Elevator Boy—Yes'm.

Old Lady—Is it the motion of the going down?

Elevator Boy—No'm.

Old Lady—The motion of going up?

Elevator Boy—No'm.

Old Lady—The stopping?

Elevator Boy—No'm.

Old Lady—What is it, then?

Elevator Boy—The questions.

### The Difference!

IN consequence of the great success of Molassine Meal, other foods containing molasses have been put on the market. Buyers frequently ask:

"What is the difference between Molassine Meal and..... Meal?"

The answer is that other sugar foods are simply imitations of Molassine Meal, and do not contain any antiseptic, digestive, health-giving, worm-destroying properties. They are simply foods containing molasses and other ingredients, but have no special or unique properties.

There is no comparison between Molassine Meal and other sugar foods. Particulars and prices from

ANDREW WATSON,  
91 Youville Square, Montreal.

### BOOK REVIEW.

#### THE BOOK OF WHEAT.

Wheat, the great bread staple of the world, has been treated in a very complete and instructive 350-page book, a review copy of which is just to hand from the printers, Orange, Judd Co., New York. The author, Peter Tracy Dondlinger, Ph. D., has endeavored, quite successfully, we should judge, to include in one volume, an economic history and practical manual of the wheat industry of the world, comprising a complete study of everything pertaining to wheat.

It is the work of a student of economic as well as agricultural conditions, well fitted by broad experience in both practical and theoretical lines to tell the whole story in a condensed form. It is written with a view to completeness and accuracy, and at the same time is made very readable for the benefit of the general student. It is designed for the farmer, the teacher, and the student as well, and the bibliography which accompanies the book is very valuable to the investigator of any subject connected with the culture of wheat. This book presents most interesting reading to those not particularly interested in the practical side of agriculture, owing to the extensive historical notes regarding the methods followed in the culture of wheat from ancient times to the present. The great age of wheat as a tilled crop is impressed upon one when the early history is traced from prehistoric times to the present. The chapters on transportation, marketing and prices, should be read by every miller and dealer in this staple crop, and the practical farmer will find in the chapters on improvement, cultivation, harvesting, fertilizing, etc., the most up-to-date, practical information as deduced by the best investigators. In his preface the author acknowledges, the author mentions, among others, Dr. Wm. Saunders, Director Experimental Farms, Ottawa.

The scope of this book will be appreciated when the following table of contents is carefully studied: 1. Wheat grain and plant. 2. Improvement of wheat. 3. Natural environment. 4. Cultivation. 5. Harvesting. 6. Yield and cost of production. 7. Rotation and irrigation. 8. Fertilizers for wheat. 9. Diseases of wheat. 10. Insect enemies. 11. Transportation. 12. Storage. 13. Marketing. 14. Prices. 15. Milling. 16. Consumption. 17. Statistics. 18. Index and Bibliography.

The cloth binding and letterpress are of the admirable standard which has come to be associated with the Orange-Judd publications. The Book of Wheat may be ordered through this office. Price, \$2.00; net.

### TRADE TOPIC.

#### AN EFFICACIOUS FLY DESTROYER.

—Many dairymen in Canada have had excellent success in protecting their cattle from flies by spraying them with Dr. Williams' Fly and Insect Destroyer, manufactured by the F. Williams Co., of Morrisburg, Ont., and Madrid, N. Y. This preparation kills not only flies, but all other insects, protecting horses as well as cattle. It is also recommended as a disinfectant for stables and chicken-houses. Through the courtesy of Wm. Stewart & Son, of Menie, Ont., the well-known firm of Ayrshire breeders, who have been acting as local agents for this preparation, "The Farmer's Advocate" was supplied this year at Toronto Exhibition with a quantity of it for spraying stock brought out to be photographed for halftone purposes. It proved thoroughly efficacious, and appeared not only to repel but to destroy the flies, which could be observed dropping insensible to the ground.

### GOSSIP.

#### ENORMOUS HOG.

On page 1362, in your issue of September 3rd, Prof. Dietrich, in speaking about fattening hogs, is quoted as saying he expects to be able to make a hog at eight months weigh 300 pounds. I think he is likely to succeed, as I fed a hog last year for 201 days, which, when dressed, weighed 250 pounds. I was not trying to fatten him either, and I hope will never have another like him. Muskoka, Ont. C.

### QUESTIONS AND ANSWERS.

#### Miscellaneous.

#### CENSUS RETURNS.

Kindly tell me whether the last Dominion census returns can be obtained, and in what way? T. W. P.

Ans.—Write A. Blue, chief officer Census and Statistics Branch, Department of Agriculture, Ottawa.

#### SAVING TOMATO SEED.

This season I have grown a few rows each of a pink and a red tomato side by side. Would it be all right for me to save my own seed from them, or would they be hybrids next year? J. H. H.

Ans.—There is always more or less danger of cross fertilization from plants growing side by side, although the tomato does not readily cross-fertilize, and it is just possible you might be able to save seed from both varieties you have been growing and have them fairly true to type. The best plan is to select fruits from plants giving the greatest number of good specimens of the type you desire. H. L. HUTT.

Ontario Agricultural College.

#### WORMS.

1. What is best to put on the ram's breast during breeding season, so that it will remain moist and mark the ewes well?

2. I notice lambs passing small white worms. Are they harmful; if so, what can be done for them?

3. I bought some ewes; they have long tails. Would it be advisable to take them off this fall, and what is the best way? R. B.

Ans.—1. We know of nothing better than red lead or lampblack in water.

2. If they are only small short worms there is little if any harm to be feared from them.

3. When the weather gets cooler, clip the wool off where you want to cut the tail off. Tie a cord around the stump, above where you purpose cutting, to check bleeding. Cut at a joint as nearly as possible, with a pair of pruning shears, or a wide chisel on a block of wood, and seal with a hot iron. Later apply a five-per-cent. solution of carbolic acid in oil or water.

#### SAVING ALFALFA SEED.

1. From which crop of alfalfa, the first or the second of the season, should seed be taken, and at what stage of maturity of the crop should it be cut?

2. How harvested and threshed? J. L. L.

Ans.—Alfalfa seed is a very uncertain crop in any part of Eastern Canada. Rarely is a heavy yield obtained, usually it is about a bushel to the acre, or less, and sometimes scarcely any seed at all is secured. The second cutting is the one usually left for seed, though sometimes the third cutting is depended on for the purpose. The seed is ready for being harvested when a majority of the seed-pods assume a dark brown tint. The pods of later formation will still possess a yellow tint, and some may be green, but it is considered that the best seed is produced in the pods which ripen earlier. Another test for maturity is to shell a few pods in the hand. When the seed in a majority of the pods in a single plant can be shelled easily, it is ready for being harvested. As alfalfa seed shatters easily, it is important not to delay the harvesting unduly, but to handle with care.

2. Alfalfa, for seed, may be cut with the mower and raked into windrows, and in some cases put up into cocks. When handled thus the aim should be to do the work, as far as practicable, in the early and late hours of the day, though not when there is much dew on the crop. Another way, preferred by Prof. Shaw, is to cut it with the self-rake reaper or binder. The loose sheaves dry quickly, and when lifted the aim is to carry them directly to the threshing. Sometimes it must be stacked or stored in mows, but care should be observed to prevent heating. Threshing may be done with an ordinary grain separator, or by a huller. The latter does the work more slowly, but probably more perfectly.

### MILBURN'S



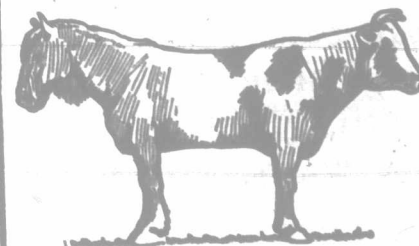
Many people make a mistake in thinking that the only office of a pill is to move the bowels, but a properly prepared pill should act beneficially upon the liver and the entire glandular and secretory system.

This is just what Milburn's Laxa-Liver Pills do, and by their specific alterative action cure Liver Complaint, Biliousness, Jaundice, Constipation, Flatulency, Heartburn, Headache, Dyspepsia, Water Brash, Catarrh of the Stomach, Coated Tongue, Foul Breath, and all diseases arising from impurities clogging the system.

They are small and easy to take, and do not gripe, weaken or sicken. They may be used as a mild laxative or a strong purgative according to the dose.

Price 25 cents a vial, or 5 vials for a \$1, at all dealers, or mailed direct on receipt of price by

The T. Milburn, Co., Ltd., Toronto, Ont.



### THE STOCK-OWNERS' MEDICINE CHEST

What You Have Been Wanting for Years!

THIS CHEST CONTAINS: PRICE:

- 1 Colic Draught.
  - 6 Cough Powders.
  - 6 Diuretic Powders.
  - 1 Wound Lotion.
  - 6 Diarrhoea Draughts.
  - 12 Condition Powders.
- \$3**

Full instructions and veterinary advice enclosed. For \$3 you get drugs that would cost you \$10 in the ordinary way.

