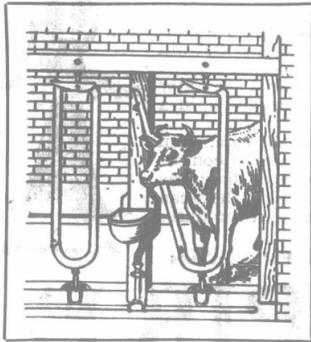


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The Metal Shingle & Siding Co.,
LIMITED,
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SYNOPSIS OF CANADIAN NORTH-WEST HOMESTEAD REGULATIONS.

ANY even numbered section of Dominion Lands in Manitoba, Saskatchewan and Alberta, excepting 8 and 26, not reserved, may be homesteaded by any person who is the sole head of a family, or any male over 18 years of age, to the extent of one-quarter section of 160 acres, more or less.

Entry may be made personally at the local land office for the district in which the land is situated.

The homesteader is required to perform the conditions connected therewith under one of the following plans:

- (1) At least six months' residence upon and cultivation of the land in each year for three years.
- (2) If the father (or mother, if the father is deceased) of the homesteader resides upon a farm in the vicinity of the land entered for the requirements as to residence may be satisfied by such person residing with the father or mother.
- (3) If the settler has his permanent residence upon farming land owned by him in the vicinity of his homestead, the requirements as to residence may be satisfied by residence upon the said land.

Six months' notice in writing should be given to the Commissioner of Dominion Lands at Ottawa of intention to apply for patent.

W. W. COBY,
Deputy of the Minister of the Interior.

N.B.—Unauthorized publication of this advertisement will not be paid for.

Binder Twine.

Central Prison Binder Twine will be supplied to farmers as follows:

600 feet per lb.,	11 1-2c. per lb.
550 " " "	10 1-2c. " "
500 " " "	9 1-2c. " "

These Prices are Net Cash.

The twine is put up in 50-pound jute sacks, and is manufactured from Select Fibre; Quality and Length Guaranteed.

Please specify at once what quality and quantity required.

Purchaser pays freight, and cash must accompany shipping instructions.

Apply J. T. GILMOUR, Warden,
Central Prison, Toronto, Ont.

The Maritime Stanchion

PATENTED 1906.

Has AUTOMATIC LOCK which is simple and sure. SWINGS FREELY so as to give the animal the utmost comfort. Holds animal absolutely secure. The simplest, safest, strongest and cleanest tie on the market. Send for illustrated folder.

BAILEY - UNDERWOOD CO.,
Limited,
New Glasgow, Nova Scotia.

THE SPICE OF LIFE.

A Buffalo man stopped a newsboy in New York, saying: "See here, son, I want to find the Blank National Bank. I'll give you half a dollar if you direct me to it." With a grin, the boy replied, "All right, come along." And he led the Buffalo man to a building half a block away. The man duly paid the promised fee, remarking, "That was half a dollar easily earned, son." "Sure!" responded the lad, "but you mustn't forget that bank directors is paid high in Noo-Yawk."

Man was not meant to live alone. Instances may be found here and there in which mere men avoid matrimony and live lives that appear to be successful and satisfactory, but, as a rule, a man needs a good, honest wife, who, in the sanctity of the home and in the intimacy of holy wedlock, will tell him that he is a born fool with a tendency to make a blithering idiot of himself. Nobody can do this for a man as effectively as his wife.

A duck which had faithfully stuck to business during the summer and laid several dozen large, fawn-colored eggs, complained that she was not appreciated. "See that hen over there?" said the duck; "she has not laid so many eggs as I have, nor so big, but she has books written about her and verses composed in her honor, while nobody says a word about me." "The trouble with you is," said a wise Buff Leghorna cock that was standing near, "that you do not tell the public what you have done. You lay an egg and waddle off without letting anybody in the neighborhood know it. If you want to eat any ice in this community, you must learn to advertise."—[Troy (Kansas) Chief.

NEW ENGLAND AMENITIES.

Two New England farmers met at the post office one morning:

"Mornin', Si."
"Mornin', Josh."
"My hoss is ailin', Si. What did you feed your'n on when he wus ailin'?"
"Benzine, Josh."
"Mornin', Si."
"Mornin', Josh."
Two days later:
"Mornin', Si."
"Mornin', Josh."
"Say, Si, my h ss d'ed."
"So did mine, Josh."
"Mornin', Si."
"Mornin', Josh."
"Under the Spreading Chestnut Tree,"
Everybody's Magazine for August.

SENTENCE SERMONS.

Daily duty may be the divine drill.
He takes heaven everywhere who has the happy heart.
The way to heavenly mansions may lie through mean tenements.

You cannot tell much about your crown by the size of your hat.
Man, in the making, can only be measured by the Master Workman.

Be patient; card-houses are built in an hour; cathedrals take the centuries.
Stepping stones to success cannot be built out of broken commandments.

Where ambition plows the heart, you can always plant the seeds of hatred.

Dark days always last longest and look blackest to people who frown at them.

Some men think that they are weary in well-doing because their jaws ache.

Nothing you can do pleases the devil more than your attempt to do nothing.

The soul gets little provender out of a performance that looks only to the salary.

When furniture becomes all-important to the faith it has reached its own funeral.

The place where temptation is fiercest is where the brave can learn to be most faithful.

Whatever helps us to think more kindly of another, helps to bring in the kingdom of heaven.

It is easy to get to think that you are warming the world when you are roasting others.

Men who take pains to be faithful to the fashions are not likely to be fashionable to the faithful.

Some men never find anything they can stick to until they get in the slough of despond.

Rex Flintkote ROOFING

DAIRY BARN MAJOR DAVIS GRAND ISLE, VERMONT. COVERED WITH REX FLINTKOTE ROOFING

"Thoroughly Adapted for any Farm Building."

The practical farmer here quoted states from experience this truth about Rex Flintkote Roofing. Your roofing problems now were his a little while ago. He experimented just as you're experimenting—wasting money on roofs that invite fire, that expose products to the weather, that damage the buildings themselves and that require frequent replacing. He is at last satisfied because he found

Rex Flintkote Roofing

The test was severe—a dairy where heat, cold, dampness and dust must be kept out. Rex Flintkote Roofing did it. It won't warp, it clings close and fast, and has qualities that insulate against all weather extremes. It resists fire, being made of long-fibre wool, chemically treated, and an ordinary workman can lay it. But what are claims when THERE'S A PROOF:

"I am thoroughly satisfied with Rex Flintkote Roofing. I have sent you a picture of the barn from which you can see that it was a very difficult matter to put a roofing on a building of this shape and have it look well. Rex Flintkote Roofing wears well and makes an attractive roof in appearance when laid. I think that Rex Flintkote Roofing is thoroughly adapted for any farm building. Yours truly, (Signed) E. J. Parker, Grand Isle, Vt."

For those desiring decorative effects we offer a new red paint adapted to Rex Flintkote Roofing. Write us for sample of roofing to test with red-hot coal, also free book on roofing points. For 4c. postage, we will send another free booklet, "Making Poultry Pay."

J. A. & W. BIRD & CO.
20 India Street, Boston, Mass.
Agents everywhere

FARM LABORERS

To Manitoba and Saskatchewan

1906 \$12 for the going trip. \$18 additional for the return ticket, under conditions as below.

—GOING DATES—

AUG. 14 Stations south of, but not including main line, Toronto to Sarnia, including Toronto.

AUG. 17 Main line Toronto to Sarnia and stations north, except north of Cardwell Junction and Toronto on No. 1 Bay Section.

AUG. 22 From all points Toronto and east to and including Sharbot Lake and Kingston, and north of Toronto and Cardwell Junction on North Bay and Midland Divisions.

One way second class tickets will be sold to Winnipeg only. Representative farmers, appointed by Manitoba and Saskatchewan Governments, will meet laborers on arrival at Winnipeg. Free transportation will be furnished at Winnipeg to points where laborers are needed. A certificate is furnished when each ticket is purchased, and this certificate, when executed by farmer, showing that laborer has worked thirty days or more, will be honored from that point for a second class ticket back to starting point in Ontario, at \$12.00, prior to Nov. 1st, 1906. Tickets will be issued to women as well as to men, but will not be issued at half fare to children. Tickets are good only on special Farm Laborers' trains. For full particulars see nearest C. P. R. ticket agent, or write C. B. Foster, L. P. A., C. P. R., Toronto.

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are in use from coast to coast, and every one giving the best of satisfaction. Concrete blocks make the handsomest, most durable and cheapest building material. They are simply and quickly made on the Dunn Machines; and the cost of outfit is very moderate. Full directions furnished.

Write for catalogue to Dept. O.

THE JAS. STEWART MFG. CO., LIMITED, Woodstock, Ont.



Neither the HOTTEST day of August nor the COLDEST day of January affects the Carey Roof. In the process of its manufacture, the Asphalt Cement found only in Carey's Roofing, undergoes a secret chemical treatment, which renders it absolutely proof against heat or cold. Hence

CAREY'S ROOFING

forever retains its form, life and flexibility. Carey's Roofing resists fire, moisture and wind; is adapted to steep or flat surfaces; is easily and neatly laid on new buildings, or over leaky shingle or metal roofs without removing same. The Patent Carey Lap protects wall heads. Carey warehouses are located at convenient points all over the country, insuring you lowest freight rates.

Write for Free sample and beautiful booklet. Please mention the size of your building.

THE PHILIP CAREY MFG. CO.
Toronto, Ont.; London, Ont.; Montreal, Que.

20,000 Acres Wheat Land

In the Famous Goose and Eagle Lake Country, with Home-stands Adjoining.

If you have Western Lands and wish to sell, kindly furnish us with description of it, the price per acre and terms of sale, and we will undertake to find you a purchaser.

G. W. Blackstock & Co.,
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THE NEW HOME OF THE

Canada Business College,

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The only building of the kind in Canada built and used exclusively for business college purposes, and the finest equipment of the kind on the continent.



CANADA'S GREATEST SCHOOL OF BUSINESS.

Full term opens in the new building Tuesday, September 4th.

Our catalogues are free for the asking, and will tell you all about this splendid school, the finest of its kind on the continent, and the GRAND WORK IT HAS BEEN DOING FOR THE PAST THIRTY YEARS.

IF YOU CANNOT COME TO CHATHAM, and want to be a bookkeeper, stenographer or penman, take our home training by mail.

Catalogue E will tell you all about our home courses.

Catalogue F will tell you all about our training at Chatham.

Write for the one you want, addressing:

D. McLACHLAN & CO.,
Chatham, Ont.

P. S.—Mention this paper in writing.

There is a saying current in the city of New York to this effect, "You can always tell a Boston man, but you can't tell him much."

"Boss, Ah's lookin' foh work." "All right, there's a ton of coal on the walk that must be brought up." "But, boss, dat's no work foh a lady; wife does washin'."

THE SPICE OF LIFE.

Minister—I'm sorry to find you coming out of a public house again, Hamish, after all you promised me.

Hamish—Ay, sir, it's wonderful what an awfu' deceivin' thing this mist is! D'ye ken, I went in there the noo thinkin' 'twas the butcher's shop.

The Scot is proverbially careful with money, but if the following be true, he is more careful than we before believed. The other day a wild-eyed Highlander entered a chemist's shop, and asked for "Twa pennorth o' Rough on Rats. Awm sick o' this life," he gasped out.

He was informed that it was only sold in sixpenny packets. He looked long and lovingly at his sixpence, and then said: "Then Aw'l no commit suicide the noo."

In 1862 an intimate friend of President Lincoln visited him in Washington, finding him rather depressed in spirits as the result of the reverses then repeatedly suffered by the Federal troops.

"This being President isn't all it is supposed to be, is it, Mr. Lincoln?" said his visitor.

"No," Lincoln replied, his eye twinkling for a moment. "I feel sometimes like the Irishman, who, after being ridden on a rail, said, 'If it wasn't for the honor av th' thing, I'd rather walk.'"

Mark Twain had finished his speech at a recent dinner party, and, on his seating himself, a lawyer rose, shoved his hands deep into his trouser pockets, as was his habit, and laughingly inquired of those present at the society dinner:

"Doesn't it strike this company as a little unusual that a professional humorist should be funny?"

When the laughter that greeted this sally had subsided, Mark Twain drawled out:

"Doesn't it strike this company as a little unusual that a lawyer should have his hands in his own pockets?"

When the late Senator Wolcott first went to Colorado, he and his brother opened a law office at Idaho Springs under the firm name of "Ed. Wolcott & Bro." Later the partnership was dissolved. The future senator packed his few assets, including the sign that had hung outside of his office, upon a burro and started for Georgetown, a mining town farther up in the hills. Upon his arrival he was greeted by a crowd of miners who critically surveyed him and his outfit. One of them, looking first at the sign that hung over the pack, then at Wolcott, and finally at the donkey, ventured:

"Say, stranger, which of you is Ed?"

In the train between Rome and Naples some friends were smoking and discussing education in England and Italy. One of them suddenly said:

"I bet you \$100 that there are 100,000 people in London who cannot speak a word of English."

All accepted the bet, so he added:

"And I will bet you \$200 that there are another 400,000 persons who can neither read nor write."

This also was accepted and proof demanded.

The first man thereupon drew out a list of statistics showing that in London there are 100,000 children under one year and another 400,000 of less than four years. The bettor left the car rich.

A Texas correspondent of Law Notes tells how an obstinate jurymen was circumvented by his fellow judges of the facts. The offense charged was assault with intent to murder. After the jury had been out about two hours, it returned the following verdict: "We, the jury, find the defendant guilty of aggravated assault, and assess his punishment as twenty-five dollars fine, and herewith pay the fine." On inquiry as to the meaning of the last clause of the verdict, it came out that eleven of the jurors had agreed that the defendant was not guilty, but the twelfth doggedly hung out for a conviction for aggravated assault, and would not consent to a punishment less than a fine of twenty-five dollars. Finding it a hopeless task to bring over the obstinate one to their way of thinking, the eleven finally decided to agree with him, and "chipped in" enough to pay the fine.

It's The Easy Separator

What's the use of doing a thing in the hard way when there's an easy way that is better?

What's the use of breaking your back turning a hard cream separator when you can get an easy turner that will do better work?

What's the use of taking an hour to clean a separator when you can get one that you can clean thoroughly in a few minutes?

What's the use of having tainted, off-flavor cream, when you can have cream of perfect flavor? No use, of course! Well, then, why don't you get the separator that turns the most easily, that is the most easily cleaned, that can be kept sweeter and purer than any other, that produces the highest quality cream?

That separator is the **Improved Frictionless EMPIRE**



as you can readily see for yourself, if you will compare its construction with others. It's easier than other cream separators in every way, because it is so much simpler. That's the whole secret.

In the Empire the work of separating is done in a small, light bowl, with a few light cones with perfectly smooth surfaces, instead of the heavy bowl with many complicated interior devices used on other separators.

Being lighter the bowl requires less machinery and less labor to turn it. Having fewer parts and being perfectly smooth, they are much more quickly, much more easily, much more thoroughly cleaned.

Being easily kept clean, there is no danger of off-flavor cream.

I can't show you the Empire construction here, but if you will go to an Empire agent or write to the manufacturers, they will send you a catalogue which shows just how the Empire works, and you can see for yourself.

That's better than a lot of talk, anyway.

Write to-day. Tell how many cows you keep and what you do with your milk, and they'll send you some mighty interesting books on dairying. Address

Empire Cream Separator Company of Canada, Ltd.,
Toronto, Ontario.

Get The Empire Books. Ask for the one you want. 1. Full catalog and price list. 2. Dairy Results—Dollars. 3. Money and the Way to Make It.

More Money for Your Grain

If You use My Chatham Fanning Mill Pay Me as It Saves For You

You can get a Chatham Fanning Mill and pay for it as it saves for you.

I sell on liberal long time terms to all responsible parties.

You can get first price for your grain if you clean it with a CHATHAM FANNING MILL. It will weigh more to the bushel.

A CHATHAM FANNING MILL takes Cockle and Oats out of Wheat, or any one kind of grain from another.

It takes all chaff, weed seed and withered kernels out of seed-grain.

You don't get "mixed crops" nor "sow weeds" if you clean your seed with a CHATHAM FANNING MILL.

It will save you money and become a source of profit, for you can sell seed grain to others instead of buying it yourself.

A CHATHAM FANNING MILL will clean Barley, Wheat, Oats, Timothy, Clover, Millet, Flax, Peas, Beans, Grass Seed.

Wheat, Oats, Timothy, Clover, Millet, Flax, Peas, Beans, Grass Seed.

Address all mail to

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When a man buys a Tudhope Carriage, he knows he has gotten a full money's worth. He knows he has bought the best materials—put together by Tudhopes who have been born and raised in the business. The very name Tudhope means money to every man who buys Carriages.

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is daily adding fame to the Tudhope Carriage Makers. Corning body. Side spring gear—double reach with full length steel plates. Bell collar steel axles. Dayton fifth wheel. Quick shifters. Double bar dash rail, seat handles, and hubcaps nickel plated on brass. Write for free illustrated catalogue.

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The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established
1866.

VOL. XLI.

LONDON, ONT., AUGUST 9, 1906.

No. 724

EDITORIAL.

Plowing Matches.

One thing strikingly noticeable in going through the country in these days is the indifferent character of the plowing done on most farms. Time was when farmers' sons and servants were taught that straight furrows and neat, uniform work was the only kind that was creditable, and that slovenly work in plowing was a mark of a poor farmer; but now neat plowing is seldom seen, and carelessness in this regard excites but little comment. Apart from the difference in appearance notable between good and inferior work, and apart from the aptness of the adage, "What is worth doing is worth doing well," there is a real and substantial advantage in good plowing, as we shall endeavor to show. The object in plowing is to move and mellow the surface soil to a uniform depth, to invert, and leave it in the best condition for being disintegrated and reduced to a fine tilth by the implements used to follow the plow. It therefore follows that if the land is unevenly turned, some parts deep and others shallow, the furrow wide in some places and narrow in others, some parts are not properly broken up, a "cut-and-cover" class of work is the result, and the implements of cultivation which follow the plow cannot catch and move the soil to a uniform depth or in a thorough manner, and the consequence is an imperfect preparation of the seed-bed, imperfect germination of the seed, defective nourishing of the plants, a reduced crop yield, and an uneven surface, rendering the work of harvesting machinery less efficient and more tiresome to the teams. Since plowing is the base of all cultivation, and cultivation the essential to success in crop-growing, it follows, as a logical sequence, that good plowing is one of the most important of farm operations, and should be done in the most thorough and effectual manner possible, in order that the best results may be secured.

In order that the young men of the farm may be stimulated, and induced to take a pride in this part of their work, the question arises whether the plan of holding competitive plowing matches, which more generally prevailed some thirty years ago in Ontario, might not be profitably revived and encouraged. There is no doubt that these matches were effective in inciting not only those who participated in them, but also those who were spectators, to greater care and effort to do their work in a workmanlike and creditable manner, and the observer can readily distinguish, as he travels through the country, the better quality of plowing and more general neatness of all the work on the farms in the sections where plowing-matches were formerly held, and where men and boys made for themselves and district a reputation for first-class plowing.

The writer recalls the case of a farm in Central Ontario where the father and the sons were prize-winning plowmen, and where, on visiting the farm, it was distinctly noticeable that not only in regard to plowing was neatness and thoroughness observed, but the same spirit of pride in doing the work well was manifest in everything about the place, even to laying the rails of a snake fence with their ends even, cutting the stakes off at an equal height, and piling a heap of unused rails with their ends plumb. Such an education in thoroughness will prove wholesome and helpful to a boy or man in all the relations of life.

It is true that the style of plows used and the kind of work seen at the matches of years ago may not be considered best for the changed conditions of the present, but these may be provided for in the rules and regulations as they are in Manitoba, where the requirements are, in many respects, different from those in vogue in the East, and where plowing-matches are becoming increasingly popular, and are having a good effect as an incentive to more neat and thorough work. It is generally conceded that the autumn is the most suitable season for holding plowing-matches in the older Provinces, and now is a good time to consider and discuss the desirability of organizing and arranging for such. We offer the suggestion that the officers and directors of local Farmers' Institutes might well take the initiative in the matter, as they have the necessary official machinery for such a movement. We shall be pleased to have our



Turning the Sod.

readers take part in a discussion of this subject through the medium of our columns.

The value of ideas lies in their application. A man may have ever so bright a brain, with well-balanced judgment to boot, but unless he gets down to hard work his talent will do him little good. Unused talent is like a miser's money lying in the vault—with this difference, however, that when the miser dies his property is liable to be discovered and used. When a gifted man departs from the terrestrial sphere, his genius goes with him. Give to the world the best that is in you; if you do not give it now, you never will.

The Fall Fairs.

The autumn agricultural and industrial exhibitions, displaying representative specimens of the best products of the farm, the factory and the studio, constitute at once an educative institution and a welcome relaxation from the toilsome tasks of the harvest, and the shop, and are well worth all they cost in money and the care expended in their management. Probably no other influence has done so much to stimulate the spirit of improvement in the character of our live stock and other farm products, and the invention and introduction of mechanical contrivances for facilitating the work of the farm and lessening the labor connected therewith. The spirit which moved men of influence in this country half a century ago to organize agricultural exhibition associations, and offer liberal encouragement for the importation and dissemination of improved stock and the introduction of labor-saving devices, challenges the admiration and gratitude of the present generation. And the good work goes on in ever-widening circles of area and influence. The boundaries of Agricultural Canada have extended towards the setting sun, and the little one has grown into a giant, with promise of yet greater development in the comfortable home-making of a happy and contented people, where there is room for millions more to work out a desirable destiny.

The midsummer exhibitions of the mid-Western Provinces, held early in the season, owing to the comparative lateness of their harvest and the rush of farm work in the fall, have been more than usually successful, and the prospects for the Eastern shows are big with promise. The Toronto Industrial, claiming the title of Canadian National, is now by common consent the greatest annual exhibition of the kind on the American continent, in extent, in variety, in excellence and influence. With buildings and equipment insured for \$3,000,000, an ideal location on the lake shore, a prize-list of \$45,000, and the certainty of a record display of high-class horses and other stock, including a contribution from the Royal Farms of His Majesty the King, the Toronto show this year offers attractions greater than ever before.

The London and Ottawa exhibitions, always attractive in themselves and in the beauty of the cities in which they are held, with added buildings, increased prize-lists, and improved facilities, have every prospect of a successful outcome, while the Dominion Exhibition, to be held at Halifax, down by the sounding sea, with a \$50,000 Government grant, enlarged grounds, extended building accommodation, and a liberal prize-list, should draw visitors from all sections of the Maritime Provinces, as it will exhibit from far beyond their boundaries. Later on, British Columbia, with her outlook westward on the Pacific Ocean, will present more than the usual excellent exhibi-

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

LONDON (ENGLAND) OFFICE:
W. W. CHAPMAN, Agent, Mowbray House, Norfolk Street,
London, W. C., England.

1. **THE FARMER'S ADVOCATE AND HOME MAGAZINE** is published every Thursday. (32 issues per year.) It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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13. **ALL COMMUNICATIONS** in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, CANADA.

tion of her products of the farm, the dairy, the orchard, the mine and her fisheries, at the Provincial fair in New Westminster, one of the best-equipped and most ably-managed exhibitions in the Dominion. The dates for these leading shows are published elsewhere in this paper, together with many of lesser note, but of proportionate influence and usefulness in their own sphere, most of which well deserve the support and encouragement of the people in the sections in which they are held. Farmers and their families should plan to take advantage of the opportunity for the recreation, after the stress of the season's work and the harvest-home, which the fairs afford.

As Others See Us.

No man really sees his peculiarities of character exactly as others see them. Some think they do, and some think they know themselves better than others know them; these are the most sadly deceived of all. A few pretty level-headed people are conscious of certain idiosyncrasies of which their friends have made them aware, but these are not the self-centered ones who are so positive they have an accurate idea of their own characters. Put it down as a general rule that the persons whose minds dwell habitually upon their own virtues and shortcomings, attach an exaggerated importance to the points in which they excel, and look with uncommon charity upon the points wherein they fancy their faults lie. One thing, too, they are almost sure to do, they fail to appreciate their own colossal self-centeredness, not to say conceit. It is a good thing to ascertain one's peculiarities, and quietly endeavor to overcome them; but it is very much better to accept a friend's verdict than one's own sizing up. No man can judge his own child; much less can he judge himself. It is mischievous to let one's mind dwell too long or frequently upon himself. Worst of all is it to be continually parading the self-

drawn character-sketch before others. Conceit is a dangerous and obnoxious parasite, which fattens alike upon flattery and opposition. The best treatment is starvation. Think not of yourself, but of others.

Is the Road Grader Misused?

A good deal has been said officially and otherwise regarding the advantages of the graders in municipal roadmaking. Properly used, they are a labor-saving implement, but from our observations in different parts of the country, we are satisfied that they are becoming greatly misused, and their operation is liable to degenerate into a sheer make-shifting waste of money. We have seen graders working, the outfit consisting of a traction engine, a team of horses and two or three men, involving an expenditure of probably \$15 per day, and all that they accomplished was to scrape up a few loose stones and some dust into the center of the roadway, spoiling it, and sometimes turning the edges into the ditch, tending to fill the latter and make drainage still worse. The money thus wasted should have been spent in opening up ditches and putting in culverts at crossroad intersections so that the water could get away, and where the crown was in good condition, applying a good coat of gravel. Some municipal authorities appear to have got it into their heads that, once the grader was purchased, all the rest was easy and the road trouble was solved. We are quite satisfied that in a few years the last stage will be infinitely worse than the first, and the ratepayers will have practically no roads as the result of such costly blundering.

In the first place, the work to be done in the season should be carefully planned early in spring, after a personal examination by the road commissioners, councillors or committee, equipped with some knowledge and experience in roadmaking, and, once a piece of work is begun it should be completed, instead of going in a hop-skip-and-jump fashion from one part of the municipality to another. The work ought to be done as early as possible, before the earth becomes hopelessly hard. After the work is laid out systematically, then the all-important point is to put the machine in charge of a competent operator, capable of following instructions. This is a subject of so much vital concern to the people whose money is being spent, that we should like to hear from municipal authorities and others as to the results of their experience with the grader, and how it can be most effectively and economically used in road construction and repairs.

Where Farm Labor Counts for Most.

Food for thought is to be found in some examples cited recently at a Kentucky convention by Prof. Knapp, who undertook to demonstrate the advantage of the exercise of mental faculties in connection with manual labor.

The Iowan is taken as an example of the higher educated, more intelligent class of farmer. In Iowa, agriculture yields to each man who works at it one thousand and eighty-eight dollars annually, Vermont four hundred and seventeen, South Carolina one hundred and forty-seven, and Alabama one hundred and fifty. Nor is this due to any particular or relative difference in the fertility of the soil. Iowa has four horses for each of her farm workers to use, while South Carolina has one mule for every two men. Five times the amount of power is used for cultural purposes in Iowa as in Carolina, and the returns are eight times as great. Unconsciously, the Iowan conducts his business in accord with the law of increasing returns; that is, he is demonstrating that the returns for his work go on increasing out of proportion to the value of the labor he expends, and that course is open and imperative for us if we are to attain to greater average productiveness.

The Carolinian is an example of the poorer class of farmers, who invariably do a little less work on their land than will result in even average returns, and from the fact that they have only half a horse to each man, we must conclude that very little mechanical ingenuity is called into play.

Our Western Letter.

By the time this reaches the readers of "The Farmer's Advocate," the leading shows of the West will be over. We are early in this business out here, for the Westerner does not like to attend shows in harvest time, and threshing follows close on harvest, and so it's a case of "now, or never." Every year shows a marked improvement in nearly every class of stock. Heavy horses are the long suit of many of the ranchers, and at one small show—such as your township show in Ontario—there were close to three hundred entries. The Shorthorn men are also coming strong, and many a keen contest was witnessed in the ring this year. Herefords always were a leading class in the range country, and of late years they have gathered strength. Altogether, the outlook for live stock seems exceedingly bright. One strong feature of the shows in Alberta was the effort made to furnish educational demonstrations of interest to the people. The Provincial Department of Agriculture provided experts with full equipment for demonstrations in poultry-raising, feeding and management; weeds, identification and destruction; dairying and milk-testing; and, for the ladies, cooking and domestic science. All day long the tents were crowded, and it is quite evident that, though they may not do as they were told, yet the people were at least very eager to listen and to learn, and that is the first step in the right direction. When people lose faith in old methods there is hope for them—the first doubt was the womb and cradle of progress.

"The Farmer's Advocate" has lately seen visions of mange. It has brought this nightmare fresh from the range, and turned it loose on the people of Ontario. I am vaguely wondering where you found that bad case that was displayed so prominently in your columns a few weeks ago. I have been in the heart of the range country for some time now, and have never seen a single case. Perhaps this exists in the minds of the Ontario people, as does the idea of diseased Canadian cattle in the minds of the British public. The fact is that compulsory dipping has cleaned the disease out of the country, and at the present time it is practically non-existent. When you speak of an embargo against our products, it is well to remember that two can play at that game, and the importation of your scab apples might well be restricted, in order to prevent injury to our growing fruit industry in the West. This is the healthiest country in the world for horses and cattle. We have long sunshine, clear air, and good food for man and beast. Why shouldn't we be healthy?

But still, "Sandy Fraser" doesn't like the West. Years ago he came out here and looked it over. He lacked faith, and returned. Really, away down deep in his heart he is sorry for it, sorry that he did not stay and profit by the country's progress; but in a spirit of sourness at his own mistake, he expresses his gratitude at the fact that he bought a return ticket. We, too, are glad. There is no place in the West for men of small faith and narrow vision, and right good cause have we for congratulation when men of that class buy return tickets and go back to their native habitat amid the moss-covered stumps and snake fences of the good old county of Glengarry.

R. J. DEACHMAN.

A Field it Pays to Work.

The greatest field to cultivate is the mind. Minds vary as do areas of real estate, but in either case the harvest usually depends more upon the cultivation, and feeding than the character of the original soil. Land may be impoverished or improved; so may the mind. Deterioration or improvement does not really affect the potentialities of the land, but merely its immediate productiveness. If run down it can be built up again, and vice versa. To a certain extent this principle applies in the cultivation of intellectual faculties, but as the span of human existence is short, and as one's life is judged not by a year's production in his prime, but by the total fruits of a lifetime's efforts, he cannot afford to work many years at low pressure. The possibilities of the brain are such that one may till it industriously for at least half a century, steadily increasing the harvest year by year.

Pleased with Book on the Plank-frame Barn.

Received premium (book on plank-frame barn construction) with thanks, and think it will be a great boon to farmers intending to build. I take much pleasure in reading "The Farmer's Advocate and Home Magazine."

Lambton Co., Ont. W. H. NORTHCOTT.

HORSES:

Clydesdales at Winnipeg.

The exhibit of Clydesdales at the Winnipeg Industrial last week was of the "on-and-off" variety, some of the classes being well filled and others light, and the individuals ranging from world-beaters to ordinary stock. There have been better exhibits of stallions, but it is doubtful if at any show in Canada or the States there has been a better display of females. Several importations of fillies during the past year have wonderfully improved the Clydesdale representation in the West. It is indeed a rare thing to have a winner at the Royal (England's best show) and the Cawdor-cup female meet in a Canadian show-ring, as was the case at Winnipeg. The show was also noticeable for the number of new exhibitors and the high quality of the stock they brought out. The championships, and many of the top prizes, were won this year by men who have never before figured to any extent in the horse-ring. The work of the judge, Mr. J. M. Gardhouse, of Weston, was univorsally satisfactory, and the spirit in which his awards were received was more than a credit to the owners and groomers.

The senior section for stallions numbered eight, and was headed by Bryce's (Arcola) Perpetual Motion, the Hiawatha colt, which won first in his class last year at the Highland. Considerable has been said in the press about this horse, and Mr. Bryce's females, as he is well known to horsemen. He was shown in nice bloom, and has the best of show-yard manners. The past year has improved this horse considerably. He has the quality of the aristocrat, and is built on the most approved lines, unless it be that his back would be improved by a couple of inches less length. Shoulders, chest, middle and rump fill the eye pleasantly, and he propels himself grandly. Summit Prince, by Prince Alexander, stood next him. He is owned by the Swan Lake Association, and has developed into a grand horse in their hands. He is a very solid, closely-knit horse, a true goer, with springy joints, fine large feet, but might have flatter and cleaner bone. He is a rare good sort. The next place was taken by John Graham's (Carberry) Storm King. Between this horse and the winner there was very little difference, and it was chiefly in bloom, style and character. In conformation he is a hard horse to fault; feet and ankles are right; he has a beautiful contour and goes true. Another of Graham's importations got into fourth place. This was the roan, Masquerader, a Hiawatha horse, owned by Wm. Bailey, of Carberry. This type of horse is very popular, having lots of substance; hard, clean bone, a well-turned body, but a little lacking in style. King Dick, owned by Barron, of Purves; Gem Prince, W. Sporle, Winnipeg; Stewart's Pride, J. T. Douglas, Swan River, and Silver Prince, W. S. Adams, Morden, were the remaining entries. An unfortunate misunderstanding with the railway company was responsible for the non-appearance of the Napinka horse, Show King, and several Woodend Gartley yearlings.

The champion Clydesdale stallion of the show came out in the two-year-old section, in Sir Wm. Van Horn's Lord Hedwall, which the manager of the Selkirk farm imported this summer. He is a Baron's Pride colt, and looks it every inch. Big for his age and well matured, yet he gives promise of much more growth. He is very flash in his limbs, open at the hoof heads, and as keen and snappy a mover as one could wish. His real victory was in winning the championship, as the colts shown against him were quite in the rough. He beat Perpetual Motion in the "whipcordy" appearance of his legs—although the Arcola horse is clean—and, possibly, in the shortness of back. The back, by the way, was the only thing in Lord Hedwall we heard adversely criticised; some thought it being a little down. Perhaps so, with perfection as the standard. A good son of Baronson, one of the most highly esteemed sires in Scotland, stood second in two-year-olds. This was Graham's Baron Graham, shown in keeping condition, but with a lot of promise for the future. He has the appearance of a valuable horse, and his breeding certainly commends him. A. and J. Morrison, of Home-wood, landed up in third place with Majestic Prince, by Majestic (imported in dam), a very nice quality colt. The fourth and fifth positions were taken by two colts, Golden Willow and Willow Kim, bred by J. M. Webster, of Cartwright, by his horse Stobeross, the former out of an imported mare, Eyebright. These colts are a great credit to the breeder, who is one of the newer exhibitors.

The yearlings were not numerous. Geo. Mollard, of Regina, being first with his King Edward Baron, by Baron Bombee, a stylish colt, and J. B. Thompson second.

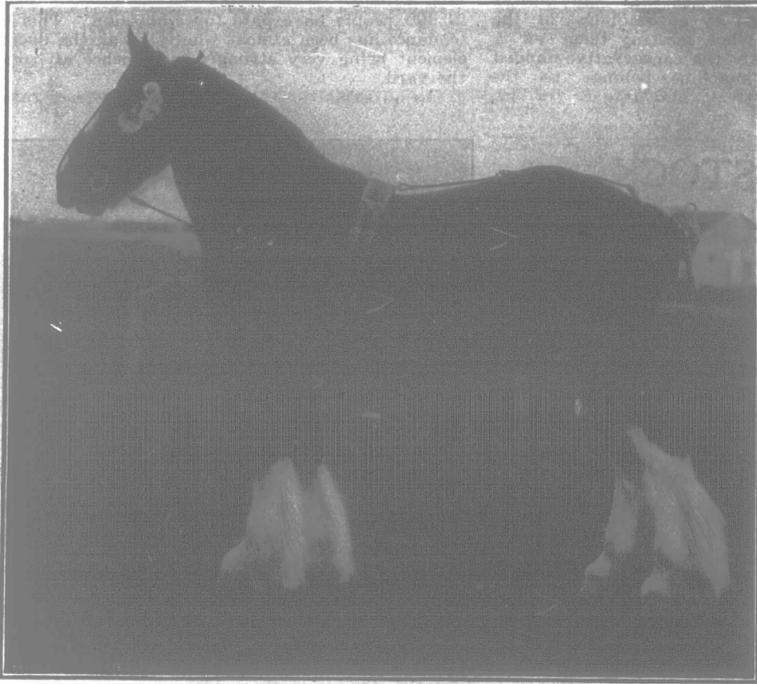
It was a continuous walk-over for Bryce in all the female classes except yearlings, where he did not show. The brood-mare section was won by his Ella Henderson, a four-year-old, by Lord Fauntleroy, and a very fetching piece of goods she is, clean and breezy looking, with plenty of style and character. A five-year-old, owned by Thompson, came second.

The pride of the Arcola stables, and the champion female of the show, Rosadora, was shown with the yeld mares. Since winning the Cawdor cup last year she has gone right along, and maintained her clean, fresh appearance. She is a splendid illustration of the modern type of Clydesdale; her sire is Marmion. Ordinarily, the second-prize mare would have made an exceptionally good leader for this class, as she has

everything to commend her, and was only behind the Cawdor-cup winner in smoothness of hips. She is quite drafty, yet clean and active, with plenty of style and true carriage. Her name is Baroness, by Lake View Laddie. In this class Wm. Barron, Lawrence O'Neil Co., and John Wishart, Portage, had forward mares that made the show a strong one.

The three-year-old filly class was a double victory for Bryce, his Lady Rotha (winner last year at the Royal) being first, and Lady Victoria, who beat her in Scotland, second. Lady Rotha has greatly improved since coming to Canada, and in the opinion of many horsemen, the judge would have made no error in awarding her the championship. She shows more bone than Rosadora, and, altogether, is heavier and more drafty. Lady Victoria is a lighter-boned, more rangy mare, and inclines more to the Scotchman's ideal. She is by Sylvander, and Lady Rotha is by Royal Favorite. John Wishart showed Muriel, by Gallant Pride, a filly imported by Carruth this spring, and won third, and made a good showing for the honor. Barron, of Purves, had out Kate of the Street, an imported filly, by Darnley Again, which crowded up the winners. Altogether it was the strongest three-year-old class of Clydesdales that has ever appeared at Winnipeg. It was a far cry, though, to the two-year-olds, which were a very ordinary lot. An Up-to-time filly, Sally of Greenfoot (Bryce's), a big, growing, uncouth youngster, got first, with Wishart's Jewel of Prospect, by Prince of Eden Grove, second, and the London people, O'Neil & Lawrence, third, with Grace Darling.

SHIRES.—There were only three exhibitors of Shires, J. B. Hogate, of Brandon; John H. Stout, Westbourne, and John Stoll, Oak Lake. The Oak Lake man showed the only entry in senior stallions, and



Two-year-old Shire Stallion, Dancesfield Stonewall.

1st and champion Oxford, and Bath & West of England Shows, '06. Owned by Mr. R. W. Hudson

afterwards got championship. In three-year-olds, Stout had a splendid type of draft stallion in Victor, an American-bred horse, by Scarliffe, which won first; Hogate's Falstaff 3rd (imp.), by Lynn Harold, a big, active, well-put-up horse, took second; and the same exhibitor's Natey Triumph won third money. J. H. Stout's Pedro and Sexon, a strong, tidy pair, had the two-year-old ring to themselves. Very few mares were shown, the championship being awarded Hogate's Violet (imp.), by Lord Cecil, a very superior sort of filly.

LIGHT HORSES.—The Standard-breds were quite numerous, and a few exceptionally fine specimens came out, but why there should be so much haggling over pedigrees in this breed passes understanding. What kind of a lithographer's exhibit would we have if the Clydesdale men, for instance, took their registration certificates to the fair in picture frames? Fanning, of Newdale, is breeding some beautiful stuff, and puts up a clean, honest show.

There was a lot of trouble picking the worst horse out of the aged Thoroughbred class. There were two types, and unsound horses representing each; finally, Millidge, of Boissevain, won, with a horse by Wickham, and the others should not be named in polite society.

