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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

VOL. XLVII.

LONDON, ONTARIO, AUGUST 15, 1912.

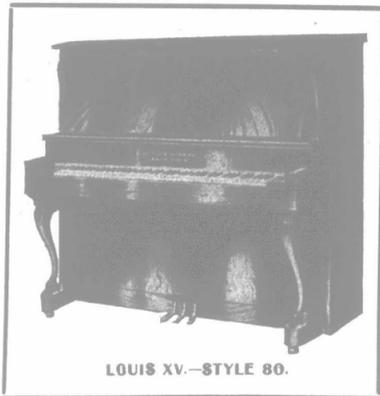
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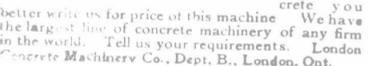
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MENTION "FARMER'S ADVOCATE."



Vol. XLVII.

LONDON, ONTARIO, AUGUST 15, 1912.

NO. 1038

EDITORIAL.

Have you destroyed the last weed in the corn and root fields?

Is there an Improvement Society in your locality, and what is it doing?

The next great step of democracy in Great Britain will be to get its feet upon the land.

A wilderness of weeds gone to seed, is one deplorable aftermath of the shortage of farm help.

This year's weed harvest gone to seed will increase the burdens of 1913.

Thorough after-harvest tillage, warmth and moisture will yet put a lot of noxious weeds out of business.

The seeding of many weeds which come in the clover crop being left for seed may easily be prevented by a little time spent in pulling, spudding or even topping them.

Spare no work in the preparation of the fields to be sown to winter wheat. Cultivate them thoroughly and complete the work in time to have the crop sown in good season.

Most districts are reporting a good harvest. What will become of the crop? This is a problem which concerns every producer, as the future of his farm depends largely upon what he does with his crops year after year.

With eggs selling at 25 cents per dozen in the summer months, the hen should surely hold an important position on the farms of the country. Quite a difference between the seven or eight-cent eggs of a few years ago and the quarter-dollar variety of the present day, but the difference is all in price. Make the hens produce more eggs.

In filling the barn with the season's crop, plan the work so that as much of the straw as possible may be kept inside at threshing time. Keep it all in if it can be done. When next winter's blustery days come, more satisfaction will be felt in getting the straw from the mow to the stables than when it is stacked in a yard. Besides, there is much less waste.

All prosperity, both in the country and in the city, depends very largely upon the success of the rural population. Stop and think what your work on the land means to the country. Its importance can scarcely be realized. Stop the plow and the reaper, and what would be the result? Even in years of light crops the outcome is serious enough. A realization of the importance of the calling should stimulate every individual engaged therein to put forth great efforts, should induce others to turn to agriculture as a means of livelihood, and should influence all to make a more thorough and complete study of the agricultural principles which insure success.

The Season's Crop.

Each year brings its seedtime, and each seeding is followed by harvest. The harvest depends upon a large number of conditions: soil fertility, drainage, cultivation, time of seeding, rotation, variety of seed, quality of seed, moisture, plant diseases, and dozens more. Is it any wonder that the country anxiously awaits harvest each year? Prosperity depends upon the crop. In fact, our very lives depend upon it. Its importance in the economy of a country cannot be overestimated. Even the difference between a good crop and a poor one is often enough to cause alarm. The business man, the manufacturer, the wholesaler and retailer show a great interest in "the crops," for they well know that to a great extent their sales depend upon rural prosperity, which is directly dependent upon the yield from the soil.

This year has been favorable in most localities and the bulk of the crop is a good one. What will the grower do with it? This is a question which should occupy the mind of every farmer in the country. There are many ways to dispose of the crop. Part of it may be sold in the field and removed entirely from the soil, or it may be harvested and then sold. This is a practice which if continued in year after year cannot but have a lasting detrimental and depreciating effect upon the farm. No land is so endowed with the different chemical, mineral and vegetable substances which go to make up the food of plants as to be able to maintain maximum production year after year unless at least a part of that plant food taken by the crop is returned to the soil, and the more the better. Knowing this to be true, it is folly to sell the entire crop in the state in which it is produced, unless some other means of adding fertility are resorted to. The average soil is not by any means a never-failing spring, manufacturing an unlimited supply of material upon which plants thrive. What is drawn from it by the season's crop must be returned at least in a measure in order that the supply does not dwindle below the mark of profitable production. Fertilizers are necessary if the highest yields are to be obtained.