Send for our medicine chest at once—you may have a sick horse to-morrow, and by sending \$3 now you may save \$300 in a week.

Agents wanted everywhere.

THE STOCK-OWNERS' VETERINARY DISPENSARY,  
249 Jarvis St., Toronto, Ont.

### Pleasant Valley Herd

Present offering: 7 high-class young bulls by imp. Ben Lomond = 6540 = (3046) and Bud's Emblem = 6360 =, and good imp. and Canadian-bred dams. Write for particulars and prices, or visit personally.

GEO. AMOS & SON, Moffat Station and P.O. Moffat is 11 miles east of Guelph on C. P. R.

#### TWO IMP. BULLS

of excellent quality, color and breeding. One 7 months old, sired by imp. Joy of Morning = 32070 =; dam Blossom 2nd, imp. Also heifer calves and young cows, and heifers in calf. And choice bred Yorkshires of either sex. Prices very moderate. GEO. B. FLETCHER, BINKHAM P. O., ONT. Erin Station, C. P. R.

#### FOR SALE: FOUR

Fit for service. Dairy SHORTHORN BULLS type. Some of them from imp. cows, and all got by Broadhocks Prince (imp.) 5592. Prices the lowest. Also cows or heifers. Go head to select from DAVID MILNE, ETHEL, ONTARIO.

#### Scotch Shorthorns

Canada's greatest living sire, Milledred's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated. GEO. GIER, Grand Valley P. O., Ont. Waldemer Sta., C. P. R.

### SPRING VALLEY SHORTHORNS

A choice lot of young bulls for sale, which will be priced right. Among them are winners at the Canadian National.

KYLE BROS., AYR, ONTARIO.

### Greengill Shorthorns!

We offer for sale our herd bull, imp. Lord Roseberry, also young bulls and females all ages, either imp. or from imp. stock. Prices right. Long-distance phone.

R. Mitchell & Sons, Nelson P. O., Ont. Burlington Jct. Sta.

When Writing, Mention This Paper.

## Dipersion Sale

OF

## Scotch-bred



## Shorthorns

ON

Wed., Oct. 7.

At my farm, 2 miles from Belgrave, G. T. R., I will sell by auction my entire herd of Scotch-bred and Scotch-topped Shorthorns, consisting of 11 bulls and 22 females, including my stock bull, Scotland's Challenge, imp. The cows are good milkers, from good milking stains, and have calves at foot. The whole will be sold without reserve, as I have sold my farm and am retiring from farming. Catalogues will be sent on application. Terms of sale: 6 months' credit on approved joint notes; 6 per cent. per annum off for cash. Conveyances will leave the Exchange Hotel, Wingham, on the arrival of noon trains for the farm; also Hill's Hotel, Belgrave, and Mason's Hotel, Blyth.

R. CORLEY, Belgrave, Ont.

### The Salem Stock Farm 1854 MAPLE LODGE STOCK FARM 1908

#### SHORTHORNS A SPECIALTY.

Write for any information.

J. A. WATT, ELORA, ONT.  
G. T. R. and C. P. R.

One handsome roan SHORTHORN BULL for sale, and several choice heifers.

LEICESTERS of the best kinds, bred from champion prizewinners. Several in good show fit.

A. W. Smith, Maple Lodge, Ont.  
Lucan Crossing Station, G. T. Ry.

## Scotch Shorthorns

BULLS: 4 choice yearlings, IMPORTED; 8 yearlings and a number of choice calves of our own breeding. FEMALES: A number of cows and heifers forward in calf, including showyard material. Tempting prices.

W. G. PETTIT & SONS, FREEMAN, ONT.

Bell telephone at each farm. Farms only 1/2 and 1 1/2 miles from Burlington Jct., G. T. R.

### SCOTCH SHORTHORNS.

For sale: A number of good Scotch heifers, mostly from imp. sire and dam, and bred to imp. bulls. One imp. yearling bull, red, a straight, smooth one. One 9-months bull from imp. sire and dam. One 10-months bull, by imp. sire and from Duchess of Gloster dam. Long-distance phone. Farm 1/4 mile from Burlington Jct. station.

J. F. Mitchell, Burlington, Ont.

### Two Red Bulls.

12 months old. A Clipper and a Martha. Priced low for quick sale. One of them out of an extra milker. Females of all ages for sale. Inspection solicited. Always have on hand some good Lincoln sheep for sale. Long-distance phone.

J. T. Gibson, Denfield, Ont.

## Shorthorns!

### BELMAR PARC

John Douglas, Peter White,  
Manager, Pembroke, Ont.

Calves for sale by our grand quartette of breeding and show bulls:

Nonpareil Archer, Imp. Proud Gift, Imp.  
Marigold Sailor. Nonpareil Eclipse.

Females, imported and from imported stock, in calf to these bulls.

An unsurpassed lot of yearling heifers.

### A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,  
Breeds SCOTCH SHORTHORNS Exclusively.

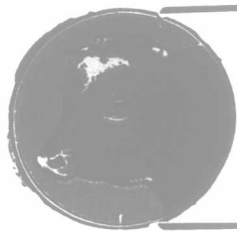
Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68703 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

### VALLEY HOME SHORTHORNS

AND BERKSHIRES. For sale: Young bulls from eight to twelve months old. Young cows and heifers safe in calf, and young yearling heifers not bred yet. Also young Berkshire pairs supplied not akin.

S. J. Pearson, Son & Co., Meadowvale, Ont.

Stations: Meadowvale, C. P. R., and Brampton, G. T. R.



### We are offering a very superior lot of Shorthorn Home-bred Bulls

of the best breeding and quality at attractive prices for the buyer. To see them is all that is necessary. Try to do so if you are in the market. It will pay you.

JNO. CLANCY, H. Cargill & Son, Cargill, Ont.  
Manager.

### SHORTHORNS MAPLE HOME SHORTHORNS

One imported bull, Good Morning (imp.) = 55018 =, five years old. Choice heifers, sired by Lord Lieutenant, imp. Some from imported dams, and all safe in calf to Good Morning, imp. Two extra good young roan bulls, one from imported dam. Come and see them.

M.C.R. Scott Bros., Highgate, Ont. P.M.R.



Our present offering is several very choice and richly-bred one- and two-year-old heifers, and three yearling bulls. A way above the average. Pure Scotch and Scotch-topped.

A. D. SCHMIDT & SONS  
Elmira, Ont.

### Scotch Shorthorn Bulls

We are offering at hard-times prices five bulls from six to fourteen months old, from the best of imported Scotch Shorthorns. It will pay to see these bulls before buying. Long-distance telephone, 516.

GIBBS WOODFIELD STOCK FARM, St. Catharines, Ont.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### DRAINAGE PROCEDURE.

1. Can a council or a ratepayer compel a man to open a natural watercourse through his farm, at his own expense, without first obtaining the decision of an engineer or surveyor? If so, how?

2. When a ratepayer requests council to call an engineer to settle a dispute concerning a watercourse which runs across the road, who pays his expenses, the one who requests to have him called, the council, or all persons concerned, according to benefit received by having watercourse opened?

3. Can a matter of this kind be settled legally by arbitration, when all concerned agree to have it settled that way?

4. If so, can we compel a settlement by arbitration, when one person interested does not agree to settle that way?

Manitowaning, Ont. J. R. W. P.

Ans.—1. No.

2. The expenses are paid as the engineer directs, and he is supposed to apportion them among the different parties interested, according to the benefit to be derived by each by having the watercourse opened.

3. The Ditches and Watercourses Act does not mention arbitration, but sections 8 and 9 provide for an agreement among all the parties interested, apportioning the work and supplying of material among the several owners according to their respective interests in the ditch, such an agreement being enforceable (section 9) in like manner as the award of an engineer, when all the steps outlined in sections 8 and 9 are complied with. While these sections do not mention arbitration specifically, I think that an agreement to accept arbitration would fulfil the spirit of these sections, and the arbitrator's award be legally binding when all the conditions were complied with.

WM. H. DAY,  
Lecturer in Physics.

O. A. C., Guelph.

#### JUDGING AGE OF HORSES — LANDLORD AND TENANT — TOLL ROADS.

1. Will you kindly inform me how I can tell the age of horses? You will convey a favor by letting me know in such a manner that it would be impossible to make a mistake.

2. I have some land I have rented for about five years as yearly tenant. What notice must the owner give me when he wants me to leave or quit?

3. If I seed down said land, does the landlord pay me for such seed if I leave on the following May?

4. If so, how much per acre?

5. If I have another piece of land that I lease for five years, and if I seed out in the last year of my lease will the landlord have to pay me for the said seeding?

6. I live on toll road and township road as well. The toll road cuts its weeds; the township doesn't. Can I make the township cut the weeds on its road (even if my farm is not close to it)?

7. If I drive through a toll-gate and pay at the next toll-gate, can the first toll-keeper summons me for not paying him?