HACKNEYS.—The show of Hackneys was quite light, especially in the female classes. J. B. Hogate showed three in the senior class. Thornton Royalty, a showing veteran in Ontario, came in for first here, with his stable mate, Salford Rosens, by Rosador, also an Ontario winner, second. The judge, W. F. Kydd, of Simcoe, hesitated a long time between Glenlyon, a horse from the Calgary district, and Hogate's Heptondale Grande, but finally settled upon the former. In this class a brother of the great McKinley and Ambassador, the champion at the Royal, was shown in Hinxton Con-

cord, owned by Lewis Bros., of Boissevain. John Wishart, of Portage, was the only exhibitor of females.

The sensation of the horse end of the exhibition was the display of jumpers and carriage horses made by Geo. Pepper, of Toronto. The exhibition board made some concessions to get him up West, and he certainly justified the expenditure on such an attraction, but it is an awful yard here to show such stock. The two Creightons showed the fashion in harness horses, and Pearl, Myopia and Senator went over the bars for the entertainment of the people in the grand-stand. Few of the thousands who saw this exhibition could have believed a little mare like Pearl could clear six feet nine inches with a heavy man up.

The Draft Stallion, Barrister.

Editor "The Farmer's Advocate":

In "The Farmer's Advocate" of May 10th there is mention made of the stallion, Barrister, and a request for information concerning his pedigree.

Whether the answer following is meant for information, or is a description of some other horse, I am not prepared to state, but through the kindness of Mr. David R. Bell, of this place (Shubencadie), I am in a position to say that the stallion, Barrister, who was imported to P. E. I. in the year 1881, was bred by Edward Pease, Esq., Greencroft, Darlington, and was foaled March 20th, 1878.

His sire was the Clydesdale horse, Emperor (277), his dam the Shire mare Bounce, by Honest Tom (1105), that great Shire horse which won so

many first prizes during his lifetime, and who at the age of fourteen years sold for 500 guineas (\$2,625).

Barrister was shown four times in 1880 in the Old Country, winning prizes every time, and on his subsequent appearance at Halifax, N.S., in 1881, and at St. John, N. B., in 1883, repeated his Old Country record by carrying off the first prize.

It can therefore be seen by the record of this great stallion, that he was not, as is generally supposed, a pure-bred Clydesdale, but a cross between the two great breeds, the Clydesdale and the Shire, and, as some claim, gets his best breeding from the Shire.

From information from the best authority to hand, it is safe to say that he left at least fifty sons considered good enough to be retained as stallions, and where the pedigrees of any exceptionally good team of horses is looked up, we can almost in every case trace it direct through one of his colts. In fact, we have come to look for this as a matter of course, and as for his great worth to our country, we can in duty say, as is often said of great men, "Those who build their monuments are those of a later generation." More information concerning this wonderful horse and his stock can be furnished if the above proves interesting to your readers.

Hants Co., N. S.

A. L. WALLACE.

A Shortage of Horses.

If any one believes that good horses are as plentiful and cheap as it was predicted they would be after motor vehicles came into general use, let him go into the markets of horse-producing farm sections and try to buy a pair, says the Chicago Drivers' Journal.

Figures on the marketing of horses at Chicago show a total of a little more than 80,000 head for the year to date, or about 100 above the movement to market for the same time last year, which up to that time stood the heaviest ever known. This movement to the greatest distributing point in the world for horses, therefore, is a plain indication of a broader outlet for nearly every class of horses than has ever before been in evidence, regardless of the encroachment of the auto in the former field of service of the horse.

That there has been a revival of interest in the breeding of horses, due to the more remuner-

tive prices paid for them during the last three or four years, there is no doubt, but from present indications this expansion in breeding is not keeping pace with the growing demand. Buyers from many sections best adapted to the raising of horses suited to business and heavy service, willingly go on record as declaring a shortage of horses of a good market class to be apparent to any man who will investigate the supply throughout the country. Farmers in general are breeding more horses of the right class—good rugged chunks and drafters—but the expansion of farm territory in the Northwest has drawn so many of them to that section that supplies for the regular markets have been depleted, and eastern territory has been compelled to pay high prices for the good horses of such classes as have been needed there.

A good many owners of farms and pasture lands were a few years ago inclined to abandon the breeding of horses, owing to the warning cry of a curtailment of demand incident to the general use of motor-cars for travel and truck service. This use is already general enough to have given the situation a good test, and with the result indicated above, that there is now as urgent a call for good big horses as ever before at this time of year.

This test seems to afford assurance to the breeders that there is still to be an inviting field in the breeding of good horses for years to come, or as long as so many good strong horses find employment in hauling in the disabled machines to the repair shops.

Liverymen and others tell us that many horses which are not frightened by automobiles in the town or city will shy when meeting them on a country road. Evidently the conservative-minded animal considers the machine belongs to the pandemonium of the street, and resents its intrusion into the country quiet.

LIVE STOCK.

Founding the Flock.

"The writer remembers with delight," says Jos. E. Wing, in his interesting book entitled, "Sheep Farming in America," the day when he drove to Woodland Farm his first flock of ewes. It was a fine sunny day in November. The sheep were well selected, round and plump, all young ewes. They travelled willingly along the country road through a quiet neighborhood where great oaks overarched the way, and stopping now and then to browse the green grass among the purpling wild asters.

The writer, was but a boy then, newly wedded, filled with high hopes, and dreaming brave dreams of the future. The young wife met him, and together they drove home the little flock. Happy beginning it proved to be, though many lessons remained to be learned and many discouragements to be contended with, yet the coming of the flock meant the beginning of the upbuilding of the old farm, and of the fortunes of its owners.

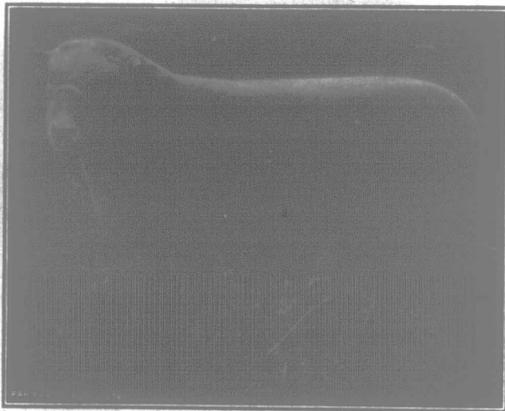
The best time of the year to stock a farm is in the early fall, before breeders have disposed their surplus and cut their flocks down to the number they reckon on wintering, when the ewes are in good condition, and while work is not crowding on the farm. Especially should the selection and purchase of a suitable sire be attended to early in the season, before the stock in the hands of breeders has been culled over and the best taken out. The ram should be typical of the best of the breed, and it is poor economy to stop for a few dollars in the price if, by going a little higher than intended, you can secure one of the type and character your judgment tells you is needed for the improvement of the flock. He should have a strong, masculine, yet not coarse head; a bright, quick eye; a brisk, energetic movement; a short, thick neck; broad shoulders; wide chest; strong, level back; well-sprung ribs; full twist; strong, short, well-placed legs; straight pasterns; a clear, pink skin; and a fine, dense, even fleece, free from coarseness on thighs, and should be well covered with wool underneath. Examine his generative organs, to see that they are to all appearance normal, and such as to indicate vigor and virility. Choose not an extra large or long ram, but one of compact make-up and of medium size for the breed selected. Size does not always go with strength and prepotency, or the ability to transmit good qualities. It is rarely that the largest ram in a lot has the most vigor or quality. A ram of such character will, if a yearling or over, care for forty or fifty ewes, if the pasture is good, or he is given a daily feed of oats and bran. A strong, well-furnished ram lamb will, with similar care, attend to 20 ewes, and, if well wintered, grow into a strong, useful sheep.

Our Scottish Letter.

THE HIGHLAND SOCIETY'S SHOW.

Writing in Peebles, the center of Tweeddale, in the neighborhood of the classic land of Scott and the Ettrick Shepherd, on the third day of a most successful agricultural exhibition, one feels rather more lively than after the depressing experiences of Glasgow in the matter of agricultural shows. Peebles is a comparatively small town, and grave doubt was entertained by many as to the wisdom of holding the Scottish National Show within its borders. The railway accommodation is not the most ample, and, although very popular as a health resort with Edinburgh people, the town has comparatively limited hotel accommodation. It must be frankly conceded now that all misgivings have proved unwarranted, and the show has proved an unqualified success. The attendance on all three days have been unprecedented for a show held in the Border district. There is still one day to go, and I expect the result will be a record for a show of the H. & A. Society held in this neighborhood. Hitherto the center for, the show when the Border district was visited has been Kelso, except in 1889, when Melrose was preferred; but Peebles has done so handsomely for the Society that it has probably secured the show for itself every eighth year under the present itinerary. The drawings for the first three days of this show have been £2,261, while for the first three days at Kelso in 1898 they were £1,422, 4s. 3d. The railway companies have risen to the occasion, as it was scarcely anticipated they would, and to-day, with the gate admission only one shilling, the amount drawn at the gates has been £1,077. This means that somewhere about 21,600 people have paid for admission. This attendance has been almost wholly rural, the bucolic element being very strongly in evidence all round the yard.

As an exhibition of stock, the show has rarely



Southdown Ram.

First and champion, Bath and West of England Show, 1906. Exhibited by Exors. of Col. McCalmont.

been excelled in the history of the Society. That it has been excelled goes without saying. The best sections have been those for sheep. The district of the show is nothing, if not pastoral. Blackfaces, Cheviots, Border Leicesters and half-breeds are everywhere on the hills and slopes, and all round the atmosphere is redolent of the shepherd and his interesting calling. Clydesdales also make a brave appearance, and Shorthorns, Galloways and Highlanders are shown in large numbers, and with no deficiency in quality.

The Shorthorns are championed by Sir R. P. Cooper's beautiful white bull, Meteor 86631, which stood first last year at the Highland, and this year was second at the Royal. He is a lovely, level specimen, with straight upper and under line. His birthplace was Wales, but he has good Scots blood in his veins through his sire, Moonlight 75110. Were this bull red in color, his price would be hard to estimate. No unworthy second was found in Mr. John Ross' stock bull, Ajax 80320, a six-year-old red from Meikle Tarel, and a very smooth, level, well-finished specimen. He was bred by Mr. Robert Bruce, Heatherwick, Inverurie, and claims as his sire Sittyton Archer 73059, a name which almost indicates breeding, and his dam was one of the Inverquhomery Augustas, by the great sire, Waverley 68072. Mr. A. T. Gordon's Fascinator 88569, the Aberdeen champion bull of the preceding week, was first in the two-year-old class. He was bred by Mr. James Burno, Jackston, Rothie-Norman. Mr. W. T. Malcolm, Dunmore, had second in the class with Ballachugan Admiral 87842, a nice roan, got by the Collicie-bred sire, Challenger 74199, out of Lady Amette, by the great Chamberlain 60461. Another spirited breeder, Mr. Alexander Robertson, Haugh of Ballechin, Ballinluig, was first with the yearling bull Avondale, bred at Stonytown, and got by Pride of Avon

86878. The champion female was Mr. George Harrison's big cow Ursula Raglan, a Westmoreland-bred roan, seven years old, and a winner at the Royal. There is plenty of substance in this cow. Sir Richard P. Cooper, Bart., was first with the two-year-old heifer Dalmeny Beauty 2nd, got by Villager 80177, a nice sweet sort. The first yearling heifer was Mr. Taylor's Pitlivi Rosebud 2nd, the winner at Aberdeen in the preceding week, and a very superior specimen in every way.

Aberdeen-Angus cattle were not as numerous as they have sometimes been at the Highland; but, although rather out of their habitat in Tweeddale, it is not to be forgotten that one of the best herds of the breed that ever existed—that of Sir Thomas Gibson-Carmichael, Bart.—found its home in this county. The championship of the breed was awarded to Mr. I. Ernest Kerr's noted heifer, Juana Erica 36285, a well-bred three-year-old, bred by the Countess Dowager of Seafield, at Cullen House, Banff. She is this season unbeaten, and in faithfulness to breed tyne, is almost without rival among females to-day. Her sire was Premier of Finlarig 17059, and her dam Ettina Erica, by Earl of Finlarig 12434. In a capital class of old bulls, Sir George Macpherson Grant, of Ballindalloch, Bart., was a good first with his stock bull Teshurun 19257, now five years old. After several years' service in the Morlick herd of Mr. George Cran, this fine bull has returned to head the herd in which he was bred. He was got by Eblito 14306, and is a remarkably true specimen. He should breed well in the Ballindalloch herd. The second and third were also bred at Ballindalloch. They were, respectively, Prince Forest 21106, and Khartoum of Ballindalloch 20732, and stood first and second at the Royal. The first-prize two-year-old bull was Mr. Garden A. Duff's stock bull Eblis 23069, bred at Hatton Castle home farm, Turriff. He was got by Evarra 20507, out of an Erica cow. His breeder was Mr. James Kennedy, of Doonholm, Ayr, who has a very fine herd of black cattle in the very heart of the dairying district of Scotland. Eblis was first at the Aberdeen in the previous week, and his merits were not obscured by those of the great Prince Forest, which there beat him for champion honors. Mr. D. M. Macrae's Everlasting of Ballindalloch 24435, the highest-priced bull stirk at the Perth sale in spring, was first in the yearling class.

Galloways have found a new and spirited patron in Mr. William Montgomerie Nelson, of Queenshill, Ringford, Kirkcudbright. This gentleman is anxious to help forward in every good work, and his friends and the friends of the Galloway were pleased to see him lead. He took champion honors with the great bull Campfollower 3rd of Stepford 8407, a five-year-old, by Great Scot £489, and a great massive specimen, and was first with the beautiful cow Joan of Queenshill 17454, a superior specimen which is pretty sure to attain to further honors. A phenomenal animal in this breed this season is Mr. Fox-Brockbank's Jacamine 18939, the first-prize yearling, and got by Cairnhouse 8784, out of Knockstocks Jessie 16116, the Galloway breed champion of 1905. Sir Robert Buchanan-Jardine, Bart., Castlemilk, Locherbie, had second and third with a pair of beautiful cows.

Only at the Highland can a really grand show of Highland cattle of all ages be seen. The breed champion this year was the Meggernie Castle fold bull, Lord Clyde 2034, a great, square, brindled specimen, bred by the late Earl of Southesk, K. T., and first in his class last year as a two-year-old. He was then beaten for champion honors by the Eusay three-year-old heifer, Laochag Bhuidhe IV. 6584, which led her class as a two-year-old, and this year she leads as a cow with calf at foot, but was not preferred for champion honors to Lord Clyde, but stood reserve to that great specimen. The late Earl of Southesk also bred the first-prize two-year-old bull, Saladin 2067, which is now stock bull in the Kinnaird fold. One of the finest specimens exhibited was the first-prize three-year-old heifer, Empress Victoria 6513, a very stylish animal, with lovely head and horns, and squarely-set body, owned and bred by the Countess Dowager of Seafield, Castle Grant.

Ayrshires were but poorly represented. There were many blanks in the classes for cows in milk, and it cannot be said that the award of the championship to a small-teated, tight-vesseled, three-year-old heifer in milk did much to enhance the breed in the eyes of the onlooker. The fact that such an animal was preferred before all the bulls, and a very fine specimen of the dairy cow, named Dairymaid, owned by Mr. Wm. Murray, Borrowmoss, Wigtown, which won in the cow class, more than anything else, demonstrated the need for some radical reform in the judging of Ayrshire cattle. The champion bull was Mr. James Howie's Spicy Sam, the unbeaten two-year-old of this season. The first-prize three-year-old was Mr. Barr's Zomosal, which only at the Royal has this year been beaten, and this week, with the Royal judge on the bench, he has been reinstated in his old position, being put in

Mr. George Westmoreland a winner at once in this class first with the 2nd, got the first Rosebud preceding every way. s numerous Highland; habitat in that one of the... that art.—found... of Kerr's... a well-bred... of her... is this sea... tye, les to-day... 9, and her... 12434. In... Macpher... a good... 7, now five... the Morlick... all has re... was bred... remarkably... in the Bal... were also... respectively, Ballindal... at the... all was Mr... 9, bred at... was got... ow. His... Doonholm, cattle in... of Scot... n in the... t obscured... which there... r. D. M... 4435, the... h sale in... d spirited... Nelson, of... his gentle... very good... of the Gal... He took... Campfol... r-old, by... specimen, Joan of... which is... A phe... on is Mr... first-prize... out of... ay breed... anan-Jar... d second... and show... The breed... Castle fold... brindled... Southesk, as a two... champion... heifer, her class... ds as a... ferred for... stood re... Earl of... o-year-old... ull in the... mens ex... d heifer, a animal... set body... of Sea... d. There... s in milk... d of the... -vessels... o enhance... The fact... e all the... airy cow... Murray, the cow... ated the... dging of... was Mr... ten two... ze three... only at... and this... he has... g put in

front of the bull which beat him at the Royal. Both decisions are sound, an evidence that animals may alter greatly in their showyard appearance.

A most important meeting in connection with the Ayrshire breed was held in the Board Room in the show-yard on Tuesday afternoon. It was the result of a memorial addressed to the Directors of the Highland Society by certain breeders of this class of stock. There was a very large attendance. The object of the memorialists is to get the basis on which Ayrshires are judged made parallel with the purposes for which the breed is intended, viz., the production of milk. It is admitted that a good many prize heifers and cows are very unprofitable in the dairy, but so eager are certain breeders to win prizes that the fancy points of a tight, level vessel and short teats are still able to command sufficient support among patrons of the breed. It is to be hoped some good will come out of the conference, although the outlook is not too hopeful. The milk stockmen are very much dissatisfied that any such memorial should have been presented, or any movement initiated in favor of reform. The movement, however, has behind it the clear needs of the breed for commercial dairy purposes, and in these days this is a momentum which in the end will carry to certain victory.

CLYDESDALES were shown in goodly numbers, and, except in one class, were admitted to have been very well judged. The champion stallion was Messrs. A. & W. Montgomery's Scottish Crest 13183, first in the two-year-old class. He was bred by Messrs. Wright & Sons, Silloth, and was got by Baron's Pride, out of Seabreeze 15902, a notable mare of a notable race in Cumberland. This colt is thick, solid, and of great substance, with short legs, strong, flat bones, and a good mover. He has not before been shown, except as a foal. He is a colt dark-colored in body, but having a good deal of white about his feet and legs. The champion female was Mr. John-Ernest Kerr's grand mare Pyrene, also got by Baron's Pride, champion at Edinburgh and Glasgow this year, and first last year in the yeld mare class at the H. & A. S. Show at Glasgow. She is a thick, low-set, bay mare, with capital feet and legs. Mr. Kerr had first in the brood-mare class with the handome black mare Chester Princess 1637; first in the three-year-old class with the unbeaten three-year-old of this season, Veronique, and first with the yearling filly, Marilla, which was first at Kilmarnock, and is regarded as one of the finest animals of the breed exhibited this year. The first, second, third and fourth aged stallions were, respectively, Baron's Best, Baron of Buchlyvie, Baron's Voucher, and Blackheath, all sons of Baron's Pride. A good many favored Baron o' Buchlyvie for first honors, and another fine horse in the class, Mr. Wm. Renwick's Margrave 12240, a handsome bay four-year-old, by Hiawatha, for second place. He was, however, placed fifth. In the three-year-old class the winner was another Montgomery horse, Warlab 12779, a very stylish bay colt, with close movement, got by Rozelle, a son of Baron's Pride. Mr. Wm. Clark, Netherlea, Cathcart, who owns Baron's Best, was second with Dunnydeer 12557, a capital colt by Sir Hugo. Messrs. Montgomery were third with Baron Winsome 12475, a thick, strong-boned colt, by Baron's Pride, and champion at Edinburgh when a two-year-old. He is a right good sort for the Australian market, but has been already hired, like many more, for 1907. M. H. B. Marshall, of Rachan, Broughton, was second in the two-year-old class with the Edinburgh winner, Royal Choice 13165, a son of Everlasting, and a nice, sweet-boned colt. The same owner was first with the two-year-old filly, Baron's Brilliant, a beauty, of great weight and good action, by Baron's Pride. The first, second and third yearling colts were all owned by Messrs. Montgomery, the first being the Baron's Pride colt which won at Ayr, and the second and third were, respectively, by Everlasting and Royal Edward, sons of the champion sire. The only first-prize winner in the show not got by Baron's Pride or his son, was Mr. Robert Park's magnificent big mare, Floradora 16295, got by Prince of Brunstane 9977, and unbeaten last year. She was first in the yeld-mare class, and is a mare with very fine action. She is own sister to the celebrated breeding horse Marmion, sire of the Cawdor-Cup champion of 1905. This year that honor goes to Pyrene, which last year stood reserve.

Quite a number of Canadians were at the show, as well as gentlemen from New Zealand and other colonies. Some of the New Zealand men are not much enamoured of the present-day Clydesdale. They prefer the kind of animal in favor in Scotland 40 or 50 years ago. We still occasionally meet that kind, but they are not at the top, and are not much in favor with breeders. Mr. Robt. Ness, Howick, Que., sails on Saturday with a capital selection of Clydesdale stallions. He has purchased them out of several of the foremost studs in Scotland, and among them are some that will give a good account of themselves in Canadian show-yards. About a fortnight hence

many other shippers will be making tracks hence. They are buying cautiously, and not hurrying. Mr. William Duthie, Collynie, is not with us this year at the Highland. He sailed for Canada a week ago, and is, I believe, to judge Shorthorns at Toronto. Canadians have a treat in store to meet the "Short-horn King." We have only one William Duthie, and we love him, but do not grudge him on loan to our friends on the other side of the water.

"SCOTLAND YET."

July 29, 1906.

Canadian Store Cattle.

HON. SYDNEY FISHER WRITES OF CANADIAN CATTLE TO BRITISH SOCIETY.

The following communication was recently sent to P. L. Gray, Edinburgh, Scotland, a member of the executive of the Free Importation Canadian Cattle Association of Great Britain, and deals fully with the condition of the Canadian herds:

Department of Agriculture, Canada, Minister's Office, Ottawa, June 9th, 1906.

Mr. Patrick L. Gray, 27 Downie-terrace, Murrayfield, Edinburgh, Scotland:

Dear Mr. Gray,—I duly received your letter of May 12th, in which you invite my attention to the statements made in the House of Commons by Sir Edward Strachey and Mr. Walter Long. I note that Sir Edward Strachey withdrew his statement that "foot-and-mouth disease and pleuro-pneumonia are rife in the United States." I also note Mr. Long's reference to Mr. Cairns' statement, quoting me as saying that contagious pleuro-pneumonia is unknown in Canada. An important version of Mr. Long's statement, as given by you, is the following: "There was all the difference

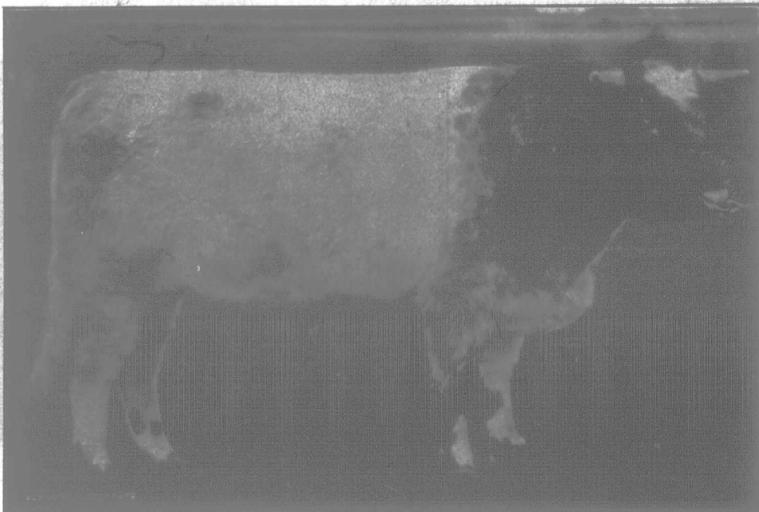


Photo by Buscot Victor. G. H. Parsons. Two-year-old Shorthorn bull, and champion, Notts County Show, England, 1906. Owned by Alex. Henderson, Farrington, Berks.

in the world between saying 'it does not exist' and saying 'I do not know of its existence.' There was evidence of the existence of the disease in many of the herds of Canada."

The following are the established facts with reference to the existence of these diseases in Canada and the United States: In the United States there has been no contagious pleuro-pneumonia for thirteen years. In the United States there had been no foot-and-mouth disease for the eighteen years previous to the fall of 1902, when the outbreak of that disease occurred in the New England States. The United States strictly quarantined the infected States, preventing the spread of the disease into other States, and in the course of a very few months completely stamped it out.

At the time of this outbreak the imperial authorities put an absolute prohibition for a few months on the importation of cattle coming from these States. When the United States had completely stamped out the disease, the imperial authorities removed that prohibition, and acknowledged that the disease was stamped out. Canada acted with the imperial authorities in quarantining absolutely these States during the time the imperial authorities quarantined them. No foot-and-mouth disease was introduced into Canada. We removed our quarantine soon after the imperial authorities removed theirs, being, like them, absolutely sure that the disease had been absolutely stamped out. The imperial authorities were to such a degree satisfied, as we were, with the efficiency of the United States Animal Husbandry Bureau's service that, although the disease was in the New England States, they did not prohibit the importation of cattle from New York, Baltimore, Philadelphia, and other United States ports, nor did we prohibit the importation of animals from the other un-quarantined States along our frontier; thus showing that both we and they were perfectly satisfied with the

efficiency of the United States inspection and animal diseases supervision. Our action was entirely justified by the fact that there was no spread of the disease from the quarantined States into other parts of the United States; nor from any part of the United States into Great Britain or into Canada.

In Canada we have not had a case of foot-and-mouth disease for over twenty years. We never have had in Canada a case of contagious pleuro-pneumonia, with the single exception of some animals which were imported from the United Kingdom in 1886, in which the disease was discovered while they were in quarantine at Levis, near Quebec, where they were all slaughtered in quarantine. The finding of the British experts with reference to the animals complained of in 1892 was that there was "a close resemblance (to contagious pleuro-pneumonia), amounting to practical identity." Our own experts, some of them being of the highest standing in science in the veterinary world, were permitted to examine the lungs of the animals in question. They contended that these were not cases of contagious pleuro-pneumonia, but of an affection of the lungs, commonly called transit pneumonia. If the home experts were right in their finding, these cases must have been something in the nature of a scientific freak in the occurrence of the disease. In view of this discrepancy of opinion, and the exceptional circumstances of the case, the Canadian Government suggested to the Home Government that they send a commission of their official experts to Canada to trace these particular importations and their original source, and investigate on the spot the question of existence or non-existence of the disease, the Canadian Government to pay all expenses. This offer was not entertained.

Previous to the imposition of the embargo, between 1880 and 1892, there had been landed in Great Britain about one and one-half million head of Canadian cattle, in which no case of contagious pleuro-pneumonia had been found. Since the imposition of the embargo, in

November, 1892, up to the beginning of the present fiscal year, there have been exported to Great Britain considerably over a million and a half head, in which the watchful British inspectors have found no trace of this disease. It is an absolute fact, acknowledged by the best British veterinary authorities, and at various times by the heads of the British Department of Agriculture, that no pleuro-pneumonia exists in Canada, nor has it existed since 1892.

Contagious pleuro-pneumonia has been stamped out in countries where it has occurred only by means of extensive slaughter and a large expenditure of time and money on the part of the authorities. It is inconceivable that if the disease existed in 1892 in Canada it should have spontaneously disappeared, and that the conditions since acknowledged by the imperial authorities to exist should have been brought about without any action on the part of the Canadian Government. I note from your letter that Sir Edward Strachey was forced, in the House of Commons, to withdraw the statement which he had previously made in regard to the existence of the disease in the United States. This is in itself a pretty emphatic reply to Mr. Long, in so far as it applies to the latter's assertions. I venture to say that, in the light of the facts as stated in my present letter, Mr. Walter Long's statement, as quoted by you, is entirely unjustified. I read his statements rather to mean a reference to the old dispute in 1892, as between the Canadian authorities and imperial authorities on the exact nature of the disease in the animals slaughtered in 1892, when advantage was taken of this dispute to put the embargo on, first by order-in-council, and afterwards to confirm that action in 1896, by the act of the Imperial Parliament. It, therefore, appears that contagious pleuro-pneumonia does not exist, and never has existed in Canada; and that the statement ascribed to me by Mr. Cairns, that this disease is "unknown in Canada," is borne out by the facts.

SYDNEY FISHER.

A Real Pleasure.

Mr. Robert H. Everest, Newmarket, Ont., writes: "Enclosed please find P. O. order for my subscription in full to 'The Farmer's Advocate.' Though I have not been in the business of farming for the past four years, I take just as much pleasure in reading over the pages of 'The Farmer's Advocate' as ever."

Swine Breeding in Ontario.

In bulletin 149, recently issued by the Ontario Department of Agriculture, it is reported that, taking the Province as a whole, the evident tendency is to produce more hogs of the approved bacon type. In the western part of the Province there is an inclination to use more Berkshires than heretofore for the purpose of crossing, principally with the Yorkshires, although crosses with other breeds are also noted. In the eastern part of the Province the tendency in most sections is to go more to Yorkshires. In one or two counties the Chester Whites find considerable favor, also the Tamworths; although the general impression given by the reports is that these two breeds are both decreasing in popularity. It may be noted, however, that in the counties where the Tamworths are mostly found, there seems to be no general tendency to change; the principal breed in these counties, however, is Yorkshire, the Berkshire being slightly in excess of the Tamworths. It would also appear that while the Yorkshires are increasing in the greatest numbers throughout the Province, the Berkshires are showing a higher percentage of gain.

PRODUCTION.—The general tendency throughout the Province is slightly to increase production. In the eastern part of the Province it has been customary for many farmers to depend upon breeders in their locality for their supply of young pigs for feeding; it has been noted that the demand this spring considerably exceeds the supply, the breeders who usually sell their pigs retaining them this year on account of the good prices for hogs. It is quite probable that the feeders who are short this year may be inclined to breed pigs for themselves another year, which would add considerably to the production in that locality. While the tendency throughout the Province is to increase as above, considerable caution is observed among many individual breeders and feeders not to go into the business too extensively, for fear that over-production might bring prices down to an unprofitable point.

The number of breeding sows was decreased considerably during 1905, while 1906 shows an increase in the number not only over 1905, but also over 1904. The reports indicate that in 21 counties the sows were decreased in 1905, while 13 counties report slight increases, and 8 counties report no change. Comparing 1906 with 1905, 35 counties report increases, while only 2 report decreases, and 5 counties no change in the number of sows. Comparing 1906 with 1904, in 26 counties correspondents report increases in sows, while in 9 counties decreases are reported, and in 7 counties no change.

COST OF FEEDING.—Taking the averages of the cost of feeding, as given in the different counties, the average for the Province for summer feeding is \$4.51 per cwt., and for winter feeding, \$5.38 per cwt. In very few cases do correspondents state that the figures given are the results of actual experiments. In a number of cases no information is given as to whether the figures are the result of experiment or an estimate. In a small number of cases, however, it is stated that experiments have been made and that the figures given are the result of such experiments. It is almost invariably noticed where this is done that for both summer and winter feeding the cost is considerably below the average given above. A number of correspondents, especially in Western Ontario, state that with comfortable quarters and roots, the cost of feeding is no greater in winter than in summer.

THE FARM.

Loss of Fertility by Successive Cereal Cropping.

The chemist at the Minnesota University, Prof. Harry Snyder, who, by the way, is one of the most eminent authorities upon wheat-growing, is the author of a very valuable bulletin, just issued from the Station.

It is in two parts, the first treating of fertilizer tests with wheat and corn, and the second part the loss of nitrogen from soils. We quote as follows from Part II. of the bulletin:

"In former bulletins the influence of different methods of farming upon the nitrogen content of soil has been discussed, and in the case of those that have been exclusively cultivated to grains it was found that larger losses of nitrogen occur. In some of the experiments at the University farm it was learned that the main loss of nitrogen is due to oxidation of the humus, of which nitrogen is one of the constituent elements, rather than to the removal of large amounts by the grain crops. A crop of wheat yielding 30 bushels per acre removes less than 40 pounds of nitrogen per year, but tests have shown that in twelve years of exclusive grain cultivation, the loss of nitrogen in the case of rich soils has approximated 1,600 pounds per acre. Numerous analyses of soils that have been under cultivation for different periods have shown similar losses of nitrogen. In some cases the losses have been very large, while in others, where mixed farming has followed, they have been comparatively small.

"In order to determine the extent to which losses of nitrogen occur from soils under different experiments upon a number of farms in the state were undertaken in 1895. The following

soils from representative fields were obtained and analyzed. Ten years later samples from the same fields were again taken and analyzed, and the extent to which losses of nitrogen had occurred was determined. The soils were originally sampled by young men who were then students of the Minnesota School of Agriculture; about ten years later other samples were taken by the same persons, and from the same places and fields. It is believed that this gives a reasonable basis for making comparison as to the extent of the losses of nitrogen from these fields.

"At Kennedy, Kittson County, a soil of unusually high fertility contained in 1895 .601 per cent. of nitrogen. It is seldom that a soil is found with such a large amount, but, as pointed out in previous bulletins, the soils of the Red River Valley are excessively rich in nitrogen, except in cases where they have been under long periods of cultivation. After ten years of exclusive grain farming, in which wheat was the main crop produced, the land being one year in fallow, the soil contained .523 per cent. of nitrogen, a loss during that time of 2,600 pounds per acre. The wheat crop during this ten-year period removed less than 350 pounds. Hence the heavier losses have occurred through too rapid decay of the humus, of which nitrogen forms a part, and subsequent loss of the soluble nitrogen in the drain waters, and by the formation of volatile compounds of nitrogen. The soil still contains a large amount of nitrogen; in fact, ten times more than is found in some soils that are producing fair yields of wheat. The loss of nitrogen from this soil has not been sufficient as yet to appreciably affect its crop-producing power.

"At Childs, Wilkin County, in the Central Western part of the State, a sample of soil in 1895 contained .422 per cent. of nitrogen, and ten years later .389 per cent. On this farm live stock has been kept, and, in addition to wheat, corn and other crops have been grown. Once dur-

cent. of nitrogen has taken place, amounting to nearly 1,200 pounds, a much larger loss than the amount required as food for the crops produced. It has been observed in former work that the heaviest losses of nitrogen occur in the case of soils which contain the largest amounts of nitrogen, and that the fermentation and decay of the humus is much slower in soils where the content of humus and nitrogen is comparatively small. It is rich soil that suffers heaviest losses. It is to be noted that, in the case of mixed-grain farming, as in this last example, even where manure is periodically returned to the land, if no grass crops are grown, loss of nitrogen is continually taking place. The soil, however, is still rich in nitrogen, and produces good crops of wheat, but if a rotation were followed in which clover formed an essential part, this loss of nitrogen would be checked.

"A soil in the Chippewa River Valley, in the south-western part of the State, in 1895 contained .363 per cent. of nitrogen. Since that time it has produced wheat, oats and corn, and received one light dressing of manure. At the end of ten years of cultivation the soil contained .24 per cent. of nitrogen, a loss of 12 per cent. Notwithstanding this loss, the soil is still rich in nitrogen, and the crop-producing power has not been affected. Unless clover is grown, the loss will, however, in a few years, make itself felt materially in the reduced grain yields.

"A soil at Lakeville, Dakota County, contained in 1895 .31 per cent. of nitrogen. During the subsequent ten years, wheat, oats, corn and clover were grown. The land was manured once during this period, at the rate of 20 tons of manure per acre. Mixed farming has been followed, and only a small amount of grain has been sold from the farm. This system of farming has had a marked effect upon the nitrogen content of the soil, as, after ten years of cultivation, .309 per cent. of nitrogen was found, practically the same amount

as at the beginning. Live stock was the principal product sold from this farm, the income being derived from the sale of sheep, hogs and cattle. Practically all of the crops raised on the farm were fed to the live stock. The farm crops were supplemented by the purchase of a small amount of bran and shorts. Under this system of farming the yield of wheat has been increased, and the last year that wheat was grown an average of 28 bushels per acre was secured. The rotation

followed upon this land was wheat, seeded to clover; one year of meadow; followed by corn, to which manure was applied; and then two grain crops following the corn. Because of the production of clover, practically no loss of nitrogen has occurred. Losses of phosphoric acid and potash have been very small. The effect of the farm manure upon the soil has more than offset the small amount of mineral matter lost in the live-stock and farm products which have been sold. In fact, it is largely the action of the farm manure upon the mineral matter of the soil, making it more active and available as plant food, that has resulted in increasing the crop-producing power of the soil.

"Since clover has been a prominent factor in building up the fertility of soils, it occupies a unique and important position among farm crops, and the conditions affecting its growth have naturally received a good deal of consideration from both scientists and practical farmers. Atmospheric nitrogen acquired by the action of the bacteria which are on the clover roots, is the source of the increase of nitrogen in soils where clover has been grown.

"In this State clover failures have been found to be due in most cases to poor seed, lack of proper preparation of the seed-bed, or to lack of available phosphoric acid and potash in the soil. Poor seed has probably more often been the cause of failure of the crop than all other causes combined. The soils of this State are chemically and physically well adapted to the production of clover. The prevalence of the nodules on the roots of clover and the negative results of the inoculation tests show that general inoculation of the soil is unnecessary in Minnesota for the production of clover to restore nitrogen to old grain soils.

SUMMARY.

"The loss of nitrogen from four grain farms in



Britannia of Tweedhill 73153.

Aberdeen-Angus bull, owned by E. A. and G. S. McIntosh, Seaforth, Ont.

ing the ten-year period manure, at the rate of eight tons per acre, was applied to the land. No clover or grass has been grown. It is to be noted that from this farm, where the soil is rich in nitrogen, but contains less than the soil in the preceding experiment, the losses have been proportionately less, due in part to the different systems of soil treatment practiced. A loss of .033 per cent. of nitrogen in ten years is equivalent to a loss of nearly 1,000 pounds per acre. It is estimated that one-third of this has been removed by grain crops, and two-thirds have been lost in other ways. The large amount of nitrogen in this and the preceding soil occasionally makes itself manifest in unbalanced crop growth, the nitrogen becoming available in larger proportional amounts than the phosphoric acid and potash of the soil, and, as a result, the crop makes a rank growth of straw and a restricted yield of grain. On some of these rich soils it is often difficult to adjust a satisfactory rotation of crops, as the further addition of organic matter sometimes unfavorably affects the balance of the plant food. These soils are exceedingly rich in nitrogen, and can, without seriously impairing the crop-producing power, sustain further losses, but heavy losses should be prevented, as they are unnecessary, and will, if continued, make themselves felt in an impoverished condition of the soil. If more live stock were kept, and mixed farming were more extensively followed, the losses of nitrogen would be much reduced.

"At Hutchinson, McLeod County, in the central part of the State, soil in 1896 contained .286 per cent. of nitrogen, and ten years later the same field showed .247 per cent. Wheat, oats, corn and barley have been the crops produced during this time. The land has received a dressing of farm manure, but no clover or grass crops have been grown. It is to be observed that, during the ten years, a loss from the soil of .039 per

ten years amounted to from three to five times more than was removed by the crops. This loss was due to the rapid decay of the humus and the liberation of the nitrogen, which forms an essential part of the humus. The losses of nitrogen from these grain farms were practically the same as from the experimental plots at the University Farm. The results of the tests on the small plots are in accord with the field tests in different parts of the State.

"Where clover was grown, crops rotated, live stock kept, and farm manure used, an equilibrium as to the nitrogen content of the soil was maintained, the mineral plant food was kept in the most available condition, and maximum yields were secured."

The Automobile Nuisance.

Editor "The Farmer's Advocate":

We often hear the old adage repeated, "Make the best of a bad job," and I think it is wisdom to act in this manner in regard to the auto car. We don't like the machine, but it is here, and, doubtless, here to stay. We don't like the law in regard to it, but, likewise, it is here, and that to remain for at least a few months. The law is, perhaps, stringent enough, but so complicated it will give a great deal of trouble to those who will try to live up to it. One of the unsatisfactory features of the regulations is that regarding the numbers to be displayed, both in front and behind. In case of an accident, what difference would it make if the machine were covered with numbers, when a man has his leg broken, the rest of the family dashed into a ditch, and he sees his horse tearing down the road making kindling wood of his carriage? He is then not in a fit state of mind to read and memorize even large numbers, and numbers covered with dust are not easily distinguished. So what good will the numbering do, if the tourist tries to escape?