The maintenance of soil fertility has been one of the problems of the agriculturist for ages, and the older the soil the greater has been the problem. Different methods have been resorted to in solving it. Green crops have been plowed down, artificial fertilizers have been used, and barnyard manure has filled a big place in this respect. All these fertilizers are useful, but the one "best bet" of the farmer who produces large crops has been live stock of some kind to consume his season's crop each year, and manufacture it at a profit into meat or milk ready for consumption, and at the same time leave him the greater portion of the plant food, in the form of good manure, to be returned to the soil, there to be instrumental in producing heavy future crops. Let the live stock be the prime factor in maintaining soil fertility, and if this is done the destination of the season's crop is to be consumed by cattle, horses, hogs or sheep on the farm. The class of stock to be kept is a matter to be decided by the farmer. Soil, climate, locality, labor, equipment and the size of the farm are some of the governing factors in selecting the class of animals in which to specialize. The kind of stock does not matter so much as long as it is profitable, as most of them are, all things considered, but it does matter whether or not live stock is kept. The mows are full of hay and straw, the granary filled to the top with

grain, fodder and roots are plentiful, the season's crop is a valuable one, so fill the stalls and pens with the four-footed friends of all and place the crop on the market in its most profitable form, and reserve that which the farm needs for the use of the crops of years to follow.

Where Will We Get Our Steak?

The question of beef shortage is not taken nearly so seriously by the rural population of our country as it should be. The average farmer on a mixed farm pays little heed to the cry for good beef as far as his own table is concerned. He has it in his own hands to eat whatever kind of meat he chooses, for he has the means of producing it. If he wants fresh pork he kills a pig, if he wants cured pork he kills and cures it himself. The same is true of mutton, lamb and beef. In the winter the beef will keep, in the summer the beef-ring is the source of supply. The housewife is always at liberty to kill a chicken or some other poultry, so what concern has the farmer?

Time was when thousands of cattle roamed our Western ranges, and when nearly every farm in the older Provinces turned off its quota of finished bullocks yearly, but this is passed into history. The ranch is becoming extinct. Why? Because the grain-grower has come. Where did the grain-grower come from? In nearly every case from older settled portions where grain-growing had gradually "run out," because it was found that the land would not stand continuous cropping without putting something back to maintain the fertility. He found that mixed farming or at least manure was necessary, and to get manure necessitated the keeping of live stock, which meant yearly labor. So he went West and drove the cattleman out of business. What became of the land in the older settled districts? The answer is short and not hard to find—the dairy cow took the place of the beef animal. Beef was not high in price, and the urban population began to increase very rapidly. The demand for milk and its products grew in accordance with the demand and the beef business suffered. Milk cows offered quicker and larger returns, and no one can blame the producer for putting forth his efforts in the direction which he believes most profitable for himself. The milk cow allowed him to keep his farm enriched, and placed him in a position to grow good crops.

With the milk cow came an indiscriminate calf slaughter, which year after year has grown worse and worse. The idea that dairy calves make fair veal but common beef has been acted upon to the limit. Veal has been a fair price, which has also helped to make matters more acute. The man with the dual-purpose cow has jumped "in the swim" and turned his attention all toward milk, and has for the time being forgotten the calf rearing end of the business until those who would feed cattle if they could get them cannot secure the right kind of stockers.