8. If I live, say, two, three or four miles from the toll-gate, can I drive near the toll-gate, then turn and go back home without paying?

9. Can the toll-keeper, if he meets me on the road (or follows me up) collect the mileage I have driven or intend driving?

10. If a person lives alongside the toll-road, can he enclose 10 or 15 feet for a garden, or other purpose, from the said toll-road, which is 66 ft. across, with post and netting?

11. If there are cattle (including a bull) continually on the toll-road, can they be put to pound?

12. Can any person put them to pound? If not, can a person order the toll-keeper to put them to pound, and how much can he collect per head?

ONTARIO.

Ans.—1. To answer this question fully would require nearly a page of space. An instructive illustrated article on judging a horse's age by his teeth appeared in the horse department of "The Farmer's Advocate," issue March 7th, 1907.

2. At least half a year's notice, and

ing with the current year of the tenancy.

3. Yes, assuming that the tenancy is so ended by notice from the landlord.

4. There is no legally fixed rate. The law would allow reasonable compensation.

5. No.

6. No.

7. Not effectively.

8. Not legally.

9. He is probably entitled to do so.

10. No.

11. Yes, provided they are not permitted so to run at large by municipal by-law.

12. Yes.

#### LINE FENCING.

1. A and B have farms adjoining. A wishes to build his part of the line fence with wire. On which side of posts should he put the wire?

2. If A builds his line fence new, and the old post holes remain on B's side, who should fill those holes?

Ontario.

Ans.—1. On his own side.

2. B, if he desires them filled; that is to say, we do not see that he is in a position to compel A to attend to it.

#### AILING TURKEY.

My turkeys are full-grown; they get very thin; heads become a light gray; around their eyes black or dark; droop their wings; eat well, and very fond of water. I put them in a pen away from the rest and they lived only a few days. They had a diarrhea of yellow. I gave them stuff for the diarrhea, but did no good.

A POULTRY GIRL.

Ans.—Although the plural number is used here in speaking of the turkeys and symptoms, I gather that there has only been one sick bird. From the fact that the bird was very thirsty and only lived a few days, I should say the disease was cholera. The other symptoms might indicate the so-called black-head, although I have never known that they ate well in the last stages of black-head, nor at any stage in cholera. A turkey sick from any cause will lose the red color of head and let the wings droop. If there was only one sick bird, and it did not run for any length of time with the flock after becoming ill, I would say that chances were good for the balance to keep healthy. If any more become afflicted in the same way, kill and bury deeply as soon as noticed; and, further would say, market the rest as soon as possible. Don't keep any sick birds running around or you will spoil your chances for next year.

W. J. BELL.

ONTARIO.

#### ORNAMENTAL CLIMBERS.

Will you kindly tell me the scientific name of the enclosed clematis, as I wish to get that kind, and I know there are several others. Is there a clematis with a leaf like the enclosed, but that flowers much earlier? Would Hall's Japan honeysuckle grow on the north side of a house? My house faces the north, so there is very little sun. Is the Chinese wistaria (Sinensis) hardy and pretty, or is the magnifica a better climber to put on a north-east corner?

D. L.

Ans.—The clematis sent for identification is Clematis paniculata, one of the very best of the late small-flowering varieties. I know of no other variety having foliage similar to this. The one most nearly like it is the Clematis vitalba, sometimes called the "Traveler's Joy," or "Old Man's Beard," the latter name given it because of the long feathery styles which succeed the flowers. Possibly it gets its name "Traveler's Joy" from the great beauty it lends to the landscape where it is found growing wild climbing through trees. Both of these varieties are well worthy of cultivation. Hall's Japan honeysuckle will do well upon the north side of a building. I think the finest specimen I ever saw of it was so located. The Chinese wistaria is not hardy here, but I have seen good specimens of it growing in Toronto. It is a strong grower, and very beautiful when in flower. The variety known as magnifica is of another species, being a variety of Wistaria speciosa. There are both purple and white forms of the Chinese wistaria, and both are well worthy of a trial, and I think they would succeed with you in Toronto. They do best upon a southern exposure, although with good care you may be successful with them even upon a north-eastern exposure.

H. L. HUTT.

Ontario Agricultural College.

**GOSSIP.**

**HOG CHOLERA, AND VACCINATION AS A PREVENTIVE TREATMENT.**

Reports from various parts of Kansas indicate the great prevalence of the disease of hog cholera in this State at the present time. The Experiment Station is daily receiving letters of inquiry relative to the prevention of this disease.

**Probable Causes of Prevalence at this Time.**—Hundreds of farms in Kansas have become infected with this disease during the last few months. Increased prevalence of the disease during the present season may be attributed to the excessive rainfall during the past spring and summer. Under such conditions the hog-cholera virus has been washed from infected pens and farms into rivers and small streams, these tributaries having emptied into larger streams and flooded districts, thus sweeping the infection over large areas. Other means of dissemination such as dogs, birds and the boots of stock-buyers, have doubtless contributed their share toward the wide distribution of the disease.

**Precautions Against the Disease.**—The greatest care should be exercised to keep the infection from entering healthy herds. If the disease is in the immediate locality, stray dogs should not be allowed in the hog lots or pastures. To eliminate as much as possible, infection from birds, the hogs should be fed in covered enclosures. Stockmen and buyers should not be allowed to enter the premises without first thoroughly disinfecting the shoes with some such germicidal solution as carbolic acid. The hogs should, under no consideration, have access to a stream which is fed from water running through other farms. No newly-purchased hogs should be placed with the general herd until they have been kept in quarantine for two or three weeks. Plenty of air-slaked lime should be used about the hog houses and feeding places.

**VACCINATION.**

The Bureau of Animal Industry, U. S. Department of Agriculture, has recently perfected a vaccine known as "Dorset's Hog Cholera Vaccine." It consists of (1) immune serum (blood serum drawn from a hog which is immune to the disease) and (2) hog-cholera virus (blood serum from a hog suffering from the disease). The two substances are injected simultaneously into the healthy hog. Experimental evidence shows that this method of vaccination is efficient.

"Dorset's Hog Cholera Vaccine" has some disadvantages. (1) These serums, both the immune and the hog-cholera serum, are expensive, because they are obtained from hogs, which, in comparison with other domesticated animals, yield only a small amount of blood serum. Under these conditions this process involving the killing of hogs to save hogs, when put into practice, is very expensive. (2) The danger that might follow the broadcast distribution of hog-cholera virus, in some instances among careless veterinarians and uninformed farmers, cannot be ignored.

**KANSAS EXPERIMENT STATION WORK.**

The Bacteriological Department of the Kansas Station has, during the past year, conducted a line of experimental work in an attempt to produce a practical hog-cholera vaccine. The general scheme of the work has been to attenuate or so modify the hog-cholera virus by passing it through a horse that it will successfully vaccinate a healthy hog against the disease, but will not produce infection. Three horses and some twenty hogs are at present under observation, and during the fall months some field work will be undertaken. The following conclusions have been suggested by the results so far obtained:

1. Hog-cholera serum exerts a toxic influence upon a healthy horse when injected intravenously.
2. The blood serum from a horse, drawn a few hours (3-6) after the animal has received in the veins 75 to 150 cc. of hog-cholera serum, is as virulent as the original hog-cholera serum, producing typical symptoms of cholera and death when injected into healthy hogs. In some cases horse serum, drawn 3-6 hours after the animal has received intravenously a dose of hog-cholera virus, produces in healthy hogs

a more acute form of the disease than does the original serum.

3. The blood serum of a horse, drawn 24-72 hours after the animal receives an injection of hog-cholera virus intravenously, shows attenuated properties and does not produce disease when injected into healthy hogs. It also, however, in most cases, produces a reaction in the temperature of the healthy hog five to twelve days after the inoculation.

4. Twenty-four-hour horse serum (drawn from the horse 24 hours after the animal was injected intravenously with hog-cholera serum), when injected into healthy hogs, exhibits protective properties against the disease.

A bulletin is in process of preparation which will explain the above experiments in detail. WALTER E. KING, Manhattan, Kan. Bacteriologist.

**SHEEP TO FIGHT RAGWORT.**

In the Maritime Provinces sheep are fast becoming a popular part of the livestock world, because of their value in eradicating ragwort, a weed that has been found to cause serious sickness among cattle. According to J. B. Spencer, of the Live-stock Branch, Department of Agriculture, Ottawa, this disease was for some time considered to be contagious. Investigation revealed the fact that it never should have been classed as being contagious, as it is now known to be due to the cattle eating hay in which ragwort is abundant. This condition of affairs was discovered on a farm opened by Dr. J. G. Rutherford, at Antigonishe, N. S. It was found that sheep could eat it either in pasture or hay, without ill effects, and with the former treatment the weed soon was eradicated.