However, I incline to think Sandy Fraser is right in his presumption that calling the auto "bad names" will not cure the evil.

I believe the idea is not far wrong, that of giving the tourist certain days upon which he may run—for, say, two years—until horses become acquainted with the nuisance. The people would then know when it is safe to drive. In the course of a very few years horses will become accustomed and educated, so that they will give no more trouble from this source. The same condition prevailed, perhaps to a lesser extent, when bicycles were first introduced. Everywhere they were a terror to all who had driving to do. To-day it would be difficult to find a horse or colt that is afraid of one. Why? Because they became so common that they were seen by horses and young colts from every pasture—an every-day occurrence—and the animals became so well acquainted with them they ceased to be alarmed. Now, if we could get certain days, even two days per week, during which the auto cars were prohibited from running, for, say, two years; and during that time the horse-owners do their part, we would have protection to the public, which protection we are justified in demanding; also, at the end of that time the dangers would largely be past.

Yes, sir, the people have a duty to perform. It will not be met by simply cursing what cannot be hindered, but pains should be taken to show horses the machine, and let them learn that it is harmless to them. In this manner a great deal of danger and many accidents may be avoided. Let us act the part of men in these common difficulties, and what we cannot get rid of, let us use our best efforts to remedy as far as possible.

Wentworth Co., Ont.

J. R. H.

Grain Inspection Commission.

(Ottawa correspondence.)

A thorough inquiry is to be made into the grain trade of Canada by the Department of Trade and Commerce. Authority for this has been given by a recent order-in-council, by which commissions are appointed to make a comprehensive investigation of all matter connected with the Grain-inspection Act and Manitoba Grain Act. Power is given to visit the grain-growers and elevators all over the grain-growing region, to inquire into the methods of handling grain at the various stations, including farmers' elevators, as well as company elevators, and to look into the methods of the distribution of cars, and the practices of the grain dealers of Toronto, Winnipeg and Montreal. The system of Government inspection and selection of grades, and the methods adopted at all the inland and lake ports will be looked into, as will also the ways in which the grain is handled on its arrival in England.

The order-in-council appoints the following commissioners to look after this important and extensive inquiry: George E. Goldie, Ayr, Ont.; William L. McNair, Keyes, Manitoba; and John Miller, of Indian Head, chairman. The secretary has not yet been appointed, but the understanding is that he will be an Alberta man.

F. D.

Building a Silo.

Silos are built of all sorts of material, and in all sorts of shapes, ranging from a hole in the ground to expensive stone and cement structures. I have had experience only with the round wooden stave or tub silo. I think it the cheapest and easiest to construct. It is at the same time the most durable of them all, except the masonry structures. It dries out immediately the silage is removed, and does not hold moisture as do those with thicker walls. In planning a silo, be sure not to make it too large, as a little silage has to be fed off the top each day after the silo is opened to keep it from molding. A diameter of sixteen feet is about right for thirty head of cattle. To accommodate the required number of tons, build the silo high. If you plan to put it down in the ground a few feet, have the dirt excavated and a smooth, circular wall laid up. If cemented, so much the better for smoothness, but I do not yet see that the acid in silage rots the rock and mortar, as some claim. Have the sill got out of the planing mill. It will come in sections about four feet long, sawed out of 2x10 plank. "Float" it in mortar, and then lay a second sill over it, breaking joints, and spike the two together thoroughly. Have this ready when the lumber arrives, so that it may be set right up before the staves get warped. In my silo I used fourteen and sixteen foot staves for each story, alternating first a long one and then a short one. Plumb your first stave carefully, and brace it thoroughly; then set the others one by one, toe-nailing the bottom and nailing a three-eighths inch batten around the top as you go, to hold the staves in position. After completing the circle, put on two or three hoops, and repeat the operation, placing a fourteen-foot stave on top of a sixteen-foot stave and a sixteen-foot stave on top of a fourteen-foot, so making a two-foot splice in the middle.

For hoops, I used three to six strands of No. 9 galvanized wire, well twisted into a rope, with an eye-bolt twisted on each end. For tightening, pass the eye-bolts through a 12-foot 4 by 4 oak scantling, and screw up the nuts. I used 8 wire hoops on the first story and 5 on the second. Over the matched ends of the staves at the splices I used two flat-iron hoops about four inches wide, and, perhaps, 3-16 inch thick. When the hoops are on and drawn tight, cut out the doors on the side from which you want to feed; two feet square is large enough. Cut on a bevel all around; cleat the pieces of staves together, and simply set the door in place from the inside, to be held by the silage. I have two doors above the splice and three below. It is not necessary to put a door near the top, as the stuff will settle a few feet after the silo is filled. Such a silo as I have described, 30 feet above the ground and six feet below, with a diameter of 16 feet inside, will hold about 150 tons of silage, and cost in New York State about \$800; that is, a cost of \$800 for a silo that will hold 150 tons of feed—\$2.00 for each ton capacity. This amount of feed will supply 20 cows with all the silage they should have, even if they are big cows and are fed the 40 to 50 pounds each day. If one were to build a barn that would hold hay for 20 cows, even for a winter, can he build it for \$300? Not at all. He would have to invest very much more than that sum in a barn to hold the hay for that number of cows. So we see the silage is the cheapest thing possible to feed, if we are to consider the cost of the structure that contains it.

The farmer who intends to largely increase the number of his cows will have to put hundreds of dollars into a barn structure if he intends to confine himself to the feeding of hay for roughage. It will be far easier for him to extend his stables and build a silo than to construct a stable sufficiently high to hold the hay. When a man is freed from the necessity of providing for bulky feed, he can then construct his dairy stable with the object of getting cleanliness and light. He can build his stable long and low, and secure a flood of light from three sides. His foundation does not have to be so heavy as it must be if it is to sustain a heavy superstructure. A silo is thus not expensive, and, moreover, it is a great factor in the development of dairying. It solves the dairyman's problem of making a living from 50 to 100 acres of land. That is going to be the great question in the not distant future, for with us the farms are already being cut up into smaller ones. If any man doubts whether or not it will pay him to build a silo, let him look into the cost and benefits, by actually getting estimates on the cost of construction.

I make silage my main cow food. I feed from 30 to 40 pounds of silage per day, according to the cow. It is my intention for the cows to have all they want. The silage ration is balanced with bran and clover hay. The bran is fed in proportion to the period of lactation of the cow, and as much as she will consume at a profit. I feed silage and bran the first thing in the morning, then do the milking and separating, then feed as much clover hay as the cows will clean up before noon. The same method is followed in the evening, feeding hay the last thing at night. I do not depend on grass alone more than 90 days in the year; then, if I have any silage left over from winter, I feed about 25 pounds per day. If I have no silage, I plant a small plot of early corn in the spring, and sow oats and peas, begin feeding as soon as it will do, cutting from the field and hauling to the pasture each day. This is a more expensive way of feeding than the silage.

but it is far better than to let the cows go hungry, for a hungry cow won't give milk.

Fulton Co., N.Y.

J. P. FLETCHER.

[Note.—While, as Mr. Fletcher truly points out, a man must be careful not to build a silo with too great a diameter, we hardly approve of a structure 36 feet deep, nor would we let the silo down below the surface of the ground. Rather would we have two silos of rather smaller diameter, and each one about 26, or not over 30 feet in height.—Editor.]

Weeds that Worry Farmers.

Editor "The Farmer's Advocate":

While attending, as a delegate, the series of field meetings held in June through Central Ontario, I noticed that perennial sow thistle was the most common weed found. It is found all over the central part, in some sections worse than others. Bladder campion and ribgrass were found in several places; also bindweed. Thorough shallow cultivation, with a short rotation of crops, is the easiest and surest method of getting rid of these plants. Night-flowering catchfly is very prevalent in most of the alsike-growing sections. For this annual we recommend pulling the plants before they mature their seeds. Several specimens of hare's-ear mustard was seen at one place. This is a very bad weed when once established, and the farmers would do well to be on the lookout for it. It is an annual, growing about one or two feet high, with thick, fleshy, spear-shaped leaves, lightish-green in color. It has long seed pods on the top of the plant, and these are four-sided. It would be well to pull this weed wherever found, if not in too large quantities.

Black meddick, or trefoll, is also giving trouble to the alsike growers in some sections, and is being spread over the Province pretty rapidly. By sowing good clean seed after a hoe crop or summer-fallow we should get rid of this pest. One great danger with alsike growers is that some of them allow the fields to reseed themselves, thereby letting all the weed seeds grow up with the alsike in the second crop, and increasing the trouble and expense of cleaning the fields by an hundred-fold, and as is often done, the fields are neglected and the seed goes on the market in this dirty condition, and some farmer is sure to buy it because it is cheap.

Prospects for alsike and timothy were good. Red clover in some sections was far advanced, and farmers had begun cutting the first crop, so as to avoid the second brood of midge.

In some sections a white maggot was found eating in the head of the red clover. Not having seen this before, we were unable to tell what it was, or anything of its life history.

These meetings seem to give the farmers an incentive to clean their fields before cutting, as many of them expressed themselves in that way.

The Seed Control Act appears to be appreciated by the farmers where it is understood, but many of them were of the opinion that they were exempt from the provisions of the Act, and that only the seed dealers were liable.

Interest in the meetings was good. At two of our meetings 120 and 150 were present, and the average attendance at the others was about 25. The speakers were frequently on their feet for two hours and over.

Crop prospects generally are good. Corn and peas suffered in some sections from too much rain; also spring grains on undrained lands. Meadows rather thin in some sections.

At several of our meetings representatives of some of the seed firms were present, and gave much valuable information regarding the weed seeds that are hard to separate from clovers and timothy, and showing samples of seeds with the reports from Government inspectors, giving the number of weed seeds present.

Northumberland Co., Ont.

GEO. CARLAW.

Anent the Auto Car.

Editor "The Farmer's Advocate":

It gied me great pleasure to see the manfu' words o' Sandy Fraser in defence o' the motor car, in "The Farmer's Advocate," o' July 19th. Man, but ye're great, an' I'd like fine tae meet ye. It luiks tae me, as it diz tae Sandy, that tae muckle hawering is gaein' on consalrnin' automobiles. I mind hearin', yin time, o' fowk wha couldna thole the thocht o' common trains; and ithers, later on, wha thocht electrecty wisna canny. It's mony o' the same kin' o' fowk nooadays wha are reldy an' willin' tae support ony law that wad stop the automobile trade. But it can no be stoppit; it's here tae stay. At hame it's lukit upo' as the fairmers' freen', in spite o' a hantle people in a wheen countees wha are daein' their best tae kill it. But the like o' them is lukit doon o' by the bulk o' the country as tae slow tae gane in oot o' the weet, an' fine they desairve it!

As for the smell o't, it'll no gar ony horse great that ever I heard tell o'. Gin a horse canna thole the smell o' a wee bit gasoline along a road, hoo are they gaein' tae work that same beastie on a fairm whaur yin o' these gasoline engines is aye used for power? Forbye, hoo wull the smell o' the "denaturized alcohol" affeck them? By the way, I'm thinkin', as a guld Scot, that it's a shamefu' waste o' guld

sperits tae spoil it for ony ither use but tae burn in a machine!

We has na automobiles up here yet—mair's the pity. Gin we had, mebbe the Government wad gie us better roads. But bide a wee, an' we'll hae them yet.

Temiscaming, Ont. "GEORDIE," o' Temiscaming.

The Crop Prospects.

Canada has been favored with several consecutive summer seasons in which, in most sections of the country, vast as is its area, the rainfall has been sufficient to ensure abundant growth of farm crops, and to keep pastures fairly fresh, enabling dairymen to secure satisfactory returns from that source, on which so large a proportion of the farmers in the older Provinces, and some of the new, now principally depend.

While very much of the success of crop growing depends upon the presence of sufficient moisture in the soil, it is gratifying to know that farming is being more thoroughly and more intelligently prosecuted than formerly; that the more general liberal feeding of live stock is adding to the fertility of the land, and that by better cultivation the forces of nature are enabled to perform their functions more efficiently in helping the husbandman to secure generous returns from his fields. While it is undeniable that a protracted summer drouth may, to a large extent, defeat the best effort of the best of farmers, as experience in lean years in the past has proven, yet it has been amply demonstrated in such seasons that the farms kept most fertile by feeding stock and making manure in considerable quantity, and the farms that have been most thoroughly cultivated in the preparation of the seed-bed have most successfully withstood the drouth and given fairly good harvests in years when those not so well managed in these respects have made very poor returns. The lesson to be learned from these reflections is that it is of great importance to the farmer that he plan to keep up the fertility of his land to as high a degree as he can, and to not slight the cultivation, for he has no means of knowing when a dry season may recur, and his resources be seriously curtailed.

Fortunately, rains have fallen this summer in sufficiency in all the Provinces of the Dominion, and, perhaps, too generously for best results in the extreme east, delaying the seeding and minimizing the returns from some crops, while compensating for this by furnishing lush pastures, and thus adding to the dividends from the dairy, probably the most important industry in that section of the country.

The grain crops throughout Ontario are abundant, and in most districts are being secured in good condition. The fruit prospects are better than in the average of good years. Corn is promising well, as also are roots; while the cows are doing extra good work in the dairy, and the hog market is booming, so that the outlook for this Province is very satisfactory; while the Western Provinces have been exceptionally favored with weather conditions, and, with the exception of some damage sustained from hail in limited areas, their prospects for a bountiful harvest are exceedingly encouraging. With the present outlook and the good prices prevailing for most of their products, Canadian farmers have much cause for thankfulness.

New Material for Roadmaking.

Mr. W. A. MacKinnon, Commercial Agent for Canada at Bristol, Eng., in the weekly report of the Trade and Commerce Department, Ottawa, says: "Owing to the fact that roads made of the ordinary limestone macadam are liable to be cut up by horses and vehicles, and to be affected by weather conditions—being either dusty or muddy, according as the weather is wet or dry—efforts have been made to produce a traffic and weather-resisting substance. As a result of experiments it has been proved that a material called 'tarred slag macadam,' if properly applied, produces a surface capable of withstanding the weight of vehicles and the jar of horses' hoofs.

"It is claimed that this material would reduce the dust nuisance to a minimum; it is clean after a shower, often cleaner than the path; it is economical from the cleansing point of view, as there is practically no slop; it is less affected by frost and snow, as being non-absorbent, there is nothing to freeze, and snow can be quickly swept or scraped off its smooth surface.

"Should any municipal bodies or others be interested in this material, I shall be glad to obtain full particulars, and to forward the same to any correspondents."

Alcohol Experiments.

Now that free denatured alcohol is assured for the United States, the Federal Department of Agriculture is planning extensive experiments, says an exchange, for the purpose of determining how best the farmers and manufacturers can take advantage of it. Investigations are proposed, with the view of securing correct data concerning the manufacture of the product from potatoes, corn, sorghum and sugar beets, and the results of the tests to be carried on will doubtless mean much to the industry.

The process of distillation will also be made a matter of close study and investigation. Authorities hope to bring about the adoption of a small still, which will be suitable for use of localities. In this way the farmer will not only furnish a source of material for fuel and light supply, but in so doing will create a local market for some of the raw products of the farm.

THE DAIRY.

Dairy Exhibits at Fall Fairs.

Editor "The Farmer's Advocate":

The dairy exhibits at our fall fairs, so far as the writer has observed, are not truly representative of the great dairy industry of Canada. Outside of three or four large fairs in Ontario, and a few of the smaller fairs, the exhibits are not at all such as would strike the visitor forcibly.

We may well ask why it is that greater interest is not manifested in the exhibits of butter, cheese, etc., at many of our fairs. It seems to us that among many causes, the following may be mentioned:

1. The prizes are so small in many cases that persons who make good butter and cheese will not take the necessary trouble to exhibit.

REMEDY.—Increase the value of the prizes so as to make it worth while.

2. In many cases the judge or judges are incompetent. We have heard of a case where a judge first inquired who made the exhibits of butter, and then awarded the prizes according to the reputation of "Mrs. So-and-So."

REMEDY.—Have none but competent judges, and, if necessary, pay these men for their services. The dairy committee should also see that the exhibits are in place and everything in readiness for the judge at the time appointed. A competent judge does not care to sit about for half a day waiting for the exhibits to be arranged or the secretary to prepare the judge's book.

3. Exhibitors are unable to find why their exhibits receive second, third, or no prize at all. They are sure their goods were equal to or better than the first-prize article.

REMEDY.—Use score-cards, and have a competent clerk to take down the score and also remarks of the judge. A copy of this should be placed on each exhibit, and one should be mailed to each exhibitor. We know a case where this has been done for several years, and where the improvement in the quality of the butter has been very marked after following this plan for five or six years. In fact, there is now no poor butter shown at this fair.

4. This leads me to the next point, wherein we should recommend awarding prizes on an entirely different basis from that usually followed, viz., "first," "second" and "third" prizes.

To each worthy exhibitor we should recommend that a portion of the prize money be given. All butter and cheese scoring over, say, 40 points should receive a share of the money. Suppose that \$25 is the amount of money to be given in prizes for butter, and that three exhibitors score 95, 94 and 91 points, respectively. The value of one point is $25 \div (95+94+91) = \$2.50$. The 95-point exhibit should receive \$12.50, the 94-point exhibit \$10, and the 91, \$2.50. This principle may be applied to all worthy exhibits. The weak point of this plan is that where the amount of money is small, and the exhibits large and worthy, the sum coming to each is very little.

REMEDY.—No. 1 should be applied in this case.

5. At some of the fairs held early, when the weather is hot, the butter soon becomes greasy and the cheese heated.

REMEDY.—Have a refrigerator for dairy exhibits, or, at least, a few blocks of ice in a suitable receptacle for keeping the butter and cheese cool.

6. Some of our larger fairs require two or three cheese for each section, and 50 lbs. of rolls or prints. This is too great a sacrifice to ask from many competent makers who cannot afford the loss in case of winning no prize, which is necessarily the case with many under the present system of distributing prizes.

REMEDY.—One cheese and ten prints of butter is all that should be asked for in any one section. (In the case of export butter a 56-pound box seems necessary, although it is a question if a 28-pound box would not serve the purpose just as well, and be less expensive to the exhibitor. Exhibition authorities sometimes forget that dairy products are nearly as valuable as gold nowadays.)

SUGGESTIONS.

If we may be allowed to do so, we beg leave to suggest the following classes in addition to the ordinary sections in the prize-lists of fall fairs:

1. The demand and extra price paid for saltless butter in British markets would seem to make it advisable to have a class for saltless butter at all our fairs in districts where the export trade is an important factor.

2. A prize or prizes should be given for the best milk or cream delivered at any regular cheese factory or creamery on the morning of the day on which dairy exhibits are judged at the local fair. In the case of large exhibitions, have the samples sent on some appointed day for judging. The samples should be taken from the regular delivery, and, preferably, by the cheese or butter maker. A brief description of the methods followed in caring for the milk or cream should be sent with each exhibit.

3. There should be a section for handy dairy utensils and time and money savers on the farm and in the factory. For instance, one of our lady correspondents writes: "I have been practicing housekeeping and common farm dairying for a number of years, making every aim to make good butter, but I find it hard to thoroughly clean milk vessels. A cloth does not clean

out creases well. The brush you get at the hardware is too large for some dishes. I tried a common hand brush, which does the work the best of anything so far, but it is too stubby. I would like to know if a brush, about 5x1½ inches, with bristles projecting well at the ends, could not be made? I believe it would meet with the hearty approval of us busy women who wish to do things cleanly and in a short time."

We trust our fair correspondent will pardon us for quoting from her letter, but we believe she voices the needs of a great many women who make butter on the farm. Why should not our local and provincial fairs not try to bring out such an exhibit for the benefit of those interested? We feel sure that our manufacturers will do so if they are given a little encouragement.

We trust that these friendly criticisms and suggestions may prove helpful in stimulating greater interest in the dairy exhibits at our fall fairs. H. H. DEAN, Ontario Agricultural College.

Cow-testing Records.

The record of the first test at Bagotville, Que., in the Lake St. John District, for the 36 days ending July 16th, shows the very fair average of 27.6 pounds fat per cow. The two largest herds, of 34 and 37 cows, are both above this average, proving what may be obtained through careful selection. Herd No. 23 has the highest average yield of milk, the lowest individual yield being 690 pounds. It is satisfactory to note the individual records of 1,100 pounds milk and over, which throw up in relief the 320-pound cow. Number of cows tested, 250; average yield of milk, 767 pounds; average test, 3.6; average yield of fat, 27.6 pounds. Highest average milk yield for a herd 920 pounds, average test 3.5, and average fat for same 31.1 pounds. Highest individual milk record 1,330 pounds, five others going over 1,100 pounds. Lowest individual milk yield, 320 pounds.

The fourth test at St. Edwidge, Que., for the 30 days ending July 9th, shows a steady improvement since April—an increase of 6.3 pounds of fat per cow. As illustrative of the difference between individuals, the lowest yield of fat in herd 21 is better than the highest in herd 11. While there are many individual yields of under 26 pounds fat, there are some good ones of over 40, and in herd 1 one of 50.8 pounds. Aim high! Number of cows tested, 307; average yield of milk, 725 pounds; average test, 3.7; average yield of fat, 27.2 pounds. Highest herd average of milk, 1,007 pounds; highest average test, 4.1; highest average fat, 39 pounds. Highest individual yield of fat, 50.8 pounds, from 1,060 pounds milk; lowest yield of fat, 7.4 pounds, from 240 pounds of milk.

The result of the test for the second period of 30 days, ending July 16th, at Lotbiniere, Que., shows an increase of 1.4 pounds of fat, on the average, over the June test. Herd 6, with 10 cows, averages 13.4 pounds of fat per cow more than herd 18. This means about \$3.50 more per cow per month. Is it worth keeping good cows? Grade up! Number of cows tested, 156; average yield of milk, 655 pounds; average test, 3.8; average yield of fat, 24.9 pounds. Highest herd average milk, 790 pounds, test 4.3, fat 31.3 pounds. Highest individual milk yield, 1,320 pounds; lowest, 335 pounds.

The figures giving the results of the first periods at Normandin and Laterriere, Que., in the Lake St. John District, show the range from 500 pounds milk testing 3.8, to 1,140 pounds, testing 4.0 per cow. The average yield of butter-fat taken by herds is from 23.3 pounds to 34.7 pounds. This indicates that, while there are good individual cows in this district, there is still room for judicious selection and "weeding out."

Laterriere.—Number of cows tested, 28; average yield of milk, 713 pounds; average per cent. of fat, 3.7; average yield of fat, 26.9 pounds.

Normandin.—Number of cows tested, 45; average yield of milk, 743 pounds; average test, 3.9; average yield of fat, 29.1 pounds.

The table giving the result of the fourth period of 30 days, at Princeton, Ont., shows an average of 4 pounds of butter-fat per cow less than June. There is the remarkable difference of 23 pounds of fat per cow in the average yield of herds 10 and 16, and a difference of 714 pounds of milk per cow between herds 6 and 16. This looks as if there is room for feeding and breeding for production and profit, not for maintenance only. Number of cows tested, 107; average yield of milk, 722 pounds; average test, 3.4; average yield of fat, 24.7 pounds.

The table giving the result of the fifth period of the Brockville, Ont., association shows the good average of 934 lbs. milk for 162 cows, in the 30 days ending June 30th. The noticeable contrasts are between herds 12 and 15 in average yield of fat and milk, the one double the other. No. 12, with an average milk yield of 1,219 lbs. for the herd, and a highest individual milk record of 1,760 lbs., is particularly good, and with which the totals of 350 and 340 lbs. in Nos. 4 and 5 do not compare favorably.

The number of cows tested was 162; average yield of milk, 934 lbs.; average test, 3.2; average yield of fat, 30.1 lbs. Three herds made average milk records of 1,036 lbs., 1,267 lbs., and 1,219 lbs., and nine cows, in as many herds, made individual records of 1,000 lbs. up to 1,760 lbs.; the latter an average of 58.66 lbs. daily. The highest herd average of fat was 40.7 lbs. for herd No. 12, in which was the highest individual milk-yielding cow. The highest individual test was 4.0, and the lowest 2.8.

The sixth period test at Cowansville, Que., for the 30 days ending June 22nd, with the largest number of cows tested, gives the highest herd average attained there up to that date. There are seven individual records of over 1,000 lbs. milk, with one of 1,270 lbs. At the same time there are some cows giving 300 lbs. and less.

Herd 32 has the good average of 842 lbs. milk for 28 cows—just 328 lbs. more per cow than herd 20, and putting to shame the too numerous individual records of only 300 lbs. per cow.

The number of cows tested was 414; average yield of milk, 646 lbs.; average test, 3.7; average yield of fat, 24.4 lbs.

Successful Dairying.

Previous to two years ago, I kept 22 cows, mostly pure-bred Ayrshire or Ayrshire grades, on 95 acres, together with 4 horses, 20 head of young cattle, 15 sheep, and a number of hogs. The sheep and young cattle were pastured on another small lot a few miles distant, but all the feed needed, with the exception of a few tons of bran and gluten feed, was raised on the farm, 83 acres of which is under cultivation, the balance bush and rough land. That season we had 30 acres of pasture, part of which had been pasture the year previous, the rest meadow; the cattle had also the run of the uncultivated land. During the dry period, in July and August, the cows were fed one feed per day of green vetches and oats, grown together, and cut in the milk stage. In September we had a good supply of second crop of clover. In October I commenced to feed a grain ration. Since then I have purchased an adjoining 100 acres, which gives us more pasture land. Last year we milked 30 cows, besides pasturing our young stock a good part of the time. This season we will carry 35 cows, when they all freshen. I always like to let the grass have a good start before I turn my cattle out in the spring, which is usually about the 20th May. This ensures a good bite until the dry season comes on. Should the month of June be very moist and the pastures get much ahead, we usually mow them off about July 1st. This allows them to come up fresh again. This season we have about 26 acres of cultivated land; the same of unbroken land, in pasture. We usually put in a few acres of vetches and oats to give a supply of green feed, should the pastures become dried up later on in the season. Our aim is to keep up the milk flow, as once let down it cannot be raised again to what it was. We usually commence to feed a grain ration in October, composed of a mixture of oats and barley chop 3 parts, bran 3 parts, and gluten meal 1 part. This is fed, according to the milk flow, to all the milking cows until they go to grass next season.

The winter ration consists of about 30 lbs. corn ensilage, 12 lbs. clover or mixed hay, and 5 lbs. of good clean oat straw. This is fed to all cows, whether milking or dry; the cows in full milk get along with the above, and a grain ration of about 8 or 10 lbs. The grain ration is reduced as the milk flow decreases, until the cow gives less than 10 lbs. of milk per day, when the grain ration is withdrawn. The oat straw is chopped and mixed with the ensilage and fed twice a day, and one feed of long hay is given, generally the first thing after milking in the morning.

The water supply in winter is pumped from an artesian well by a one-horse power to a tank overhead, thence conveyed to the troughs in front of the cows when they can drink at will. As we have a running spring brook (whence the farm derives its name) through the farm, the cows get the best of water in unlimited quantities in summer whenever they wish. Salt is kept in a trough convenient to the barn, where they can satisfy their desire at all times. The milking is done at all seasons in the stable. We prefer our milkers to milk with dry hands, but find it about impossible to carry this out effectually: as so few have been taught to milk with dry hands, force of habit is hard to eradicate. If cows' teats are inclined to crack, we use vaseline to moisten the hands.

We seldom have a kicker among our heifers; kind treatment and handling and manipulating the udder before freshening has a tendency to win the confidence of the most fractious heifer. If, perchance, I have one (as I had this season), I allow the calf to suck its dam for a week or so. While the calf is sucking the heifer from the left side, the attendant milks at the right side. She soon learns what this means, and I have seen the most vicious heifer become very docile and tractable in less than two weeks. In these cases it re-

quires patience on the part of the attendant. He must realize that he is only educating the heifer to a new and unnatural order of things. By this method, and by the attendant exercising patience and coolness, the heifer will be taught to be milked without the breaking of tempers, stools, or any of the Commandments. The day of "breaking-in" the heifer I trust has gone by. Straps or ropes in the stable I have no use for at this time.

In the case of a cow holding up her milk, we generally leave her for a few minutes, go back to her again, and by manipulating the udder we usually succeed in drawing all the milk; a little feed sometimes has the same effect. If I had a bad case of a cow leaking her milk, I would send her to the butcher; regularity in milking is the best remedy I know of for this trouble. In stripping, one must be guided by good judgment, as some cows may be stripped so much more quickly than others. I like to get the last of the milk. Ten cows per hour is about the capacity of our milkers.

Each cow's milk is weighed and recorded as taken from the stable to the milk room, a short distance from the stable, and composite samples are taken every six weeks or two months for testing, to ascertain the amount of butter-fat in the milk. Only in this way can we find out the "boarder" cows. I want every cow in the herd to yield me a profit; if she does not, I have no use for her, no matter what other good qualifications she may have.

Only the ordinary precautions are taken for keeping the milk clean. This means clean stables, clean cows, clean udders, clean utensils, clean milkers, and, as a result, clean wholesome milk.

The production of our dairy at Springbrook is a high-class quality of cream for the City of Montreal trade, whence it is sent daily by rail (occasionally, in

and immature sire. True, the first cost of a good pure-bred sire is considerably more than of a "scrub," but it is usually the best investment in the end. If a farmer who keeps only ten cows pays \$50 every four years for a pure-bred sire, and raises four heifer calves each year, and raises them right, he will have cows that may produce \$10 more per year than those from the "scrub" bull; therefore he is not long in getting his money back with large interest, he has made a better investment than had he placed the same amount in any insurance company, mining, railway, or bank stocks you may mention, and it will be an investment in which the dairyman and his family will take a greater delight as the years roll on.

Huntingdon Co., Que.

Quality of Cream-gathered Creamery Butter.

The question may be fairly asked, "Are our creamery managers carrying on the business in the best manner to improve the quality of our Western Ontario cream-gathered creamery butter?" Is it not admitted by all that the great need is sweeter cream, yet what do we find taking place this year? There are more creameries gathering cream only twice a week this year than ever before. When asked why, the answer is generally, "We want to cut down our expenses so that we can compete with our opposition in prices paid to the patrons for butter."

The creamery instructors have visited hundreds of patrons this year to try and get them to send sweet cream. They are met repeatedly with this question, "If you want us to send sweet cream, why do you not get the creamery to gather the cream oftener?"

The situation at the present time at many of our creameries is this: The patrons say if you want sweet

cream gather it oftener. The creamery man says I cannot afford to gather it oftener than twice a week. The result is sour, tainted cream, and old-flavored butter. Does it pay either the patron or the creamery man to have three or four opposition wagons going over the same road? Would it not pay them very much better to devote their time and energies to increasing the numbers of cows and their production in the immediate vicinity of their own creameries, instead of driving past some other fellow's creamery to steal some cream from him? Of all the foolish things in the dairy industry, it is this trying to get cream and milk away from another man's territory.



Jerseys Going to Pasture After Milking.

On the farm of S. J. Lyons, Norval, Ont.

winter, milk is shipped instead). The milk is run through a separator, the cream thoroughly aerated and cooled, then put away in the ice box ready for shipment. The skim milk is fed to the calves and hogs. Quite a number of the former are raised for stock purposes, and a large number of hogs are fed off each year.

When milk is shipped to the city instead of cream, the same precautions are taken to produce good, clean milk; then the milk is run through an aerator and immediately cooled to below 50 degrees F., then put in the ice box until shipped. This system has been followed for over 10 years, and, suffice it to say, it is a very unusual thing to hear a complaint from our city dealer about milk or cream. If, perchance, our milk goes to the creamery, the same system is followed.

There is a singular feature of the dairy business in this section—nearly every farmer draws his own milk to the cheesery, or creamery, or railway station. In the cheeseries, about 1½c. per pound is charged for making, and for butter at the creameries, about 2½c. to 3c. per pound is charged. Last year cheeseries paid about an average of 90c. per cwt. of milk, and creameries about 82c. This season prospects are that these figures will be exceeded 10 to 12 per cent. I think that the make of cheese will be larger, and of butter about the same as last season.

I know of no line of farming that is paying better than dairying, and the dairyman that is putting brains into his work, adopting the best systems of stabling, of paying close attention to all the details, in selecting his cows, in caring for them, and in handling his product with the necessary skill, is making a success of his profession.

Too many of our farmers are still using the "scrub"

Why is it that in many instances the farmers in the immediate vicinity of the creamery are either sending very little cream or none at all? May it not be due to the fact that the creamery manager has been giving more time to trying to "do" his opposition ten miles away than he has to trying to satisfy and please his immediate neighbors? Then, again, if the creameries accept all kinds of cream it is impossible to make as fine a quality of butter as our best farmers can do on their own farms, and they can receive just as high a price as the creamery does for the butter.

When in Montreal recently, several warehouses were visited to see some Western Ontario creamery butter. In the warehouse of probably the largest buyer of western butter, several lots were compared with Quebec butter. The head of the firm was asked what he considered was the relative value of the Quebec and Western Ontario? He said, if these two lots were offered today, the Western butter would sell for two cents less per pound than Quebec, and the difference was due to flavor. Now, the point is this, does it pay the patron to take two cents less for the butter than they would if the flavor were right? Would it not pay them better to pay half a cent more to the creamery man, so that he could afford to draw the cream four times a week, and get a cent and a half more per pound for the butter?

Too many of our farmers think that they are making money if they get things cheap, but in the butter business cheapness is the cause of thousands of dollars loss to the patrons of creameries in Western Ontario. Is it not time our creamery patrons were taking more interest in the way their cream is handled? Let them see to it that the creamery is paid a liberal commission for manufacturing, and then insist upon the collecting

of the cream so that it will be sweet and clean-flavored.

Many of our patrons of cheese factories and creameries seem to think that strong opposition and competition among factory and creamery men is the only way to get a good thing. So far as I can see, the only thing strong competition does is to produce a poorer quality of milk and cream, and make inferior cheese and butter. Take a sample: This year a certain patron had his milk returned because it was sour and tainted. He told the maker if he could not take in his milk when it was sour he could not have it when it was sweet, and took it next morning to an opposition factory, where he was received with open arms. Another case, where one maker returned a can for being gassy, and it was taken to an opposition factory and taken in the same morning.

Will this kind of competition tend to improve the quality of our Canadian cheese or make more profits for the producer? There is no doubt that by taking in two such cans of milk as mentioned above, would cause a loss of ten or fifteen pounds of cheese in the vat it was put into. Let us all along the line have less talk about competition and cutting down prices, and more talk about how to improve the quality of our milk and cream, and butter and cheese.

GEO. H. BARR.

Where Dairying Flourishes.

When the McKinley tariff shut Canadian barley out of the United States a couple of decades ago, the farmers of Hastings County thought they would have to go out of business. The market which had been taking their chief product for years was suddenly lost. What could be done?

For a number of years the cheese business had been established. It had grown slowly, but while barley held in the vicinity of a dollar a bushel, dairying did not by any means become a specialty. But things have changed. Now Hastings produces more cheese than any other county in Ontario, or, for the matter of that, in Canada.

While this premier position has been held for some little time, the apparent changes of the last two or three years are especially striking. The factories have always been built and owned cooperatively, for the most part, and new and improved buildings are taking the place of old, unsanitary shacks. A still greater change—a change of heart—is to be noticed among the patrons of the factories. Better stock and better feeding characterize the new era. It is not long since the scrub bull—a yearling at that—sired the greater number of the calves. Now, practically every farmer uses a good pure-bred male, for his best females, at least. The Holstein is the most generally popular of the pure breeds, and many of the grade herds have a high percentage of Holstein blood. Much better care than formerly is taken in raising the calves. It is difficult to do it properly where the milk is sent to a cheese factory. The best method seems to be the keeping at home of a certain amount of new milk for the youngsters until they are four or five months old. Many farmers give them the run of a clover meadow during the summer, before it is cut, and after the second growth springs up.

Better feeding is aiding and perpetuating the good work that better breeding has begun. Clover is grown much more largely than it used to be. It is the sheet-anchor of successful dairying, both for hay and pasturage. Peas and oats and corn are the soiling crops most used to supplement the pastures. The dairyman aims to maintain the milk flow at its highest during July and August, so that the cows will be able to produce well under the more favorable conditions of the later months.

Good stables, many of them with cement floors, are, too, the order of the day. A great deal of building and alteration has taken place in the last two years, nearly all of it with a view to improving the accommodation for the cattle and to increasing the returns from them. The hope of the Hastings Co. farmer is in the cow, and she will not—she has not disappointed him. What is true for Hastings, applies equally to the other counties of the Province—we might almost say, in all the Provinces east of the Great Lakes.

C. W. ESMOND.

Feeding for Next Year's Milk.

It is too often the case where cows are kept simply to supply the family that as soon as they go dry they are put on light fare and left to shift for themselves. Not much is expected of such cows at any time, but it is always false economy not to get out of a cow, or any other animal, all she is capable of. A cow has to be fed a certain amount to maintain her, and it requires just as much time to bring up and milk a poor cow as a good one; therefore a person should endeavor to extract all the profit and pleasure possible out of his milk producer. To do this, the cow must have a chance when she is dry. Feed her enough to fortify her against the time of calving, then she will give a much better account of herself than if she had lived all winter on a mere-sustenance diet. If she is a profitable cow

her owner should know it and give her a chance, but it might be noted that there are many cows which shiver around during the winter, but which, if they were in another man's stable, would soon be discovered to be worth better care and feed. The family cow, whether kept for profit or convenience merely, deserves the best of care. She earns it, and her services are indispensable.

POULTRY.

Poultry Pointers.

Don't keep last winter's layers in small yards and close, stuffy houses; get them out in the fields, and let them roost in open coops.

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Be sure that the pullets have plenty of good food during the summer, if you expect them to be developed and lay well next fall when eggs are high.

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Provide a fresh supply of cool water, at least twice each day. Place the water-fountain or trough in a well-shaded place, wash it thoroughly once a day, and scald it with boiling water once or twice a week.

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It is a good plan to separate the cockerels and pullets as early as the sex can be positively distinguished. The pullets will do enough better to pay for the trouble, and the cockerels will consume more food and grow faster as they grow older.

• • •

Now is the time to fatten and market all the old fowls that you do not intend to keep over another winter. They have about finished laying for this season, and will take on flesh and fat faster now than they will later when they are shedding their feathers.

Neglected Poultry.

The amount of money lost to farmers and other poultry-keepers by keeping mongrel, cross-bred fowls, is almost incredible, and only fully realized when looking into the yards of various farms and dwellings, and seeing the miserable, ill-assorted, undersized fowls kept there. It disgusts one to see them consuming good food which would support a profitable flock of fowls. It is usually people who keep these mongrels who complain either that poultry-keeping does not pay, or, if they admit that fowls do pay for their keeping, that it is only to such a small amount as to be barely worth considering.

Fortunately, one is usually rewarded in a day's wanderings by meeting a few good housewives who keep good poultry, and find it a source of both pleasure and profit. Hard-working, thrifty wives of agriculturists and small holders, who are fully alive to the advantages of keeping level with the times in most matters, are sometimes painfully slow to take any measures to improve either the laying or table quality of their poultry. This is true, even when it is clearly pointed out to them that their neglect is losing them money month after month, year in and year out, and this is simply because they begrudge a small initiatory outlay in money and trouble which would be repaid the first season. It does not suggest itself to them that it is to their advantage to improve their stock and get a large return in eggs, and in the extra price obtained for their young birds killed for table.

One is often met with the argument, the farmer's wife can only get the same price for a large pair of fowls as for a small pair, so that there is no advantage in keeping good table poultry; yet the same raisers admit that the price of geese and turkeys varies with size and quality—the two arguments are illogical.

One great blunder often made is the selling of early pullets for the table, under the impression that the later broods will do just as well to keep for layers. This is a sad mistake, as it is the early pullets that begin to lay just when eggs are at the top price of the year, and when the old hens are taking a rest.

Old hens are too often allowed to run on year after year. The owners seem quite oblivious to the fact that these have not only failed to be self-supporting, but have become a positive source of loss to their owners. The best remedy for this evil is to sell them to the first buyer that comes along.