What is the result? A large falling off in the numbers of beef cattle in Canada, not only in Canada, but in North America. No longer ago than last week a Toronto daily contained a report of ten train loads, comprising some 10,000 head, of Mexican steers coming into Alberta—the first time in the history of the Canadian West that this class of feeding cattle had to be resorted to. The East is not even this fortunate. While the advance of dairying has in some districts encouraged to some extent the keeping of promising

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.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and 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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heifer calves, the greater number have been slaughtered. Cheese factories in many districts have given place to powder factories and condenseries which take all the milk, leaving no by-product, and so calf-rearing is out of the question. City milk trade does not permit of calf-raising, and so the "slaughter of the innocents" goes on, and year by year the beef supply of the country becomes scarcer and the price advances. The seriousness of the situation may be seen by the following special despatch a few days ago to the Canadian dailies from Chicago:

"Notwithstanding the dissolution of the National Packing Company, the corporate name of the so-called Beef Trust, the price of beef continues to soar to levels attained only in time of war. That the people of New York and of the Atlantic States generally will have to pay an extraordinarily high price for beef in the immediate future, trust or no trust, was demonstrated when prime corn-fed bullocks attained in the stockyards the top-notch price of \$10.10 per hundredweight, a price not reached in this market since 1867, just after the civil war."

The Breeders' Gazette, commenting on the subject, says "Grow corn." We might say "Produce milk." To grow corn or any other crop successfully and at a profit requires that the soil be kept in a high state of fertility, and to do this stock of some kind must be kept. Then, again, just as soon as all the farmers become so intensely interested in a single crop, just so soon will the production of that crop be increased beyond the demand and prices fall. Then what becomes of the crop? It must be turned to a profit, and so is fed and sold as milk or beef. It would appear that "Grow corn" then is good advice. If everyone turns to milk in time the price of beef must raise so high as to make it equally profitable with dairying, and more so. This will not come in a year, nor in two or three years, but it must follow unless our people turn to some other food to take the place of wholesome beef, which is not likely, unless the price is prohibitive, and it would not be a good thing for the race to be de-

prived of one of the best, if not the best, all-round meat. Surely prices are now high enough to sufficiently reimburse the producer of beef. Surely beef pays better than grain farming, everything considered. Surely it is profitable to keep stock and thus maintain soil productiveness. All that is now left to compare is beef and milk. Both are profitable, and no doubt there are many farms in this country upon which beef can be just as economically produced at present prices as milk. When beef was low such a statement could not be truthfully made. But now beef is in demand. The price is high and labor is scarce. Practically all the plant food is left on the farm in beef production, so good crops are ensured. Is it worth while then to turn all the calves off for veal? It does not appear so.

There is only one way to meet the question, and that is "save the calves." Stockmen in conference at Winnipeg recently suggested a law making it a criminal offence to kill a female calf. Things must be reaching a climax when such a suggestion is necessary. All calves are not fitted to become profitable breeders, but many which are under present conditions prematurely butchered would be highly profitable as such. The only way to get cattle is to get calves and raise them. Our country's agriculture must ultimately depend upon the live-stock interests and beef-raising must be one of the foremost branches of that industry. A half loaf is better than no bread, and poor beef is better than none, but there is no good reason if prices keep up, and present indications point to even a further advance, why good beef should not be produced in larger quantities. Think twice before you kill that calf. What is he worth as finished beef? What will it cost to finish him, and what will fattening him mean to the farm?

HORSES.

Horses which are to be shipped any distance for showing should be taken off the grass some time before the show, in order that they will be in a condition to stand shipping. Pasture grass makes them "washy," and must be avoided under such circumstances.

Develop the foal as rapidly as possible. By development is not meant excessive fattening, but keep him growing by giving all the oats or oats and bran he will eat. A well-fed colt will be as big at two years of age as the poorly-fed one at three.



Critic (15788).

Three-year-old Clydesdale stallion; first in class, and grand champion at Winnipeg Exhibition, 1912. Shown by Colquhoun & Beattie, Brandon, Man. Sire Everlasting.

A safe rule to follow in handling horses is never to trust any of them too far. It is never safe to leave a horse without tying, and it is equally bad practice to tie with a poor rope or strap. Far better practice is that of carrying a strong rope halter for tying, and using it every time the horse is left standing.

If your horse fails to win the coveted rosette in the show-ring, do not abuse the judge. Such conduct never changes a decision, never places the animal any higher up in the awards, and only marks you as a "kicker." Take defeat and success alike and the show-ring business will soon be mastered.