The districts infested by ragwort are found chiefly surrounding Antigonishe and Pictou, in Nova Scotia, and at the east and west ends of Prince Edward Island. Last spring seventy-seven pure-bred shearing rams were selected by Mr. Spencer and sent to these districts. They were chiefly Shropshires and Oxfords, but a few each of Cotswolds, Leicesters and Lincolns. The selections were made on the recommendations of the Maritime mutton-raisers. In addition, twenty-five well-developed lambs were purchased in the Maritime Provinces.

To further encourage the sheep-raising industry, sales are being arranged at which Mr. Spencer will be present. On September 30th, at Pictou Fair thirty-four fine lambs were to have been sold. At Antigonishe on October 14th, an equal number will be disposed of. On October 1st, at Souris, P. E. I., 14 are to be sold, and again on October 3rd, 15 are to be on sale at Summerside, P. E. I.

The sheep-raisers of those localities are very much interested in these sales. Great results are anticipated for the sheep industry of the Maritime Provinces. At the same time a weed that has been causing great annoyance with the cattlemen will be at least partially subdued, as a result of the increased attention to sheep husbandry.

**SELF-SUCKING COWS.**

For the benefit of those that have cows that suck themselves, Sylvester Klinker, of Iowa, submits the following to Wallace's Farmer. He claims it is a sure cure, as he has used it for over thirty years: "Take an ordinary bridle bit, jointed in center, and bridle the cow just as you would a horse, using strap, rope, or anything to keep bit in mouth. This ends all trouble, with no inconvenience to the cow. Publish this for the humane part of it, as I see so many cruel and many bunglesome contrivances used."

The time has arrived when the tests of cows must be real tests in order to command the slightest attention from commercial milk-producers, who are starting in to breed up or to pure-breed their herds. The "private" tests may be all right, but dairymen are not looking for tests of that sort. The breed that puts out real tests is going to do the business in the near future.

Mr. John Robertson, Wyoming, Ont., has a few nice yearling Shropshire rams, good flock-headers. If interested, write him, and you will find prices right. See advertisement in this issue.

**Dairy-bred Shorthorns By Auction**

ON TUESDAY, OCTOBER 20th, 1908,

At his farm, 2 miles south of Whitechurch station (G. T. R.), and 5 miles west of Wingham (C. P. R. and G. T. R.), Mr. David Clow will sell by auction 28 Head of strictly Dairy-bred Shorthorn Cattle. This offering is one of the best dual-purpose lots of Shorthorns in Ontario. Big, thrifty cattle, every one a money-maker. Terms: 3 months on bankable paper, or 6% per annum off for cash. Conveyances will meet trains at Whitechurch and Wingham stations.

JOHN PURVIS, Auctioneer. Catalogues on application to: David Clow, Whitechurch, Ont.



**Shorthorns, Cotswolds, Berkshires.**

In Shorthorns, over 50 head—cows, heifers and calves from 2 to 8 months. In Cotswolds, shearing ewes and ram and ewe lambs. In Berkshires, a few young sows.

Chas. E. Bonnycastle, Campbellford, Ont. Post Office and Station.

**Spruce Lodge Shorthorns and Leicesters.**

In Shorthorns, we are offering young bulls and heifers, by imp. sires and out of heavy-milking dams. In Leicesters, we have a grand lot of shearing rams and ram lambs, and one and two year old ewes of No. 1 quality.

W. A. DOUGLAS, TUSCARORA P. O., Ont. Colodonia Station.

**Athelstane Shorthorns** Three choice bulls and a few heifers; low-down, thick-fleshed sort of noted families, and mostly sired by Star Prince =53900=. Prices very reasonable.

WM. WALDIE, Box 324, Stratford, Ont.



**HAWTHORN HERD OF DEEP-MILKING**

**Shorthorns**

For Sale: 2 young bulls and 10 heifers, sired by Aberdeen Hero (imp.) =28940=. Some bred to the Lavender bull, Lavender Lorne =68706=.

WM. GRAINGER & SON, Londresboro, Ontario.



**MAPLE GROVE SHORTHORNS**

6 bulls and 2 heifers for sale. Bred from imp. and home-bred stock. A number of young cows safe in calf. Present stock bull, Starry Morning. C. D. WAGAR, Enterprise, Ont. Stn. and P.O.

**Shorthorns, Lincolns and Oxford Downs**—Imp. Protector heads herd. For sale: Young bulls and cows; also ram lambs and ewes. All at reasonable prices. JOHN McFARLANE & W. H. FORD, P. M. and M. C. Rys. Box 41, Dutton, Ont.

**Farmers and Cattlemen, Read This!**

When you cannot sell your export cattle at satisfactory prices at home, and wish to ship them to the Old Country markets, write or wire for steamer space, market and shipping information to Donald Munro, Live-stock Forwarding Agent and Commission Salesman, 43 St. Jacques St., Montreal.

Load your cattle carefully, and bill them to me. I provide the necessary feed, insurance, etc., pay freight and all other expenses from shipping point, and give liberal cash advances on all consignments. Cattle are loaded on steamer under my personal supervision, and placed in charge of capable attendants for the ocean voyage. I represent the most reliable salesmen at all the different British markets. BUSINESS ESTABLISHED 1890. REFERENCES: THE MOLSONS BANK, MONTREAL.

**Brampton Jerseys!**

Select your stock bull or family cow from Canada's most famous and largest Jersey herd.

B. H. Bull & Son, Brampton, Can.

**DON JERSEYS**

We are now offering a number of heifers of all ages, out of producing show stock, and by champion sires, and in calf to Fontaine's Boyle. Also several yearling bulls out of high-class cows, and by same sires as the heifers. The best lot of young things we ever had for sale. Duncan Station, C. N. R.

D. DUNCAN, DON, ONTARIO.

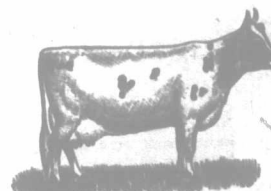
W. Willis & Sons, Pine Ridge Farm, Newmarket, Ont.

Breeders of registered high-class JERSEY CATTLE. Stock for sale of both sexes, and reg. Cotswold sheep. Correspondence solicited.

JERSEYS We have the get of Ethel's John, a 75 FOR SALE per cent. Mary Ann of St. Lambert bull; also of Minette's Star, a son of Brampton bull; also of Minette's Star, (imported), Blue Minette, Brampton Monarch (imported), Blue Blood, and Financial King. Write for what you want. H.S. Pipes & Son, Amherst, Nova Scotia.

**Burnside's Champion Ayrshires**

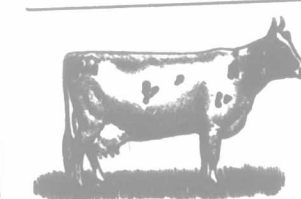
My 1907 importation of 75 head being about all disposed of, I am preparing to import again. Mr. And. Mitchell, the world's most extensive dealer and breeder of Ayrshires, is at present securing for me the best young bulls from the best herds in Scotland. Send in your order now for a choice bull and a female or two. Bulls will be out of quarantine in time for spring service. Correspondence solicited. Long-distance phone in house.



R. R. NESS, Howick, Que.

**Wardend Ayrshires** Present offering: 1 two-year-old, 2 yearling bulls, and choice lot of spring calves from good milkers. F. W. TAYLOR, Wellman's Corners, Ont. Hoard's Sta., G. T. R. Telephone in house.

**SPRINGBROOK AYRSHIRES** have been bred with a view to large milk and butter production, coupled with vigor of constitution, and being true to type. A few bull calves of 1908 for sale. W. F. STEPHEN, Box 163, Huntingdon, Que.



**Springhill Ayrshires!**

A better lot of young cows and heifers we never had. They have only to be seen to be appreciated. "Deep milkers." "Good teats." Just the kind for foundation stock. Bull calves from best cows. Will leave for Scotland shortly to import. Order a choice yearling or bull calf or a female or two. They will be out of quarantine for spring service. Write for prices. Long-distance phone.

ROBERT HUNTER & SONS, Maxville, Ont.

**HOWGLEN AYRSHIRES!** For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to ALLAN P. BLUE, Eustis, Quebec.

**AYRSHIRES** Bull and heifer calves from producing dams. Right good ones. Hickory Hill Stock Farm. N. DYMENT, Clappison, Ont. Dundas Station and telegraph.

**FAIRVIEW HERD** offers you another son of the great Pontiac Korndyke, who has more high-testing daughters in the American Registry than any other living bull. We have four of his daughters that have seven days records that average over 28 lbs. each, and over 4% fat. This young bull was born Nov. 2, 1907, is two-thirds white, and a beauty. His dam is sired by a son of De Kol 2nd's Paul De Kol, the sire of Aggie Cornucopia Pauline. You cannot find better breeding than this. First check for \$150 takes him.  
E. H. DOLLAR, Newellton, St. Law. Co. N.Y.  
Near Prescott, Ont.