Many breeders make a point of breeding year after year from hens which make individually a liberal egg record, and the result of buying from such yards is pretty sure to be satisfactory. When we take into consideration all the trouble taken in keeping a record, by using trap-nests, of every egg laid by each individual hen—in fact practically opening a ledger account for every hen—it will at once be apparent what an advantage it is to secure eggs from such a yard, and that, too, early in the season, so that the pullets will begin to lay at a time fresh eggs are scarce and dear.—W. R. Gilbert, in The Farmer.

Reminders for Poultry-keepers.

Supply clean water. It is essential to health and to the hen for the production of the egg, the contents of which are nearly three parts water.

A large percentage of poultry, especially young chickens, die through drinking from puddles and dirty water in their drinking troughs.

As chickens grow, diminish the number of meals, as well as variety of food.

Separate the sexes as early as possible; the pullets will then obtain a better chance of getting their share of food.

Weed out the inferior birds, whether as to size, form or quality, at the earliest moment, and feed the two lots separately; unless the birds are on grass, supply them with green food daily, therefore cut grass is excellent. A mangel may be cut in halves and supplied for the birds to peck at.

The business man will keep his customers supplied all the year round, and by so doing he will obtain better prices in summer than outsiders who have nothing to sell in the dear season.

Learn the fattening system, if a practical knowledge has not already been acquired. Chickens finished in this way largely increase in weight and quality, being much richer on the table.

Milk should find its way into the chicken rations much more generally, and if a cow is kept for the purpose of supplying it, it would be found one of the cheapest of foods.

Young chickens still with the hens thrive better on a variety of foods. The object is to induce them to eat largely by giving small quantities during many meals.

The way to succeed in production is to use a trap nest, record the eggs laid by each hen in a particular pen, and to breed from these hens only which lay the largest number of eggs, adopting this plan each year.

Select the breeding cockerel from the eggs laid by the best-laying hen. Mate him with the best-laying hens or pullets, and again select both sexes for stock in the same way.—[Farmers' Gazette.]

GARDEN & ORCHARD.

The Tussock Moth in Nova Scotia.

Just now a small section of King's County, Nova Scotia, is being treated to a new visitation, in the shape of a scourge of the tussock moth, which bids fair to entirely ruin the fruit of several orchards. The orchards most seriously affected are on Long Island, just north of Grand Pre station, where in several orchards there are already hardly any sound apples to be found.

The insects have been seen for several years past in small numbers, but have never been known to do any particular damage, and have received little attention, even as a possible future enemy. But last winter, and, more particularly in the early spring, when orchard owners began pruning, the writer received a great many of the egg clusters (which are quite noticeable when the leaves are off the trees), with requests for information as to the insect which laid them. Evidently last season was a good one for them, and they multiplied freely.

Some orchardists, where they were most plentiful, gathered the egg clusters during the winter and spring (at least two collecting over a peck of them from rather small orchards), and, as a result, their orchards are comparatively free from attack, while their neighbors who did not adopt this method are in some cases paying very heavily for their neglect. The worms hatch here about July 1st, though their time of coming out varies considerably, as they can now be found all the way from those just hatched, and less than a quarter of an inch long, to those nearly full-grown and over an inch in length. They feed on both foliage and fruit, but seem to prefer the young leaves at the tips of growing shoots, and the young apples. Of course, the most serious damage is on the fruit, and they will sometimes go over the entire surface, taking the skin and a little of the tissues beneath. In other cases they will gnaw holes here and there over the surface. In one or two orchards which the writer visited recently, there was scarcely a sound apple to be found, and while, no doubt, many of them will recover so as to be marketable, the great majority will never be fit for anything, even if they do not drop from the trees as a result of their injuries. They seem to attack all varieties indiscriminately for the most part, Spies being the only sort we found in a badly-infested orchard, which did not seem to be hurt much. The orchard included an early sweet variety, Golden Sweet, King of Tompkins, Baldwin, Blenheim and Ben Davis, and even the last-named was damaged considerably, though they seemed to prefer the more forward fruit, the tissues of which would, no doubt, be softer.

The insect is very easily recognized in the larval stage, even by those entirely unacquainted with it, by the two long black tufts of hair at the head and the one long tuft at the tail-end of the caterpillar. There are also four upright, whitish tufts along the back, like sections from a scrubbing brush, which are very characteristic. For the rest, the most common form is largely black and yellow, with a dull red head and two

red spots along the back, near the rear end. It has also a good many scattering black hairs along the body.

In the adult stage the female is wingless, like the female of the canker worm, and the male a small grayish-winged moth. The insects go into the pupa stage largely on the trees, and the females when they hatch deposit their eggs in masses on the leaves and cover them with a white, frothy mass. Usually two or three leaves are held together by the egg mass, and the whole remains on the tree over winter and is quite conspicuous, and collecting and destroying these egg clusters is a most effective method of combating this insect. As each egg cluster contains from 300 to 500 eggs, it is easy to see that even a few clusters left on a tree may mean a good deal.

What makes this insect difficult to deal with, and likely to be overlooked, is the fact that it hatches late, after the ordinary spraying has been done, and when orchard owners are usually busy with other work, and are not on the lookout for it.

We would urge farmers, particularly in the Annapolis Valley, to look over their trees at once and see if the fruit is being eaten, and if so, spray immediately with Paris green, using 1 lb. per cask, with plenty of lime, to prevent any possible burning. We should also put in the vitriol to make Bordeaux, as this will adhere better to the foliage than plain lime whitewash.

Of course the work of this insect must not be confused with that of the "green fruit worm," which usually eats but a single hole into the apple, and which works earlier in the season.

I am not an alarmist, and have no doubt this insect can be controlled if taken in time and properly managed, but it certainly is doing in the section where it is plentiful the most serious damage that we have seen from any insect pest. Caterpillars and canker worms will eat the leaves, but the tree will send out a new crop and go on its way rejoicing (though, no doubt, hoping that its owner will not permit such an outrage the following year), but when this insect takes charge the fruit seems to be doomed for that year at least. And another point worth considering is this: that the orchards which this year are overrun with the tussock moth were last year no more affected than a very large number are now. It will certainly pay to be on the watch for this insect's eggs the coming winter.

N. S. Agricultural College. F. C. SEARS.

APIARY.

Producing Both Comb and Extracted Honey on the Same Colony.

The following paper, by James A. Green, was read before the National Beekeepers' Convention in Chicago last December:

Whether comb or extracted honey can be produced most profitably, is a question that is often asked, and one that each man must settle for himself, according to the conditions under which he must work. Having settled this, he is too apt to assume that he should confine himself entirely to the production of one or the other. We all know something of the advantages of specialty, and I would be one of the last to decry them. Yet I think that, in many cases, at least, the beekeeper is making a mistake in so deciding. The extracted-honey man is all right. He has no need to produce any comb honey, and, in most cases, it will not pay him to do so.

With the comb-honey producer it is different. All practical comb-honey producers know that it is a difficult matter to get all colonies in such condition that they will enter the supers promptly at the beginning of the honey flow. A colony that is in just the right condition will go into the sections with a rush, and keep things moving right from the start. Another, apparently as strong in numbers, will hesitate about going into the super, and do nothing for some days except to crowd the brood combs as full as possible of honey. This perhaps results in swarming, which, in many localities, and with some systems of management, effectually spoils the chances of any comb honey from that colony. In any case, the colony that started promptly in the super is pretty sure to have a great deal more honey to its credit than the one that is slow about starting, even when they are apparently equal in all other respects. It is exceedingly important that the bees form the habit as early as possible of storing their honey in the super.

Beekeepers generally are in the habit of using "bait-combs" in the supers to secure this early start. But even a full super of drawn combs in sections is not as good for this purpose as a nice set of extracting combs.

For a number of years I have combined the production of extracted honey with that of comb. My extracting supers are only 6 inches deep, with the frames at fixed distances, firmly held in place by a thumb-screw through the side of the hive, after the style of the Heddon hive. This makes them easily handled as a whole, and none of the frames are ever handles separately until they come to the extracting room.

One of these supers is placed on each colony at the beginning of the honey flow. The bees enter this readily, and if there is any surplus to be gathered, it goes into the super. After the bees

are well at work in it, a super of sections is placed under it, after the usual tiering plan, or sometimes the extracting super is removed altogether, and replaced by the super of sections. The combs thus removed are placed over the poorer-working colonies. There will always be some colonies that will not do good work in the sections, because they are not strong enough in numbers, because they are not good comb-builders, or because they do not cap their honey with the nice white finish so necessary for a fancy article. On these colonies the extracting combs may be tiered up to any desired height, and left to be finished, or until you are ready to extract the honey. This gives you the ability to use profitably those colonies that are not good for comb honey. In most apiaries there are bees that are not fit for producing comb honey, simply because they fill the cells so full that their combs have a water-soaked appearance that detracts largely from its market value. These should be culled out, if comb honey is what you are trying to produce, and their queens superseded with better stock as soon as possible. In the meantime, they are just as good for extracted honey as any.

It takes a strong force of workers to work comb honey profitably. A colony that will do very fair work at storing honey in combs already built, may do little or nothing at building comb in super. That foundation principle of beekeeping, "Keep your colonies strong," applies with much greater force to colonies producing comb honey than to those run for extracting.

For this reason I keep extracting combs on all colonies that are not yet strong enough for the profitable production of comb. When they have reached the point where they can build comb profitably, the extracting combs may be exchanged for sections. When a colony swarms, or is divided, its comb supers go with the swarm, while a set of extracting combs is put on the old colony until it is in good working condition again. Any colony that any time during the honey flow is found to be doing poor work in the sections, has those sections promptly removed and replaced with extracting combs.

One of the greatest advantages of this combination system is seen at the end of the season. As the honey flow draws to a close, instead of giving new sections that may never be completed, give extracted combs to the colonies that are doing the poorest work in the sections, and give their sections to other colonies to complete. In this way you not only secure a larger amount of finished honey, but you avoid the expensive nuisance of having a lot of unfinished sections on your hands at the close of the season. By working in this way, I have sometimes had nearly every section in an apiary of over 100 colonies run mostly for comb honey, finished up in marketable condition at the close of the season. Another important point to be considered is that, in many localities, the last honey gathered is not fit to be put into sections, but can be much more profitably handled in the extracted form.

It will be seen that by this system there is considerable changing about of unfinished supers. Usually the supers are first freed of bees by the use of bee-escapes, but during the honey-flow I simply get out the greater part of the bees by smoking, and then shaking or "jouncing." The few bees that are left do no harm, and are just as useful in one hive as another.

Of course, a queen-excluding honey-board is a practical necessity with this system, but its advantages are so many and so great that I would not think of doing without it.

Several years ago I was much taken up with the idea that has been made public during the past season, of using one or more extracting combs in each comb super, but I soon gave it up, as it seemed to me too fussy and complicated, and not nearly as well suited to the work in a large apiary as separate supers, used according to the needs of the particular colony.

The system I have outlined has been in practical use in my apiaries for nearly twenty years. There are some small advantages that I have not mentioned, but, briefly, the advantages of the system are that it secures more honey, a higher grade of comb honey, saves a great deal of waste, and does it with a control of the bees and an economy of labor that is not to be secured by any other method that I am familiar with.

Considerable discussion followed the reading of the paper. We append the comments of Mr. R. F. Holtermann, of Brant Co., Ont.:

"The objection which I have seen to the production of comb and extracted honey in the same hive is this: It requires a good deal of concentrated energy to produce good comb honey; and as far as skill and time are concerned, it requires more careful and skillful application to produce good comb honey than it does good extracted honey; and where you have a percentage of your extracting combs in that super, you are really producing extracted honey at an increased expense, compared with comb honey, and the more you produce, the greater is the cost of producing that extracted honey. The question has been touched upon as to the unfinished sections on the outer

sides of the hives. It has also been mentioned that it is not necessary to have those unfinished sections. That, I am thoroughly satisfied, is correct. I learned some years ago by putting in wedges between the bottom-board and the brood-chamber, that the brood-chamber was practically raised an increase of $\frac{1}{4}$ of an inch from the bottom-board, and by that means the bees are compelled to go up at the side. By having a double-bee space at the sides, by careful experiment, I have found that the outside sections are in many cases even better filled than the center.

"I have never seen a bait section as well finished as a section built upon comb foundation. But, on the other hand, I want to plead this, that for these bait sections you can get a better price than you can get for honey after it has been extracted from those extracting frames. That is the reason I do not consider the system without its faults.

Removing Combs from the Hive for Extracting.

In how many apiaries throughout the land does the season for extracting become a season of dread? Time was when it was the same to me; but long experience and careful observation, and pointers from others whom I have met at conventions, and the reading of articles in bee journals, have changed all this, and now we often extract in out-apiaries in buildings very far from beehive-tight. During the robbing season we extract all day, and for years have not been compelled to stop work. To go into the details of management to accomplish this will necessitate another article. The present is simply to cover the removal of combs from the hive to the beehouse.

We work in pairs, the least experienced doing the smoking, although to smoke bees "to perfection" requires great skill, close observation, and faithful work.

The next hive to operate upon is smoked while we are about to open a new hive. Smoking is done through the ventilator. To smoke the bees at the entrance is to drive them into the super. The hive is not jarred, but handled carefully. The cover and cloth, or honey-board, are removed from the super, and the bees smoked. A swinging motion of the smoker throwing the smoke between the combs from end to end is far more effectual to drive the bees down than to smoke in the usual circling motion, and largely across the combs. If there are two supers on the hive, the combs are taken out of the first super, shaking the bees in front of the hive, but so far in front that they are not likely to reach the brood-chamber before the super next to the brood-chamber is being operated upon. We work quickly but not roughly. Let movements be rapid, purposeful, but not nervous. We avoid crushing bees; and by having straight combs and using a little careful judgment we have no trouble about crushing bees. I now catch hold of the top-bar ends with thumb on one side, fore fingers on the side-bar and the rest of the hand on the other side of the frame inside of the hands, facing each other, and make a quick shake, followed by a rapid reversal in motion, and another quick shake down, done in less time than it takes to describe it, and yet the bees have had three attempts to dislodge them, followed in rapid succession. To hold a heavy comb by the top-bar lugs alone would break the lugs in many cases; but by also pressing on the side-bar, much of the weight is taken from the lugs. I also find that the staples driven into the top-bar weaken the lug, and they are more liable to split off. Your metal spacers would have the opposite effect. Unless with some strains of Italians, I find, after such shaking, but few bees upon the comb. Whatever is left upon the comb is brushed off.

For twenty-five years I have tried almost if not everything recommended as a brush if within reach, and some things which had to be purchased a long way from home. A turkey feather and wing, or a goose wing, was the first. I find these too harsh. There is not give enough to them; and even with an experienced hand the bees are likely to be more or less crushed or rolled under the feather, and they will fight the feather. I have seen the bees do it many a time. Asparagus and weeds do not last, and are too irregular, and much time is lost in looking for more. The Cogshall bee-brush, which should be used only at the end, has sufficient play, but does not cover enough surface at a sweep. The Dixie bee-brush is all right at first; but when it has been put in water it hardens, and when in use becomes tangled. However, I prefer it to any of the above-named articles.

More than a year ago I saw cataloged a German brush, and sent for two. It is a hair brush. Water has had no effect upon it. The hairs are long enough to be pliable and not crush the bees if caught between the brush and the comb. There are neither too many nor too few hairs in the brush, either being a defect. With that brush we brushed at least comb surface enough to contain 30,000 lbs. of honey, 60,000 lbs. being one crop. I showed the brush to many, and it looked, aside from a dulling of the paint on the wood, about as good as new. Even when used by a novice, as it was many a time, we never saw the bees try to fight it. It was shown at conventions in Canada, and many wanted to buy one like it, among them some of our very best-known Canadian beekeepers (I have none for sale). I never used a brush its equal. It could be washed in a moment, and be again ready for use, water not changing

its texture, as with vegetable matter. I know the brush has saved us from many stings and annoyances. The lower-story combs, when a third have been removed, have their bees shaken into the super. An empty super is taken out on a barrow and filled. If two supers are on the hive the first super will then be empty, and it can be placed on top of the first upon the barrow. We often (one man) wheel a barrow with two twelve-frame supers from the apiary to the house. By means of a plank, or other device, the barrow is wheeled directly into the extracting-house, and this method is much easier and more rapid than carrying in buckets.—[R. F. Holterman, in *Gleanings in Bee Culture*.

THE FARM BULLETIN.

Quebec Notes.

Since sending you the notes of last month, our beautiful valley has changed its aspect of a month or so ago. Then it was superb in its greenness, to-day the fields are becoming more variegated in color, the purple blossoms of the clover, the yellow of an occasional field of buttercups, the lighter green of the grain fields, with their heads of grain turned to the summer sun, which will soon turn them to gold, and the dark-green corn fields waving in the breeze; this, with the stately elm on the banks of the gently-flowing river, or the shapely maple of the forest in the background, makes a picture fit for any artist, or a fit subject for any poet; here nature's lovers can drink in to their heart's content the Works of the Creator. But amidst this beautiful scene there is activity on every hand. 'Tis the "haymaking time," and while the City Cousin is enjoying the latest book in the hammock, under the shade of the big oak or maple tree, and the capitalist is meandering among the mountains or enjoying the sea breezes, our farmers are exerting their energies to the tune of the mowing machine, the hay tedder, the rake, etc., making the most of the sunshine in saving the hay crop.

Huntingdon, Que.

W. F. S.

International Horse Show.

Mr. Henry Wade, Secretary, Canadian Horse-breeders' Association, writes:

"I have received a letter and circular from Mr. Frank F. Euren, Secretary of the International Horse Show, 12 Hanover Square, London, in which he encloses the prospectus of the coming International Horse Show, to be held in the Olympia Show Building, London, England, in June, 1907, at which about £10,000 will be paid in prizes. He is asking the co-operation of Canadian horsemen in making this show a success; he also wishes to know if the Canadian Government would assist in sending some of the best jumping, saddle and driving horses bred in the Dominion. This show will be of an international character, and will be open to competitors throughout the world, and for all classes of horses. It would be well for Canadian horsemen to hold this exhibition in prospect, as we have just as good horses in Canada as in any part of the world."

MARKETS.

Toronto.

LIVE STOCK.

Cattle receipts at the Junction market were large—100 carloads. At the City market the cattle receipts were light, but the bulk of the sheep, lambs and calves go to this market. Trade in choice, well-finished cattle was brisk, but common to medium were slow sale. Prices have declined 10c. to 15c. per cwt. for the best grades, and 15c. to 30c. per cwt. for the common.

Exporters—Prices ranged from \$4.40 to \$5.10; the bulk selling at \$4.65 to \$4.90 per cwt. Export bulls sold at \$3.50 to \$4.25.

Butchers'—Market easier. Prime pickled lots, \$4.50 to \$4.60; loads of good, \$4 to \$4.25; medium, \$3.75 to \$4; common, \$3.50 to \$3.75; cows, \$2.50 to \$3.25.

Stockers and Feeders—Few offered, but plenty for demand. Prices easier at \$3.80 to \$4 per cwt. for best steers, 900 to 1,050 lbs.; \$3.50 to \$3.75 for steers, 800 to 900 lbs. Stockers sold from \$2.50 to \$3.50, according to quality.

Milch Cows—Few offered. Trade firmer at \$30 to \$60 each.

Veal Calves—Offerings moderate; prices easy at \$3.75 to \$6 per cwt. Two prime, new-milk-fed calves brought \$6.50 per cwt., but there were only two out of 150 on sale.

Sheep and Lambs—Trade brisk. Export ewes, \$4.25 to \$4.50 per cwt.; bucks,

\$3.50 to \$3.75; culls, \$3.50; lambs, \$7 to \$7.75 per cwt.

Hogs—Deliveries light; prices steady at \$8 per cwt., fed and watered, and \$8.25, off cars.

Horses—There is little doing at either the Repository or the Canadian Exchange. The little business being done is confined to workers and drivers. The work horses were generally of a cheap class for delivery purposes around the city. Prices unchanged.

COUNTRY PRODUCE.

Butter—Receipts fair; prices firm at: Creamery prints, 23c. to 24c.; creamery boxes, 22c. to 23c.; dairy pound rolls, 19c. to 20c.; tubs, 18c. to 19c.; bakers' tubs, 14c. to 15c.

Eggs—Receipts fair; trade firm at 18c. to 19c. per dozen.

Potatoes—Prices easy at 60c. to 75c. per bushel.

Cheese—Supplies moderate; prices firm at 12½c. to 13c.

Poultry—Receipts fairly large, with prices easier. Spring ducks, dressed, 12c. to 15c.; chickens, dressed, prices steady at 15c. to 18c.; last year's pullets, 12c. to 13c.; hens, 10c. to 12c. per lb.; turkeys, 12c. to 15c.

Hay—Baled; market strong at \$10 per ton for No. 1 timothy, in car lots, at Toronto; No. 2, \$7 to \$7.58 per ton.

Straw—There has been little doing in straw, baled; prices steady at \$6 per ton for car lots, on track, at Toronto.

Beans—There has been little doing in beans, and prices remain steady at \$1.75 to \$1.80 for hand-picked; prime at \$1.50 to \$1.60 per bushel.

Fair Dates for 1906.

Cobourg Horse Show	August 21-23
Canadian National, Toronto	Aug. 27-Sept. 6
St. John, N. B.	Sept. 1-7
Winchester, Ont.	Sept. 6-7
Canada Central, Ottawa	Sept. 7-15
Western Fair, London	Sept. 7-15
Michigan West, Grand Rapids	Sept. 10-14
Sussex, N. B.	Sept. 10-14
New York State, Syracuse	Sept. 10-15
Chatham, N. B.	Sept. 10-15
Arthur	Sept. 14-21
Peel Co., Brampton	Sept. 18-19
South Ontario, Oshawa	Sept. 20-21
Dominion Exhibition, Halifax, N. S.	Sept. 20-Oct. 5
Prince Edward Island Agr. and Industrial Exhibition	Oct. 8-12
Provincial Exhibition, New Westminster, B.C.	Oct. 2-6
American Royal, Kansas City, Mo.	Oct. 6-18
International, Chicago	Dec. 1-8
Ontario Winter Fair, Guelph	Dec. 10-15
Caledonia	Oct. 11-12

Managers of fairs whose dates do not appear on our list will confer a favor on our readers by sending in their dates.

Crops in Temiskaming.

We are having quite a dry summer here; an excellent summer for burning the fallow. At times the fire runs somewhat, especially where it follows the dry brush in the woods, but as yet it has not done very much harm. The fire makes the clearing of the land quite easy. There is quite an amount of clearing being done this year; but the last two weeks the farmers have been busy with their hay, which is an abundant crop, and has been gathered in fine condition. The grain crops also look promising. Fall wheat is well filled and ready to harvest; the oats are also headed out good and strong, and the peas are covered with blossom, which, with the potatoes, root crops and gardens all looking so bright, makes the farmers here quite jubilant. We have lately had a visit from Mr. Andrew Elliot, of Galt, and Miss Laura Rose, of Guelph, addressing meetings, which were greatly appreciated by the farmers and their wives and families, inasmuch as they came here as representatives of the Farmers' and Women's Institutes, of which quite a good many are already organized in this district. I had the pleasure of hearing them both at Hilliardton (this is a village on the banks of the White River). Mr. Elliot being the first speaker, spoke briefly on different subjects, including plowing and cultivating the land, and the raising of different crops, and the growing of fruit for profit and pleasure. He also said, among other things, that in his travels in our district the worst difficulty we had in this country was the high rate of wages paid the laborer, explained that it took a great many farmers from their farms and after the silver that glistens. I might take an exception to this remark of his, because a great deal depends on this question. My opinion is that those high wages, after being earned, will be one of the best advantages to the farmers, if they will take this cash and buy more supplies, come back on their farms and develop more acres for the succeeding crops. If they would do this the high wages would certainly be for the best, because they would not require to be away from home so long to earn. This district is certainly

a high-wage country, both summer and winter, which will be a great help to the beginner that doesn't bring in much of the needful. Mr. Elliot was also down on the mines. He declared it was another bad feature for our development, because it took the minds of the people from the farm. I might mention as to this, that I consider in the near future a large number of those prospectors will be found coming back to their farms, as they will find that the farm will be safer and surer profit for the money and labor invested. Let the farmer stick to his farm and the miner to his mine. I believe this will be a happy combination, and each industry will certainly help the other to develop and make this district one of the wealthiest in Ontario, if not in Canada. Miss L. Rose also spoke to the ladies and gentlemen. As there were quite a few present, her subject in the afternoon was the making of good bread and buns, made quite palatable by the addition of blueberry and other preserves. She also organized a Women's Institute at Hilliardton. The choice of ladies to represent this society here presages success, as they certainly are of the right class. Miss Rose also spoke in the evening, on the dairy cow. She seems to be most familiar with her subjects. She had a large profile of an ideal dairy cow pinned on the large black-board of the Hilliardton schoolhouse, where they were speaking. She described the proper appearance of the best cow, and also said that a great deal depends on cleanliness, plenty of light in the stable, and kindness to the profitable dairy cow. In my next letter to the readers of "The Farmer's Advocate," I purpose giving a description of how the honeybee industry is handled in this district, both profitably and successfully.

Temiskaming, July 28th. NEIL A. EDWARDS.

A Big Show of Horses.

The exhibit of horses at the Canadian National Exhibition, Toronto, last year ran up to 1,200, but the promise that that record will be far exceeded this year, and that something like fourteen or fifteen hundred horses of all types will be seen on the grounds. Entries are not confined to Canada, but the classes and the prizes are open to all the world. Several prominent breeders have been to England and the United States to make purchases specially for exhibition at Toronto, and a consignment of Shires from the studs of King Edward and Lord Rothschild are already in the stables on the exhibition grounds. The principal classes of horses will be shown and judged the first week in September.

Dairy Meeting at Brockville.

The Dairy Commissioner is arranging for a meeting to be held at the Brockville Cool Cheese-curing Room, on Friday, August 17th, at 2.30 p.m. The question of again having an official referee of butter and cheese at Montreal, and the selling of cheese on three grades instead of two, as at present, will be among the subjects discussed.

All the cheese boards in Eastern Ontario, and the Montreal Produce Merchants' Association, have been invited to send two delegates, and a general invitation has been extended to salesmen, cheesemakers, patrons, and others interested.

Mr. J. A. Ruddick, Dairy Commissioner; Messrs. G. G. Publow and Geo. H. Barr, chief instructors, and others, will be present to take part in the discussions.

Honey—Market firm; prices unchanged at 10c. per lb., strained; combs, \$1.75 to \$2 per dozen.

Hops—Market dull at 13c. to 16c. per lb.

BREADSTUFFS.

Grain—Wheat, red and white, winter, 70c. to 71c. Manitoba, No. 1 northern, 84c., and 82c. for No. 2.

Corn—Market easier; No. 2, American, 58½c. to 59c., at Ontario points.

Rye—Prices nominal from 61c. to 62c.

Peas—Steady at 82c. to 83c., outside points.

Barley—Offerings of new are light at 50c. for No. 2, at outside points.

Oats—Old, No. 2 white, steady, at 36c. to 37c., outside; new oats, for future delivery at 32c. to 32½c., outside.

Flour—Manitoba patent, \$3.90, on track, at Toronto; Ontario, 90 per cent. patents, \$2.90 bid for export; Manitoba patents, special brands, \$4.40; strong bakers', \$4.

Milled—Bran, market steady at \$15.50 to \$16, outside. Shorts, \$17.50 to \$18, outside.

HIDES AND WOOL.

E. T. Carter & Co., 85 Front St., Toronto, have been paying the following prices: Inspected hides, No. 1 steers, 12½c.; inspected hides, No. 2 steers, 11½c.; inspected hides, No. 1 cows, 12½c.; country hides, dried, cured, 11c.; calf skins, No. 1 city, 14c.; calf skins, No. 1 country, 13c.; pelts, 55c. each; lamb skins, 60c. each; horse hides, \$3.25 to \$3.60; horse hair, per lb., 30c.; wool,

washed, 26c.; wool, unwashed fleece, 16c. to 18c.

FRUIT MARKET.

Deliveries of fruits in season have been large, but none too large for the demand. Bargains in fruit are scarce. Prices ranged as follows: Blueberries, \$1.10 to \$1.35 per basket; cherries, large basket, \$1 to \$1.30; raspberries, per quart, 11c. to 12c.; black currants, \$1.15 to \$1.25 per basket; red currants, basket, 90c. to \$1.10; gooseberries, 90c. to \$1.10; peaches (Canadian), basket, 50c. to 75c.; tomatoes (Canadian), 50c. to 65c. per basket; cucumbers, 50c. to 65c. per basket; pears, 50c. to 75c.; pears, small, 35c. to 40c.

Buffalo.

Cattle—Slow and steady; prices unchanged. Veals—Active, and 25c. higher; \$4.50 to \$7.25. Hogs—Slow, and 10c. to 15c. lower; heavy, mixed Yorkers and pigs, \$6.85 to \$6.90; roughs, \$5.75 to \$5.90; stags, \$4.25 to \$4.75; dairies, \$6.50 to \$6.75.

Sheep and Lambs—Active and steady; lambs, \$5.50 to \$7.75; yearlings, \$6 to \$6.25; wethers, \$5.50 to \$5.75; ewes, \$4.75 to \$5; sheep, mixed, \$3 to \$5.50.

British Cattle Markets.

London.—Cattle are quoted at 11½c. to 12c. per lb.; refrigerator beef, 9½c. to 9½c. per lb.; sheep, dressed, 14c. to 16c. per lb.

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Montreal.

Live Stock—In the local markets for live stock there is nothing specially new, the tone of the cattle market, however, being rather firmer. Choice cattle sold at 5c. to 5½c.; good at 4c. to 5c.; medium, 3½c. to 4½c., and common, 2½c. to 3½c. Demand for sheep was good, but offering was, as usual, a little on the short side, and prices were firm at 3½c. to 4½c., according to quality. The same remarks apply to lambs, which sold at \$3, or perhaps a shade less for some, to \$5 each, a few choice bringing a shade more. Common calves were \$2.50 to \$5 each, and \$6 to \$10 each for choice, while milch cows ranged from \$25 to \$50 each, according to quality. The market for hogs was quite firm, but there was no actual advance in price, the range for selects, off cars, being still 8c. to 8½c. per lb.

Dressed Hogs and Provisions—The market for dressed hogs is steady, in sympathy with that for live, and fresh abattoir stock is still quoted at 11c. per lb. for choicest. There has been some change in prices for hams and bacon, recently, and hams are now selling at an advance of about ¼c. all round, demand for them being good and supplies being limited. Extra large hams are quoted at 14½c.; large, 18 to 25 lbs., being 16c.; hams, with bone out, being 16½c. for large, and 17½c. for small. Bacon, contrary to the movement in hams, declined in price, on certain grades of the best quality, these being neglected owing to the high prices at which they were held. Demand is better now than prices are lower, best smoked breakfast bacon being 16½c., Wiltshire being 15c., and long, clear, light being 13c., and long, clear, heavy and green flanks being 12c. Lard has advanced half a cent a pound, at 8½c. for choice refined compound, 12½c. for extra pure, and 13½c. for finest kettle. Pork is unchanged at \$22.50 to \$24 per bbl., according to quality.

Horses—There is practically nothing doing in the market, prices being, however, very firm, at: Heavy-draft, 1,500 to 1,700 lbs., \$250 to \$300 each; light-draft, 1,400 to 1,500 lbs., \$200 to \$250; express, 1,100 to 1,300 lbs., \$150 to \$225; choice saddle or driving, \$350 to \$500; fair drivers, \$125 to \$150, and old used-up animals, \$50 to \$100.

Hides, Tallow and Wool—Hides are unchanged and in moderate supply, dealers paying here, 10½c., 11½c. and 12½c. per lb. for Nos. 3, 2, and 1, respectively, and sell to tanners at an advance of ¼c. No. 1 calf skins are 15c. per lb., No. 2 being 13c., and lamb skins 35c. each. Rough tallow is 1½c. to 8c. per lb., and rendered, 5c. The wool market is fairly active, and prices are about the same. Demand for wool is fair, and the market holds firm, at 30c. to 32c. per lb. for pulled lamb, brushed, and 30c. for unbrushed. Tub-washed Canada fleece is 26c. to 28c., and in the grease it is 18c. to 20c. Canada pulled wool is steady at 30c. per lb. for brushed, and 27c. to 29c. for unbrushed, while N.-W. Merionos are 18c. to 20c.

Cheese—The market shows very little change. It fluctuates up and down, and is at the moment about steady. Demand has been rather lighter for a few days past. There is much drought throughout

the country, and this has parched the pastures in many sections and reduced the yield of milk. Should this continue for a short time, the market for cheese is bound to be influenced. Quotations are about 11½c. to 11½c. for Quebecs, 11½c. to 11½c. for Townships, and 11½c. to 12c. for Ontarios. Exports were large for the week ending July 28, being 106,000 boxes, this being still 6,000 behind the same week last year. Total shipments for the season, however, are still ahead, being almost a million boxes.

Butter—The market for butter has shown very little change for some time past. Early in the week, the tone was strong, and sales were made for export at 22½c. for fancy Townships. It would be hard to get this price for much, but some holders are asking it. Purchases of finest have been made at 22½c., and of fine at 22c., although 22½c. is a more general figure for the latter. Shipments from Montreal, for the week ending July 28, were only 20,000, which was 9,000 less than for the same week last year. Total shipments for the season are 159,000 packages, or 75,000 less than in 1905.

Potatoes—A good heavy fall of rain has lately taken place. Although it will have a good effect upon the crop, which was previously all but ruined by the drought, it is still insufficient to penetrate the ground to any considerable depth, and more is badly needed. The potatoes are growing very small and very firm. They are said to be very sound, and if only some rain would fall before they ripen too far, a crop of splendid quality might result. Prices have declined to \$2.25 per bbl., paid to farmers, and \$2.50 paid by retail stores. Bags are \$1.12 and \$1.30.

Eggs—The market for these holds very steady. The tone continues firm, and dealers are still receiving 17c., here, for wholesale lots of fine straight-gathered, some very fine having been reported at 17½c. Apparently as high as 16½c. is being received at country points, near by, purchases being also made at less.

Millfeed—The market for bran and shorts is exceedingly firm, and prices advanced \$1 per ton during the past few days. Millers are almost unable to obtain sufficient to fill their orders, and many of them would be glad to make purchases themselves. Bran is wanted, the demand being probably owing to the drying up of the pastures on account of the lack of rain. Sales can readily be made at \$18 per ton, in car lots, for Manitoba bran, bagged. Shorts are also in active demand, and prices have gone up to \$21, at which figure there is none too much offering.

Hay—The market is very firm on spot, owing to light deliveries and an advance of 50c. per ton has taken place on this market. The English market is also a shade better, but is still below an export basis as compared with this market. Prices now are \$10 per ton for No. 1 timothy, \$9 for No. 2, and \$8 for clover and clover mixed. The crop will be below the average, but the quality will probably be fine.

Grain—There is only one kind of grain selling here just now, and there is extremely little doing in it; this is oats. Prices have declined a cent or so since a week ago, quotations for local account now being 38c. for No. 4, store, 39c. for No. 3, and 40c. for No. 2.

Chicago.

Cattle—10c. higher; slow and steady; common to prime steers, \$4.25 to \$6.25; cows, \$2.75 to \$4.50; heifers, \$2.75 to \$5.25; bulls, \$2.40 to \$4.40; calves, \$6 to \$7; stockers and feeders, \$2.60 to \$4.25. **Hogs**—A shade lower; choice to prime heavy, \$6.40 to \$6.50; medium to good heavy, \$6.20 to \$6.35; butchers' weights, \$6.35 to \$6.55; good to choice, heavy, mixed, \$6.25 to \$6.35; packing, \$5.75 to \$6.30. **Sheep and Lambs**—Best firm; others weak; sheep, \$4.25 to \$5.60; yearlings, \$5 to \$6; lambs, \$6 to \$7.75.

Cheese Markets.

Kingston, colored, 11½c.; white, 11 9-16c. Madoc, 11 9-16c. to 11½c. Tweed, white, 11 9-16c. Montreal, 11½c. to 11½c. for fancy Western, and colored cheese bringing better prices than white; Easterns, 11½c. to 11½c.

A laborer among the gardens of the soul found that the strength to uproot weeds was less rare than the power to distinguish them from flowers.

"As I passed through life," said a pilgrim near his journey's end, "I saw grief blight many hearts; but I also saw the Angel of Pity weep more over these whom it could not touch."

The Power of Music—Mr. Jack London was introduced to a celebrated musician. "I, too, am a musician in a small way," said London. "My musical talent was once the means of saving my life." How was that? the musician asked. "There was a great flood in our town in my boyhood," replied London. "When the water struck our house my father got on to a bed and floated down with the stream until he was rescued." "Well?" said the musician. "Well," responded London, "I accompanied him on the piano!"

AN EVERY-DAY CREED.

I believe that work is the best panacea for most ills, especially those of the mind.
I believe in fun and laughter.
I believe in the beauty of flowers, sunsets and mountains; in the music of birds and brooks.
I believe there is a bright side to everything.
I believe in human kindness.
I believe that an ounce of frankness and explanation is worth a pound of repentance and forgiveness.
I believe in the hearty handshake, in hospitality, comradeship, friendship and love.

The hope of the nation is in the farm and suburban home and in the country and suburban town and village. It is not in the cities that this country now needs the service of the flower of its patriotic manhood. It is in the country where the great national problem of the improvement of the rural life is to be solved, where more beautiful towns and villages and better roads are to be built, better schools to be established, telephones and trolley lines constructed, and all the influences put to work that will improve the country, and drive away the isolation and hardships that were formerly its drawback.—George H. Maxwell.

John Weaver, the reform mayor of Philadelphia, was recently congratulated by a delegation of clergymen on the clean administration that he has given the Quaker city.

In the course of his reply, Mayor Weaver said:

"I am glad to tell you that things with us have improved. Take, for instance, the matter of elections. A Philadelphian, some years ago, was running for a small office, and on election day he went from poll to poll, cheering his supporters on.
"As he left a certain poll a shabby individual approached and shook him by the hand.
"I trust, sir," said the candidate, "that you are one of my supporters?"
"One?" chuckled the shabby individual. "Why, bless your heart, I'm seven of 'em."

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Life, Literature and Education.



Upton Sinclair, Author of "The Jungle."

Dramatization of The Jungle.

Upton Sinclair is busy in New York dramatizing his novel. "The Jungle" has, no doubt, accomplished a great work in the modern world, but why should it be dramatized? A surfeit of even a good and pleasant thing cloy, but surely an overdose of such a pig-sticking, blood-wallowing, filth-reeking horror as "The Jungle" must come nothing short of an abomination. True, herds of a certain class of people in the cities will flock to see the play, just as crowds of the same class might congregate to see a hanging. There is a morbid element which finds place in the inner nature of some ill-constituted people; but why, in the name of all that is artistic, or literary, or virtuous, should such a morbid element be thus pandered to? "The Jungle's" work is already done, and no red-letter perpetuation of it can now suffice to work any further good as a result of it.

It would appear that the almighty dollar, of which his novel has already brought to Mr. Sinclair a plentitude, has dazzled his eyes, even to the blotting out of his judgment. Better things had been expected of him. Better far were it that he should be contented to relegate the book to the limbo of literary curiosities, and apply himself to the creation of another which might take its place as true literature. Parts of "The Jungle" show that he is capable of such work. Why, then, should he thus waste himself and his opportunities?

What Do Our New Words Signify?

One may have noticed in recent popular newspapers and magazines the use of a new word, "jungled." At the present juncture it is scarcely necessary to explain the signification of this word. As used in "jungled jam," for instance, it adequately explains itself.

We are accustomed to look upon language as one of the permanent things; yet every once in a while some new word comes jogging along, and it is presently rolling glibly from our tongues, and ensconcing itself in our dictionaries with as brazen an assurance as though it had come down in true orthodox fashion from the Saxon mixing-bowl itself. It is not long, for instance, since "graft," in the sinister sense in which it is now commonly used, made its appearance. Other newcomers which will be readily thought of are, bunco, jingo, trek, jolly (in the sense of to poke fun at), slump (as a slump in one's fortunes), scalp (as used in reference to trafficking in railway tickets outside of the authorized ticket offices), Oslterize, pasteurize—most of which are as yet placed only in the supplements of our most comprehensive dictionaries. It is merely a matter of time, however, until many if not all of these will be accorded a place as recognized elements of our language.