Of course the colt intended for exhibition at the fall fairs must be fed all the grain he will eat, but his dam must not be forgotten, for it is from her that he gets the greater portion of his nourishment. The dams of the foals to be exhibited should get a large grain ration, supplemented by a little oil meal.

If you are beginning in the show-ring, do not commence with an aged horse. Proper fitting requires experience, and colts are much more easily fitted than the older animals. As far as the advertising value of the exhibit is concerned, foals and yearlings or young stock are of much more value than older horses, as they represent the breeding ability of your stud.

If the mare has not proved to be in foal there is yet time. Fall colts are considered by some an advantage, and are surely better than no colts. Late September or October is a good time for young colts, provided the mare is not forced to work too hard in the autumn rush. The only care is that the colt get proper exercise and is not too closely confined in the stall.

Over 20,500,000 of the 23,778,481 horses of the United States are owned on the farms of that country. This gives some idea of the importance of the horse to agriculture. It seems rather strange that the demand from the city should be so great, when there is such a vast difference in the numbers kept in the country and in town and city. Surely breeders are not making the most of their opportunities. It should not take the entire increase from twenty million horses to keep the supply maintained in the country districts, and at the same time fill the vacancies in the ranks of the city animals, caused by death and depreciation.

Hereditary Diseases.

In drawing up a list of diseases which he considers hereditary, transmissible or communicable, A. S. Alexander gives, in a Wisconsin Bulletin, the following, which he believes should be sufficient to warrant the rejection of a stallion for public service:

Eye disease, such as periodic ophthalmia or "moon blindness" cataract; amaurosis, or "glass eye"; chorea, or St. Vitus' dance, constituting "crampiness" or "shivering," "string-halt," "roaring," "heaves" or "broken wind"; bone or bog spavin; ringbone; sidebone; navicular disease; and melanotic or pigment tumors; but blemishes and deformities due to accident not to constitute unsoundness, subjecting a stallion to rejection for breeding purposes.

Among communicable diseases should be included glanders, farcy, "maladie du coit," urethral gleet, simple pox and mange. In addition to these diseases, the seriousness of which is generally recognized, the examiner should reject a stallion having any malformation likely to be transmitted, and detrimental to the quality or usefulness of his progeny. Among these objectionable features should be included chronic foot lameness, associated with objectionable conformation; "sickle," "curby-formed," "boggy," "thorough pin" or "sprung" hocks; "washy" coupling; undersize and lack of quality and suitability, according to breed or breeding represented; stallions having one or both testicles retained in the abdomen; vice; "grease" or "grease heel," or any temporary sickness likely to endanger the health of the mare or the progeny.

While a stallion may be sound, so far as the absence of any known hereditary, transmissible or communicable disease is concerned, he yet may be quite unsuitable as a sire by reason of lack of type, unknown breeding, lack of size, bone, muscle, desirable character or disposition. Hundreds of horses have been passed or sworn to as sound, but they still are quite unsuitable for breeding purposes, being objectionable for one reason or another. Many of them are too small, and while some of the "scrubs" may look attractive, they lack any known breeding which would give at least a little likelihood of desirable conformation being transmitted.

Condition the Show Horses.

Condition is one of the most important factors to be considered in fitting the horse for the showing. No horse is perfect in all his points, and fat covers up a multitude of deficiencies. There are no horsemen who do not acknowledge this fact. Every observer has seen a rather plain animal when thin, fattened up and rounded out into a surprisingly strong show-yard proposition. The flesh put on by the fattening process improves the appearance greatly, gives the animal a deeper, broader, thicker and more finished appearance, which fills the eye well and does much in landing the prizes competed for. When it is considered that from 200 to 250 pounds may be put on a fourteen or fifteen hundred pound horse in about three months, the problem does not seem so difficult, even though the animal were rather thin to begin with. For quick fattening, clover hay is much more suitable than timothy. The clover must be of good quality, well cured, clean, and free from dust. A little oil meal and corn added to the oats in the grain ration serves to hasten fattening, and improves the coat. Unlike fattening for sale, it is necessary to keep the animal well exercised. This does not mean hard work, which should be carefully avoided. Where fattening is the only factor to be considered, greater gains are made when the animal receives no exercise, but, for showing it is necessary to keep the horse active and to give training necessary to insure good manners before the judge. Too much stress cannot be placed on regularity of feeding. Hay fed twice a day, and grain three times is a very good plan, and each feed should be given at the same time each day. Watering and exercising should be just as regularly attended to. Thorough daily grooming is about as essential as feeding. Put the horse in the show ring in good flesh, and he is then in a position to do justice to himself and to his owner.