**WOODBINE STOCK FARM** Offers a few fine young Holstein bulls and bull calves, sired by Sir Mechthilde Posch. Sire's dam holds world's largest two-day public test record, dam Ianthe Jewel Mechthilde, 27.45 lbs. butter in 7 days; average best, 4.46 per cent. fat; out of dams with superior breeding and quality.  
Shipping stations—Paris, G. T. R.; Ags. C. P. R.  
A. KENNEDY, Agr. Ont.

**Mr. A. I. Hickman**  
COURT LODGE, EGERTON, KENT, ENG.,  
Exporter of pedigree stock of every description to all parts of the world. During the fall months light and heavy horses will be a specialty. Write for prices, terms and references.

**LAKEVIEW HOLSTEINS**  
Herd headed by Count Hengerveld Fayne De Kol. His dam, Grace Fayne 2nd, 26.30 lbs. butter in 7 days, is dam of world's champion 4-year-old butter cow. Sire Count Hengerveld De Kol, 70 A. R. O. daughters, including world's champion milk cow. For sale: 1 service bull; 10 bull calves, by 20-lb. butter cows. 75 head to select from.  
W. D. BRECKON, Mgr., Bronte, Ont.

**HOLSTEINS** We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way to arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported Pontiac Herries, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented.  
Putnam station, near Ingersoll.  
H. E. GEORGE, Crampton, Ont.

**Centre and Hillview Holsteins**  
125 head to select from. 35 in the R. O. M. Stock bulls Bonheur Statesman, high official backing, and is closely related to Colantha 4th's Johanna; Brookbank Butter Boy. All moment dams over 20 lbs. From these sires, out of R. O. M. dams, are several young bulls and a few heifers. Prices right. P. D. EDE, Oxford Centre, Ont. Woodstock Station.

**Now** is the time to buy a bull for service next year, because we sell CHEAPER now than we do next spring. Why not write to us RIGHT AWAY for a BARGAIN in bulls from R. O. M. dams? Or better yet, call and see us.  
E. & F. MALLORY,  
FRANKFORD, ONTARIO.

**MAPLE GLEN HOLSTEINS**  
For Sale: Service bull, brother to Guelph dairy test champion, 1907; three bull calves, one from 22½-lb. cow, one from 17.80-lb. 4-year-old, a Top Notcher from 19.45-lb. 2-year-old. Come and inspect the herd.  
G. A. GILROY, Glen Basil, Ont.

**Maple Hill Holstein-Friesians**  
Special offering: Two bull calves eleven months old; well bred; in fine condition; now fit for service.  
G. W. CLEMONS, St. George, Ont.

**Only Bull Calves** FOR SALE, HOLSTEINS and AYRSHIRES, Of the best performing strains.  
GEO. RICE, ANNANDALE STOCK FARM, TILLSONBURG, ONTARIO.

**The Maples Holstein Herd!**  
RECORD OF MERIT COWS.  
Headed by Lord Wayne Mechthilde Calamity, also in the Record of Merit. Nothing for sale but choice bull calves.  
WALBURN RIVERS, Falden's, Ont.

**Glenwood Stock Farm—Holsteins and Ayrshires**  
Holsteins all sold out. Have a few young Yorkshire sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock.  
Thos. B. Carlaw & Son, Warkworth P.O., Ont. Campbellford Station.

**Hilton Stock Farm—Holsteins, Cotswolds and T. O. M.**  
Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig.  
R. O. MORROW & SON  
Brighton Tel. and Sta. Milton Ont.

**Ridgedale Farm Holsteins**—For sale: 4 bull calves from one to ten months old; 2 heifer calves bred from choice dams. Also a pair of choice cows supposed to be in calf. R. W. WALKER, Utica P.O., Ont. Port Perry (G.T.R.) and Myrtle (C.P.R.) stations, Ontario Co.

**Beaver Creek Holsteins**—I have at present a few cows and heifers for sale, and three young bulls; all from good milkers. Apply to  
ALBERT MITTFELFELDT, Etcho, Ont.

**LYNDALE HOLSTEINS!**  
Bull calves out of cows with records of from 18 to 20 lbs., also three heifers coming two, and a number of young cows in Record of Merit, bred to a grandson of Pieterje Hengerveld's Count De Kol. BROWN BROS., LYN, ONT.  
When Writing, Mention This Paper.

**Maple Grove** offers a richly-bred bull calf, 6 weeks old, sired by an Aaggie, Cornucopia Pauline, A. R. O., 28.30 lbs. butter; his dam is sired by a son of Beryl Wayne, A. R. O., 27.14 lbs. butter. For particulars write:  
H. BOLLERT, Cassel, Ont.

I CAN FURNISH JUST NOW A LARGE NUMBER OF EXTRA GOOD Shropshire and Cotswold Rams  
A large number of extra good Shropshire and Cotswold ewes, twelve months old. And a few very high-class Shorthorn bulls and heifers. Any of which will be sold at moderate prices.  
ROBERT MILLER, STOUFFVILLE, ONT.

**Shropshires, Cotswolds**  
I am now offering a lot of large, well-covered rams. They weigh from 160 to 200 lbs. each. Also shearing ewes, ram lambs and ewe lambs, of both breeds, fitted for showing.  
JOHN MILLER, BROUGHAM, ONT.  
Claremont station, C. P. R.

**Oxford Down Sheep**  
AT FARNHAM FARM.  
We are at present offering a number of superior yearling rams and ram lambs, by imported sire and partly from imported dams. Some splendid yearling ewes and ewe lambs. Also a few imported yearling and ram lambs. Price reasonable.  
Henry Arkell & Son, Arkell, Ontario.  
Arkell, C. P. R., Guelph, G. T. R.

**SOUTH DOWNS AND COLLIES!**  
Imported winning collie at stud.  
HOLLYROOD PROFESSOR.  
Breeding ewes, imported and home-bred; 15 shearing rams; 20 shearing ewes. Ewe and ram lambs by the same sire as the grand champion wether, over all breeds, at Chicago International, 1907.  
ROBT. McEWEN, BYRON, ONT.  
Long-distance telephone. Ry. Station, London, Ont.

**FOR SALE—Pure Shropshire Ram and Ewe Lambs**, born from 20th March to 1st of May. Price ten dollars each, including pedigree. Shearing rams and ewes at reasonable prices—130 to choose from. Also fine St. Lambert Jerseys. All ages. Prices right. H. E. Williams, Sunny Lea Farm, Knowlton, P. Q.

**CLAYFIELD** Buy now of the Champion Cotswold Flock of America, 1886. Flock FARM! headers, ranch rams, ewes of different ages. All of first-class quality, and prices reasonable. Write, or call on J. C. ROSS, Box 61, Jarvis, Ont.

**Shropshire Rams** Yearlings, Registered. Good individuals for flock headers. Prices right. Come and see or correspond. JOHN ROBERTSON WYOMING, ONT. About a mile from depot, G. T. R.

**Shropshire Rams** Yearlings, Registered. Good individuals for flock headers. Prices right. Come and see or correspond. JOHN ROBERTSON WYOMING, ONT. About a mile from depot, G. T. R.

**Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs**—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Buena Vista Farm, Harriston, Ont.

QUESTIONS AND ANSWERS.  
Veterinary.

**WOUND.**  
Sheep had an abscess on her shoulder. I opened it and it became fly-blown and full of maggots. I put turpentine in to kill the maggots. The wound will not heal.  
H. B.

Ans.—Wash the wound twice daily with warm water, and after washing, dress the external surface, and flush the cavity with a 5 per cent. solution of carbolic acid until healed.  
V.

**PERIODIC SEVERE LAMENESS.**  
Three years ago my broncho was supposed to have slipped on the road. Occasionally there is slight swelling and tenderness in tendons above fetlock. She seems all right in limbs and shoulders, but shows sudden lameness in fore legs from time to time, sometimes in one leg and sometimes in the other. She goes all right most of the time, but will unexpectedly show the lameness when on the road, fairly losing the use of the one foot, and her head will go down with sufficient force to break the check rein.  
A. H.

Ans.—It is not probable that the slip she made over three years ago is responsible for the condition you describe. This is especially indicated by the fact that she is as liable to go wrong on one leg as on the other. I am of the opinion that there is no lesion, but that the mare simply stumbles and then may go lame for a few steps. A horse does not go sufficiently lame to break check reins, but a stumbling horse frequently does so. The leg whose tendons occasionally swell, should be blistered, and after the scale caused by the blister has come off, the leg should be showered with cold water and a cold water bandage applied and left on for three or four hours every evening after she has been driven.  
V.

Miscellaneous.

**PUMPING BY TREAD POWER.**  
We intend pumping water by tread power. In so doing we require about 30 feet of shafting. What size pulley would be right to put on shafting to give proper speed for pumping? Diameter of pulley on tread power, 5½ feet; stroke of pump, 5 inches. SUBSCRIBER.