In looking over the list, one is struck by one rather peculiar fact—that so many of the words are suggestive of the disreputable. Bunco, jingo, slump, graft, jungled—all of these have a somewhat ill-favored signification, and one might go on adding to the number. After the Norman conquest a somewhat similar set of words was introduced into the good old English. Ribald, jangle, jape, ravin, owe their existence as English words to this period. Also "chance," now a term respectable enough for anyone's vocabulary, then a gaming expression, as were also many other words which have since outlived their bad reputation—hazard, for instance, and jeopardy, formerly a mere exclamation, "jeu parti!"—drawn game! And the introduction of these, be it noted, has been attributed to "the furious and violent life of that period," which found relaxation in "abandonment to revelry and the counter-stimulant of the gaming table."

Can it be that such words as graft, jingo, etc., are in a similar manner characteristic of our time? Are chicanery, wire-pulling, etc., especially rife in the Twentieth Century, or is the increase of our vocabulary in this respect merely due to an awakening conscience which expresses its derision of undesirable conditions in a slang "taking" enough for crystallization into a component part of our speech and our literature?

Valuable MSS. Lost.

The San Francisco fire wiped out more literary treasures than the newspapers have reported. It develops that the original manuscripts of Frank Norris's books, which were the property of his brother, Mr. Chas. G. Norris, were destroyed. Mr. Norris was also the owner of the original manuscript of Dr. Jekyll and Mr. Hyde, and this, too, was also lost. By hard work, the house occupied by Robert Louis Stevenson in San Francisco was saved. A few pages of some of Frank Norris's books, which, fortunately, are in the possession of friends in New York and California, have been placed at the disposal of Mr. Norris.—[Ex.]

Brain Work Doesn't Kill.

In a lecture on longevity, delivered before the Royal College of Physicians, Sir Herman Weber, himself an octogenarian, gave official support to the doctrine that brainwork does not kill, but rather the reverse. A few of his instances are Sophocles, Plato, Galen, Cicero, Moltke, Bismarck, Mommsen and Gladstone, to whom we might add Hobbes, Carlyle, Spencer and Kelvin. The facts are that brainwork increases the supply of blood to the nerve cells, and promotes their nutrition and health. Mosso, an Italian, laid a man on a delicately-balanced table, and showed that the head end sank whenever the subject did a mental sum or any mental brainwork. The increased weight of his head was due to the life-giving blood. The truth is that brainwork, as such, never killed anybody.—[London Chronicle.]

Imperfections.

A party of travellers journeying through Japan, a few years ago, came upon an old artist in ivories. Among the carvings which he showed was one most exquisite piece, for which he asked a hundred dollars. The price was not at all high for the work, and one of the party at once agreed to take it. Before surrendering it, however, the artist examined it minutely, and the result of the examination was the discovery of a tiny imperfection, which he pointed out.

"That will make no difference," the traveller answered. "No one but you would ever have discovered it; it need make no difference in the price."

"It is not a matter of price," the artist replied, proudly. "No imperfect work ever goes from me at any price. I cannot sell you this."

The traveller, incredulous, urged again the plea that none but the artist's eye could ever see the blemish; he even offered a higher price still, but to all his arguments the old artist had but the one reply—he could not give his name to imperfect work—it was impossible. And from this decision nothing could move him.

How the spirit of the heathen artist rebukes us! Nothing was allowed to go from his shop that was not the best that he and those working with him could do; but we—what poor, half-hearted, shabby work we allow to bear the Master's name!—[Wellspring.]

Current Comment.

Items of News.

A magnificent G. T. P. station is to be erected in Montreal.

* *

Hon. W. P. Street, Judge of the King's Bench of the High Court of Justice of Ontario, is dead.

* *

A rich deposit of iron ore has been found near Sturgeon Falls, Ont.

* *

Russia.

The revolutionary movement in Russia has, during the past fortnight, assumed severer proportions in the northern provinces, where, at the fortress of Sveaborg, near the city of Helsingfors, a serious mutiny broke out some days ago among the troops and marines. After continuous fighting for more than a night, Sveaborg surrendered to the mutineers, but was, in turn, forced to capitulate to the loyalists who were poured into Helsingfors from St. Petersburg, and who effectually prevented the sending of further supplies to the fortress, thus rendering the subjugation an easier one. Much uneasiness was felt lest a similar outbreak should take place in Cronstadt, but at time of writing all insurrectionary movements in that city have been forestalled. First reports stated that the outbreak at Sveaborg was part of a conspiracy aiming at a simultaneous mutiny at Sveaborg, Cronstadt and Sebastopol, but it now appears that the rising was chiefly local. That some effort at concerted movement has, however, been under consideration, may be judged from the fact that the Radical groups of the expelled Parliament had previously addressed an appeal to the army and navy, the most important part of the text reading as follows:

"Soldiers and Sailors,—The Government has by Imperial command dissolved Parliament, and troops have been assembled from all sides to oppress the people by armed force. The people's representatives were elected from among your fathers and brothers, in order to lay before the Emperor the needs of the people and to obtain land and liberty. But the Emperor would not listen to the elected of the people. He hearkened to his former Councillors, the Grand Dukes, Ministers, Generals, and the wealthiest of the land-owners, who did not want to give up their lands, their properties, their emoluments, and their irresponsible power. Russia is now divided into two parts.

"On one side is the vast majority—all the peasants and workmen, all the poor and oppressed, the best educated, and the most enlightened citizens, the soldiers who see the most clearly, the best officers, and all the martyrs in the jails, including many thousands of soldiers and sailors. On the other side is a collection of oppressors, such as Treppoff, Pobiedonostseff, the petty Government officials, the police spies, and the whole Black Hundreds, and these rely on your strength to beat down the whole Russian people. Will

you shoot the people, shed the blood of the people, and transfix the people's breasts with bayonets? Remember that you are the children of the Russian people.

"Soldiers and sailors, we, the legally-elected representatives of the peasants and workingmen, declare to you that without Parliament the Government is illegal. Orders which it may now issue have no legal force. We call on you to cease to obey the illegal Government and actively to oppose it in conjunction with us and the whole of the poor population. You have taken an oath to defend the fatherland. Stand beside us for land and liberty.

"Any man who shoots at the people is a criminal, a traitor, and the enemy of the people. We inform all such, in the name of their fatherland, that over their names will hang the eternal curse of the people.

"Soldiers and sailors, your sacred duty is to free the Russian people from the treacherous Government and defend Parliament. . . . In this struggle your elected representatives will be with you. Be brave for the fatherland, for the people, and for land and liberty against the criminal Government."

It would appear that Russia is on the verge of a great civil war, and that above the head of the Czar hangs a sword that must mean ruin. And yet, in great Southern Russia famine is working hard against the people, and to-day not even the most far-seeing can hazard a conjecture, positively, as to what the end of it all will be. The greatest danger of uprising evidently lies in the North, and at time of going to press one of the foremost of the revolutionists is reported to have said, "Now watch Reval, Riga and Libau." Movements in these places may, however, be put down, as at Sveaborg, provided the troops do not turn in a body to the side of the people.

Plant Trees Along the Roadside.

We recommend a careful reading of the succeeding article, contributed by Mr. John S. Pearce, Parks Superintendent, of London, Ont., to every readers of "The Farmer's Advocate." The fact that Mr. Pearce has written chiefly in regard to tree-planting in the city, detracts nothing from the value of the article in its significance to the rural population. His arguments hold as good for the country road as for the city street.

The beauty of tree-lined roads is everywhere admitted, except, possibly, by those crassly prosaic mortals who can see no further than the dollar, and so miss the best of life; but the comfort of them has not, perhaps, been persistently enough represented. We who live in the City of London can sing the praises of the tree with clear conscience. In almost any of its residential districts we can walk, even on the sunniest noon-tide, in a most grateful shade, the ladies seldom feeling under constraint even to put up a parasol, while it is no uncommon thing to meet men carrying their hats in their hands. When one considers the sweltering weariness of walking a mile or two at such a time over a succession of blazing, unshaded cement sidewalks, such as are seen in most towns and villages, the advantage of such "coolth" (as Kipling has it) must be apparent. If one imagines what a continuation of it, out and out over concessions, and side-lines and by-paths, spreading like a network through counties and Provinces, might mean, one must feel as though entertaining a dream of Paradise, a dream, too, not so utterly impossible of realization. We heard it remarked not long ago that, if the men belonging to a certain treeless village and its vicinity would devote as much enthusiasm each year to the planting of trees as they do to the construction of flimsy evergreen arches for the Twelfth of July, not an unshaded walk need be left in

the village, nor along the approaches to it. Surely an equal enthusiasm might be universally stirred up were the object of it to be a permanent benefit and a lasting pleasure, rather than the mere "painting a town red" for a single day.

By the way, anent cement sidewalks, why is it that some coloring matter has never yet been introduced into the composition to produce a tint less trying to the eyes? Even in the Forest City, with its shade, the dead whiteness is sometimes objectionable. In places where there are no trees along the streets, the

freshed with green at every point. Compare for ore moment the well-planted street, with its green lawns and boulevards, with the street without a tree or greensward. Who would care to live on the latter, could he find an abode on the former?

There is one point here I want to emphasize, and that is this: If you want a tree, you must plant it, and do it at once. Time, only, will give you trees. Money will build a house or barn; but money will not put down fine trees in front of your house or along your farm. Time, only,

of the hills surrounding the city, or, better, from the roof of some of the highest buildings, will give one the impression they are overlooking an immense forest, with a few tall buildings and chimneys among the tree-tops.

About thirty-five years ago an interest and impetus was given to tree-planting by a number of the enterprising citizens, the city newspapers lending their aid, and the city council agreeing to supply gratis the tree-guards. There was a by-law, also, offering a bonus of 25 cents per tree for trees planted on the streets, but this was seldom, if ever, claimed.

There are many objections to the soft maple which space will not allow me to explain, but any close observer cannot but notice the superiority of the Norway and the sugar maple over the soft. Then, we have the American elm, a noble, stately tree, and well adapted for street planting. The above-named three varieties are, in my opinion, the best trees for the city, town or country planting. A very important matter, when planting, is uniformity on the same street, or along the same roadway. Mixed tree planting in such places never will produce the landscape effect, nor give the impression that uniformity will lend. Hence the importance of having some one who can and has the authority to supervise and direct this work. Even when clothed with this authority, he will sometimes find it difficult to get the citizens to fall into line.

JOHN S. PEARCE,
London, Ont. Park Supt.



Typical Street in London, Ont., the Home of The Farmer's Advocate.

annoyance is increased manifold—everywhere the same monotonous, half-blinding glare, and everywhere, too, a scowl of greater or lesser "ferocity" upon the faces of the people. If a change is not speedily brought about, the great majority of our citizens will have become wrinkled as Bedouins, to say nothing of the injury to the eyesight. A soft grey or restful greenish shade would surely be much preferable from the standpoint of comfort, and not to be denounced from that of the artistic. We throw out the suggestion with the firm conviction that it is an opportune one, and in the hope that it may be productive of good results in places where cement sidewalks are still under construction.

will do this, after they are well planted. But the best result can only be gained by a regular and systematic planting. Then the effects are most marked; and the increased value of the property adjoining the street avenue or country roadway will be greatly enhanced, and will repay the outlay.

TREE-PLANTING IN LONDON.

The City of London has been most fortunate in tree-planting, as far as quantity is concerned, but very unfortunate as to quality and variety of trees planted. Soft maple predominates on the streets of London to such an extent that there are not 500 trees of any other variety in the whole city. Another unfortu-

Some Echoes of a Great Calamity.

A few days only before the disastrous happenings at the Golden Gate, a well-known artist, Vernon Howe Bailey, sent to Everybody's Magazine a series of pencilled sketches of the streets, magnificent hotels and private residences, the public parks and buildings of San Francisco as it then appeared, the gayest city of the continent, the gateway to wealth and adventure, a very monument of human skill and artistic realization. We are told that everything his pencil found to draw was, with two almost insignificant exceptions, and within those few days, wiped out from the face of the earth, either by earthquake or by fire.

In the same magazine, and closely following upon the pages devoted to the sketches of the San Francisco which then smiled blithely back upon the artist as he limned his pictures, we find what has been described as "a vivid, heart-racking narrative," from the graphic pen of James Hopper, the well-known descriptive writer.

THE EARTHQUAKE.

Of the earthquake he writes: "And then I awoke to a city's destruction. It started with a directness, a savage determination that left no doubt of its purpose. It pounced upon the earth as some sidereal bulldog, with a rattle of hungry eagerness. The earth was a rat, shaken in grinding teeth, shaken, shaken, shaken, with periods of slight weariness, followed by new bursts of vicious rage. . . . Then I heard the roar of bricks coming down in cataracts, and the groaning of twisted girders. . . . I saw the mass pass across my vision, swift as a shadow. It struck the little wooden houses in the alley below. I saw them crash in like emptied eggs, and the bricks pass through the roof as through tissue paper. After the vibrations followed a great silence; not a cry, not a sound, not a sob, not a whisper, until, from the alley below, some one began to groan—a woman's groan, soft and low."

The earthquake has elsewhere been called "but the prologue to the fire," which completed the desolation of the doomed city. It is thus that Mr. Hopper, after giving in vivid language the story of the earthquake, introduces that of the even



Country Road Bordered with Trees.

A weekly walk to the store or post office along such a road as this would be a pleasure rather than a drudgery.

Value of Street Trees.

CITY TREE-PLANTING.

The value, as well as the good that may be effected by planting streets and avenues, not omitting the country roadside, with trees, cannot be estimated. The important part that trees play in the health and comfort of the people is only partially understood. What can be more restful and refreshing to the tired limbs and weary eyes than when re-

nate thing was that they were planted twice too thick. This was all right while the trees were small; and had they been thinned out after, say, fifteen years, they would have been all right. A thinning out has been going on for three years, under the direction of the Park Superintendent, and over 3,000 trees have been taken out, but the work is not more than half done. London is well named the Forest City. A view from some

still greater calamity which followed it.

THE FIRE.

"At Tehama Street I saw the beginning of the fire which was to sweep all the district south of Market Street. It was swirling up the narrow way with a sound which was almost a scream. Before it the humble population of the district were fleeing, and in its path, as far as I could see, frail shanties went down like card houses. And this marks the true character of the city's agony. Especially in the populous district south of Market Street, but also throughout the city, hundreds were pinned down by the debris, some to a merciful death, others to live hideous minutes. The flames swept over them, while the saved looked on impotently. Over the tragedy the fire threw its flaming mantle of hypocrisy, and the full extent of the holocaust will never be known, will remain ever a poignant mystery."

The hopeless fight of the firemen, baffled by the lack of water (for the mains had burst), went on for three terrible days, the dazed multitude meanwhile escaping along the streets, "with heads bowed, eyes dead, silent and stupefied." One poor old couple, a blind wife led by a crippled husband, fell as they came wailing down the steps of their porch, and refused to be raised, for they had made up their minds to die without

further struggle. It was thus Mr. Hopper closes his graphic description: "It was as if I walked through a dead city; not a city recently dead, but one overcome by some cataclysm ages past, and dug out of its lava. Fragments of wall rose on all sides. Columns, twisted, but solid in their warp, as if petrified in the midst of their writhing from the fiery ordeal. Across them a yellow smoke passed slowly. Above all a heavy, brooding silence lay. Contortion of stone, smoke of destruction, and a great silence—that was all."

A MESSAGE FROM MOLLIE.

In a private letter, our Mollie, who has been silent too long as a writer in our Home Magazine columns, tells us of a day spent at the Golden Gate. She says:

"We had a long day in San Francisco. I had read all about the disaster, had heard many personal experiences related, had seen many pictures, but I was not in the least prepared for the awful scene of desolation and the miles and miles of ruins that met my eyes as I entered the stricken city. It was truly awful. The half has not been told. Doubtless much has been suppressed in the telling, for how could the whole truth have been written in papers which almost in parallel columns spoke in hopeful prophecy of

a new San Francisco rising out of her ashes, greater, grander, more majestic, even, than before? Well, she may, but I doubt it, at least in our day, for at present she lies dead, almost as Pompeii of old. As yet they have not commenced even to remove the debris, hardly a fallen brick being lifted, no definite action being resolved upon until the decision of the several insurance companies is known. One wonders how, amidst such surroundings, anyone who has gone through such frightful experiences can have the courage to think of beginning life anew in a place where small quakes are going on all the time, two hundred 'tremblers' having been reported since the opening disaster, throwing down tottering walls, and shaking the ground alarmingly. The only houses left standing fringe the old-time city. During my one day's sojourn I lived like a refugee, taking my tea and coffee, ham and eggs, in an old wagon made into a tent, with canvas sides and top, a few steps leading up to a screen door, the chef and his assistant serving from behind a small, improvised counter. Afterward I spoke to several poor women who were cooking their simple meals in the street. They were, in nearly every case, bright and cheerful, and seemingly too thankful for escaping with their lives and the remnant of their belongings to utter murmur or complaint."

A LATER ECHO STILL.

"San Francisco does not seem to have been steadied or sobered by its fearful visitation. It has had to exist hitherto wholly without drinking resorts. Now 2,000 saloons have been licensed. Some, already with their doors wide open, jammed with thirsty throngs, long lines of drinkers, awaiting their turn, as not long ago they waited for their loaf of bread.

"Poor women and children, with no shelter but their canvas walls, have next to no protection from the drunken men and roughs. Many of these women have already armed themselves with revolvers and knives against possible attacks from intoxicated marauders. The vanguard of a new 'tenderloin' is fast drifting back; Chinatown will be rebuilt, and the old-time revels in full swing again. Evidently, something more," says the writer of this last quotation, "than the worst that nature can do, is required to reform San Francisco."

A sad retrospect, and perhaps a still sadder foreshadowing of what may yet come to pass; but as we are bidden not to judge others, lest we should be judged ourselves, let our last echo be a reminder of the lesson taught by One who, when called upon to utter condemnation, simply replied, "He that is without sin among you, cast a stone at her."

H. A. B.

The Quiet Hour.

Common Friendliness.

Be kindly affectioned one to another with brotherly love.—Rom. xii.: 10.

Be ye kind one to another, tender-hearted.—Eph. iv.: 32.

"He was a friend to man, and he lived in a house by the side of the road."

"There are hermit souls that live withdrawn,

In the place of their self-content;
There are souls, like stars, that live apart

In a fellowless firmament;
There are pioneer souls that blaze their path

Where highway never ran—
But let me live by the side of the road,
And be a friend to man.

"Let me live in a house by the side of the road,

Where the race of men go by—
The men who are good, and the men who are bad,

As good and as bad as I.
I would not sit in the scorners' seat,
Nor hurl the cynic's ban.

Let me live in a house by the side of the road,
And be a friend to man."

"Be ye kind," says St. Paul, and the three little words are very plain and matter-of-fact. Only three syllables, and yet what a paradise this world would be if everybody obeyed them every day. Are we always kind to the people we live with, careful not to be rude to them or hurt their feelings needlessly? Are we watching for chances to do little kindnesses to the friends and neighbors about us?

Each age of the world has its own peculiar spirit; there are always certain sentiments in the air which seem as infectious as disease-germs. If there is one sentiment which this age is struggling hard to perfect, it is the feeling of brotherhood. In spite of class distinctions, in spite of those tremendous "strikes" which generally produce most unbrotherly conduct, the spirit of brotherhood is in the air. People are roused to the fact that union is strength, even those who do not accept the Fatherhood of God as a living reality are ready enough to own the brotherhood of man.

This recognition of brotherhood has sprung from Christianity, though it is held to-day by men who disown the

Christ. He is our Brother, bone of our bone and flesh of our flesh. His life-blood is pulsing in our veins, His humanity thrills us through and through. Just because He is your Brother and mine, we are brethren and one with each other. He who is the King before whom the greatest kings in the world bow in lowly adoration was once a poor Carpenter in a despised village. He rules over the rich, and is linked hand-in-hand with the poor. We must own this as a matter of theory, or else renounce our Christianity altogether, but the practicing of it is not such an everyday matter-of-course. Those who are in any great trouble find that the world is a very kindly world. Friendly words, spoken or written, cheer and comfort them, until they feel that the trouble was a good thing, for it revealed depths of friendliness unsuspected before. Everyone can be kind and friendly at such times, but there are some people who are always kindly affectioned, with brotherly love. Do we not all know and like such people? Their faces may be rugged, their English may not always be exactly correct, their table-manners may not be according to the latest book on etiquette, but it is always a pleasure to be with them. It does one good simply to meet such people in the street, or to run in at the back door to borrow a little baking powder for a cake, or half a loaf of bread, or some other little thing that has unexpectedly run short. They are so genuinely pleased to lend or give what is needed that the borrower goes home with the pleasant feeling of having conferred a favor rather than asked for one. To be kindly and affectionate, one must, as St. Paul says, be "tender-hearted." A gushing manner and a pretence of being pleased to see everyone is not friendliness, and is seldom pleasing to anybody. We read thoughts far more than words, and are seldom really deceived by mannerisms. Wireless telegraph—or telepathy—is no new thing. Affection—especially an affection of affection—is always harmful and seldom deceives anybody. Never cultivate an outward friendliness which is only a sham, but let us all earnestly try to be really affectionate at heart, towards disagreeable as well as agreeable people—anyone can get on with "nice" people, we should attempt harder tasks than that. It is so easy to say that a certain person of our acquaintance is uninteresting or objectionable, and to consider that we have a right to be unfriendly and "standoffish." We don't stop to consider that such people are very dear to our Master, that their battles against sin and struggles after holiness are intensely interesting to Him and to themselves, and would be interesting to us, too, if we only tried, with real kindness, to get into touch with them.

Oh, let us make a persistent, prayerful, daily effort to come down from the place of our self-content, where we have been dwelling alone and apart from our fellows, let us "live in a house by the side of the road" on a level with our brothers and sisters. It is never good for a man to live alone, the nearer we get to people, the more we know their difficulties and temptations, and the more interesting we shall find them.

When I called this paper "Common friendliness," it was not because friendliness was to be found everywhere, but because it ought to be found everywhere. And let us remember that the little things always count more than the big things in life, because they are so common—there are so many of them. A friend who would sacrifice great things for us may cut us to the heart continually with sarcastic or unkind speeches, or may hurt us every day by careless neglect and forgetfulness. Some people are kind and thoughtful in hundreds of little ways, and how "nice" such people are. Well, we can be nice too, if we steadily practice the habit of considerate kindness, and conquer any bear-like grumpy ways.

"A good-bye kiss is a little thing,
With your hand on the door to go,
But it takes the venom out of the sting
Of a thoughtless word or a cruel fang
That you made an hour ago.

"A kiss of greeting is sweet and rare
After the toil of the day,
And it smoothes the furrows plowed by care,
The lines on the forehead you once called fair,
In the years that have flown away.

"'Tis a little thing to say, 'You are kind;
I love you, my dear,' each night,
But it sends a thrill through your heart, I find,
For love is tender, love is blind,
As we climb life's rugged height.

"We starve each other for love's caress,
We take, but we do not give;
It seems so easy some soul to bless,
But we dole the love grudgingly less and less,
Till 'tis bitter and hard to live."

Love is a wonderful sweetener of life, and heavy burdens are far more easily carried if some friend really cares. Then why do we so often hide real affection for friends and relations under an indifferent manner which seems to imply that we don't care in the least for them? Why are we so ready with blame, while we deal out praise—in our own homes at least as though we were shipwrecked sailors, and there were not

sugar enough to go round? Praise, if really deserved, is good for anybody, though flattery is a sweet poison. A kind heart is not all that is needed to make friendliness a success. We must try to look at things from the other person's point of view. The other day a small boy of my acquaintance suggested that his mother should spend a birthday present she had received on a horn and a mouth-organ. The fact that he thought these articles would be very desirable by no means proved that she would care to possess them; and, if we don't cultivate the habit of real tact and sympathy, we may—with the best intentions—make just as great mistakes.

And one thing more, let us look on the bright side of life—or "polish up the dark side." I once belonged to a Society called "The Bright-side Club." Most of the members were invalids, and one strict rule was that they were never to talk about their ailments. Troubles always seem greater if we drag them to the front where we have a good view of all their sharp points. The habit of always looking smiling and cheerful can be cultivated, and a smile cheers up the people on both sides of it—the man behind the smile as well as the man in front of it.

"A busy, bonny, kindly place
Is this rough world of ours,
For those who love and work apace,
And fill their hands with flowers,
To kind and just and grateful hearts
The present grace is given
To find a heaven in themselves,
And find themselves in heaven."

HOPE.

The Friendly Hand.

When a man ain't got a cent, an' he's feelin' kind of blue,
An' the clouds hang hard and heavy an' won't let the sunshine through,
It's a great thing, O my brethren, for a feller just to lay
His hand upon your shoulder in a friendly sort o' way.

It makes a man feel curious; it makes the tear-drops start,
An' you sort o' feel a flutter in the region of the heart.
You can't look up and meet his eyes; you don't know what to say,
When his hand is on your shoulder in a friendly sort o' way.

Oh, the world's a curious compound, with its honey and its gall,
With its cares an' bitter crosses; but a good world, after all,
And a good God must have made it—leastways, that is what I say
When a hand rests on my shoulder in a friendly sort o' way.

—James Whitcomb Riley.

Children's Corner.

Cousin Dorothy's Letter Box.

Dear Cousin Dorothy,—I have been thinking about writing to the Corner for some time. I live on a farm. We have about one hundred head of stock. I have a few pets, a dog, some cats and pigeons. They are very tame; they all are kind to each other. My dog likes to follow me all over. I do not like my cats as well as the dog. My pigeons are young, and I like them too.

My grandfather subscribed to "The Farmer's Advocate" over twenty years ago, and when he died father kept it up. We had some over twenty-one years old left in the spring. It was a much different paper from what it is now. It did not come so often. It was about the same size, and was bound like a book, with thread. G. F.

A New Member.

We have 20 ducks, 100 chickens, 30 hens, 16 pigs, 5 horses and colts. Their names are Bill, Net, Jess, Polly, Bobs. I am in the Third Reader. I study geography, grammar, reading, writing, drawing, history, arithmetic, but I like history the best. We have taken "The Farmer's Advocate" for five years, and could not do without it. Now, I will close, wishing the Children's Corner every success. WILFRID ELLIS (age 10).

Dear Cousin Dorothy,—I have never written to the Children's Corner before. I always read the letters, and enjoy them very much. Papa has taken "The Farmer's Advocate" for about six years. I am thirteen years old, and have just finished writing on the Entrance examination. I have only one pet, and that is a dog; I call her Flora. She is a water spaniel. She will do a good many tricks, such as roll over, die, shake hands, speak, swim, and beg. Well, I must not take up too much room. I will close, wishing the Corner every success. HILDA McCALLUM. Smith's Falls, Ont.

Dear Cousin Dorothy,—My uncle has been taking "The Farmer's Advocate" for a long while. When "The Farmer's Advocate" comes in, I always turn to the Children's Corner. I enjoy reading it very much. I am a little girl, nine years old. I go to school every day, and I am in the Fourth Reader. I am going to send some riddles.

Why is an angry man like a clock at 59 minutes to one? Ans.—Because he is just ready to strike one.

Why is a little dog's tail like the bark of a tree? Ans.—Because it is the farthest away from the heart.

What is round as an apple, and deep as a cup, and all the king's horses can't pull it up? Ans.—A well.

Why isn't a lady like a mouse? Ans.—Because one harms the cheese and the other charms it.

If you were to ride a donkey, what fruit would you represent? Ans.—A pear.

Why is a stick of candy like a horse? Ans.—Because the faster you lick it the faster it goes. NORA CHITTICK.

Riddles.

I have seen quite a number of riddles in "The Farmer's Advocate" that the boys and girls have sent to the Children's Corner. Here are quite a number, as follows:

1. If twenty-six cents will buy one pound of butter, what will a cent and a quarter buy? Answer—One pound.

2. Why is an old tooth like a town lot? Answer—Part of an acre.

3. If I gave five five-cent pieces to five boys, what time of day would it be? Answer—A quarter to five.

4. Why is the letter "F" like a cow's tail? Answer—It is the end of beef.

5. Which would you rather, that a jaguar should kill you or a wolf? Ans.—I would rather the jaguar would kill the wolf.

6. What is it that is mistress of the sea, and nothing could take it if they worked as busy as a bee? Answer—The British Empire.

7. What is it that cannot walk, yet has four legs and a seat? Ans.—A chair.

8. What time is it when the clock

strikes thirteen? Ans.—Time it is fixed.

9. How is a mouse like a haystack? Ans.—Cat'll eat it (cattle eat it).

10. Why are hired girls like a needle in a haystack? Ans.—They are hard to find. EDWIN R. FOSTER. Eric View, Ont.

conspicuously short) and tail being barred with darker brown.

Having once become acquainted with a pair, you may be quite sure that, barring accidents, you will see them again; for the house wren comes back year after year to the old haunts, relining the same



Kitty's Nose "Out of Joint."

The House Wren

(Troglodytes aedon—Wren family).

When the days begin to grow warm in spring, you may notice, bustling with great activity about your house or in your garden or orchard, stopping now and then to gurgle over in a very ripple of melody, or to dart furiously at some feathered neighbor which may happen to come suspiciously near, a pair of exceedingly vivacious little birds, smaller even than the English sparrow, their diminutive appearance being enhanced by the fact that when they alight they usually keep their tails erect. In all probability they are engaged in building close under the eaves, or in a hole in some tree near

old nest, rebuilding when necessary, and sending out brood after brood of young wrens to seek new homes under someone else's eaves or in someone's else's garden.

These birds live almost entirely on insect food, and do away with an almost incredible number of gnats and bugs during a summer, hence they should be given every protection.

A Reading Lesson.

It is a well-established fact that the average school teacher experiences a great deal of difficulty when she attempts to



The House Wren.

the house—for the house wren is nothing if not friendly—the little nest which, when carefully constructed of twigs and hay, and thickly lined with feathers, will form a soft bed for the tiny eggs soon to be deposited there. The eggs may be anywhere from four to nine in number, and are usually so finely speckled with reddish-brown as to present a uniformly russet appearance.

Upon closer examination you will find that the birds are brown above and whitish beneath, the wings (which are

enforce the clear pronunciation of the terminal "g" of each present participle.

"Robert," said the teacher of one of the lower classes during the progress of a reading exercise, "please read the first sentence."

A diminutive lad arose to his feet, and amid a series of labored gasps breathed forth the following:—

"See the horse runnin'."

"Don't forget the 'g,' Robert," admonished the teacher.

"Gee! See the horse runnin'."

About the House.

Catsups.

Grape Catsup.—Cook 5 lbs. grapes till soft, drain off juice through a sieve. Add 2½ lbs. sugar, 1 tablespoon each of cinnamon, allspice, cloves, and pepper, ½ tablespoon salt, and a pint of vinegar. Boil till it seems a little thick; bottle and seal.

Tomato Catsup.—Take ½ bushel ripe tomatoes. Add some sliced onions and boil till soft, then put through a coarse colander, then through a fine one. Put juice back in kettle. Add 1 cup salt, 1 cup sugar, 2 cups vinegar, ½ dessertspoon each of ground ginger, mustard, cinnamon, cloves and mace. Add a pinch of cayenne, and boil until it thickens. The cinnamon and cloves should be tied in a bit of muslin.

Apple Catsup.—Pare and quarter 1 dozen tart apples; stew and press through a sieve. To 1 quart, add 1 cup sugar, 1 teaspoon each of pepper, cloves and mustard, 2 of cinnamon, and 2 onions (chopped fine). Mix and add 1 tablespoon salt, and 1 quart vinegar. Place over fire and boil an hour. Seal while hot.

Creole Catsup.—Boil ripe tomatoes enough to yield 1 gal. juice. Put into a kettle with ½ tablespoon each of ground ginger, cinnamon, allspice and black pepper, and 1 tablespoon each of cloves, grated horse-radish and salt, pinch of cayenne, and 1 pint of vinegar. Boil till thick, then add 4 lbs. brown sugar. Bottle when cold and seal.

Cucumber Catsup.—Two dozen cucumbers, 2 onions, 2 tablespoons horse-radish, all grated. Add a dash of cayenne, 2 teaspoons sugar, salt to taste. Cover with good cold vinegar and seal.

Plum Catsup.—Cook plums, and when cool put through a sieve. To each 5 lbs. add 2 lbs. sugar, 1 pint vinegar, and 1 teaspoon each of salt, pepper, cinnamon and cloves. Boil 20 minutes; bottle and seal.

Barberry Catsup.—Three quarts barberries, 4 quarts cranberries, ½ lb. raisins, 1 sour apple, 4 onions, all stewed and strained through colander. Add ½ pint vinegar, 1 lb. sugar, ½ ounce each ground cloves and allspice, 2 ounces celery seed, 1 teaspoon cinnamon, 1 of ginger. Add salt and cayenne to taste, and a grated nutmeg. Let boil a minute and seal.

Camera Competition!!!

Occasionally in past years we have taken advantage of the holiday season, with its migratory stirrings and pleasure-seeking impulses, to give a camera competition. So successful have been the results, that we have determined to give another one this year; but the conditions will be slightly different. Instead of bits of landscape, etc., we want, this time, photos showing something of distinct interest, apart from that of the merely scenic or artistic. Pictures of historic points, of curious objects in nature, of unique happenings, or those showing unusual light effects—all of these will be in order. Photos should be at least 4 x 5 inches in size. It is not necessary that they be mounted, but they should be keen and clear in every part; otherwise it is impossible to secure good reprints.

Photos must be of scenes or objects in Canada, and must be sent by subscribers to "The Farmer's Advocate," although not necessarily taken by them. To subscribers only will the prize-money, etc., be paid. The prizes will range as follows:

First	\$5.00
Second	3.00
Third	2.00
Fourth	1.00

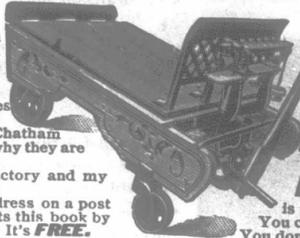
We will reserve the right of purchasing any others which may be found available, at ordinary rates.

Kindly send photos so they will reach this office on or before the last day of August.



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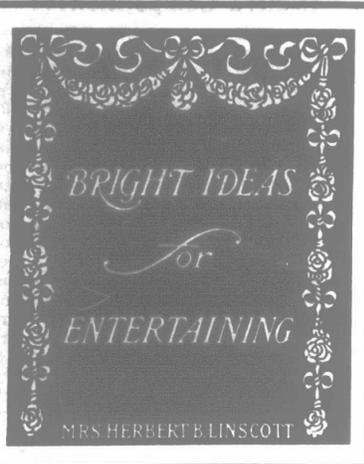
is mounted on wheels. You can haul it about like a truck. You don't have to bring things to the scale to weigh them. You can take the scale where you want to do the weighing. When you write for my scale book, if I have no agent near you, I will tell you how you can buy my Scales direct from the factory, freight prepaid to your Railroad Station. No one could make you a better offer than this. And by getting a Canadian scale—made by a Canadian concern—you save all customs charges. But send for my Scale Book today and get this whole story. Learn how a CHATHAM FARM SCALE puts dollars in your pocket. Write me at once.

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The Ingle Nook.

A Bright Canadian Girl.



Miss Maud Graham.

Last week our talk was of an English girl who has won for herself an enviable place in the realms of science. To-day we are glad to tell you of one of our own Canadian girls, whose career has been, so far, a continuous upward march, and of whom, as she is still quite young, much may yet be expected.

Years ago, in the grim old Hill street school, in the beautiful town of Owen Sound, Ont., a quiet-looking little girl, with gray-blue eyes and clear-cut features, might have been seen wending her way daily to the "Entrance" class-room on the upper floor of the old schoolhouse. Nevertheless, quiet though she seemed, this little girl would have been especially noticed, for she was much the smallest member of the class—so tiny a tot, in fact, that it was a matter of speculation among the uninitiated as to whether so young a child could "pass." But pass she did, and from that hour "things" were expected of her.

From the gaol-like old public school (which has since been remodelled, by the way) to the fine new Collegiate Institute was, in some respects, a welcome change. True, there were days of grind and days of terror to be experienced there (for who yet stepped into its examination halls without a thrill of trepidation?), but there were also merry pranks about the spacious grounds, and in the shade of the cedars upon the hill which sheered abruptly upward, like a rampart, to the eastward of them; and instead of the pebbly reach of barren schoolyard upon which the pre-Entrance candidates had disported themselves, there were winding walks and clumps of flowers, kept trimly in order by caretaker Colpitts, who lived in the basement. Poor old "Coal-pits"! How many were the jokes perpetrated at his expense by the lads and lasses, many of whom have lived to form a brilliant coterie of which Grey County may well be proud, but who still, in whatever part of the world their talents may have found scope, find time occasionally to look back with affectionate regard to the old alma mater.

In 1892, at the age of 16, Miss Graham was graduated from this institution, matriculating with honors in Modern Languages. Four years later she was graduated from Toronto University, and went immediately to Bryn Mawr College, where for the year 1896-7 she held the Fellowship in History. In 1898 she obtained the teacher's certificate from the Ontario Normal College, and subsequently entered upon the career as teacher, to which she has since, for the most part, devoted herself.

In 1902 the call came for forty Canadian teachers, who were to be sent to South Africa to assist in the work of transforming the Boers into good British subjects. By reason of her educational ability, her fine

physique, and training in athletics, Miss Graham was selected at an early date as one of the party, and the outcome of her two years' sojourn in the far-away colony was the writing of her book, a "Canadian Girl in South Africa," which was published last year, and has met with much favorable comment from reviewers.

As its name indicates, the book is a comprehensive history of the experience of the teachers' contingent, from the setting out from Canada to the return. It is illustrated with about eighty half-tone engravings, contains much valuable information as to the conditions of that turbulent time in South Africa, and is enlivened by humorous accounts of the many ludicrous incidents inevitable to such an experience.

Upon her return, Miss Graham went to teach in the High School at Harrison, Ont., but she has recently been appointed to the Principalship of the Girl's High School of Quebec City, a position which will afford her still broader opportunities, and, we trust, a very happy and prosperous experience in that quaintest of Canadian cities.

A Budget on Corn.

The following letters were received some time ago, and are now inserted in time for the corn season. Many thanks to the contributors:

CANNING CORN AND BEETS.

Dear Dame Durden.—Canned Corn: Cut the corn off the cobs, and pack it as closely as possible in gems, "so close that no air remains," then put on the tops; do not screw them too tightly. Steam or boil for four hours.

Canned Corn.—Boil the cobs of corn, then cut the corn off and pack in a crock, taking three cups of corn and one of salt; mix thoroughly. Do this until the crock is full, then pour in cold water to bring the brine to the top. Cover with a lid. To freshen this for using, put the amount of corn to be used on the stove in a dish with cold water, and let it come to a boil. Change the water four times, and corn is ready for use.

Canned Beets.—Boil young beets until tender, then cut in slices and fill gems. Add a little salt and pepper and a teaspoon of white sugar, then fill up the gems with hot vinegar and seal.

You may hear from me again.
Perth Co. A SUBSCRIBER.

PICKLING CORN.

Dear Dame Durden,—May I draw my chair up to the fire, and tell that "Mother of Three" how I keep my corn? Like a good many others, I have been enjoying the chats myself and saying nothing. Perhaps this may be called "Pickling Corn." Cut the corn off the cob. Take 3 cups of corn and 1 cup of salt, and mix in a crock. Mix them in this proportion until crock is full. Tie a paper over it, and put in cellar until you want to use it. Then take about 1½ cups of corn, wash in cold water twice, then put on to cook in cold water, changing the water two or three times. We find this very nice. THE WIFE OF A FARMER.
Middlesex Co., Ont.

CORN AND TOMATOES.