Four Essentials of Horse Fitting.

Alex. Galbraith, the well-known American horse-breeder and exhibitor, gives the following four essentials for the fitter to observe in preparing his horses for the show:

1. That the food is being thoroughly digested.
2. That no more is crowded into the horse than he has the appetite to clean up, and the capacity to assimilate.
3. That he is regularly and thoroughly groomed, and receives sufficient daily exercise to keep him in perfect health and prevent his legs from "stocking."
4. That the horse be weighed frequently, and if not increasing in weight, his feed ought to be changed or modified somewhat. A horse's perfect condition is evidenced by a bright, clear eye, a brilliant coat, high spirits and mettle, and sufficient flesh to thoroughly round him out, but not enough to interfere in the slightest degree with his natural action, which on no account must be impeded.

LIVE STOCK

Prices on the market indicate that what is wanted is lamb and mutton. Breeders should endeavor to supply what the consumer calls for.

Stockers are not going to be plentiful this fall, and now is the time to secure them, before all the best have been culled out.

The breeder can ill-afford to sacrifice the tried sire, and run the risk of a young one proving satisfactory, unless the old one has outlived his usefulness.

Protect the calves from the flies. Keep them in during the day, and let them graze at night. The calves are the future herd, and its efficiency largely depends upon their treatment.

Let the growing pigs have the run of the stubble. It is surprising how much feed they will pick up in this way and how rapidly they will grow. Do not, however, try to finish pigs while running in a large field. A small pen or paddock is more satisfactory for the latter, as in the larger plot too much feed and time are lost by the pigs running from place to place.

How Pigs are Fed in Britain.

Profitable pork production is carried on upon many farms both in Canada and in the Home Land. The pig must be kept growing from the start. An outline of methods of feeding, as carried on in England is here reproduced from an article by Charles Crowther, in the Journal of the Board of Agriculture.

The essential features to bear in mind in the feeding of pigs are their relatively low powers of

meals. The young pigs must, however, on no account be permitted to share the sow's food, or serious digestive troubles may be occasioned.

The safest single dry food for pigs for a few weeks, both before and after weaning (also for sows suckling their young) is the class of wheat milling offal known commonly as "sharps" (shorts). This should be of the very best quality.

The more concentrated meals (barley, maize, peas, etc.) should only be introduced gradually, when the pigs are older, or stomach troubles may be occasioned and endanger the lives of the pigs. The best addition to the meals is skim milk, then separated milk, buttermilk and whey. These should be given at first in small quantities, and afterwards increased up to the amount desired.

The following mixtures of food rations will serve for pigs fed from ten weeks old, for a period of eighteen to twenty weeks, and making from 130 to 145 pounds dressed weight. Each consists of food-stuffs ordinarily used in pig-feeding to meet varying farm conditions, and contains digestible albuminoids and starch equivalent in about the same ratio as the "standard" rations. The daily allowance will be regulated by the age, size and appetite of the pig:

(a) 6 pounds of maize meal or 7 pounds barley meal to 1 gallon of separated milk.

(b) 2 pounds of maize meal or 7 pounds barley meal to 1 pound of pea meal.

(c) 6 pounds of middlings to 1 pound of pea meal and 6 pounds barley meal.