Ans.—For the solution of the problem you should have given the diameter of the wheel with which the floor of the tread power engages. By measurement, I have found this wheel on a certain power to be 18 inches in diameter. You should also have given the rate of travel of the animal working the mill. Let us assume that the rate of travel is four miles an hour and that the diameter is 18 inches, the same as the one measured, then with a pulley on the shaft 6 ft. 10 in. in diameter you would get a stroke of the pump every second, which would possibly be a moderate rate, and the power required to do this would only be a small fraction of one horse-power. A pulley twice as large, that is 13 feet 8 inches in diameter, would give one stroke every two seconds, other conditions being the same as before.  
WM. H. DAY.  
O. A. C., Guelph.

JOINT WORM.

Find enclosed sample of wheat with eggs deposited therein. Kindly diagnose and answer through your journal.  
SUBSCRIBER.

Ans.—The objects in the wheat joints which you send are not eggs as you surmise, but the larvae of the joint worm (Isosoma tritici). This insect is a true fly, with only two wings. It is very small, about 1-10 of an inch long, jet black with pale legs. The females pierce the straw, and lay from six to twelve eggs inside its tissues. These eggs hatch into very small, slender, footless grubs, of a pale yellow color, which when mature are about one-eighth of an inch in length. As the young grubs grow they cause a distortion of the stems a little above the first or second joints from the roots. Most of the larvae or grubs winter inside the galls or swellings, but a few transform and appear as flies in late autumn.  
Remedies.—There is apparently only one

brood of these insects each year, and the larvae pass the winter in the straw, for the most part so near to the ground that a large proportion of them are in the stubble left on the fields, they can be largely reduced in numbers by burning over the stubble or by plowing it down deeply. Where seeding down has been done, deep plowing with wheat will be impossible, and this will mean the giving up of that practice with wheat for a time. Seeding down will have to be done with barley and oats, which are not attacked by this species of joint worm. The broken-off hard pieces of straw which become separated in threshing and cleaning should be gathered together and burned. Sometimes no apparent galls are formed, merely slight swellings with a hard, thickened condition of the straw, representing the galls. These portions break off in threshing, and many are carried off with the grain. Straw from an infested crop should be got out of the way, either by feeding or burning before the ensuing spring.  
A regular short rotation of crops, while reducing the number of bad weeds and preventing them from increasing, will also do much to reduce the numbers of the joint worms. All recorded recurrences of joint worms in Canada have been of short duration. JAMES FLETCHER.

FUMIGATING FOR PEA WEEVIL.

Could you kindly tell me, through the columns of your valuable paper, whether there is any way to kill the pea bug when peas are in the bin? J. A. M.

Ans.—Fumigating in air-tight bins with carbon-bisulphide is effective, but as the vapor is very inflammable the work should be done at a distance from barns and other buildings, and no light of any kind must be brought near, nor may smoking be allowed near the building where the bisulphide of carbon is being used. For the treatment of small quantities of seed by farmers an ordinary coal-oil barrel is recommended by Dr. Fletcher. This will hold about five bushels, and may be treated with three ounces of bisulphide of carbon, which may be poured right on to the peas. The top should be closed tightly with a cap, made specially for the purpose, or with fine sacks dampened and laid smoothly on top, weighted boards being laid over them. The bisulphide of carbon should be of the best quality, which will volatilize without any residue, and the exposure should be for 48 hours. Peas should be fumigated as soon as possible after harvest, but they may be treated at any time when the temperature is above freezing. After the peas are treated they should be promptly bagged, and the bags kept tied until seeding.

GOSSIP.

An eight-year-old cross-bred cow of the Jersey type, exhibited at a show in Kent lately, yielded the extraordinary amount of 77 lbs. 12 ozs. of milk (7½ gallons) and 3 lbs. 9½ ozs. of butter in a twenty-four hours' test. This is a standard worth striving for.

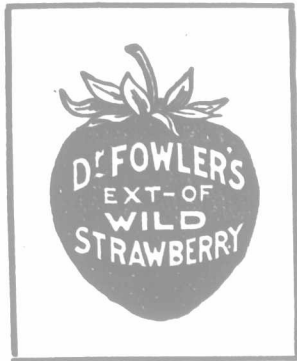
Attention is directed to the advertisement in another column of the auction sale of Mr. David Clow, Whitechurch P. O., Ont., in which he is offering his entire herd of dairy-bred Shorthorns. For fuller particulars look up our next issue, and make a note of the date, as this offering is of a kind of cattle that is all too scarce in this country.

R. M. HOLTHY'S CLYDESDALES.

Mr. R. M. Holthy, of Manchester, Ont., is just now offering a few grand good imported Clydesdale mares and fillies personally selected by Mr. Holthy for their high-class character and quality, and right royal breeding, all in foal to the champion, Imp. Acme, by Baron's Pride; also several filly and horse colts. Some were imported in dam, others Canadian-bred, with imported sire and dam. This is an extra choice offering, and Mr. Holthy will sell well within their worth. Write him, or, better, go and see them. Manchester Station is on the Whitby-Port Perry branch of the Grand Trunk, and the farm is within a mile of the station.

SUBSCRIBE FOR "THE FARMER'S ADVOCATE AND HOME MAGAZINE."

**For Diarrhoea, Dysentery, Stomach Cramps, Colic, Summer Complaint, Cholera Morbus, Cholera Infantum, and all Looseness of the Bowels**  
There is no Medicine Like



It has been a household remedy for 63 years. You can always rely on it in time of need to do just what we claim for it. Do not allow an unprincipled druggist to palm off a cheap substitute on you.

The genuine "Dr. Fowler's" is manufactured by The T. Milburn Co., Limited, Toronto, Ont.

**THE ONLY CURE FOR DIARRHOEA.**

"I have used Dr. Fowler's Ext. of Wild Strawberry for diarrhoea, and I think there is not a better remedy to be found, as I have a large family and all subject to it. I would not be without it in the house as it is a quick cure, and 'the only thing' that will cure them."

Mrs. Robt. Rahm, Burketon, Ont., writes:—

**Hampshire Down Sheep.**

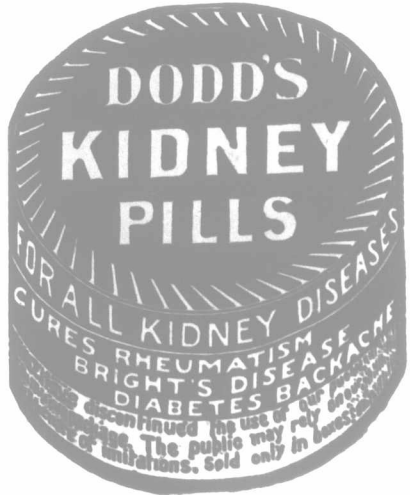
**SPLENDID MUTTON, GOOD WOOL, GREAT WEIGHT.**

This highly valuable ENGLISH BREED OF SHEEP is unrivalled in its rapid and WONDERFULLY EARLY MATURITY, hardness of constitution, adapted to all climates, and in quality of MUTTON AND LARGE PROPORTION OF LEAN MEAT IS UNSURPASSED.

Full information of Secretary, Hampshire Down Sheep Breeders' Association, SALISBURY, ENGLAND.

**Leicesters** Two-shear ram, 2 shearings, ram lambs, ewe lambs and shearing ewes. They are all well covered. Bred from imported stock, and in good field condition. Satisfaction guaranteed. Prices reasonable. **Dunnet Bros., Cianbrassil, Ont.**

**A WORLD'S RECORD.** At Nashville, Tenn., Sept. 16th, Ben Whitehead drove the two-year-old trotter, Al Stanley, a mile, against time, in 2.19. This is said to be a new world's record for a two-year-old trotter on a half-mile track.



**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**CALF SCOURS.**

Calf, about five months, has repeated attacks of scours about every week or ten days, lasts about two days and then is all right again. Calf has grown well, but is very thin, and staggers slightly when walking, and has a great appetite; looks dull about eyes, and hangs ears down; calf is a heifer and very well bred, being part Jersey; has had three attacks since three weeks old. Please advise.

J. R.

Ans.—Give a dose of castor oil ¼ pint in warm milk as a drench. Feed moderately of warmed milk with one-half pint of lime water added, and give good hay and small quantities of bran and old oats, whole or ground. Keep in clean, airy box stall or shed, well bedded.

**SAND FILTER FOR RAIN WATER**  
Having sometimes to use rain water for drinking and culinary purposes, would you kindly let me know, through the "Questions and Answers" columns of your valuable paper, "The Farmer's Advocate," how to put in an appliance, and what material to use, to filter the water before it goes into the cistern.

**SUBSCRIBER.**

Ans.—A sand filter is constructed as follows: A reservoir or tank, varying in size, according to needs, is constructed. In the bottom of this drain-tile are laid to outlet where the filtered water is to be discharged. Over this tile is placed 15 inches of coarse gravel, 6 inches small gravel, then coarse sand, and lastly fine sand, in all the sand being about 3½ to 4 feet deep, and about as much again fine as coarse. The water stands about 3½ to 4 feet deep above the sand. Such a filter will allow from 8 to 12 feet of water in depth to pass through per day. Therefore, to know the size of filter you need, you must know the amount of water used daily. A filter 2 feet square would allow about 6 barrels per day to pass.