Dear Friends and Dame Durden,—I have been a silent reader for some time, but I can keep quiet no longer. Some time ago someone asked for a receipt for canning corn. My method, which has proven successful, is as follows:

Take sweet corn when in the milk, cut from the cob, and scrape the cob to obtain all the sweetness; then fill quart cans, putting in a little at a time, and pack it very firm, using a small potato masher or a piece of broom handle about 6 inches long. Fill the can full, and boil for three hours. Put a cloth or board in the bottom of the boiler, to keep cans off the bottom. Put in cans, fill

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with cold water. Be sure to keep it boiling for three hours. When done, lift boiler off and let cool a little. Remove the can and tighten the tops, then put away in a dark, cool place. Would someone tell me the secret in canning tomatoes? I can them, but they never keep well. Last fall I put a little pepper and salt in them, but that spoils them for making soup. I always put a little salt in them. My cans were sweet and clean.

HASTINGS CO. CONTRIBUTOR.

In canning tomatoes, it is not enough to have the sealers sweet and clean. They must be thoroughly sterilized immediately before the sealers are filled, to destroy the ferment and other bacteria which, if left undestroyed, will cause "spoiling." The method of sterilizing has often been given in these columns. Have jars very clean, warm them (to help to prevent cracking), and swirl in boiling water. Put in sidewise into the boiling water, so that it will touch inside and outside at the same time, and so prevent unequal expansion of the glass, and there will be little danger to the jars. The rubbers should be adjusted before the jars are put in, and the rings and tops should also be put in the boiling water. Fill the jars, put on the lids loosely, set on a wooden rack in a boiler and surround with warm water. Cover the boiler, bring to boiling point, and boil ten minutes. You may stew the tomatoes before putting in, or you may peel small tomatoes and put in whole, then fill the jars with cold water. In the latter case the sealers must have been permitted to cool after sterilizing, and the surrounding water in boiler must be cold. If you put cold water in hot jars, or vice versa, you see, the glass would likely come to grief. When boiled, fill each jar to overflowing from one kept for the purpose, put a teaspoonful of salt on top of each, and seal while very hot. When cool, owing to contraction of the glass (which was expanded while heated) the rings may be found a little loose. If so, give an extra twist, and put away in a cool, dark place.

Welcome to Nora Creina Again.

Dear Dame Durden,—I thought I would send Wild Briar my way of making raisin pie. I take about 2 cups of raisins, stone them, and soak over night; this makes them very soft, and more digestible. In the morning I stone them well in enough water to cover them well, and when they are cooked, thicken with a little cornstarch, adding sugar and spices to taste. This is enough for two pies.

I would like to have Margaret Guthrie's hint regarding keeping linoleum fresh. I very much prefer linoleum or oilcloth to carpets on our floors, so much cleaner, and, consequently, healthier; and then, when house-cleaning comes, see how it lightens labor,—no dusty carpets to take up and drag with, one of the most objectionable jobs about house-cleaning, in my opinion. Take my advice, sisters, and put down linoleums.

One more question and I am done. Can any of the Chatters tell me why my lard does not keep? I rendered it in March, and put away a couple of large crocks for use this summer. The one I opened this week, instead of being white and solid, has turned rather a dirty white, and had little green spots of mould on it, but has not any disagreeable smell or taste. Do you think it would be a good idea to melt it over again? I must not trespass on any more of your valuable space. I enjoyed a hearty laugh over your camera experience, Dame Durden, the experience enjoyed by a good many others, no doubt. Thanking you in advance, I remain,
NORA CREINA.

You ought to see the pictures I can take now, Nora! I don't over-expose them any more, not if I know it (no slang intended).

Information Wanted.

Dear Dame Durden,—Will you kindly ask the members of our Ingle Nook if any of them have had any lengthy experience with a tin-lined steel pot, for cooking purposes? It is nice and light, but I am afraid that the tin will rust or go in holes after a time. My husband brought one home on trial, but I should like to hear from some one who has used one. Kindly oblige,
MAYFLOWER.

Some Day.

Some day: So many tearful eyes
Are watching for thy dawning light:
So many faces toward the skies
Are weary of the night!
So many failing prayers that reel
And stagger upward through the storm,
And yearning hands that reach and feel
No pressure true and warm!
So many hearts whose crimson wine
Is wasted to a purple strain,
And blurred and streaked with drops of brine,
Upon the lips of Pain!
Oh, come to them—these weary ones!
Or if thou still must hide a while,
Make stronger yet the hope that runs
Before thy coming smile;
And haste and find them where they wait—
Let summer winds blow down that way,
And all they long for, soon or late,
Bring round to them, Some day.
—James Whitcomb Riley.

Digestibility of Foods.

The following gives the length of time in hours and minutes required by the human stomach to digest the different foods:

	H.M.
Apples, hard, sour, raw	2.50
Apples, sweet, mellow, raw	1.30
Green corn, boiled	3.45
Beefsteak, broiled	3.00
Bread, wheat, fresh	3.80
Corn bread	3.15
Cabbage, boiled	4.30
Cabbage, raw	2.30
Custard, baked	2.45
Tame duck, roasted	4.00
Eggs, fresh, raw	2.00
Eggs, soft-boiled	3.00
Eggs, hard-boiled	3.30
Fresh lamb, broiled	3.30
Milk, boiled	2.00
Milk, raw	2.15
Oysters, raw	3.00
Pork, fat and lean, roasted	5.15
Pork steak, broiled	3.15
Roasted potatoes	2.30
Boiled potatoes	3.30
Fresh veal, boiled	4.00
Fresh veal, fried	4.30
Tripe, boiled	1.00
Pigs' feet, boiled	1.00
Fresh salmon	1.30

One Day at a Time.

We are not to try to take long views of life. We are to live one day at a time, and to fill that day with earnest and loving efforts to bless the world about us, and to do God's will. We are to try to make our lives each year the very best possible, whether or not we make them the best and most successful in our lives. Each year cannot be the best, but each year may be good. A man once said: "No, I do not expect to make this the most successful year in my life, but I do intend, by the grace of God, to make it the very best year possible." Lyman Beecher advised one of his sons: "Do not always be running races with yourself. Do not try to out-strip yourself each year. You will not always be able to do it. But fill each day with earnest effort, and do your very best each year."

Recipes.

Pound Cake.—One cup sugar, 1 cup "Five Roses" flour, 1/2 cup butter, 3 eggs, 3 tablespoons sweet milk, 2 teaspoons baking powder.

Sweet Muffins.—Half a cup sugar, 2 tablespoons butter, pinch salt, 3 eggs (well beaten), 1 cup milk, 2 teaspoons baking powder, 3 cups "Five Roses" flour. Bake in muffin rings in a quick oven.

Our Policy

Progressive improvement. This, coupled with the unstinted use of

MONEY, TIME, BRAINS

and eighteen years' practical experience, has made

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Sherlock-Manning

ORGAN

an instrument to be proud of.

For catalogue write:

The Sherlock-Manning Organ Co.
LONDON, CANADA.

WANTED!

Information regarding good farm for sale, with good title, somewhere near London. Give price and description and character of soil. Also state when possession can be had. Owners only need answer. State how far from town and mention improvements. Address:
W. G. GUNNINGHAM,
Andrus Building, Minneapolis, Minn.

A Bargain in Music

One of the latest and most popular Canadian songs, entitled "The Vine-clad Cottage," sent prepaid to any address for 15 cents. Regular selling price, 30c. Address: TORONTO SPECIALTY CO., 29 Colborne St., Toronto.

**ECLIPSE HIGH-GRADE
GASOLINE ENGINE**

MANUFACTURED BY
D. McKenzie & Co., London, Ont.
AGENTS WANTED.

IS WOMAN'S BEST FRIEND

It cured me of painful periods, leucorrhoea, displacement and other irregularities after I had been given up to die. I will send a free trial package of this Wonderful Home Treatment to suffering ladies who address, with stamp, MRS. F.V. CURRAH, Windsor, Ont.



The Sweet Young Woman.—A young minister, exchanging pulpits with one of his fellow-preachers, and arriving late, was conducted to the church by the resident minister's fair daughter. The sweet young woman was known by the name of Grace. All aglow with excitement, the young minister rushed up the aisle and gave out the following for the opening hymn:—

Amazing, Grace! how sweet the sound
That saved a wretch like me!
I once was lost, but now am found;
Was blind, but now I see;
Through many dangers, toils, and snares,
I have already come;
'Tis Grace has brought me safe thus far,
And Grace will lead me home.
That was humorous to everyone in the church, except Grace and the minister.

Advantages of Thinking.

To have learned to think, whether learned in schools or out of them, is to have attained the most valuable of all acquisitions. Any system of instruction which does not teach a man to think falls short of the best results. A man who has learned to think continually separates and combines, and from the scraps which he gathers as he goes he constructs. Material is ever at his hand, and whether he is on a journey, in the shop, or the factory, his eye is ever observant and his senses alert. Having learned how to acquire knowledge, he never finds himself anywhere that something does not appear which he wants to see, and having seen, will not sooner or later put to practical use. Having learned to think, he sends forth every moment freighted with some sort of effort. He has learned the "value of work as a means of happiness, and of a change of work as a means of rest," and idleness as neither necessary nor recreative. He can catch an idea on the wing, and an idea gained is a source of true happiness. Such a man does not easily weary, and it is late in life before he grows old.—Ex.

Man's Friend, the Dog.

Edward Hanavan, one of the best known miners and prospectors in Ouray County, had a remarkable escape from death in a snowslide which came down the western slope of Mount Hayden recently, says the Denver Republican. He owes his life to his dog Sandy.

Hanavan was climbing over the trail of the mountain above the Mineral Fern mine, when he was suddenly caught by a snowslide and swept one hundred feet into the gulch. His dog, following fifty feet behind, barely escaped the avalanche. The faithful canine jumped into the gulch and began pawing and scraping where the toe of one of Hanavan's boots barely showed above the snow. Within ten minutes the dog reached his master's head and began licking his face.

Hanavan was practically unconscious from lack of air, but soon revived and managed to dig out of what threatened to prove his snowy tomb.

A Favorite Japanese Game.

A favorite game of the Japanese is played as follows: One hundred well-known proverbs are selected, each divided into two parts, and each part printed on a separate card. The host of the evening has the hundred first halves, which he reads aloud, one by one; the hundred second halves are dealt to the other players, who place their hands face upward upon the "tatami," or thick mat of rice straw on which they sit. As the first half of any proverb is read, the holder of the second half throws it out, or if he sees it unnoticed among his neighbor's cards, seizes it and gives him one of his own. The player who is first "out" wins. It is a very simple game, but it affords great entertainment to the players, for the quick-sighted and keen-witted are constantly seizing the cards of their duller and slower neighbor, and this leads to much laughter and many good-natured sarcasms.—[Onward.

In Doubt.

This is from Sir Archibald Geikie's reminiscences: A country doctor, who was attending a laird, had instructed the butler of the house in the art of taking and recording his master's temperature with a thermometer. On repairing to the house one morning he was met by the butler, to whom he said, "Well, John, I hope the laird's temperature is not any higher to-day." The man looked puzzled for a moment, and then replied:

"Well, I was just wonderin' that myself. Ye see, he died at that place."

How can he be otherwise than an honorable who attends only to his own interests, who claims to himself no share of the happiness and prosperity of mankind, whose friendship cannot warm or charity inspire? Living only to himself, he can but reflect back upon himself his own weakness and inebility.—Henry Turner.

Billy and I.

They say they are going to shoot you, Old Billy, but don't you forget, For the fellow who dares to meddle with you, must reckon with me, you bet; You're a poor old horse, Old Billy, and you aren't worth much, it is true, But you've been a faithful friend to me, and I'll see you safely through.

Shoot Old Billy? I guess not, though you may be old and gray, By the self-same stretch of mercy they'll be shooting me some day; I haven't much love for the fellows who follow the shooting plan; If they had more pity for horses and dogs, they'd have more love for a man.

They tell us that horses have no souls, and they all declare it is true; That shows how little they know, Old Boy, and it proves they don't know you; Well, well, 'tis a mighty question, and quite beyond my ken— But the more I know of horses like you, the less I brag about men.

You've been a good horse, Old Fellow, steady and brave and true; You have given us faithful service—done all that a horse could do; You've earned your keep; you shall have it; so live as long as you can— For justice is justice, and right is right, whether it's a horse or a man.

Food for the Cat.

It is a common thing to hear women say that they cannot keep growing plants of any kind in their rooms on account of the cat, who persists in nibbling and biting the leaves and new buds as they make their appearance, sometimes destroying in the course of a few weeks some favorite or rare fern or flower.

The reason for this seeming vandalism is perfectly plain, or ought to be. The cat requires green food, if it is to be kept healthy and happy, and takes the shortest road to getting it.

In summer, following this need of its system, a cat will eat grass freely. In winter, or in the city, when this supply of green fodder is cut off, common sense suggests that the cat be artificially provided with it.

For its own sake, as well as for the safety of the Boston fern and the rubber plant, why not plant a cigar box of soil with some quick-growing thing, like oats or sorrel, and let the cat help itself? It will soon realize the glad fact that the plants are meant for it, as proved by the fact that indulgence brings no aftermath of slaps or scoldings.

As one crop fails sow another, and keep it up till mother earth provides a more liberal supply of her own, and your cat will bless you.

All Contraltos Dark.

"Did you ever see a blonde contralto?" asked a teacher of vocal music. "I'll be bound you never did, for the reason that all contraltos are dark. For a matter of twenty years I have observed the human voice, and I have come to the conclusion that the coloring of a person has some sort of influence upon the vocal organs. Blonde persons with blue eyes, ruddy complexions and yellow hair incline to have high, sharp, metallic voices—soprano voices. I won't go so far as to say that I can tell by a woman's appearance what type of voice she has, but I will say that I can usually give a pretty good guess as to her voice. To be sure, I have seen blondes with deep voices and brunettes with high ones, but I have only seen this rarely. Never in my life have I seen a blonde contralto—a naturally blonde one, I mean."

Musical Fish of Ceylon.

Every bay and inlet on the coast of Ceylon abounds with musical fish. Their song, if it can be called a song, is not a sustained note like a bird's, but a cascade of tiny, soft, sweet sounds, clear and distinct in itself, somewhat like the vibrations of a wine-glass. The fish is robbed with the noise of a harp. In the harbor at Bombay, I have observed a fish with a song like that produced by an Æolian harp.

30 PERCHERONS

ALSO

Shires, Hackneys and Clydes and 12 Percheron Mares

3, 2 and 1 year old.

Have just arrived with our new importation from Scotland, England and France, of high-class stallions and mares. Many of them prizewinners in their native lands. Bred by the best breeders. Percherons, blacks and greys, weighing 1,600 to 2,000 pounds. Shires at two years old weighing 1,700 pounds. Clydes, bays and blacks, 4 and 5 years old, weighing 1,800 to 2,000 pounds, and breeding that cannot be beaten. These horses can be seen at Toronto and London fairs, and all for sale at reasonable prices.

Hamilton & Hawthorne, Simcoe, Ont.

82 miles south-west of Toronto on the G. T. R.

GOSSIP.

OFFICIAL TESTS OF HOLSTEIN-FRIESIANS.

Fourteen more cows and heifers have made records that have been accepted in the Record of Merit. These tests are all for a period of seven days, and were conducted under the supervision of the Ontario Agricultural College or the Eastern Ontario Dairy School. The amounts of milk and butter-fat are actual; the amount of butter is estimated from the fat by adding one-sixth.

1. Inka Sylvia De Kol (2878), at 6 years 5 months 9 days; milk, 425.12 lbs.; butter-fat, 14.91 lbs.; equivalent butter, 17.40 lbs. Owner, G. A. Gilroy, Glen Buell.

2. Christmas Jennie (3008), at 6 years 1 month 24 days; milk, 523.4 lbs.; butter-fat, 14.36 lbs.; equivalent butter, 16.75 lbs. Owner, Thomas Davidson, Spring Valley.

3. Burkeyje De Kol (3295), at 5 years 2 months 18 days; milk, 404.1 lbs.; butter-fat, 13.62 lbs.; equivalent butter, 15.89 lbs. Owner, A. D. Foster, Bloomfield.

4. Dirkje Pel (5908), at 3 years 10 months 28 days; milk, 412.12 lbs.; butter-fat, 13.17 lbs.; equivalent butter, 15.36 lbs. Owner, G. A. Gilroy.

5. Gretchen Abhekirk De Kol (4477), at 3 years 11 days; milk, 401.1 lbs.; butter-fat, 13.08 lbs.; equivalent butter, 15.27 lbs. Owner, A. W. Davidson, Spring Valley.

6. Augusta Acme De Kol (4454), at 3 years 6 months 12 days; milk, 459.06 lbs.; butter-fat, 12.64 lbs.; equivalent butter, 14.74 lbs. Owner, A. C. Hallman, Breslau.

7. Juanita Sylvia 2nd (3921), at 4 years 6 months 16 days; milk, 395.12 lbs.; butter-fat, 12.23 lbs.; equivalent butter, 14.27 lbs. Owner, G. A. Gilroy.

8. Daisy Pieterje (3872), at 4 years 1 month 23 days; milk, 397.2 lbs.; butter-fat, 12.19 lbs.; equivalent butter, 14.22 lbs. Owner, A. D. Foster.

9. Pauline Belle De Kol (3841), at 4 years 1 month 8 days; milk, 333.1 lbs.; butter-fat, 11.65 lbs.; equivalent butter, 13.60 lbs. Owner, Thos. Davidson.

10. Emma Abhekirk De Kol (3842), at 3 years 10 months 24 days; milk, 294.9 lbs.; butter-fat, 10.98 lbs.; equivalent butter, 12.81 lbs. Owner, Thos. Davidson.

11. Gretchen of Evergreen (3816), at 3 years 8 months 21 days; milk, 338.9 lbs.; butter-fat, 10.88 lbs.; equivalent butter, 12.70 lbs. Owner, Thos. Davidson.

12. Rosie's Wonder (4845), at 3 years 4 months 27 days; milk, 399.5 lbs.; butter-fat, 10.31 lbs.; equivalent butter, 12.03 lbs. Owner, A. C. Hallman.

13. Beauty Eugenie De Kol (4014), at 3 years 10 months 20 days; milk, 371.31 lbs.; butter-fat, 10 lbs.; equivalent butter, 11.67 lbs. Owner, A. C. Hallman.

14. Minnie Evergreen (4637), at 2 years 8 months 1 day; milk, 244.2 lbs.; butter-fat, 8.29 lbs.; equivalent butter, 9.67 lbs. Owner, Thos. Davidson.—G. W. Clemons, Secretary.

A Brown County girl recently sent fifty cents to a Chicago advertiser for a recipe to whiten and keep the hands soft. She received the following reply: "Soak them three times a day in dish-water while your mother rests."

When we reach Utopia we always find the map has deceived us, and so we sail on. This is Progress.

Before President Angell, of the University of Michigan, had attained to his present high-position, a young hopeful entering college was recommended to his consideration.

"Try the boy out, professor; criticize him to tell us both what you think," the parents said.

The professor took the boy for a walk. After ten minutes' silence, the youth ventured, "Fine day, professor."

"Yes," with a far-away look. "Ten minutes more, and the young man, squirming all the time, ventured: "This is a pleasant walk, professor."

"Yes." "For another ten minutes the matriculate boiled to his bones, and then blurted out that he thought they might have rain."

"Yes." And this time the professor went on: "Young man, we have been walking together for half an hour, and you have said nothing which was not commonplace and stupid."

"True," answered the boy, his wrath passing his modesty, "and you indorsed every word I said."

They shook hands, and word went home that the boy was all right.

QUITE MIXED.

The chairman of the school committee was addressing a meeting at the teachers' institute.

"My friends, the schoolwork is the bulhouse of civilization; I mean—ah—"

The chairman here became slightly chilled.

"The bulhouse is the schoolwork of civ—"

An invincible smile began to make itself felt.

"The warkhouse is the bulschool of—"

He was evidently twisted.

"The schoolhouse is the housewark—"

An audible snigger spread itself over the faces of the audience.

"The scowse hool—"

He was getting wild. So were his hearers. He mopped perspiration, gritted his teeth, and made a fresh effort.

"The schoolhouse, my friends—"

A sigh of relief went up. A-h-h! Now he has got his feet under him again. He gazed suavely round. The light of triumphant self-confidence was enthroned upon his brow.

Is the wulbark—"

And that was all.

On the walls of an old temple was found this picture: A king forging from his crown a chain, and near by a slave making of his chain a crown. And underneath was written: "Life is what man makes of it, no matter of what it is made."

At first he cursed the world that for his heart's true gold it paid him in worthless coin; but later said: "It gave me its best, and was not to blame that I bestowed not my wealth on something worth more."

Her way in life led through a garden where flowers bloomed, but not for her.

"Bravely could I pass them by," she said, "did they who pluck them do so lovingly."

In the light flashed from the scythe of Death a miser turned from the gold he had worshiped all his life. "I see now," he said, "that wealth is a curse to him who considers it the greatest of blessings."

QUESTIONS AND ANSWERS.

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

Miscellaneous.

TURKEY WITH SORE FEET.

Turkey hen has sore feet. Trouble began with a warty substance. She is now very lame, and one of her toes has fallen off. Please prescribe. Is it contagious? E. B.

Ans.—I do not know. She may have suffered an accident. Thoroughly cleanse and use an antiseptic. It should not be contagious. F. C. E.

OWNERSHIP OF FENCE.

A sold half of his farm to B, and there is a fence, where the new line fence is to be, right through. Now, does that fence belong half to each, as nothing was said in deal, or can A take half away and make B build his half through? A SUBSCRIBER.

Ans.—The fence must be allowed to remain where it is. A is not entitled to remove a half of it as suggested.

AN OPTION TO PURCHASE.

Four years ago, A obtained an option or promise of sale from B on his property; no time stipulated for expiry, and no money deposited. Can B reclaim his property now, minus the option; and, if not, can said option hold good forever, or for what length of time? N. S.

Ans.—We do not think A's option can be considered binding on B at this late date.

KEEPING BEES.

I have an apiary (80 colonies) just across the road from an evaporator, where thousands of my bees are buried in the apple peelings that are thrown out. They crawl in, sucking the juice, and basketfuls are dumped on them. I also think this juice causes dysentery in winter and kills them. Can I compel them to build a small shed to put them in? If so, how shall I proceed? Ontario.

Ans.—We think not. It is rather a matter for mutual arrangement.

WHEY WITH MEAL FOR FATTENING FOWL.

Has anyone tried fattening chickens by mixing the meal with whey instead of milk? If so, what are the results? How does they compare with skim milk as to results? D. B.

Ans.—Yes; Prof. W. R. Graham, O. A. C., Guelph, has made some experiments with whey in place of milk for feeding chickens. Write him for his bulletin dealing with his experiments. W. C. E.

FAIR BOARD MEETINGS.

The annual meeting of — Exhibition was held in January last on the date prescribed by law, and the officers and directors' board were elected by ballot from the members present at that meeting, and the meeting adjourned after doing routine business, subject to the call of the president. Subsequently one meeting was called in April for receiving of reports from delegates to Fairs Association and other business, and another as called in June to revise prize-list and appoint judges. Now, for some unaccountable reason, neither the 2nd vice-president-elect nor one of the directors-elect were notified to attend either of these meetings. 1. Can the business of a directors' board be legally transacted if the members have not all been notified to attend the meeting? 2. Can the fair be held, and cash be paid out legally without the approval of the whole board? 3. What action can be taken to make this matter right legally? Ontario.

Ans.—1. No. 2 and 3. We would say that under the circumstances a special meeting of the board should be regularly called and held, and the business done at the so-called "meetings" referred to formally ratified. Otherwise there might be trouble.

MARE FAILS TO BREED.

I have a five-year-old mare that I have bred all this season and cannot get in foal. She is all right. Had her examined and she is open. I was told to feed her carbolic acid. Can you tell me anything about it, if it would be any good? W. H.

Ans.—It is not likely that carbolic acid would have the desired effect. See statement of P. M. in this issue re mares failing to breed and his treatment. We give it for what it is worth.

YOUNG PIGS CRIPPLED.

Pigs, not two weeks old, become stiff, or, apparently, foundered. The sow was on grass; fed ground oats and bran, a quart of each three times a day, and the day after farrowing began to look for feed, and I started feeding her a quart of the mixture and a pail of fresh whey three times a day; increased her feed to four quarts of the mixture three times a day. Did not let her out of the pen until the latter end of the second week. J. F.

Ans.—I find it difficult to suggest the cause for the stiffness of these young pigs. The only thing which I think is wrong regarding the feeding is the matter of feeding whey. I certainly would not care to feed whey to a sow at such a time. It is possible that the whey may be the cause of the trouble. Would advise that he discontinue feeding whey to the sow, and feed her on sloppy food, together with green food of some kind. O. A. C., Guelph. G. E. DAY.

HENS VS. COWS FOR PROFIT.

I see in a farm journal the statement that ten first-class hens cost less and will produce more than the average cow. I should like your poultry editor to prove the correctness of this statement. If it be true, that 100 hens will bring as much revenue as ten cows, there is certainly a lot of unnecessary work being done in a majority of farm homes in this country. I should like to see the statement verified. M. A. J.

Ans.—The "farm journal" referred to may be nearer the truth than some of us are inclined to admit. Our first-class hen will lay 15 dozen eggs a year, and a low average for this year would be 20c. per dozen. This would give a total of \$3 for the product. She would cost from 90c. to \$1, but, to be on the safe side, say she cost \$1.25. This would still leave a profit of \$1.75; or on ten hens, \$17.50. I am not sure what the average cow would give in profit yearly, but I have before me the Canadian Dairyman for July 2nd, and I read that the average profit on 20 herds visited is \$8.04, and of another 25 herds visited is \$8.53 a cow, or on the 45 herds an average profit of \$5.79 per cow, or a little more than what three first-class hens would give. I would not like to say, however, that the farmers who are keeping those average cows should sell them and buy poultry, because nine out of ten of them would still be satisfied with an average, and would not have the "first-class." F. C. E.

WATER PIPE.

I have laid a water pipe two hundred rods from a reservoir to my house, and, as it is not working satisfactorily, I would like to ask, through the columns of "The Farmer's Advocate," what the trouble is. I send you a draft of water-course. You will see that it has to be syphoned over a hill, 16 feet high, my house being about 75 feet lower than spring. SUBSCRIBER.

Ans.—This syphon would work satisfactorily in the circumstances here described, provided the pipe in the higher part of the bend were perfectly air-tight. The fact that the water runs back proves that air must get in somewhere. In a syphon, the water-pressure inside the pipe along the higher part of the bend is less than atmospheric pressure. If the pipe is air-tight, and it is once filled with water, the air-pressure acting on the surface of the water in the reservoir will keep the water in the pipe. If the lower end of the pipe is open, water will flow. If it is closed, the pipe remains full. But if there is a leak in the higher part of the pipe, the low pressure of the water inside allows the air to find its way in, and the water falls back to the reservoir. Of course, it is just possible that there is air enough in the water to collect, and, in time, to let the water back. But this would take a long time, and

would first show its effects by lessening, and, finally, stopping the water flow at the house. The speedy action in this case indicates a considerable air leakage at the upper stop-cock, or in the pipe along the upper part of the bend. The only remedy is to make the parts perfectly air-tight. J. B. REYNOLDS. O. A. C.

CROSSING BREEDS OF FOWL.

I have been breeding White Leghorn fowl for the last fifteen years, but last year I crossed them with White Wyandotte, and my chickens were all white, and all had rose combs. So I got another White Wyandotte cockerel this year, and my chickens are both single and rose combed, and all colors. Please state the cause of this mix-up?

2. I had a nice flock of turkeys which did well till about four or five weeks old, then some got dumpy and stand around with drooped wings and eyes closed for about three days, and others only a few hours, and then die. On opening one we found its liver very badly enlarged and covered with bright yellow spots, probably as large as five-cent pieces. I feed them principally on corn meal and Dr. Hess Panacea, also lots of pepper and some onion tops. Please state the cause of them dying this way, and the cure for them, if any. L. L. P.

Ans.—Replying to the question re crossing of breeds, would say that the result is quite natural. The Wyandottes are a made breed, and often when crossed with another breed will revert to the original colors. In the first cross made, the White Leghorn blood has been strong, and for that reason probably the color was retained, although it is somewhat unusual to have all the birds from such a cross with rose combs. In the second cross, you have practically three-quarters Wyandotte blood, and it is not at all surprising that you got a mixture of colors. Pure-bred Wyandottes frequently throw single combs, so that when crossed with Leghorns we would expect a greater percentage of single combs. Wyandottes crossed with Plymouth Rocks frequently throw black chickens, even when crossed with White Rocks. The White Wyandotte is supposed to be a sport from the Silver-laced, and the Silver-laced is bred from the Brahmas and Hamburgs, consequently, we would expect more or less of the colors worn by the above breeds to be shown in the crosses.

Replying to your second question, would say I am inclined to believe that the turkeys are affected with black head. There is a slight chance that it might be tuberculosis, but this is very doubtful. Considering that black head is quite common, and that the liver is affected, as mentioned in your letter, I think you would be safe to say that the birds are affected with this disease. So far as I know there is no known cure for it. The birds that are not affected will be best kept in health by roaming over ground on which turkeys have not travelled very much, and by feeding the birds from a clean trough, or where there is no chance of them feeding on ground where affected turkeys have been. It would be well to kill and burn any turkeys that show any indication of the disease. W. R. GRAHAM.

BEE CREAM SEPARATOR.

Can you kindly give me percentage of loss of butter-fat when separating at maximum efficiency temperature, 60 degrees Fahr., and also 40 degrees Fahr. My barn registers an even, steady temperature of 40 degrees Fahr. during winter.

Ans.—Assuming that the milk is separated immediately after milking, and that the separator bowl has been warmed in winter by first running a quart or two of hot water through it before commencing to separate the milk, then there should not be over one space (one-tenth of one per cent. fat) in the double-neck skim-milk Babcock bottle when testing the skim milk. If milk is allowed to cool below 80 degrees F. in winter before separating, the loss will be greater than the foregoing. In this case, it would pay to warm the milk to 90 degrees to 100 degrees F. before separating. Quite often there will be less than one space of fat in the double-neck Babcock bottle when testing skim milk, but if an average sample from the whole run does not exceed one space, it is considered that the machine is doing good work. O. A. C., Guelph. H. H. DEAN.



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

A FIRST-CLASS cattleman seeks situation. Married. Understands the feeding and management of cattle. Good references. Arthur Warren, East View Farm, Cookshire, Que.

ALBERTA FARMS Regular snaps. Prices right. Terms easy. Write to-day. Hulbert & Foster, Strathcona, Alberta.

GENUINE bargains, Alberta lands. Write, and call when you come. Austin M. Fuller & Co., Strathcona.

IMPROVED farms for sale in the Edmonton district. Candy & Co., Edmonton, Alta.

ONE hundred acres for sale. Tenth concession, King Township. All cleared. Condition, buildings, fences, good. Particulars. J. Hunter, Holly Park.

ONE-HUNDRED-ACRE farm for sale, Sombra Tp., Lambton. First class buildings. Eighteen acres bush. The drained. Close to all conveniences. Particulars apply X, Farmer's Advocate, London, Ont.

TO RENT for a term of years, the Ridgewood Park Farm, near Goderich, Ont. About three hundred acres. Good house and barns. Grazing lands well watered. Apply to Edw. C. Astrill, Goderich, Ont.

THE Perfection Cow Tail Holder (patented) insures comfort and cleanliness while milking. It will please you. Thousands sold. By mail, 15c; two for 25c. Agents wanted. Prices right. Address: Wm. Noxon, Finton, Ont.

WANTED—An experienced farm foreman. Must not use profane language or intoxicating liquors. Reference, age, number in family, religious persuasion and wages wanted must accompany application. A house, garden and quart of milk daily furnished free. Must be a good manager of boys. Services to begin October 1st, '06. Active church worker preferred. Address: Rev. T. T. George, principal, Muncey, Ont.

150-ACRES near Aurora. Good grain and stock farm. Well fenced and watered. Good buildings and bush. Will be sold on easy terms. Further particulars apply to Box 269, Aurora, Ontario.

QUESTIONS AND ANSWERS.

Miscellaneous.

STEAM FLOW FOR WEST.

I am thinking of buying a steam plow outfit to take to the Northwest (one of the newer districts).

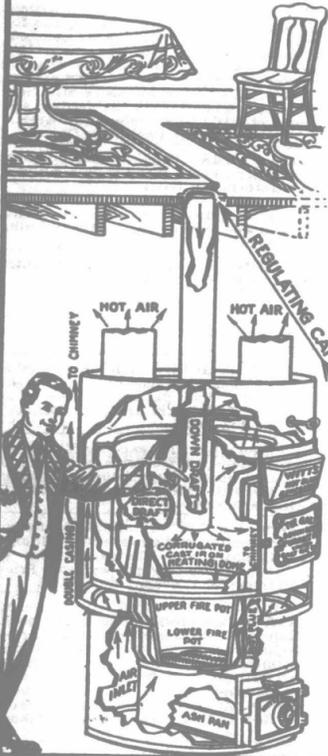
- 1. Do you think this would be a profitable investment? 2. What working should the unbroken prairie require the first summer? 3. What do you consider would be a fair charge per acre; that is, if there is no clearing to be done? SUB.

Ans.—1. After going out there and travelling around, you will have a better idea of just what is wanted. Unless you have had some experience in running such an outfit, we do not think it would pay you very well, unless you can use the engine for other work. You can probably buy better rigs out there, where the special needs of the country are catered to.

2. First year's work on the prairie consists of "breaking" two or three inches deep in May, June or first part of July, then "backsetting," say four or five inches deep, in July and August, up till harvest, or even in the fall. Sometimes "breaking" is done four or five inches deep, and the land cultivated with the disk until the sod is destroyed, but the former plan is more satisfactory. 3. About \$3.50 to \$4 for breaking, and from \$2.50 to \$3.00 for backsetting.

In the death of Mr. Wm. Dawson, of Vittoria, Norfolk County, Ontario, which occurred July 13th, last, a representative Canadian farmer, a successful breeder of Shorthorn cattle, and a public-spirited citizen has been removed from the scene of human activities. Mr. Dawson was for many years a member of the council of the Ontario Agriculture and Arts Association, in which he did good service in furthering the interest of agriculture in the Province.

The Down Draft Furnace makes Heating easy.



It is the new idea in furnace construction that does it.

The Down Draft Principle.

By this principle the air is brought down a pipe through the dome of the furnace to within eight inches of the coal. The fire burns from the top, and owing to the pressure all gases and soot are burned, and it does not permit the heat to be sent up the chimney, as is the case with other furnaces.

Every particle of heat is extracted from the fuel.

Heavy Corrugated Cast-Iron Dome, which doubles its heating capacity and durability.

It is especially adapted for burning Soft Coal, which it does with great economy—no other furnace will do this. The heat-saving devices of this furnace will lessen your fuel bill 15 to 30%. Do you recognize what a saving this is?

It costs no more to have it than any other. Write for Catalogue and information.

The Down Draft Furnace Co.,
LIMITED,
GALT, ONT., CANADA.

GOSSIP.

The Glenhudson Company, Myrtle Station, Ont., order a change in their advertisement of Yorkshire pigs, and write: "We are sold out of sows due to farrow in August and September, but some very nice ones being bred now, also a lot of nice young pigs from four to six months old."

\$35,000 FOR LIVE STOCK.

The amounts given in premiums at the Canadian National Exhibition, Toronto, August 27th to September 7th, for live stock, figure up to a total in excess of \$35,000, of which \$12,000 is devoted to horses, \$8,000 to cattle, \$3,000 to sheep, \$2,500 to pigs, \$3,000 to poultry and pet stock, and \$4,000 to dogs. The dairy breeds of cattle will be judged Friday and Saturday of the first week. The beef breeds, horses, sheep and hogs, Monday of second week and following days.

MR. COCHRANE'S SHORTHORN SALE

On September 7th, on the exhibition grounds, at Sherbrooke, Quebec, week of the fair, Mr. James A. Cochrane, of Compton, Quebec, will sell at auction his entire Hillhurst herd of high-class Shorthorn cattle as advertised in this paper. There are 34 cows and heifers, and nine bulls and bull calves in the herd. A number of these are imported, and most of the others are bred from imported stock. Most of them are well-known Scotch families, and some are of standard English families of good milking strains. It looks as though everything will be in the buyers' favor at this sale, as the cattle, with few exceptions, are on pasture and in the best breeding condition—not forced or pampered—and as this part of the country is given over almost wholly to dairying, prices will doubtless be low. All are registered in Dominion Herdbook; all are eligible, and nearly all entered in American Herdbook, and will be tested before the sale so that there need be no delay in shipping anywhere. U. S. Consul's certificates can be obtained at Sherbrooke, and export certificates and other papers will be on hand. Parties attending the Toronto Exhibition can leave there Thursday evening and arrive at Sherbrooke next morning in good time for the sale. Look for the "Gossip" regarding this stock in next week's Farmer's Advocate, and send for the catalogue.

Mr. T. H. Medcraft, senior member of the firm of T. H. Medcraft & Sons, Sparta, Ont., recently landed at Quebec with a carload of Shropshire sheep selected from leading flocks in Britain. Messrs. Medcraft & Sons claim the date October 16th for an auction sale of Shorthorns and Shropshires, of which fuller particulars may be looked for in these columns later.

Volume 65 of the American Shorthorn Herdbook has been received at this office, thanks to the courtesy of the secretary and editor, Mr. John W. Groves, Chicago, Ill. The volume contains the pedigrees of 5,206 bulls and quite as many or more of females, showing a remarkable increase in the breed in America, as volume 64, issued in October, 1905, contained over 5,000 pedigrees of bulls and as many or more of cows.

The following statement in a British exchange gives some idea of the volume of the export trade of meats and meat-producing animals from this continent to the tight little island and of the competition Canada has to contend with in that market: Thirteen steamers have, during the past week, landed cattle, sheep, sheep carcasses, and fresh beef at Liverpool from the various North and South American and colonial ports. The total imports for the week amount to 7,753 cattle, 1,142 sheep, 37,320 sheep carcasses, and 32,969 qr. of beef, these figures, in comparison with those for the preceding week, showing increases of 2,521 cattle, 469 sheep, 1,784 sheep carcasses, and 12,518 qr. of beef.

SALE DATES CLAIMED.

Aug. 29th.—J. G. Clark, Ottawa, Ayrshires, Clydesdales and Yorkshires.

Sept. 7th.—J. A. Cochrane, Compton, Que., at Sherbrooke, Shorthorns.

October 12th.—Scottish Shorthorns, at Inverness, Macdonald, Fraser & Co., Perth.

October 16th.—T. H. Medcraft & Sons, Sparta, Ont., Shorthorns and Shropshires.

October 17th.—Capt. T. E. Robson, Hurderton, Ont., Shorthorns.

October 18th.—H. J. Davis, Woodstock, Ont., Shorthorns.

GOSSIP.