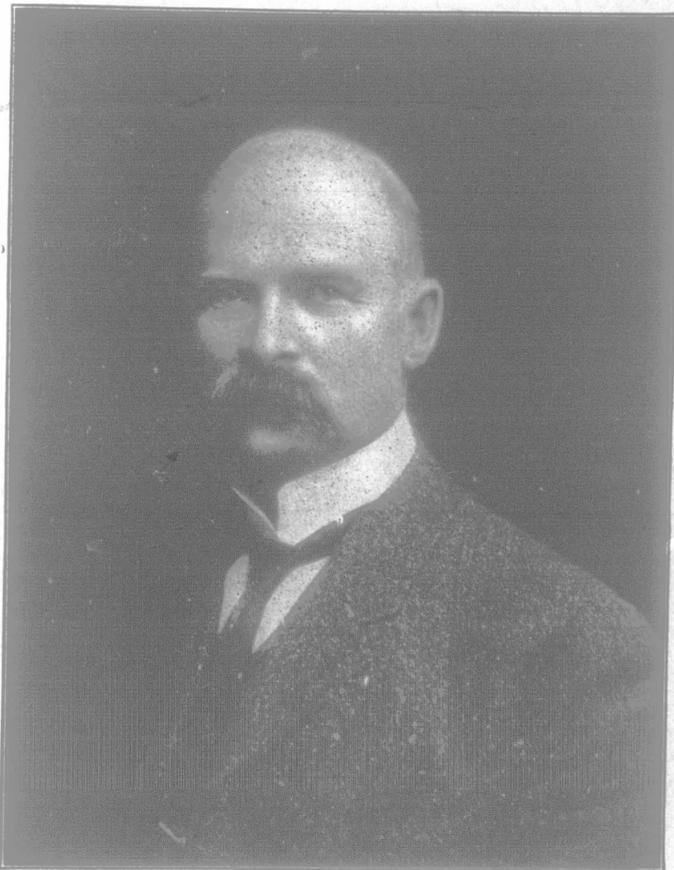
(d) 6 pounds boiled potatoes, 3 pounds of ground oats, to $\frac{1}{2}$ gallon of separated milk.

(e) 5 pounds ground oats and barley, 1 pound pea meal, to 1 gallon of whey.

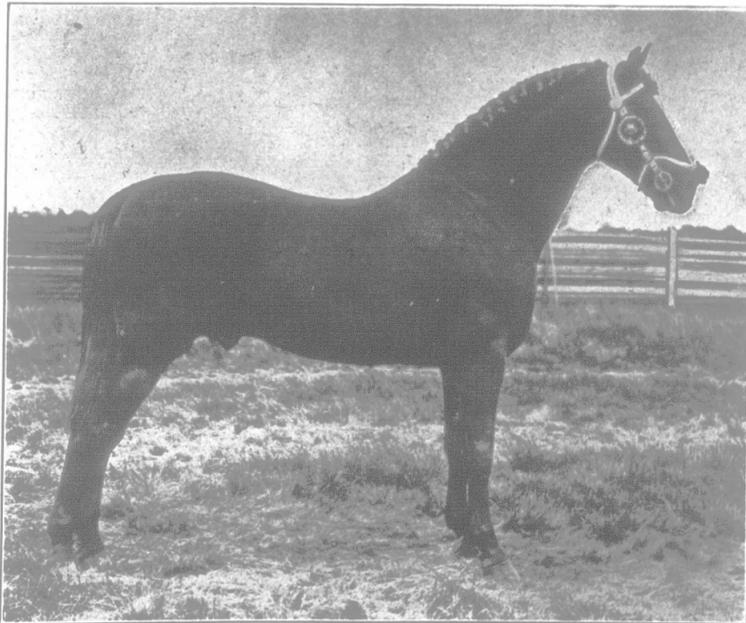
The meal is scalded in bulk and mixed with separated milk, whey or water, as the case may be, at the time of serving. The pigs are fed three times a day with as much as they will clean up each time.

In the spring and summer a moderate supply of green food (clover, vetches, cabbage, etc.), is very advantageous. In winter, a supply of turnips, Swedes, mangolds, cabbage, etc., will serve the same purpose. The potatoes should always be well boiled or steamed, but this treatment is not necessary with other succulent foods.