Unless there is solid matter in the rain water, the filter would be of little use, as only such is removed by filtration.

WM. H. DAY.

O. A. C., Guelph.

**DRAINAGE QUESTION.**

A has a low, swampy piece of ground, running across the front of his farm which he desires to drain. In order to do so a ditch will have to be made to run through his neighbor's (B) farm, which is also swampy. B's swamp is full of heavy undergrowth and stumps and logs. Can A compel him to ditch through it, to follow the natural course of the water? It will have to be carried across his swamp to connect with a main ditch, also running through his farm. The water runs to this place naturally, but not sufficient to drain the swamp.

Can one compel a man to ditch through uncleaned land when it is abandoned to pasture? If so, what course should one pursue?

H. N.

Ans.—A can compel B to do so if the engineer finds that the ditch is required (sec. 16, sub-sec. 2, Ditches and Water-courses Act). If the engineer does not think the ditch is required, A cannot force such a ditch. He would need to follow the provisions of the Act, the first step being to call a meeting to try to agree on a settlement, and in case the parties come to an agreement, it is reduced to writing and filed with the clerk of the municipality within 60 days, and is then enforceable in like manner as the award of an engineer. In case an agreement is not reached, application must be made for the engineer, according to form E of the Ditches and Water-courses Act. The engineer should then, in due course, examine the ground and give his award, which is enforceable according to the provisions of the Act. Write the Department of Agriculture for the Act, and make yourself familiar with its provisions.

In the past four years the Department of Physics has been brought into contact with a large number of drainage awards, and we are driven to the conclusion that co-operation is better than legal procedure, even though one may not get by co-operation all that he feels himself entitled to.

WM. H. DAY.

Lecturer in Physics.

O. A. C., Guelph.

**IMPORTED HORNED DORSETS**

My importation for 1908 will arrive in a few days. Look me up at Toronto Exhibition. I have for sale a few of both sexes, the get of last year's champion all round the circuit, Imp. Romulus 2nd. Canada's banner flock of Dorsets. **JAS. ROBERTSON & SONS, Milton P.O. and Sta., C.P.R. and G.T.R.**

**POPULAR LODGE SOUTHDOWNS AND BERKSHIRES.**—We are offering, at right prices, 2 aged rams, 3 shearing rams, and 2 ram lambs. Flock headers. Berkshires of all ages, in both sexes. Show stuff and of ideal type. Write me. Correct description guaranteed. **S. Lemon, Kettleby, Ont., P. O. and Sta., also Aurora Sta.** Long-distance phone.

**SHROPSHIRE**

Flock of the most approved type. We offer good animals at reasonable prices.

**W. D. MONKMAN, BOND HEAD, ONT.**

**Fairview Shropshires AT TORONTO.**

In several sections won over imported ones. In shearing ewes, beat this year's English Royal winners.

In American-bred sections won every first offered. Including that for champion ram and champion ewe. In bred-by-exhibitor flocks, won the whole three.

Won as many firsts as all competitors.

Won more of the money than any competitor.

Every sheep and lamb shown were Fairview-bred.

Because of American quarantine blockade, special reduced prices quoted on the best ever offered.

Nearly all sired by our World's Fair and International

**CHAMPION RAMS.**

Send for circular and prices to:

**J. S. D. J. CAMPBELL,**

Fairview Farm, Woodville, Ont.



**Belmont Shropshires!**

**THE CHAMPION FLOCK OF CANADA.**

Just arrived at the farm: We believe, the best selection of Shropshires ever imported from Britain. If you want flock headers, show rams, field and show ewes and lambs at moderate prices, visit the Belmont Farm and inspect our flock. We import Welsh cobs and Shetland ponies.

**J. G. Hammer & C. Hodgson, Props. Belmont Stock Farm, Box 92, Brantford, Ont.**

**Maple Villa Oxford Downs and Yorkshires**

A high-class lot. Yorkshires of both sexes and all ages. Satisfaction is guaranteed. **J. A. Cerswell, Bond Head P. O., Ont.** Beeton or Bradford Sta.

For sale: Sunset, imp., 2 yrs. old—a grand ram and a grand, good sire; 15 shearing ewes; 4 shearing ewes; this year's lambs of both sexes.

**HAMPSHIRE DOWN SHEEP!**

Yearling rams and yearling ewes. All bred from imp. sire and dams. Price reasonable.

**L. E. MORGAN, MILLIKEN, ONTARIO.** Bell Phone. P. O. and Stn. (G. T. R.)

**MAPLE SHADE FARM**

Will sell 24 excellent shearing SHROPSHIRE EWES, also 6 thick shearing rams. All are by an imported ram and from imported ewes, and would be splendid sheep for foundation of new flocks. They are offered at a reasonable price, either in one lot or in smaller flocks. Come and inspect, or write.

**JOHN DRYDEN & SON, Brooklin, Ont.**

Stations: Brooklin, G. T. R.; Myrtle, C. P. R. Long-distance telephone.

**Linden Oxfords!**

Having sold our farm, our flock of Oxfords will be sold without reserve. Composed of ewes all ages, this year's crop of lambs, an Imp. Hobbs ram and yearling rams. All sired by good imp. rams.

**R. J. HINE, DUTTON, ONT.**

**Springbank Oxford Down Sheep**

Bred from high-class show stuff. Our flock of 70 is now one of the very best. For sale are 12 shearing rams, 2 two-shear rams, a number of shearing ewes, and this year's crop of lambs of both sexes. Show stuff among them. **W. M. BARNET & SON, LIVING SPRINGS P. O., ONT.** Fergus Station.

**HIDES**

We require to fill large orders, and will pay good prices for early shipment. Write now to:

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

**WOOL**

**MONKLAND YORKSHIRES**

are the easily-fed, quick-maturing kind. The sort the farmers want.

**JAMES WILSON & SONS,**

**FERGUS, ONTARIO.**

**SUNNYMOUNT BERKSHIRES**

For Sale: A few boars fit for heavy service.

**JOHN McLEOD, MILTON, ONTARIO.** Importer and Breeder.

Post office and stations, C. P. R. and G. T. R.

**GLENBURN HERD OF Yorkshires**

Winner of gold medal three years in succession. Six young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.

**DAVID BARR, JR., Box 3, Renfrew, Ont.**

**LARGE ENGLISH YORKSHIRES**—We have a limited number of choice young pigs for sale, bred from our choicest sows, and got by the imported boars, Dalmey Joe 13577 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat Stock Show last March for the best dressed carcasses, and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders.

**JOSEPH FEATHERSTON & SON, Streetsville, Ont.**

**WILLOWDALE BERKSHIRE HERD.**—Don't forget while at Toronto and London Exhibitions to see the wonders of the world, the Berkshire pig show. Everybody welcome. The show is free.

**J. J. Wilson, Prop., MILTON, ONTARIO**

**Newcastle Tamworths and Short-horns.**—For Sale: 90 spring pigs, both sexes; boars fit for service; sows ready to breed and sows bred to Imp. Cholderton Golden Secret, descendants of Colwill's Choice and Newcastle Warrior, both Toronto champions. Also several Short-horns; females of high class. Prices right, quality considered.

**A. A. COLWILL, Newcastle, Ont.**

**Maple Leaf Berkshires**

Pigs 10, 12 and 13 weeks old, both sexes. Lengthy, well marked, large bone and well haired.

**JOSHUA LAWRENCE, OXFORD CENTRE, ONT.** BRITISH DUKE (IMP.) Woodstock Station.

**CHESTER WHITE SWINE**

AND SHROPSHIRE SHEEP. Write for prices.

**W. E. WRIGHT, GLANWORTH, ONTARIO.**

**Duroc-Jersey Swine**

and Leicester sheep. 25 one and two shear ewes, 3 shearing rams, and this year's crop of ram lambs. Also sows in pig, and sows ready to breed; boars fit for service, and pigs ready to wean.

**Mac Campbell & Sons, Harwich, Ont.**

**ELMFIELD YORKSHIRES**

50 young pigs for sale, both sexes. Young sows bred to imported boar, also sows to Canadian-bred boar due to farrow about 1st October.

**G. B. MUMA, Ayr, Ont. Ayr, C.P.R.; Paris, G.T.R.**

**OHIO IMPROVED CHESTER WHITES.**—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. **E. D. GEORGE, Putnam, Ont.**





## This shows the Fused Joint idea in "Hecla" Furnaces

No dust can escape through "Hecla" Fused Joints. They are absolutely tight and will remain so. That is what makes the "Hecla" the safest and most sanitary furnace to buy. It supplies only pure and fresh warm air, without a trace of gas or dust.

The "Hecla" is economical in the consumption of fuel. The Steel Ribbed (Patented) Fire Pots, which have twice as much radiating surface as any other style of fire pot, draw a great deal of heat from the fire that in other furnaces would be sent out of the chimney.