T. MERCER'S CLYDESDALES AND HACKNEYS.

Mr. T. Mercer, of Markdale, Ont., on Owen Sound branch of the C. P. R., the well-known importer and breeder of Clydesdale horses, Shorthorn cattle, Shropshire sheep and Yorkshire hogs, whose splendidly-equipped 300-acre stock farm lies about one and a half miles east of Markdale Station, has just arrived home from Scotland with an extra choice lot of Clydesdale stallions and fillies and Hackney stallions. Judging by the high-class importation made by Mr. Mercer a year ago, that won so many premiums at Toronto, and that won practically everything offered for imported Clydesdales at the Dominion Exhibition, New Westminster, B. C., the public will not be surprised to learn that in this lot Mr. Mercer has excelled all his previous importations. They carry Scotland's richest blood, combine size and quality to a marked degree, stand on the best possible quality of bone, feet and ankles, are stylish, flashy movers; in short, are just the kind that this country wants. Knight of Glamis, the great son of Mercutio, and grandson of the invincible Hiawatha, is still in the stud, and after making an exceptionally heavy season, is in prime condition. He is a fixture on the farm, and is not for sale, being the only one reserved. King Crawford, a brown eight-year-old, got by Prince of Carruchan, has to his credit first prize as a one-, two- and three-year-old, stands 17 hands high, in condition, weighs 2,200 lbs., and with it all is choke-full of style and quality, and moves like a machine. Cawdor Castle is a brown three-year-old, by Sir Hugo, dam by Prince of Kyle, is one of the smooth, stylish kind, full of quality, and a winner sure; one of the best all-around three-year-olds we have seen for many a day. Pride of Boother is a bay two-year-old, by Lord Graham, dam by Prince Edward, an extra large colt with very heavy bone of A1 quality, will make a 2,200-lb. horse, and has heaps of style and quality, and moves straight and clean. Pride of Drumberlie, a brown two-year-old, got by Baron of Buchlyvie, dam by Montrave Mac, is a very sweet-turned colt, smooth and even, stands on ideal underpinning, and will certainly win his spurs this fall. Still another is a brown four-year-old, by Pride of Blacon, a big, well-put-up horse, combining size and quality, a grand stock horse. Aberdour is a bay three-year-old, one of the thick, smooth ones, a stylish cart horse with grand underpinning. Among the fillies, the bay three-year-old, Miss Kyle, by King of Kyle, dam by Scottish Standard, struck us as being just about right. She won third at Dumfries as a two-year-old, has size and quality, and is a grand mover. She was served in Scotland. Tina Grant, three years old, by Labori, dam by Lord Erskine, has won at a number of Old Country shows, is capable of winning again, and was bred to Knight of Glamis. Lady Rozelle, a bay three-year-old, by Rozelle, dam by Prince of Balmanno, is an Old Country winner, a big, flashy mare on model legs, was served in Scotland, and is likely in foal. Blossom of Stralloch, bay, two years old, by Dunmure Castle, dam by Lord Erskine, is bred to Knight of Glamis. Rosy of Newmains, a bay two-year-old, by Prince of Balmanno, dam by Prince of Johnstone, is also bred to Knight of Glamis. Fanny of Greenfield, a brown yearling, by Royal Citizen, is the making of something extra. Lassie Jean, a Canadian-bred yearling, by Fidelity (imp.), by Imp. Horn Beam, grandam by Imp. Lord Derby, is a show filly all over—a cracker. All these fillies have grand underpinning, Mr. Mercer putting great stress on ankle and foot and quality of bone.

In Hackneys is the bay four-year-old Diamond City, by the sire of winners, Precious Stone, by the World's greatest Hackney sire, Rosador, dam Lady Alice, by Nil Desperandum, a son of the great Lord Derby. Diamond City stands 16 hands 2 inches high, with high, true and natural action. His head, neck, shoulder and back are those of a high-class hunter. He possesses heavy, flat bone, grand feet and ankles, and has style to spare. Diamond Cross, a chestnut two-year-old, by Wicham's Friar Tuck, is one of the coming Hackneys, a very flashy, stylish-moving youngster of more than

ordinary quality—the kind that draws the eye and wins the red. Any of these horses and fillies are for sale at living prices. Look them up at Toronto Exhibition. Another consignment of fillies is now on the way out.

Mr. G. W. Clemons, St. George, Ont., reports trade in Holstein cattle as very brisk the past season, and writes: "My advertisement in 'The Farmer's Advocate' has been responsible for several good sales, among which are the following: To Mr. C. A. Kincaid, Kingston, Ont., a fine bull calf, a prizewinner at Toronto last year, sired by my stock bull, Sir Mercedes Teake, whose sire, Chief Mercedes De Kol, was a son of De Kol 2nd's Paul De Kol No. 2, a full brother of May Hartog Pauline De Kol who made an official seven-day record of 29 lbs. 4 ozs. of butter as a four-year-old. Flossetta Teake and Daisy Teake's Queen, the dam and grandam of Sir Mercedes Teake, were two of the best cows of the breed I ever saw. Both were sweepstakes and dairy-test winners at Winnipeg. Dam of Mr. Kincaid's purchase was Princess Pledge De Kol, who won first at the Pan-American as a yearling. Running with the herd last season, she gave 14,000 lbs. milk in 11½ months as a five-year-old. Telfer Bros., of Ingersoll, selected a bull of remarkable dairy quality, a business-bred bull to head a business herd. His sire was Sir Mercedes Teake, and his dam Helen Modjeska, who gave 45½ lbs. milk in one day as a two-year-old. Her dam, Daisy B. De Kol, had an official seven-day butter record of 19 lbs. 2 ozs. Her grand-dam gave 62 lbs. milk in one day, 420 lbs. in seven days, 1,790 lbs. in thirty days, and 11,913 lbs. in nine months, finishing this remarkable record before she was three years old. J. B. Arnold, Easton's Corners, took Romeo Teake, a son of Sir Mercedes Teake and Julia Arthur, a fine show cow, who won, among other prizes, first at the Pan-American as a calf, and first at Toronto as a three-year-old. She gave, as a three-year-old, in August, 50 lbs. daily on grass alone. Mr. R. W. Willis, Jr., Aylmer, Ont., bought Oyama, a typical De Kol, a son of Sir Mercedes Teake, and from Queen De Kol 5th, a member of my famous Queen De Kol family. Mr. Thos. L. Smith, Dorval, Que., got a highly-bred bull in Samuel Weller, also a son of Sir Mercedes Teake, dam Maxine Elliott, a very promising heifer full sister Helen Modjeska, mentioned above. Mr. Chas. Sifton, Cairngorm, bought Jock De Kol, a son of my old show bull, Count Mink Mercedes, out of Lena Josephine De Kol, half-sister of Mr. Sangster's famous dairy-test winner, Lady Colantha De Kol. Mr. Neil Sangster, Ormstown, Que., secured, to head his herd of pure-breds, the splendid calf, Inferno, which should make a show bull, and is of excellent breeding, his sire, Count of Maple Hill, being a son of Count Mink Mercedes and Kaatje De Boer 3rd, whose official seven-day butter record is nearly 17 lbs. as a four-year-old. A representative of 'the Farmer's Advocate,' who recently visited my herd, pronounced her the handsomest cow of the breed he had ever seen. Her full sister, Kaatje De Boer 2nd, has an official seven-day butter record of 25 lbs. 2 ozs. Inferno's dam, Queen De Kol 2nd, gave 74 lbs. of milk in one day on grass alone, two milkings daily, and has given 55 lbs. in a day, nine months after calving, and due to calve in three months. She won the Prince of Wales' sweepstakes prize at the Provincial Dairy Show, at Brantford, in 1897, for heifer under 36 months, and made an official test at two years of age of 10½ lbs. butter in seven days, one hundred and twenty days after calving. Mr. James Elliot, Bluevale, secured a fine dairy bull, a son of Sir Mercedes Teake, and Kate Castleton, one of my most promising heifers. She gave 48½ lbs. in a day, and averaged 45 lbs. daily for 80 days, calving at twenty-six months old."

Col. Robert McEwen, Byron, Ont. (near London), writes under date July 30th, advising us to continue his advertisement of Southdowns and collie dogs, which has brought many enquiries, and resulted in many sales, and mentions the fact that the Hessian fly is considerably in evidence in wheat sown early last fall in his locality.

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Health the Prize Most Sought For

AND TO THOUSANDS OF WEAK,
SICKLY PEOPLE HEALTH IS
RESTORED BY

Dr. Chase's Nerve Food.

You want to be strong and healthy.
Everybody does. Women as well as
men.

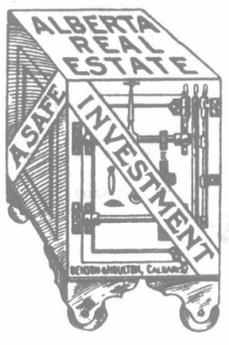
There was a time when women prided
themselves on looking pale and delicate.
That day is past.

To-day robust health is the ideal. A
well-rounded form, firm flesh and muscles,
strength and elasticity of movement and
a healthful glow to the complexion—these
are what all are striving for, and many
are attaining their object by the use of
Dr. Chase's Nerve Food.

When the food which is taken into the
body fails to supply the required amount
of rich, life-sustaining blood, external
assistance must be sought until the sys-
tem is fully restored.

Dr. Chase's Nerve Food supplies the
very material which goes directly to the
formation of blood—pure, health-giving
blood.

Weakness, irregularities, headaches,
dizzy spells, feelings of fatigue, discour-
agement and despondency soon disappear
before the splendid restorative influence
of this great medicine, and for this reason
Dr. Chase's Nerve Food has become so
popular; 50 cents a box, at all dealers,
or Edmanson, Bates & Co., Toronto.



FARMS

Send for our list of Alberta farms for sale.

Benson & Houlton, Calgary, Alta.



Bell's Feed Cutters

Cut Clean as a Razor and Hold their Edge.

Bell's Cutters are all fitted with the Marshe Concave Knife. That means quick, easy work. The Marshe Knife cuts full mouth or few straws equally well—and strikes first at the feed farthest from the center, with the greatest force.

Write for illustrated catalogue of Bell Farming Implements. Free.

B. BELL & SON, Limited - ST. GEORGE, Ont.

ATTENTION! POULTRYMEN.

The choicest prizewinning birds from the best strains of any variety of **Wyandottes**. Only high-class birds for sale. Address:

JAMES HOULTON, GREAT MALVERN, ENGLAND,
or **S. HOULTON, CALGARY,**
Canadian Representative.

Advertise in the Advocate

A Visit of Condolence.

Miss Mattie, gathering peas in the old garden in which vegetables had taken the place of flowers—though here and there a decrepit crepe myrtle or rose, a dim trace of walk or parterre, testified of the higher estate from which it had fallen—suddenly descried upon the long red ribbon of road which stretched away into the still distance a moving speck, and a pale flicker of excitement kindled upon her wan face. A little wasted figure, in a scant black calico dress, carefully pinned up around her waist, she stood absorbed in speculation; the blank, many-paned windows of the hip-roofed house looking down upon her.

"I don't reckon it could be anybody coming here," she said. "The Clarkes have been, and the Warrens and the Fords and the Wilburs and the Robinsons and everybody. But some of them may be coming back."

With childish intensity she watched the approach of the object of her curiosity.

"They may turn off the road at the blacksmith's shop," she said.

"But they didn't!" she exclaimed with thrilling excitement. Catching up her basket of peas, she hurried with it to the open window of the old brick kitchen.

"Have these for dinner, Aunt Dilsy," she said. "Have all of them, boiled with a little bacon. And stew some tomatoes, if there are any left, and see if you can't find some ears of corn. Company's coming, and they may stay for dinner." The old woman took the basket grimly.

"Go 'long, honey," she said, "dey ain' gw' stay to dinner; I lay dey know what good fer 'em better'n dat."

She hobbled infirmly to the door. "You go 'long to de sto', Ebenezer," she said to a bent old negro thawing his rheumatism in the welcome warmth of the August sunshine, "and see whedder dey'll trus' us fer 'nother poun' o' bacon an' a bushel o' meal. Tell 'em de sale gw' be nex' week, an' we ain' got no change tell den. An' we des bou'n' to eat!"

Miss Mattie upon the time-stained stone steps awaited the approach of the spring wagon which had turned into the gaunt locust avenue before the house.

"I don't know who it could be," she said, half aloud. "It looks like—it looks like—it's Anna Harding!"

A pretty, plump, blonde woman, in a much-embroidered linen dress and a rose-laden hat, alighted briskly from her incongruous vehicle with the help of the negro youth who had driven her, and embraced Miss Mattie with a solemn impressment under which her flurried smile of welcome faded and the tears rained from her eyes. And yet her face shone.

A vague excitement had throughout the week kept off from her the full pressure of grief. She was a center of respectful interest, a recipient of unprecedented attention. Even the half-realized ruin of her world widened her horizon, making room for nebulous hope. And now, to crown all, Anna Harding had come—Anna Harding, a mere chance glimpse of whom now and again during her occasional visits to her old home had been to Miss Mattie an event of magnitude, a thrilling reminder of life's sunlit side.

She had never dreamed of her coming. And yet, modestly conscious of being the prime repository of authentic "particulars," it seemed to her not unnatural that she should have come. Conscientiously, she began at the very beginning, sitting in her seat of ceremony on the old lyre-

(Continued on next page.)

THE DISPERSION AUCTION SALE

OF THE

Hillhurst Shorthorn Herd

WILL BE HELD ON

Friday, September 7th, 1906,

AT ONE P. M.,

ON THE EXHIBITION GROUNDS, SHERBROOKE, P. Q.

WEEK OF FAIR.

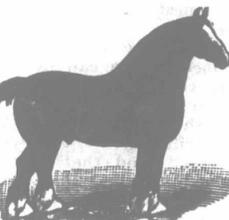
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backed sofa, facing her visitor, who bloomed in the dusky, high-wainscoted room like a brilliant flower.

"Brother," she said, wiping her eyes, "always was delicate. Over and over again I've heard ma say she never did expect to raise him—he was such a puny baby. Then, when he was two years old he had meningitis; 'twas that that left him deaf. And afterwards he all but died of scarlet fever. I don't remember all that, because it was before I was born. (He was the oldest and I was the youngest. The three children between—two girls and a boy—all died when they were babies.) But I remember like it was yesterday how low he was with pneumonia when he was just grown, because I helped to nurse him. They put fly blisters over his lungs, and did everything they could think of, and with it all he just did pull through by a narrow margin.

"That was the year before ma died—thirty years ago next October. There was just us three then, and ma died and there were just brother and me. And after that spell he never did really have any health, though he worked the farm some sort of way up to three months ago. And then—he took that chill—"

She paused to dry the tears that streamed over her cheeks.

"Dear, dear!" Anna Harding said, "how sad! how terribly sad! We simply cannot understand these things! How many chairs, Miss Mattie, have you to match that sofa?"

It took time for Miss Mattie to take in the question and to arrive at the answer.

"These four," she said, "are all the good ones—if you can call these good. The covers of the two in the garret are so worn out—"

"Two in the garret!" said Anna Harding, thrillingly. "Six chairs and this sofa; and that delicious marquetry cabinet, and that double-triangle corner table, and those adorable glass vases with the dangling prisms, in this room alone!"

A curious feeling of not being sure she was awake came over Miss Mattie. She looked about her, as if for some key to the amazing mystery of Anna Harding's enthusiasm.

"I always thought it was pretty to see the light through the glass dangles of the vases," she said, timidly. "It makes rainbows! But I didn't think you would care for old things like these."

"I just dote on them," said Anna Harding. "Do show me everything."

She darted about the dim old house like a mammoth butterfly, Miss Mattie, dazedly, delightedly following—rather than leading. In her slow-moving mind (in ten years she had not learned to call Anna Harding by her new name) credence lagged behind experience. Even though with her own eyes she saw Anna Harding pouncing with ecstasy upon one and another of the unconsidered things which had been immemorial constituents of her spare humdrum life, it was too preposterous for belief. It was dreamlike, unreal. But everything had been unreal, more or less, since the happening which had put a definite period to the things which were. She could but float upon the current of events, too bewildering to be coped with. And Anna Harding was pleased. That at least was clear. With simple-hearted elation she abandoned herself to the enjoyment of that strange, indisputable, most flattering fact.

In a way obscurely personal it flattered her—almost as she might have been flattered by praise (if such a thing were thinkable) of hand or eyes or hair. They were not to her possessions, the things her visitor eulogized, save in the sense almost precisely that hands and eyes and hair were possessions; appurtenances rather—elements of selfhood almost. Not the least factor in the sensation of strangeness, of unreality, which had come upon her, was the prospect of being, as it were, disembodied by

divorce from life's familiar envelope of visibilities. But that, too, hovered just beyond the full grasp of apprehension—inagle toward novelty.

"Everything, I understand, is to be sold next Thursday," Anna Harding said. "Dear, dear! how you must hate to part with them! It would simple break my heart, I know. But since you must sell them, I positively must have that lyre-back furniture, and the marquetry cabinet, and that corner table, and those dear dangly vases, and this claw-foot dining-table, and these Chippendale chairs, and these brass andirons—and I don't know what else! Before we go any further and I lose all my senses over these enchanting things that look like they might be straight out of Noah's Ark, won't you tell me what you will take for these? Suppose we begin with the parlor sofa and chairs. Now, what would you be willing to take for the set, including the two in the garret, which you say are very shabby?"

She led Miss Mattie back into the parlor.

"May I have a little more light?" she said. Miss Mattie assenting, she threw open the blinds, admitting an unfriendly glare upon the faded furnishings of the room.

"Now, what," she urged, "would you take for these?"

"For these?" said Miss Mattie, helplessly. Obviously it was a mere echo, precluding nothing.

"Would you be willing to take ten dollars for the set?" the visitor inquired, after a reasonable pause.

The marvel of her wanting them, the strangeness of parting with them, left no room for detail in Miss Mattie's mind.

"They've got to go," she said. For the first time something like a realization of the fact was dawning upon her. Her face took on a touch of blankness. "They've got to go—" she said. "But what in the world you want with them—"

"Will you take ten dollars for the set?"

Slowly Miss Mattie took hold of the question. "Do you think they are worth it?" she queried, anxiously.

Four dollars and a half for the claw-foot table in the dining-room, two dollars for the marquetry cabinet, a dollar for the corner table, seventy-five cents apiece for the dining-room chairs, thirty cents for the andirons, twenty-five cents for the pair of vases—it was very wonderful, very exhilarating. If she just could be sure the things were worth it!

"I'm afraid there isn't anything that's really worth buying," she said. "All the silver's gone long ago—the little that was left after pa bought a pair of mules with it. And there isn't any jewelry now, either, except this breastpin I've got on with ma's and pa's hair in it. And I couldn't just part with that!"

"I wouldn't ask you to!" said Anna Harding, cordially. Her competent glance was travelling swiftly over the dark old dining-room.

"Do open that fascinating cupboard. (I wish I could afford that, but I've got one something like it, and I must make that do!) There might be something in glass or china—"

There was. There was blue china, with the right duck's-egg complexion of ground, jugs and platters, cups, saucers, plates and bowls; there were quaint wine-glasses and decanters and dishes of cut glass—

"And a pewter tea-set!" said Anna Harding. "A pewter tea-set! What will you take for that, Miss Mattie?"

"For what?"

She struggled through the speechlessness of her surprise.

"It isn't silver," she said. "It isn't even plated. It's just—"

"It's just old pewter," said Anna Harding, crisply. "What will you take for it, Miss Mattie?"

"I couldn't take anything," said Miss Mattie, distressfully. "It isn't worth anything."

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ELM GROVE SHORTHORNS
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 heifers, of the Fashion and Belle Forest fam-
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 High-class Shorthorns—We are now offer-
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 Marigolds, the eldest, a daughter of Imp. Royal
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"It is worth at least thirty cents,"
 Anna Harding assured her; and re-
 luctantly Miss Mattie submitted.
 "And the glass and china," said
 Anna Harding. "Would you think
 three dollars for the lot—?"
 "Oh yes!" said Miss Mattie.
 "I don't know, after all," said
 Anna Harding, "whether I can re-
 sist this dear, diamond-paned press.
 I could sell the one I have, and—
 What would you take for it, Miss
 Mattie?"
 Something like a scale of values
 was beginning to formulate in Miss
 Mattie's mind; the excitement of
 the traffic to take hold upon her.
 "Is it worth, do you suppose,"
 she ventured, "two dollars?"
 "Perhaps it is," Anna Harding
 said. "But I am not sure, after
 all, that I want— It is certainly
 worth a dollar and a half. If you
 care to sell it for that—"
 "It's a-plenty!" said Miss Mattie,
 eagerly.
 "This," said Miss Mattie, "is my
 room. I don't reckon there is any-
 thing you want—"
 Anna Harding took it in with a
 glance.

"The bureau is a darling, with that
 little swinging glass and those cute
 little drawers under it, but I don't
 particularly care—nor for the bed.
 I do want a wardrobe, though; and
 there doesn't seem to be any—"
 "There's a closet I hang my other
 dress in," Miss Mattie said, "but
 there's a wardrobe in brother's
 room."

She crossed the passage.
 "This," she said, laying a rever-
 ent hand upon the small knob of the
 door, "was his room."

She paused upon the threshold as
 upon that of a shrine. But Anna
 Harding did not pause.
 "A tester-bed" she said, "with
 carved posts!—the very thing of all
 others that I wanted! What will
 you take—?"

Miss Mattie shrank as from a blow.
 She squeezed her thin hands to-
 gether, and the tears rained from her
 eyes.

"It's the bed he died in!" she
 said. "I couldn't—"
 "But, my dear Mattie," said Anna
 Harding, "how in the world will
 you travel around with a four-post
 bed? And you will be moving about
 from place to place, won't you, all
 the time?"

"I'm going to visit around in the
 neighborhood a little while, till
 I can decide what to do," Miss Mat-
 tie said, absently. She thought dis-
 tractedly a few minutes. "I don't
 mean to be unaccommodating," she
 said, anxiously. "But I couldn't
 sell it. I couldn't sell it to save
 my life. But 'twouldn't be the same
 thing to give it. I'd be too glad
 for you to take it off my hands—
 just so—without giving me anything
 for it—"

"You dear thing!" said Anna
 Harding.
 "It's so lucky you came in the
 wagon," Miss Mattie said. "I sup-
 pose the carriage is broken?"

"Oh, no," said the other careles-
 sly, "but the wagon is nearly as
 comfortable as that antediluvian car-
 riage of ours (country carriages are
 such marvellous things, aren't they?)
 and it holds so much more. It
 positively breaks my heart to leave
 anything behind, but I'll send over
 for the rest in the morning."

Tumbled, dusty, radiant, she stood
 on the porch making her adieux, in
 one hand a pair of painted bellows,
 in the other a tarnished ormolu
 screen, which, with other things, in-
 cluding a lacquered wine-cooler, a set
 of mahogany bed-steps, and an inlaid
 kidney desk lacking one roller, she
 had rummaged from the garret, to
 her own delight and Miss Mattie's
 further enrichment by a dollar and
 seventy-five cents.

"But can't you stay to dinner?"
 Miss Mattie said. Her tone was al-
 most pleading, so imperative the im-
 pulse to stave off a little longer the
 waiting loneliness.

But Anna Harding kissed her, re-
 sisting the invitation.
 "And thank you so much," she

said, "for the bed. It is a perfect
 darling! And you were the love-
 liest thing to give it to me!"

Miss Mattie's eyes filled and over-
 flowed.

"Oh, no!" she said. "I hadn't
 any place—"
 She lingered upon the steps even
 after the road dwindled to the hori-
 zon empty, and under all the blue
 vastness there was no sign of life
 but the nearby shrilling of summer
 insects in the rank grass.

"I hadn't any place for it," she
 said aloud, as if arraigned before the
 bar of silence. An intolerable re-
 proach was in the air, in the strid-
 ent voices rising from the ground,
 most of all in the sombreness of the
 ravished house, upon which she
 turned her back, temporizing.

"I hadn't any place for it," she
 said, "or anything. I don't know
 where I'll be or what I'll do—"

Appalled, she faced the strangeness
 of the thought—then rose to meet
 it.

"But I've got friends!" she said.
 "Just think of Anna Harding's com-
 ing!"—[Annie Steger Winston, in
 Harper's Bazar.

GOSSIP.

THE RIBY SALE.

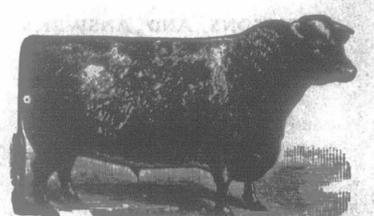
Live-stock breeders throughout the
 world will be interested in fuller details
 of the notable record-breaking sale of
 drafts from the Riby Shorthorn herd and
 Lincoln sheep flock of Mr. Henry Dud-
 ding, of Lincolnshire, last month. Many
 of the higher prices for Shorthorns were
 paid by Argentine buyers. The highest
 price for cows was given by Lord Win-
 terestoke, who retained this first-class
 animal in England. The top price for
 two-year-old heifers was given by Mr. C.
 Villatte, and two others of the same age
 went to the Argentine. The same buyer
 and Mr. R. J. Pearson, both of whom
 were buying for the Argentine, gave the
 top price for yearling heifers, and Mr.
 Pearson secured the champion bull,
 Prince Alastair, for 1,000 gs.

With regard to the sheep sale, there
 are a few averages that are not included
 in the summary that will be of interest
 where they go. The Argentine buyers
 took thirty-nine out of the fifty-six
 yearling rams offered. Mr. Miller, who
 gave 1,450 guineas for the champion
 ram, also purchased the first-prize pen of
 yearling rams at the Royal Show; the
 individual prices for these rams were
 580, 500, 430, 350, and 300 guineas,
 making an average for the pen of £453
 12s. Mr. Casares gave 560 guineas for
 the third-prize ram at the Royal Show,
 and 120 guineas for another. These
 eight rams of Mr. Dudding's, exhibited
 at the Royal Show, gave the notable
 average of £563 1s. 3d. All through
 the sale the demand was excessively keen,
 and although the owner, Mr. Dudding,
 was unable to be present at the sale per-
 sonally, being confined to his bed with
 a broken ankle, he had the pleasure of
 reviewing from his bedroom window, one
 of the most notable assemblages of
 buyers and breeders of Shorthorn cattle
 and Lincoln sheep ever seen at his well-
 known home at Riby Grove. The num-
 ber present was not far short of 1,000.
 Argentine, New Zealand, and Australia,
 as well as many of the other South
 American countries, were represented, but,
 so far as we know, no buyer from the
 United States or Canada, or North
 America, was present.

There can be, therefore, not much
 doubt as to the reason why the Argen-
 tine and South American beef and mutton
 is making such strides in public favor:
 it is because they are having the best of
 England's stud stock. W. W. C.

THE BEST LINIMENT IN THE MARKET.

Calgary, Canada, July 26, 1905.
 The Lawrence-Williams Co., Cleveland,
 O.
 The West, as you no doubt know, is a
 great horse country, and we have a large
 sale of Gombault's Caustic Balsam. We
 believe you have the best liniment on the
 market, and, although the sale in this
 country is large, it could be greatly in-
 creased by a little advertising.
JAS. FINDLAY.



ARTHUR JOHNSTON
 Greenwood, Ont.

Offers for sale, at moderate prices,
12 high-class BULLS
 All sired by imported bulls, and most of
 them from imported dams.
 Also imported and home-bred cows and
 heifers of all ages.

PURE SCOTCH SHORTHORNS

Herd bull: Imp. Prime Favorite =45214=
 a Marr Princess Royal.
 Imp. Scottish Pride =36106=, a Marr Roan Lady.
 Present offering
 2 imported bulls.
 18 young bulls.
 10 imported cows with heifer calves at foot and
 bred again.
 20 one- and two-year-old heifers.
 Visitors welcome. New catalogue just issued.

W. G. PETTIT & SONS, Freeman, Ont.
 Burlington Jet. Sta. Long-distance tele-
 phone in residence.

KENWOOD STOCK FARM. SHORTHORNS.

Headed by (Imp.) Jilt Victor =45187=, 10 grand
 young bulls; also heifers; from imp. and home-
 bred cows, for sale. Choice Lincoln sheep;
 Berkshire and Tamworth hogs offered.

HAINING BROS., Highgate, Ont. Kent Co. SHORTHORN BULLS FOR SALE

1 roan calf, 15 months old, of the Duchess of
 Gloster family.
 1 roan, two years old, from imp. sire and dam.
 Also a number of good registered Clyde
 mares.

JOHN MILLER, Brougham, Ont. SPRING VALLEY SHORTHORNS.

Herd headed by Imp. Bapton Chancellor
 =40889= (79293). A choice lot of females, mostly
 with calves at foot or safe in calf. Also a good
 six-month-old bull calf. Inspection and corre-
 spondence invited.

KYLE BROS., Ayr P.O. For Sale: 1 Choice young bull

7 years old, seven months
 old. Dark roan, by Queenston Archer =45335=
BELL BROS., The "Oedars" Stock Farm, Bradford, Ont.

SUNNYSIDE STOCK FARM.

For sale: The two-year-old show bull, Blyth-
 some Ruler =52436=. Also cows and heifers in calf.

James Gibb, Brookdale, Ont. MAPLE HILL STOCK FARM—Scotch

Shorthorns of the best families. Young
 stock for sale of either sex, sired by the
 grandly-bred bull, Wanderer's Star =55325=
Wm. R. Elliott & Sons, Guelph, Ont. PROSPECT STOCK FARM.

For sale: 4
 Bulls, including Gold Mine (imp. in dam), also
 some choice young females. Stations: Oak-
 ville and Streetsville, C.P.E.; Brampton, G.T.R.
 Peel Co. F. A. Gardner, Britannia, Ont. c

Medical Student—What did you operate
 on that man for?
 Eminent Surgeon—Five hundred dollars.
 "I mean what did he have?"
 "Five hundred dollars."—[Puck.

QUESTIONS AND ANSWERS. Miscellaneous.

FEEDING A FOAL.

Kindly let me know through your valuable paper what would be the proper food for a colt two months old. The mother does not seem to keep it full, the colt being hungry all the time.

CONSTANT READER.

Ans.—If it will drink cow's milk lukewarm, with a little sugar added, we know of nothing better, but we would not feed more than two quarts at any time, and would give ground oats and bran, and green grass or good clover hay in stable.

The Bee and the Flowers.

An old bee-poem, by Mary Lundie Duncan.
MOTHER.

Ah! do not, do not touch that bee;
Stand still, its busy course to see,
But take your hand away;
For, though 'tis neither large nor strong,
It has a sting both sharp and long,
And soon could spoil your play.

You need not fear; it loves like you,
The flowers of varied form and hue.
Then yield it honeyed spoil;
It only stings the thoughtless train,
Who seek its life, or give it pain,
Or stop its happy toil.

Or idle drones which labor not,
But eat the honey it has sought
To store the crowded hive;
Or insects that would enter there,
To steal the food it brings with care
To keep its race alive.

In search of flowers this food that yield,
It flies abroad through hill and field
With pleasant, humming sound;
It rests on many a blossom bright,
That opens, far from human sight,
To deck the lonely ground.

Flowers were not made for man alone,
But freely o'er the earth are strewn,
To bless the creatures, too;
And many an insect nation dwells
Among fair fields and mossy cells,
That we shall never view.

CHILD.

I did not know the bee could sting;
I see it fly on rapid wing
Among the garden bowers;
And now it lights upon a rose,
And now to a jasmine branch it goes—
Say, will it sting the flowers?

It settles where the woodbine sweet
Twines round the tree—it plants its feet—
How firm and fast they cling!
Oh, how I love the pretty flowers,
That bloom through all the sunny hours—
Pray, do not let it sting.

Special Reduced Rates to St. Paul and Minneapolis.

For the Grand Army of the Republic National Encampment, Minneapolis, Aug. 13th to 18th, the Grand Trunk Railway will sell round-trip tickets at special reduced rates, good going August 10th, 11th, 12th; also for such trains on Aug. 13th as will enable passengers to leave Chicago on same day. Tickets valid returning until August 31st, with extension until September 30th on payment of 50 cents. Call on G. T. R. agents for full particulars.

The attention of breeders of Shorthorn cattle and Border-Leicester sheep is called to the new advertisement in this issue, to run for a year, of the Westside herd and flock, property of Messrs. A. Cameron & Sons, of Brechin, Scotland, which has an excellent reputation, their breeding and character being up-to-date, with quality to correspond. If in need of stock in these lines, write for prices and particulars to this firm.

An entertainer and humorist one afternoon recently had just made his bow, and was about to begin, when a cat walked in and sat down on the stage. With quick wit he said, severely: "You get out; this is a monologue, not a catalogue."

GOSSIP.

Sixteen high-class Hackney stallions and mares, selected in England by Mr. Frank H. Stericker for Mr. F. Pabst, the wealthy brewer of Milwaukee, Wisconsin, were recently shipped from London for New York, by s.s. Minnehaha.

Mr. A. W. Smith, Maple Lodge, Ont., writes: "The Leicester ram, Winchester, I offer for sale in my advertisement is one of the best stock rams we have ever had, and only that so many of my ewe flock are sired by him induces me to sell. I do not intend to exhibit this year, consequently have a number of different ages, in fair good shape, for sale yet, and my lambs are as good a lot as we have had for some time. I regret very much dropping out of the show-ring. I believe everyone, who can, should show some, and trust my health will permit me entering the lists again next year."

Mr. Chas. E. Bonnycastle, Campbellford, Ont., in ordering change of advertisement, writes: "Among my sales since January are the following: To Geo. R. Hinds, two-year-old heifer and yearling bull, and a yearling bull to each of the following: John Lancaster, Bird-sall; Allen N. Hitchins, Emerald; Mr. Parr, Hoard's Station; Henry Morrison, Beaverton; Mr. Johnston, Trent Bridge; M. Sullivan, Frankfort. To F. J. McCalpin, South Lake, bull calf; to M. E. Copeland, Teeswater, two heifer calves; to H. M. Robertson, Toronto, four two-year-old heifers and one yearling heifer. In Berkshires: To M. E. Copeland, 2 young sows, and to each of the following one young sow: John A. Cochrane, Havelock; Matthew Petherick, Havelock; Robert Bertrand, Campbellford; and boar to John A. Cochrane, Havelock. I have about 60 head of Shorthorns, including about 20 calves, which will be ready for next season, have also two yearling bulls on hand for sale cheap, the balance young cows and heifers. In Berkshires, I have a number about three months old, a nice lengthy lot. In Cotswolds, I have about 20 lambs for sale for the fall trade, a lot of good ones among them."

PREVENTION OF SWINE DISEASES.

The heavy loss from disease in hogs is largely due to transmissible diseases. The organisms that produce this class of disease usually enter the body in the feed and inspired air. Hence, muddy or dusty yards, especially if over-crowded and filthy, filthy feeding floors, troughs and hog-houses are largely responsible for the prevalence of hog cholera, swine plague, etc. As young hogs are less able to resist these diseases than healthy mature animals, the necessity of using preventive measures at this season of the year is of double importance.

During the spring and summer wallow holes are formed in the yards and pastures. In case the hogs run in a large lot or pasture during the summer, it is often considered unnecessary to clean and disinfect the small yards and hog-houses, and they become filthy and dusty. Muddy yards are especially objectionable, as they soon become filthy.

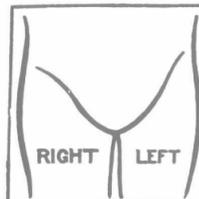
If necessary, the sanitary conditions of the yards can be improved by draining them, keeping the wallow holes filled in and taking the hogs out for a few months every year. The unused lots can be cleaned and put to good use by plowing and sowing them to oats, rape, cow peas, etc.

In no place on the farm are disinfectants so necessary as in the hog-houses and yards. Whitewash should be used about the houses at least once during the year. Every two or three weeks the houses, feeding floors, troughs, etc., should be sprayed with a disinfectant. The tar disinfectants are the most convenient to use. These should be used in not less than two-per-cent. water solutions. An occasional spraying or dipping of the hogs in a one-per-cent. water solution should be practiced.

Young hogs should not be given crowded quarters. In order to keep them in a healthy growing condition, a proper diet should be fed. Healthy individuals possess a certain amount of power to resist disease, and this plays no small part in preventing it.—R. A. Craig, Veterinarian, Purdue Ag. Experiment Station.

THE NEW QUICK WAY TO CURE RUPTURE

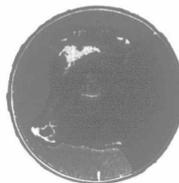
Is Without Operation, No Pain, No Danger, No Loss of time From Daily Work.



This Remarkable Simple NEW WAY TO CURE RUPTURE has opened up a new era in the treating of this terrible dangerous, dreaded, hitherto considered incurable malady, Rupture. You ruptured people who have borne the painful agonies of Rupture surely will be glad to see this notice, for it means a NEW lease of life for you—one free from pain and suffering. Won't it be grand to be cured? You can be sure—hundreds of Canadians have been. Cut out this notice and send all to me at once. I will send you Free A FREE TEST to show you how quickly you can be cured right in your own home. I'll also send you a valuable Book of Information for the Ruptured. You must write for these at once. Remember they are FREE. No ruptured person who has had these would part with them for money. You wouldn't either. Write at once.

DR. W. S. RICE, 95 Church Street, Block 279, Toronto, Ont.

Do you wear a truss?..... Does rupture pain?.....
On which side ruptured?..... Ever operated on for rupture?
Age..... Time ruptured.....
Name..... Address.....



SCOTCH SHORTHORNS

9 heifers, yearlings. 4 bulls, yearlings.
29 heifers, calves. 27 bulls, calves.

All out of imported sires and dams.
Prices easy. Catalogue.

JOHN CLANCY, H. CARGILL & SON,
Manager. Cargill, Ont.

Maple Shade Shropshires AND CRUICKSHANK SHORTHORNS.

We offer about thirty extra good yearling rams of our own breeding, among them some ideal flock headers; also a few home-bred yearling ewes. Twenty imported yearling rams and thirty imported ewes the same age. Bred by Buttar, Farmer and other breeders of note in England. All are for sale at moderate prices.

JOHN DRYDEN & SON, Brooklin, Ont.
Stations: Brooklin, G.T.R. Myrtle, C.P.R. Long-distance telephone.

Westside Shorthorn Herd and Border Leicester Flock.

All Registered in the Herd and Flock Books of Great Britain.

We invite all interested to inspect the cattle and sheep on this farm. The Shorthorns are long tried families, tracing to the pioneer herds of Scotland through channels of repute. The Border Leicester flock is one of the oldest in Scotland, and embraces blood of the highest breeding. Selections for Sale. Visitors from the States and Canada will be cordially welcomed.

A. Cameron & Sons, Westside Farm, Brechin, Scotland.

JOHN GARDHOUSE & SONS, Highfield P.O., Ont.

Breeders of
Scotch and Scotch-topped Shorthorns, Lincoln and
Leicester Sheep and Shire Horses.

A good selection of young stock of both sexes
always on hand for sale. Scottish Prince (imp.),
Vol. 49, at head of herd. Royal Albert (imp.)
90867, at head of stud. Farms 3 1/2 miles from
Weston, G. T. R. and C. P. R., and electric cars
from Toronto.

BELMAR PARK SHORTHORNS

10 bull calves.
16 heifers under two years.
All of the choicest breeding and practically all
of show-yard quality. You can buy anything in
the herd at a reasonable figure.

JOHN DOUGLAS, PETER WHITE, JR.,
Manager. Pembroke, Ont.

SHORTHORN BULLS and HEIFERS

Sired by the Scotch bull, Scottish Lad 45061
FOR SALE.

S. DYMENT, Barrie, Ontario.

Clover Lea Stock Farm SHORTHORNS

FOR SALE: Choice bull calves by
Golden Cross (imp.). All dark roans.
Some from imported sire and dam.
Visitors met at Ripley station.

R. H. REID, PINE RIVER, ONT.
Ripley Station, G. T. R.



is in good trim for fall shows. W. J. Shean &
Co., Box 856, Owen Sound, Ontario.

CEDARDALE SHORTHORNS



For immediate sale: Four
young bulls and a few heifers,
a nice thick, well-put-up lot,
and bred on heavy-milking
lines. Will be sold cheap.
DR. T. S. SPROULE, M.P.
Markdale, Ont.

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers,
for sale at greatly reduced prices
for the next 60 days. om

J. T. GIBSON, Denfield, Ont

PLEASANT VALLEY SHORTHORNS

Herd headed by imp. Old Lancaster =50068=,
Grand champion, Toronto, 1905, and consisting
of females of the leading Scotch families; can
spare a few young cows bred to imp. Old Lan-
caster.

GEO. AMOS & SON, Moffat Stn. and P.O., C.P.R.

Pine Grove Stock Farm.

Breeders of
High-class Scotch Shorthorns.

Choice Shropshire Sheep, Clydesdale and Hack-
ney Horses.

Herd catalogue on application. Address:

JAMES SMITH, Supt., Rockland, Ont.
W. C. EDWARDS & Co., Limited Props. om

SHORTHORNS AND BERKSHIRES.

For sale: 2 very fine pure Scotch bulls fit for
service; also 2 boars of bacon type fit for service,
and grand young sows bred to imp. boar. 25
males and females (Berks.) 2 and 3 months old.

S. J. PEARSON, SON & CO.,
MEADOWVALE, ONT.
Stations: Streetsville and Meadowvale, C. P. R.

MAPLE GROVE SHORTHORNS



Imp. and Canadian-bred.