In many parts of the country, the most salable pig is one weighing about 160 pounds, or eight scores, dead weight, giving a side of bacon about 60 pounds in weight. This should be attained when the animal is about eight months old. The pigs are weaned at about two months and for the next three months are kept in rapidly-growing store condition. They should be given cooked potatoes, roots or vegetables of some sort every day, and in addition should receive a thin wash comprising a fair proportion of albuminoids. Salty refuse from the dairy or house must on no account be given to the pigs. The following are



Dr. Fred. Torrance.
Recently appointed Veterinary Director - General.



King George 5th.
Cleveland bay stallion. First and champion at Royal Show, Doncaster, 1912.

dealing with fibrous foodstuffs and their high powers of converting easily-digested foodstuffs into meat. For these reasons, pigs are fed almost exclusively upon milk, dairy wastes, potatoes and meals. No animal responds more liberally to generous treatment in the matter of food supply.

For the first three weeks the young pigs will be entirely dependent upon the mother's milk, but this should afterwards be supplemented with gradually increased quantities of skim milk or separated milk, together with a little meal and boiled potatoes, given in three

160 pounds, or eight scores, dead weight, giving a side of bacon about 60 pounds in weight. This should be attained when the animal is about eight months old. The pigs are weaned at about two months and for the next three months are kept in rapidly-growing store condition. They should be given cooked potatoes, roots or vegetables of some sort every day, and in addition should receive a thin wash comprising a fair proportion of albuminoids. Salty refuse from the dairy or house must on no account be given to the pigs. The following are

examples of suitable mixtures of foods for pigs after weaning:

1. Separated milk or buttermilk, barley meal, and bran or pollards. If one gallon of separated milk be allowed, the milk and bran should be mixed in the proportion of 5 to 1.
2. Separated milk or buttermilk, maize meal, and bean or pea meal. With one gallon of separated milk, the maize and bean or pea meals should be in the proportion of 4 to 1.
3. Separated milk or buttermilk, maize meal, and wheat meal, the meals being in proportion of 3 of maize to 1 of wheat.
4. Whey or house wash, barley meal and bean or pea meal. With one gallon of whey, the meals should be in the proportion of 2 to 1.
5. Whey or house wash and ground oats.
6. Brewers' grains (fresh), barley meal, and bran or pollards.

Compared with whey, separated milk and buttermilk are both rich in flesh-forming constituents (albuminoids). A mixture of whey and maize meal would be quite unsuitable unless fortified by, say, bean or pea meal.

Attention must be given to the supply of lime and phosphates in the food of growing pigs. As a rule, the milk and meals supply all the phosphate required, but there is often a deficiency of lime. This can be made good by small additions of precipitated chalk, increased gradually up to $\frac{1}{4}$ or $\frac{1}{2}$ ounce per day.

With regard to the quantity of food required, young pigs of three or four months old will consume about $3\frac{1}{2}$ pounds of dry food per 100 pounds live weight per day. This quantity of dry food would be supplied by one gallon of separated milk and about 3 pounds of meal.

After pigs have attained the age of about five months, the feeding is of a more forcing nature, and the amount of exercise restricted. From this time the fattening process continues till the animals are slaughtered, at the age of eight or nine months. The quantity of food required is represented by about $3\frac{1}{2}$ pounds of the dry feeding substance per 100 pounds live weight per day, and, in order to produce a fair proportion of lean flesh, the diet should have an albuminoid ratio not wider than about 1 to 6. The allowance of meal should be gradually increased, and the food should be given of thicker consistency as the fattening proceeds. A pig of 160 to 180 pounds live weight will require about 6 pounds of meal per day, or its equivalent in meal or dairy refuse. The following are suitable daily rations for pigs of this kind:

1. Five pounds barley or maize meal, 3 pounds potatoes, 1 gallon separated milk or buttermilk.
2. Six pounds barley or maize meal, 1 gallon separated milk or buttermilk.
3. Four pounds barley or maize meal, and 2 pounds bean or pea meal.
4. Equal quantities each of bean, maize, barley and wheat meals.
5. Barley or wheat meals in the proportion of 5 or 6 of the former to 1 of the latter, with separated milk or buttermilk, and in the proportion of 3 or 4 to 1 with whey or wash.