Our catalogue tells more about these and other exclusive features of "Hecla" construction.

59

Clare Bros. & Co. Limited, Preston, Ont.

## Broken-down Men

Take This Belt for What it is Worth, Wear it Until You Are Cured, Then Pay Me.



You who are old while young, whose vitality is gone, whose nerves are shattered, who find life burdensome, I can cure you with electricity, as I have cured thousands of others. I can make the blood circulate in your veins, the nerves tingle with vigorous life, and the spirit of energy show itself in every move of your body. My

### DR. McLAUGHLIN'S ELECTRIC BELT

is a Model, a Modern Home Treatment

My twenty-six years of study are shown in this grand appliance. You wear it with comfort at night, and the ELECTRICITY infused in the body cures all Nervous, Kidney and Bladder Troubles, Varicocele, Rheumatism, Lame Back, Indigestion, Weak Stomach, and all form of pains and weakness. It restores the life while you sleep, and must cure.

**You Run No Risk in Using My Belt. I Take All Chances.**

Do you doubt it? If so, any man or woman who will give me reasonable security can have my Belt, with all the necessary attachments suitable for their case, and they can

#### PAY WHEN CURED.

Dr. McLaughlin:—  
Dear Sir,—I am very pleased to say that I have derived great benefit from your Belt. I have given it a good trial and am glad to say that I am not troubled at all with my back now, and shall certainly recommend it to any of my friends suffering from trouble of the back. You are at liberty to make what use of this you see fit. Thanking you for the prompt manner in forwarding the Belt, and the interest you have taken in my case, I remain, Yours thankfully,  
SIDNEY GRANT.

#### Free to You.

Get my 80-page book, describing my Electric Belt, with illustrations of fully-developed men and women, showing how it is applied.

If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon.

Consultation free. Office hours—9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

DR. M. S. McLAUGHLIN,  
112 Yonge St., Toronto, Can.

Please send me your Book, free

NAME .....

ADDRESS .....

SUBSCRIBE FOR "THE FARMER'S ADVOCATE AND HOME MAGAZINE."

### GOSSIP.

A students' judging competition will be held in connection with the third annual National Dairy Show at Chicago, December 2 to 10, inclusive. Any student of an agricultural college may enter. Six institutions have already expressed a desire to send teams to the contest.

T. S. Cartwright, the extensive and highly successful feeder at Marshalltown, Ia., shipped to Chicago, on Sept. 18th, 280 head of hogs that averaged around 302 lbs. and for which Clay, Robinson & Co. secured \$7.37½. These swine were mixed barrows and sows and were in prime condition. The lot netted him at Chicago \$5,954.33, a mute testimony of what can be done where the raising and feeding of hogs is done on a scientific plan. Up to that day it was necessary to go back to April, 1903, to find a time when so large a bunch of heavy swine sold so high in Chicago.

Radiol, an English preparation advertised in this paper for the treatment of such blemishes on the legs of horses as sprained tendons, windgalls, bog spavins, capped elbow, big leg, enlarged glands, etc., has gained a very wide reputation for its efficiency in curing these and other complaints without leaving scars. No blister, no laying up, and no hair removed, while effectually doing the work of removing by radiation, the blemishes which disfigure and reduce the usefulness and selling value of horses, are among the claims made for this specific. Enquire of your druggist for it, or write the Canadian Agent, Thos. Reid, 9 Nicholas street, Montreal, Que.

An old goat-herd fell asleep, and one of his animals pulled out the contents of his knapsack, and among other things devoured a £50 note, constituting the man's savings during many years. The goat-herd travelled to Berlin, and went to the offices of the German Imperial Bank, where he put before the officials a strange, pulpy mass, wrapped up in leather, and asked them to examine it for the purpose of establishing the fact that it contained the remnants of a £50 note. It was the interior of the unhappy goat, which had had to pay for its fondness for dainties with its life. The officials sent the deposit to an expert for examination, and after he had given his verdict that the goat-herd's story was true, the old man was paid.

#### R. CORLEY'S SALE OF SHORT-HORNS.

As announced last week, Mr. R. Corley, of Belgrave, Ont., will, on Wednesday, Oct. 7th, at his farm, 2½ miles from Belgrave Station, sell his entire herd of 33 head of Shorthorn cattle, including his stock bull, Imp. Scotland's Challenge =50086=, calved November, 1902, sired by Daybreak, a son of the Missie bull, Scotch Thistle, dam Boyne Lady (imp.). Scotland's Challenge is a very large bull, red and little white, on the shortest kind of legs, and is an ideal dairy type, a bull that should be eagerly sought by owners of dairy-bred Shorthorns. All the young things in the herd up to two years of age are sired by him. Other bulls that have been at the head of the herd were: Roan Duke 35th =18465=, by Duke of Hillsdale, dam Roan Duchess 52nd; Baron Knightley 9th =14277=, by Imp. Ingram's Chief, dam Knightley Grand Duchess 13th; Strathallan Victor =27582=, by Lord Willoughby, dam Rosina Strathallan, and Red Ribbon =26599=, a son of Imp. Blue Ribbon. All these bulls were personally selected by Mr. Corley for their dairy conformation. The herd are all descended from the two English dairy-bred cows, Imp. Princess =419=, and Imp. Rosina =481=. They are a large, well-put-up lot of cows, carrying grand, big, even udders, and certainly are very heavy milkers, the most profitable kind of cattle for the ordinary farmer. Nearly all the cows have calves at foot. In younger things are four two-year-old heifers, six one-year-old heifers, four yearling bulls and five bull calves. Don't forget the date, Oct. 7th.

#### HILTON HOLSTEINS AND TAMWORTHS.

Almost within a stone's throw of Hilton post office, four miles north of Brighton Station, is Hilton stock farm, the property of Mr. R. O. Morrow & Son, the well-known breeders of Holstein cattle and Tamworth swine. Mr. Morrow never has had any of his Holsteins officially tested, but in other hands they have showed up remarkably well. They are never pushed, and on common feed give from 50 to 60 lbs. a day, and two-year-old heifers 40 lbs. a day. They are a big, well-developed lot, and eagerly picked up by buyers, who know a good type when they see it. Nearly all the younger things are by the present stock bull, Sir Mutual's Butter Boy 2nd, whose dam has a 7-day butter record of 19 lbs. as a four-year-old, and sire's dam has a record of 24 pounds. For sale are six yearling heifers and several younger ones, an exceptionally choice lot, from which may be expected great things. Mr. Morrow places great confidence in his herd of Tamworths, which is one of the best in Canada. About a dozen sows are now in breeding, a lot that in weight runs from 600 to 900 pounds, and put up in strict conformity to the ideal bacon type, among which are two imported last year, one of them imported Cholderton May, winning the female championship at Toronto this fall in the strongest class ever shown there. Out of her for sale are three sows and four boars, five months old, sired by Diamond King, a 1,000-lb. son of Imp. British King, and winner of first prize at Toronto last year, and second prize this year. Here is a lot of fresh blood for Tamworth breeders that should not be long in Mr. Morrow's stables. Second to Diamond King in service is the splendid type of boar, Imp. Cholderton Golden Star, imported last year, and proving a phenomenal sire. For sale are both sexes and all ages, pairs not akin.

#### TRADE TOPICS.

The attention of sportsmen, and farmers generally, is directed to the advertisement in this paper of the New Model, No. 24 Marlin repeating shotgun. The shooting season is approaching, and the importance of being well-equipped for the sport is patent to all. The Marlin repeater is noted for strength and simplicity of construction, and the facilities for quick shooting. See the advertisement and send for descriptive catalogue to the address of The Marlin Firearms Co., 183 Mechanic street, New Haven, Connecticut.

#### "DOES QUALITY COUNT WITH YOU?"

An old proverb says, "the secret of success is constancy of purpose," the truth of which is completely demonstrated in the case of the Frost & Wood Company, of Smith's Falls, Canada. The success of this company has been one of the most notable in the Dominion, and they ascribe it to their constant adherence to "quality." During the seventy years they have been manufacturing farm machinery, this firm has never lost sight of "Quality." From the smallest bolt to the varnish and paint, the material used in the construction of their machines has always been the best procurable for the purpose. Nothing that would improve their plant has ever been considered too expensive to instal. The most skillful workmen have been employed. And every machine has been thoroughly tested before leaving the factory. Such a rigid adherence to "Quality" has brought its reward in the confidence the farmers of Canada repose in Frost & Wood products. From the Atlantic to the Pacific, wherever harvesting, haying and cultivating machinery is used, you will hear Frost & Wood machines spoken of in the highest terms. The man who buys a Frost & Wood binder, mower, harrow, etc., shows that he is a firm believer in "Quality"—and knows how to invest his money wisely. "Does Quality count with you?" The Frost & Wood Company believe that it does, and are therefore using large space in this publication to tell you about the "Quality" of their products. The firm is strictly reliable. Its advertisements are interesting, and all farmers should make it a point to read and study them carefully.