Males and females, as good types as the breed produces. With breeding unsurpassed.

C. D. Wager,

Enterprise Stn. & P.O., Addington Co.

GREENGILL HERD
of high-class

SHORTHORNS



We offer ten young bulls ready for service, a number of them from imported sire and dam; also high-class females, all ages, either imported or Canadian-bred. The herd is headed by (Imp.) Lord Resberry.

R. MITCHELL & SONS,
Nelson P.O., Ont.; Burlington Junc. Sta.

R. A. & J. A. Watt, Salem, Ont.
Eliora Station on the G. T. and C. P. Ry. Home of the first and third prize aged herds, Canadian National, Toronto, 1905. Mayflower grand champion Toronto and Winnipeg, 1904-05; Olga Stamford, grand champion New York State Fair, 1905; Gem of Ballechin, grand champion Toronto, 1903; Tiny Maude, reserve senior champion Toronto and Winnipeg, 1905; Mildred's Royal and other leading winners. A choice number on hand to make your selection from at all times.

GLENAVON STOCK FARM

Shorthorns and Lincoln Sheep

I have one Shorthorn bull calf, with imported cross near the top, and a registered Lincoln ram, which I will sell cheap, or will change rams.

W. B. ROBERTS, Sparta P.O.
Station: St. Thomas, C.P.R., M.C.R., G.T.R.

SHORTHORNS AND LINCOLNS.



Present offerings: 4 choice young bulls 9 to 14 months; also a few good heifers, Lincolns, descended from the best English flocks.

JOHN LEE & SONS,
Highgate, Ont.
40 miles west St. Thomas, on M.C.R.E. & P.M. Ry.

SHORTHORNS

Imp. Keith Baron 36050. Six young bulls from 10 to 18 months old. A lot of 2-year-old heifers in calf and a few young cows. A bunch of heifer calves, cheap.

CLYDESDALES

Just now: One pair of matched geldings 5 and 6 years old; show team.

JAS. McARTHUR, Goble's, Ont.

Riverview Shorthorns and Oxfords

Shorthorns represent Crimson Flowers, Athelstanes, Lady James and Roses.

We have for sale three yearling bulls and some spring calves, also a few females. A thick, straight, mossy lot. Also some Oxford Down ram lambs.

Peter Cochran, Almonie P. O. and Station.

Queenston Heights SHORTHORNS

I am offering extra value in yearling and two-year-old heifers. Bull calves that will make high-class sires. Straight Scotch.

HUDSON USHER, Queenston, Ont.

SHORTHORNS & CLYDESDALES FOR SALE

Bull in service: Scotland's Fame = 47897-, by Nonpareil Archer (Imp.) (61778) = 45902-, dam Flora 51st (Imp.), (Vol. 19.) Present offerings: Two heifers rising 1 year old, two bulls rising 1 year old; also young cows and heifers of good quality and breeding, mostly well gone with calf. Also stallion rising 1 year old, sired by the well-known Macqueen, dam from imported sire and dam, and one filly rising one year, sired by King's Crest (Imp.). Will sell at a bargain if taken soon.

JOHN FORGIE, Clarendon P.O. & Sta.

SCOTCH-TOPPED SHORTHORNS

Three young bulls, from nine to thirteen months old; also several young heifers by Scottish Baron (Imp.) for sale. Prices reasonable.

H. GOLDING & SONS, Thamesford, Ont
Stations. Thamesford. C.P.R.; Ingersoll. G.T.R.

Glen Gow Shorthorns

Our present offering is 9 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of imp. and Canadian bred cows. Also a number of very choice heifers. No fancy prices asked. Long distance telephone. **WM. SMITH, Columbus, P.O.**
Brookline and Myrtle Sts.

Brown Lee Shorthorns

Present offering is 3 young bulls from 9 to 15 months old, a nice straight, good-doing lot, sired by Blenheim Stamp; also females of all ages, daughters of Imp. Sir Christopher and Imp. Beaucamp. Prices very reasonable.

DOUGLAS BROWN, Arr P.O. and Station.

QUESTIONS AND ANSWERS.
veterinary.

ITCHING.

I have a horse which breaks out along the side of neck and along the back with little lumps, which are itchy, and he would bite the top of them, and is very itchy when he gets warm.

Ans.—Give a thorough washing with strong soft-soap suds, then dress the itchy parts with a solution of corrosive sublimate, forty grains to a quart of water, or a five-per-cent. solution of Zenoleum.

MARES FAILING TO BREED.

I see in "The Farmer's Advocate," page 1153, C. V. B. has difficulty in getting mare to breed. I have a mare, 20 years old; bred her several times last season and could not get her in foal, and the same way this season. The last time I bred her, we bled her (about 2 quarts), and she is, I believe, safe in foal now. My father treated two mares the same and got them both in foal. I would like to have others try this, and report results. Let the mare stand idle for a day or two after bleeding.

ECZEMA OR LICE.

I have a mare which is always itching and rubbing herself against the stall or fence, or some tree. I cannot see any vermin on her. She has not been in harness for two months, and she has a colt, which is affected the same way. I have fed her wood ashes, but it does no good. What can I do for them?

SUBSCRIBER.

Ans.—Wash thoroughly with strong warm soft-soap suds, then wash with a solution of corrosive sublimate, 40 grains to a quart of water, or with a five-per-cent. solution of Zenoleum.

MISCELLANEOUS.

1. What can be done for a horse with heaves?

2. Horse has cracks in front of the hocks.

3. Horse has skin disease. He rubs his tail and mane and bites himself. The lumps have scales like tissue paper on them.

Ans.—1. Feed small quantities of first-class hay, or, better still, first-class straw. Feed larger quantities of grain to make up for the limited amount of bulky food given. Dampen all his food with lime water. If possible avoid working shortly after meal. The addition to his drinking water of about one-sixth of its bulk of lime water is also beneficial.

2. This is called sallanders, and is of the same nature as scratches. Beefy-legged horses are predisposed. It is very hard to treat. Purge with 8 drams aloes and 2 drams ginger. Follow up with 1 ounce Fowler's solution of arsenic night and morning every alternate week. Dress the cracks with a lotion made of 1 ounce each sulphate of zinc and acetate of lead and 2 drams carbolic acid to a pint of water. If the parts become too dry, dress with oxide of zinc ointment.

3. It is possible this is mange. If possible have him examined by a veterinarian. If you cannot do this, isolate him. Clip him, and, of course, you will have to cover with a fly sheet to keep the flies off. Wash thoroughly with strong, hot soap suds applied with a scrubbing brush, and then give a thorough dressing, three times daily, with a warm solution of corrosive sublimate. 1 dram to a gallon of water. Give Fowler's solution of arsenic, as question 2.

Miscellaneous.

ANTS IN BEEHIVES—TIME TO TAKE OFF HONEY.

1. What will stop ants from getting into beehives?

2. When is the proper time to take off honey, in the heat of the day, or in the evening?

3. Where can I get a book for teaching how to handle bees?

Ans.—1. If a hive is strong in bees, as it should be, the ants we have in this climate will have to keep on the outside, or take the consequences. If ants are disturbing a weak colony, better unite it with a stronger one.

2. Honey to be extracted should be taken off in the heat of the day, and extracted immediately, as the warmer it is,

the more easily it leaves the combs. Comb honey can be removed whenever convenient.

3. "Langstroth on the Honey Bee (revised)" and "The A B C of Bee Culture" are two of the best. A beginner would probably prefer the latter. "The Farmer's Advocate" can supply you with either, or they may be bought from any dealer in beekeepers' supplies.

E. G. HAND.

OWNERSHIP OF FRUIT.

If a fruit tree grew on A's property, and the limbs hung over on B's property, could B own or claim the fruit that grew on the branches that hung on his property?

Ans.—No.

POTATO DIGGER WANTED.

Is there a potato digger manufactured in Canada—one that will take the potatoes out? The — will do the work, but patriotism bids me patronize my own country, and the excessive duty forbids me patronizing any other; therefore, I want a Canadian potato-digger, and I want it quick. If there is such a thing in existence, why do not the makers thereof rise up and let their goods be known in the land?

SANDY.

Ans.—Here is business for the Canadian firm that will make and advertise a good article. There are thousands of men looking for this same tool.

STARTING BLACK-CAPS AND GOOSE-BERRIES.

When is the best time to start black-cap raspberry tips, and how is it done? When is the proper time to cut goose-berry cuttings for to start next spring, and in what way are they put in the ground?

Ans.—When the tips of tip-rooting raspberries are in a condition to strike root, they become swollen at the end, are more or less bare of leaves, and have a white snakey appearance. This stage is reached about the month of August or September, when the canes have grown long and hang over to the ground. If put down too early, they are liable to rot off. The tip should be put straight down so as to check its growth, and be covered with a couple of inches of mellow soil. By the following spring they will have formed good strong plants for moving to the regular plantation. Gooseberries may be grown from cuttings or by means of mound layers. The cuttings should be taken in the fall after the leaves have fallen. They should be made from the strong new shoots, about 6 or 8 inches in length, and cut close to a bud at the base. They should be planted in mellow, well-drained soil, with only one or two buds above ground. It is best to plant in straight rows so that they may be conveniently cultivated. They may be set about six inches apart in the row. It takes about two years to get good strong plants in this way. Mound laying may be done as soon as the fruit is picked. Earth is banked in a mound into the bush, covering the base of the new shoots to a depth of eight to ten inches. If the soil is dry, it should be watered to induce rooting of the shoots. The American varieties, such as Pearl or Downing, form good plants in this way in one year, but the European varieties, such as Whitesmith and Industry, require two years in the mound. When well rooted, the mounds are thrown out, and the plants separated.

H. L. HUTT.

HAY-BALING PRESSES.—The baling of hay for convenience in shipping and handling is one of the most satisfactory of modern devices for handling this bulky farm product. Perhaps the largest and most complete baling-press manufactory in America is that of the Whitman Agricultural Company, of St. Louis, Missouri, whose advertisement runs in this paper. If an experience of more than 20 years, the adoption of all the most modern improvements in baling machines, and the winning of highest awards at international exhibitions, counts for anything, this company and their balers rank at the head of the list. They claim, however, that they have not been copied, but leaders in this line of machinery, having produced machines of new and novel design, which have proved completely successful and satisfactory in actual work. Write them for their illustrated descriptive catalogue.

Bog 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—Bog Spavin, Thoroughpin, Splint, Orb, 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 imitated. Easy to use, only a little required, and your money back if it over 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,
45 Church Street, Toronto, Ontario

Shorthorns OF SCOTCH BREEDING.

Imported cows and heifers for sale at easy prices, also Canadian-bred females all ages, and a fine collection of young bulls from six to sixteen months old—imported and Canadian-bred. New importation due home August 26. Inspection invited.

H. J. Davis,
Importer and breeder of Shorthorns and Yorkshires.
WOODSTOCK, ONT.
C. P. R. and G. T. R. Main Lines.

HOLLYMOUNT SHORTHORNS

Pure Scotch, imported, and the get of imp. stock.

25 HEAD

Anything for sale, 5 young bulls. Breeding gilt-edged and unsurpassed. A few heifers. Prices right.

W. J. Thompson, Mitchell P. O. & Sta.
Spring Grove Stock Farm
Shorthorn Cattle and Lincoln Sheep

First bred prize and sweetest, Toronto Exhibition, 1895, in possession. Head headed by the imported Dutch-bred bull, Boy Morning, and White Hill Ramsden. Present crop of calves sired by Imp. Prince Humbert, 1st, Toronto, 1905.

High-class Shorthorns of all ages for sale. Also prize-winning Lincolns. Apply

T. E. ROBSON, Idarnton, Ont.

High-class Shorthorns

The well-known Dutch-bred bull, Scottish Hero (Imp.) (36099), by the great Silver Plate, formerly at head of E. A. & J. A. Watt's herd, now heads my herd. Young stock usually on hand for sale.

N. S. ROBERTSON, ARNPRIOR, ONT.

A. EDWARD MEYER,
Box 578, Guelph, Ont.
Scotch Shorthorns.

The Sunny Slope herd comprises Crickshank Bellona, Mysie, Villages, Brawith Buds, Broadhocks, Bruce Augustus, Mayflowers, Campbell Bossies, Ury, Minas, Clares, Kiblean Beauties. Herd bulls: Scottish Hero (Imp.) (36099), a Shethin Rosemary, and Chief Ramsden = 3548-, a Miss Ramsden. Correspondence solicited. Visitors welcome. Long-distance phone in house.

For Sale: Two Young Shorthorn Bulls

Also Cows and Heifers, and one good Imp. York. Sow, also a good Yorkshire Bear one year old. Good breeding and good animals

DAVID MILNE, ETHEL, ONT.
WILLOW BANK STOCK FARM
Established 1855. Will offer imported Rosicrucian of Dalmezy = 4820-, Recorded in both Dominion and American Herdbooks. Also young stock of either sex. "Shorthorns," James Douglas, Caledonia, Ontario.

Oak Grove Shorthorns—Present offering: heifers and young bulls, all sired by Imp. Nonpareil Duke and out of imp. dams; also the stock bull, Imp. Nonpareil Duke, a choice offering. Prices right. **W. J. ISAAC, Cobourg Station, Harwood P. O.**

Cows from the ANNANDALE HOLSTEIN HERD

Have won during the past show season at Ottawa first and sweepstakes on cow, first on 2-year-old, first on 3-year-old class. At Guelph (dairy test) first and sweepstakes on cow, first and second in heifers. At Chicago (National) first and sweepstakes on cow, also second-prize cow, second and third on 3-year-olds, second on 1-year-old heifers, and a host of other prizes (different cows at different shows)

Bull calves, 4 months and under only, for sale from great dams and greatest of sires. Buy young if you want them from Annandale Stock Farm.

GEO. RICE, Tillsonburg, Ont.

HOLSTEINS FOR SALE



Four imported and one home-bred bulls, from 8 to 12 months old; also our entire crop of spring-bull calves, from week old up.

sired by the grandly-bred imp. bull, Sir Howitje B. Pietertje, whose dam record is over 82 lbs. milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 13c. Don't delay if you want one from this herd.

H. E. GEORGE, Crampton, Ont.

WOODBINE HOLSTEINS

Herd headed by Sir Mechtildie Posch, absolutely the best official-backed sire in Canada. Dam is the Jewel Mechtildie, 25.8 pounds butter in seven days. Champion cow of Canada ever all breeds. Sire's dam, Aaltje Posch 4th, holds the world's largest two-day public test record—6.6 pounds butter. Young bulls of the choicest quality for sale.

A. KENNEDY, Ayr, Ont.
Ayr, C.P.R.; Paris, G.T.R.

A FEW HOLSTEIN BULLS

fit for service, for sale at reasonable prices. Choice females, all ages. If you are willing to pay good prices for good stuff, write me.

G. W. OLEMONS, St. George, Ont.

Lyndale Holsteins.

For Sale A number of bull calves from one to four months old, out of Record of Merit cows, and sired by Beryl Wayne Paul Concordia, whose four nearest dams have official butter records averaging 23 lbs. 11 ozs. each. **BROWN BROS., LYN, ONT.**

Centre and Hill View Holsteins

We have four yearling bulls left which we will sell at reduced price to quick buyers; from good producing strain; our own raising. Sold out of females at present. **P. D. EDE, Oxford Centre P. O., Woodstock Station, C. P. R. and G. T. R.**

MAPLE GROVE HOLSTEIN-FRIESIANS

For Sale: Three bull calves, sired by Lord Wayne Mechtildie Calamity, and all out of Advanced Registry cows. Apply

WALBURN RIVERS, Folden's Corners.

Maple Glen Holsteins—Three sons of Sir Altra Posch Beets, whose grandam holds world's largest official record for her age, and grand sire has over 60 tested A. R. O. daughters—the most by any bull on record. Brother of Aaggie Cornuopia. Secure the best. **C. J. GILROY & SON, Glen Buell, Ont.**

Grove Hill Holsteins—Herd contains 55 head, a number of which are in the advanced registry. Our stock bulls have all been backed up by high records. Present offering: Several young bulls and a few females. **F. R. MALLORY, Frankford P. O. and Sta., C. O. R.**

IMPERIAL STOCK FARM HOLSTEINS

A prize-winning herd of imported, officially tested stock. Bulls of all ages for sale, also a few cows. **W. H. SIMMONS, New Durham, Ontario.**

"GLENARCHY" HOLSTEINS

We have for immediate sale several young bulls and a number of young females, that for ideal type and superior quality, backed up by gilt-edged breeding, are unsurpassed. **G. MACINTYRE, Renfrew P. O. and Stn.**

Glenwood Stock Farm—Holsteins and Yorkshires all sold out. Have a few young Yorkshires 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., Campbellford Stn.**

Holsteins, Tamworths, Oxford & Dorset SHEEP FOR SALE.

At present we have 1 young bull, 8 Oxford ram lambs, Dorsets, 1 yearling and 1 aged ram, Tamworths, both sexes. **J. A. Richardson, South March P. O. and Stn.**

HOLSTEINS AND YORKSHIRES

R. HONEY, Brickley, offers for sale a choice lot of young boars fit for service; also sows ready to mate.

HILTON STOCK FARM—Holsteins, Outswolds and Tamworths—Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton P. O., Brighton Tel. and Stn.**

QUESTIONS AND ANSWERS. Miscellaneous.

ALFALFA IN CAPE BRETON, N. S.

I am a subscriber of "The Farmer's Advocate," and, while not a farmer, appreciate its value and greatly admire the able manner in which it is conducted. I have a small estate here which I occupy as a summer home. I keep enough stock of all kinds to supply our needs, but the hay problem is, in dry seasons, a very difficult one to deal with. We are far from a market, and communication with the outside world is, even in summer, difficult and uncertain. In winter it is closed entirely. I want to try alfalfa, but as I know nothing whatever about practical farming, I am anxious to have the advice of experts. The ground here is very rocky. The soil is a clay, shallow, but very fertile. As fertilizers, we have kelp and rich bog; sometimes it is possible to get codfish offal. These conditions being stated, will you have the kindness to answer, categorically, the following questions:

1. How should ground be prepared for alfalfa?
2. How fertilized?
3. When should seed be sown?
4. How much to the acre?
5. Where can the seed be procured?
6. Will crop grow on steep hillsides?
7. If there is a simple, practical treatise upon the subject, please send me a copy. The man in charge of our place is a fisherman, who, like myself, is wholly ignorant of farming. All directions, therefore, must need be very simple and plain.

H. C. C.
Ans.—While commending our friend's decision to try alfalfa, we do not counsel him to base too high hopes upon it. Alfalfa has not yet been proven a general success in Nova Scotia. The climate is so moist, and the soil, in most cases, so light that the latter has been leached poor in potash and lime, two constituents alfalfa imperatively demands. The soil, being leached poor in lime, is inclined to be rather sour, and the bacteria which gather nitrogen for alfalfa, and upon which its thrift largely depends, will not flourish in an acid soil. It is believed that the soil sourness might be corrected, and a supply of potash insured by fertilizing annually with a load of two of lime per acre, and, say, 30 bushels of unleached wood ashes. Applications of barnyard manure help materially in getting a catch, but barnyard manure contains too much valuable nitrogen to be a very economical fertilizer for legumes, which, given potash and lime, can collect their own nitrogen from the atmosphere. If you sow lucerne, do some experimenting with the manures you mention, but place your main reliance on wood ashes and lime. Alfalfa usually requires experience, gained by repeated attempts, in order to grow it successfully, but it is a grand crop where it succeeds, and is worth persistent efforts to establish. We are not favorably impressed by the description of your soil. Alfalfa prefers deep, well-drained land, but do not be discouraged; sometimes it succeeds where success was not expected, and vice versa.

Taking up the list of questions in order:

1. Select land that has been in hoed crop, or even grain. Fall plow, and work up thoroughly and repeatedly in spring. Take special pains to prepare a fine clean seed-bed.
2. It is well to apply a good coat of barnyard manure to the crop preceding the alfalfa seeding. In the spring, a short time before seeding, broadcast, and work in at least 30 bushels of fresh-slaked lime per acre; also, if you can get them, a wagon load of unleached wood ashes. In lieu of ashes, a potassic commercial fertilizer may be used, such as muriate of potash.
3. In your district, keep working the land, and sow the alfalfa toward the latter part of the grain-seeding season.
4. Sow at least 20 pounds of good seed per acre. We would suggest sowing it alone, though it may be sown with a nurse crop of barley (1 bushel per acre).
5. Order seed from any leading firm of seedsmen. Be sure to ask for their best. Cheap alfalfa seed is an expensive luxury.
6. In a wide observation, extending pretty well over the Province of Ontario, we find that once established on hillsides, it does better there than on level land. It does not winter-kill so

easily, nor does water have a chance to stand about the crowns of the plants—a fatal condition.

7. Write to the Central Experimental Farm, Ottawa, for their bulletin on alfalfa.

MISCELLANEOUS.

1. I have a cow which is subject to diarrhoea. She had it last fall, but I got it stopped, and since she has gone to grass she has got it again, and it has become chronic. Would you kindly give me the cause and cure, if any?

2. Which is the best way to feed oats to young calves? Should it be fed to them whole or ground?

3. What is oil of tar made of?

4. I have a mare which I am breeding. She missed last year, and she seems to be hard to catch this year. I am feeding her oil of tar for a cough she has had. Would it be the cause of her being so hard to catch, or would it have any effect on her?

5. What is the cause of horse spitting out lumps of hay (chewed)? He is in good condition.

6. Would you let me know the value of milk in making butter and cheese? Will milk that will make two pounds of butter make three of cheese, or could you give me an idea of the value of milk in making butter and cheese?

7. How should young apple trees be cared for the first two years after planting on loam land?

J. M.
Ans.—1. Try a quart of raw linseed oil.

2. Many good feeders, nowadays, prefer feeding calves whole oats.

3. Wood tar.

4. Not in that way. Try the operation of dilating the os-uterus frequently described in these columns.

5. Have his teeth examined. The trouble will likely be found there.

6. The value of milk for making butter depends upon the percentage of butter-fat contained. The value of milk for cheesemaking depends partly upon the percentage of fat, and partly upon the casein. The casein is a practically constant quantity; the fat is not; hence the closest way to estimate the value for cheesemaking of milk of different degrees of richness is to let 2 represent the value of the casein in each cwt. of milk, adding to it the percentage of fat in each case. For example, one sample of milk tests 5 per cent. fat, another sample tests 4 per cent. fat; the relative value of these two samples would be as 7 (5+2) to 6 (4+2). Rich milk is relatively more valuable for butter-making than it is for cheesemaking.

7. Cultivate till late July or early August, then seed down to cover crop of crimson clover or hairy vetches. Prune in spring, and spray according to directions frequently given in these columns. In early May plow about 5 inches deep and repeat cultivation till July, then seed again as before.

BARN PLAN WANTED.

Will you please give plan of barn? I would like a stable at one end for four horses—three stalls and a loose box stall—and the other end big enough to hold 10 head of cattle, and room in the top to hold about 14 tons of hay. I would like a loose box in the cow stable, too. **Temiskaming, J. W. P.**

Ans.—Anyone who has in actual use a barn planned like the one our inquirer desires, but different from others that have appeared in "The Farmer's Advocate," might send it in. If suitable in its layout, we shall be pleased to prepare a cut from a plain pencil plan.

SPRAYING FOR MUSTARD.

1. Is spraying the best way to kill mustard?

2. Give a good recipe for spraying mustard.

G. W. F.
Ans.—When a field is badly infested with mustard, spraying with a solution of copper sulphate is the best way to kill the plants, thus preventing seeding without seriously injuring the grain. Spraying is not equally effective against all kinds of mustard, but it is pretty fatal to the common rough-leaved kind known as charlock (*Brassica sinapstrum*).

2. To prepare the solution, dissolve nine or ten pounds of bluestone by suspending it in a coarse bag in about three gallons of boiling water. Strain into the pump barrel, and add enough water to make 40 gallons. It is too late to spray this season. It should be done before the weed is in bloom.

A BAD CASE

OF

KIDNEY TROUBLE

CURED BY

DOAN'S KIDNEY PILLS.

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

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

PAROID

Before you buy roofing for any building, from a small poultry house to the largest mill or factory, it will pay you to get samples and complete proofs of quality from the oldest makers of ready roofing in America. (We originated the roll of roofing ready to lay with fixtures packed in the center.) Our concern was

Founded in 1817

We can show you why "Paroid" is the best of them all—lasts longer and saves most in repairs. Drop us a postal to-day.

F. W. BIRD & SON, Hamilton, Ont.

ROOFING

THE HAYES BULLETIN

Issued quarterly, containing short articles on the origin, cause, and the principles involved in the successful treatment of Asthma and Hay-Fever. Special Hay-Fever and Summer Asthma number now ready. Free on request.

DR. HAYES, Dept. D. D., Buffalo, N. Y.

FOR SALE: 26 JERSEYS under ten years of age. Prime condition. Sound. Nine due to calve August and September. **Cheviot and Dorset Horned Sheep, 1 Poland-China Sow, and 3 Boar Pigs. F. S. WETHERALL, Rushton Farm, COOKSHIRE, QUE.**

Brampton Jersey Herd For sale: 10 bulls, old, descended from St. Lambert, imported stock; also females of all ages. For full particulars address: **B. H. BULL & SON, Phone 68, Brampton, Ont.**

HIGH-GROVE JERSEY HERD. Our present offering is: a few choice heifer calves from 3 to 8 months old, which, considering quality, will be sold reasonable. **ROBT. TUFTS & SON, Tweed P. O. & Sta.**

Pine Ridge Jerseys—Present offering: Some choice lot of heifers, all ages, from 4 months up; also some good Cotswold sheep (registered). **WILLIAM WILLIS, Newmarket, Ont.**

SPRING BURN STOCK FARM, North Williamsburg, Ont. **H. J. WHITEKER & SONS, Props.** Breeders of Pure-bred Yorkshire Cattle, Oxford Down Sheep, Berkshire Pigs and Bull Orington Fowls. Young stock for sale. Eggs for hatching, \$1 for 13, and \$4 per 100.

HIGH-CLASS AYRSHIRE CATTLE—Bulls and heifer calves, two to nine months old, cows and heifers all ages. Prizewinners from this herd include Tom Brown and White Floss, sweepstakes at Chicago. **DAVID BENNING & SON, "Glenhurst," Williamstown, Ont.**

Wardend Ayrshires—We are offering young bulls from 1 to 2 years old; also a choice lot of spring calves from deep-milking dams. Sired by White Prince of Menie No 1825; bred by A. Hume, Menie. **F. W. TAYLOR, Wellman's Corners, Hoard's Stn., G. T. R.**

Select Ayrshire Bulls—Four choice last calves. Special low price on five March and one May calves. Phone to farm. **W. W. BALLANTYNE, Neidpath Farm, Stratford Ont.**

Stockwood Ayrshires for Sale.—Have some nice yearling heifers, also a few aged cows. All in fine condition. Write or call and see them. Address: **D. M. WATT, ST. LOUIS STATION, QUE.**

MEN

You are Cured First,
Then You Pay.
If You are not Cured
You Need Not Pay.

Your case will be accepted for treatment on the following propositions:

1. If you doctor here, you will receive the services of an EXPERIENCED SPECIALIST.
2. Your case will receive most careful attention each time you call or write.
3. YOU MAY PAY AFTER YOU ARE CURED.



Nervous Debility

The Latest Method Treatment is a heaven-sent boon to nervous sufferers. There are scores and hundreds of persons suffering from severe nervous disorders resulting from overwork, hurry, worry, business and domestic cares, bereavements, dissipation, etc. To them life is one continual round of misery, while peace, comfort and happiness are impossible. They suffer from headaches, loss of memory, mental depression, strange sensations, dizziness, dullness, restlessness, weakness, trembling, heart palpitation, cold limbs, utter fatigue and exhaustion. In this class of cases almost immediate relief is afforded by my treatment, while the cure itself is a permanent and lasting one.

BLOOD POISON

If you have traces of it you are in constant danger until cured; there is no stand-still in diseases of this kind; you cannot tell how soon the poison will affect the other organs of the body; have you sore throat, ulcers in the mouth or tongue, copper colored patches, sores breaking out, sore bones, hair falling out, itching skin? Call to see me, and receive a written guarantee of a cure, and you may

DR. S. GOLDBERG.
Located in Detroit since 1895. The possessor of 14 Diplomas and Certificates, makes Diseases of Men a specialty, and allows the patient to pay after cured.

PAY WHEN CURED

I cure Nervous Debility, Varicocele, Stricture, Early Decay and Waste of Power, all Nervous, Chronic, Blood and Skin Diseases.

X-RAY EXAMINATION, ADVICE AND CONSULTATION FREE

Office hours from 9:00 a. m. to 7:30 p. m.; while on Sundays from 9:30 a. m. to 2:30 p. m. Patients who cannot call may write for question blank and book containing diplomas free; everything held honorably confidential. Medicine for Canadian patients sent from Windsor, Ont. All duty and transportation charges prepaid.

DR. GOLDBERG, 205 Woodward Ave. Suite 636, DETROIT.

BERKSHIRES

Imported and Canadian-bred
H. M. VANDERLIP, Cainsville,
on T. H. & B. and B. & G. division of Grand Trunk. Telephone and telegraph, Cainsville, Ont.

HILLCREST HERD OF ENGLISH BERKSHIRES

Sires in use: Concord Triumph 13903, got by Perfection (Imp.) 9901, possibly the best sire in Canada to-day. Stoll Pitts' Winner (Imp.) (13185), first at the Royal. On hand, young sows, sired by Concord T., bred to Stoll Pitts' W. These are choice and lengthy.

JOHN LAHMER, Vine P. O., Ont.

A lady carrying a little dog got into a London omnibus and wanted to know if every turning was Park Lane. She began asking the question at Putney and repeated it at intervals all along the route until at last she was told, to the intense relief of everybody in the omnibus, that Park Lane was really before her eyes. But they were not to see the last of her even then. "Look!" she said in ecstatic tones, holding up the dog to the window, "that's where your mother was born!"

NEWCASTLE HERD OF TAMWORTHS and Shorthorns.—We have for immediate sale several choice boars ready for service, and sows bred and ready to breed, together with a lot of beautiful pigs from two to four months old. Also a few choice heifers in calf to Donald of Hillhurst No. 44690, and a few nice bull calves and heifer calves. All correspondence answered promptly. Daily mail at our door, and prices right. Colwill Bros., Newcastle.

Mount Pleasant Herd of Tamworths and Holsteins. A large herd of choice pigs of all ages on hand. Mount Pleasant type of hogs are profitable breeders and ideal bacon hogs. Pairs not akin. Herd headed by Colwill's Choice No. 1343. Won sweepstakes and silver medal at Toronto, 1901-2-3. Also a few bulls.
Bertram Hoskin, The Gully

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

Yorkshires!

Have some grand spring litters farrowed in Feb., Mar., April. May from A1 stock. Will sell at living prices. **L. HOOEY, Powrie's Corner P. O., Fenelon Falls Station.**

IMPROVED YORKSHIRES.

Choice young stock from imported prizewinning stock for sale.
GEO. M. SMITH, HAYSVILLE, ONT.

Berkshires and Shorthorns.—Choice young pigs of both sexes, sired by Folgate Doctor (Imp.), and from Industrial prizewinning stock; also a few excellent Shorthorn cattle. We invite your inspection.
McDONALD BROS., Woodstock, Ont.

ELMFIELD YORKSHIRES
Have a few young sows from 4 to 7 months, bred and ready to breed; also some young pigs weaned and ready to wean, from imp. dam and sire. **G. B. Mums, Ayr, Ont.**

MONKLAND YORKSHIRES

Imported and Canadian-bred.

We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right.

JAS. WILSON & SONS, FERGUS, ONT.
G. T. B. and C. P. B. Long-distance Phone

Oakdale Berkshires

Of the largest strains imported from England. The produce of these and other noted winners for sale reasonable. Let me book you order for a pair or trio not akin.
L. E. MORGAN, Milliken Str. and P. O.

Ohio Improved Chester Whites

100 Pigs to Offer of the long, deep, heavy sort. Breeding stock selected from the most noted families, with a view to size and quality. Booking orders for choice spring pigs; also a few fall pigs for sale. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed.

H. E. GEORGE, Crampton, Ont.

Glenburn Herd of

YORKSHIRES

Now on hand, a number of sows, 5 and 6 months old, for spring farrow; also a large number of September sows and boars. Booking orders for spring pigs. o

DAVID BARR, JR., Box 1, Renfrew, Ont.

Glenhodson Yorkshires.

Sows bred to farrow in July, August and September. Young pigs from three to six months old. Pairs not akin. Satisfaction guaranteed.

GLENHODSON COMPANY, Myrtle Station, Ont.
Long-distance phone at farm. Lorne Foster, Mgr.

Rosebank Berkshires

FOR SALE: Young stock from six to eight weeks old; sired by Maple Ridge Doctor and Concord Professor. Some choice sows bred and ready to breed. Express prepaid.

JOHN BOYES, JR., CHURCHILL P. O.
Lefroy Station, G. T. R.

Eastern Ontario Live-stock and Poultry Show.

Editor "The Farmer's Advocate":

The Eastern Ontario Live-stock and Poultry Show has been established at Ottawa for educational purposes, and is held under the auspices of the Ontario Department of Agriculture and the Ontario live-stock associations. The next exhibition will be held at Ottawa, Ontario, March 4th to 8th, 1907, in a fine new steel-frame building, which will supply comfortable quarters for the exhibits of live-stock and poultry, and good accommodation to visitors for seeing the exhibits and judging, and hearing the practical addresses on subjects relating to agriculture.

Following is a brief summary of the prize-list that will shortly be issued for the next show:

BEEF CATTLE.

Grades or Crosses.—For steers 2 years and under 3, and steers 1 year and under 2—1st, \$20; 2nd, \$15; 3rd, \$8. For steer under 1 year, and cow or heifer 3 years or over—1st, \$15; 2nd, \$10; 3rd, \$5. For heifer 2 years and under 3, and heifer under 2 years—1st, \$10; 2nd, \$8; 3rd, \$5.

Shorthorns same as grades, except that specials are donated by Shorthorn Association.

Herefords or Aberdeen-Angus, and Galloways or Devons.—For steer or heifer 2 years and under 3, steer or heifer 1 year and under 2, steer or heifer under 1 year, and cow or heifer 3 years or over—1st, \$15; 2nd, \$10.

Dressed Carcasses.—For pure-bred and for grade—1st, \$25; 2nd, \$15; 3rd, \$10. Three Export Steers.—1st, \$40; 2nd, \$30; 3rd, \$20.

SHEEP.

In the sheep department there is offered \$89 for each of the following breeds: Cotswolds, Lincolns, Leicesters, Oxfords, Shropshires, Southdowns, and Dorset Horns, with a classification for each as follows: Wether 1 year and under 2, wether under 1 year, three wethers under 1 year, ewe under 1 year, and dressed carcass of wether under 1 year. Hampshires or Suffolks are provided for as above, except that no prizes are offered for three wethers under 1 year. Grades or crosses have the same classification as Cotswolds, etc., except that no prizes are offered for ewe under 1 year. The amount of prizes is \$78.

SWINE.

Berkshires, Yorkshires, Tamworths, Chester Whites, and grades or crosses each have the following classification: 1st, \$8; 2nd, \$5; 3rd, \$3, for each section—barrow 6 months and under 9, barrow under 6 months, sow 6 months and under 9, and sow under 6 months. For bacon hogs, prizes are offered for three pure-breds and for three grades or crosses. The amount of money offered for the pure-breds is \$122.50. This is divided into 7 prizes, the first being \$25 and the seventh, \$10. The amount offered for grades is \$50, divided into three prizes. There is also a sweepstake prize of \$12.50. A similar classification is offered for dressed carcasses.

DAIRY CATTLE.

In the dairy department, classes are for Shorthorns, Ayrshires, Holsteins, Jerseys or Guernseys, and grades. The classification is: Cow 42 months and over, and heifer under 42 months. The prizes offered in each section are: 1st, \$25; 2nd, \$15; 3rd, \$10. The prizes for dairy cattle will probably be considerably increased for Shorthorns, Ayrshires and Holsteins by special prizes from the associations representing these breeds.

The ages of beef cattle will be computed to March 1st, 1907; dairy cattle to February 1st, 1907; sheep to September 1st, 1906, and swine to March 1st, 1907.

In the seed department, prizes of, 1st, \$5; 2nd, \$3; 3rd, \$2; 4th, \$1, are given for fall wheat, spring wheat, Banner oats, any other variety white oats, six-rowed barley, small field peas, potatoes of Rose type potatoes of best early variety other than Rose type, white potatoes, Indian corn best for ensilage in Ottawa Valley, timothy seed.

In the dressed poultry department, provision is made for all the leading

varieties of poultry. Rhode Island Reds and French, any variety, have been given a place on the list this year. The selling class is as last year, with Brahmas and French added. The live-poultry list has been increased by adding Partridge Wyandottes, White Orpingtons, Creve Coeurs, La Fleche, Faveolles, Partridge-Cochin Bantams and Indian Runner ducks.

Breeders and feeders, especially in Eastern Ontario, should begin now to make preparations for exhibiting. Persons wishing prize-lists will receive them free upon application to the Secretary, A. P. Westervelt, Parliament Buildings, Toronto.

QUESTIONS AND ANSWERS.

Miscellaneous.

PASTURE ON SANDY UPLAND.

On a high rather dry pasture, with sandy soil, not drifting, however, June grass is almost the only native grass, and this becomes almost worthless in midsummer. The land cannot be plowed, as there are many fine old trees which it is intended to preserve. Efforts to improve the pasture by sowing other grass seeds and clover, and using a drag harrow, have been but slightly successful. White clover has obtained a foothold here and there, and appears to be hardily holding its own, and certainly not spreading. Sheep's fescue, however, which was apparently sown in a lawn-grass mixture, is increasing from year to year. The small tufts which at first appeared, are now much increased in size, and much more numerous. In fact, sheep's fescue so far is the only grass sown that appears to be able to make headway against the ubiquitous June grass, and to even push it out. Before sowing more fescue seed, however, I would like to know more about its real value as a forage plant. Do cattle relish it? How does it compare with other grasses in nutritive properties, protein especially? Is it much superior to June grass? Is it desirable to encourage it as the leading grass plant on such land? Is there any other grass or clover which is preferable to sheep's fescue, and able to force its way on such soil as well as that plant? How would *Bromus inermis* suit for such soil? Would *Bromus erectus* be superior to the latter for such land in any way? How can moss and ferns be got out of such a pasture without plowing? Would lime be beneficial in this connection?

T. B. M.

Ans.—The first thing we would recommend is a liberal dressing of unleached hardwood ashes, say 50 bushels per acre, or probably two dressings of 25 bushels each would be advisable. This might be supplemented, experimentally, on a small portion with a load of lime and a couple hundred pounds of acid phosphate, or even basic slag. Top-dressing with barnyard manure would also have a marked effect, but the use of purely mineral fertilizers will be less expensive, and will have a marked effect upon the clover, which is undoubtedly suffering for lack of potash and lime, two elements that are frequently deficient in very light soil. Sheep's fescue is a fairly good pasture grass. Sheep and cattle are very fond of it. It is especially adapted to dry soils, where better grasses refuse to grow. Shaw says of it: "To renew this grass means the application of more seed. This may be done in pastures by simply allowing some of the seed to ripen and become strewn with the wind, or by adding some more seed at the proper season or seasons. In the absence of positive experience, it will probably be found that sowing soon after the seed matures in the summer, or in quite early spring, will secure the end sought."

Shaw also makes the statement that sheep's fescue is highly nutritious. We doubt if you can find any one grass better than sheep's fescue for the situation you describe. *Bromus inermis* or *Bromus ciliatus* might also be worthy a trial. The clovers and grasses we would suggest as worthy of trial are white clover (after the soil has been fertilized as described above), alfalfa, red clover, sheep's fescue, orchard grass, *Bromus inermis*, meadow fescue, timothy and tall oat grass. Of these, we would place chief reliance on white clover and sheep's fescue. A disk harrow might be used to advantage to cover the seed.