Well-bred pigs, slaughtered at, say, 8 or 9 months old, will usually weigh about 200 to 212 pounds live weight, and they will yield 75 to 80 per cent. of carcass meat.

It is considered that a pig thriving well should yield about 1 pound of dressed meat for every 5 pounds of meal consumed.

In London and the South of England, fattened pigs weighing, when dead, from 60 to 120 pounds ("jointers," "porkers," or "porket pigs") find the readiest sale at best prices. Such pigs are fattened as they grow from the age of about three months onwards, and are fat when about sixteen to eighteen weeks old. This is undoubtedly the most profitable system, where the fattened porkers can be readily disposed of at fair prices, since the cost of production of any form of meat, other things being equal, steadily increases with advancing age.

Pigsties should be kept clean, warm and dry, as the pig is very susceptible to cold or damp.

A brood sow will largely provide herself with food if allowed the run of a grass field, but it is advisable, especially during the last month of gestation, to add some more concentrated food, such as maize, peas or beans, that have been soaked in water for at least twenty-four hours. Bulky food should, however, be avoided. After farrowing she will require a liberal supply of nutritious food, which may consist of shorts, maize, boiled potatoes and skim milk.

[Note.—It will be noticed that the pigs are not forced at as early an age as in this country, and are older when marketed. However, many good points in feeding are brought out. Note the amount of milk used.—Editor.]

Water and Dry Food.

Few people realize the importance of an abundance of water to all classes of farm stock. A few figures by Ingle, and based upon actual experiment, are of interest to stockmen. The quantity of water consumed by stock, in proportion to dry food consumed, varies considerably in different animals and with different conditions. According to Warrington, the normal amounts are: For sheep, 2 to 1; for horses, 2 to 3 to 1; for cattle, 4 to 1. With sheep, when fed on succulent food, no water to drink is, as a rule, required. In dry climates, however, a sheep will drink from 1 to 6 quarts of water per day. With roots, in winter, much more water than is necessary is taken, even though none be drunk, and the addition of a little dry food, meal or cake is decidedly economical. With horses, the proportion of water consumed varies greatly with the amount of work done by the animal and with other circumstances. With the Paris cab horses, Grandeau found the average proportion of water to dry matter in the food to be 2.1 to 1 when at rest, and 3.6 to 1 when working.

With fattening oxen, American experiments showed that from 1.6 to 3.4 pounds of water per pound of dry matter were consumed, and that the largest amount of water was drunk when the food was richest in protein.

With milch cows, the average amount of water to each pound of dry food is 4 pounds, according to American experiments, but here again a ration with a narrow albuminoid ratio requires more water than one with a wide one. Thus, at the Wisconsin Station, in 1886, it was found that, with food having an albuminoid ratio of 1 to 5.5, there were 4.33 pounds of water drunk for

one case, the mixture was soaked for some days in four times its weight of water, while in the other only twice its weight of water was used. The former was fed to pigs in a sloppy condition; the latter was of the consistency of oatmeal porridge. Both lots were allowed as much of the food as they would eat, and the animals receiving the drier food had access to a water trough. In eight weeks, the pen getting the wetter food increased by 334 pounds, while the other gained 458 pounds (live weights). The pigs of the former consumed 1,904 pounds of food, while those of the latter ate 2,254 pounds. The proportions of food consumed to weight gained were, in those getting much water, 5.7; in those getting little water, 4.9. The pigs on the drier food thus made 124 pounds more increase in live weight, and yielded about 102 pounds more pork, while each pound of increase in live weight was obtained by the expenditure of 0.81 pounds of food less than with the other animals. The extra food cost about 19s., but the value of the increased quantity of pork was about 42s. 6d., leaving a net gain of 23s. 6d. for the pen receiving the drier food.

Economic Use of Food for Stock

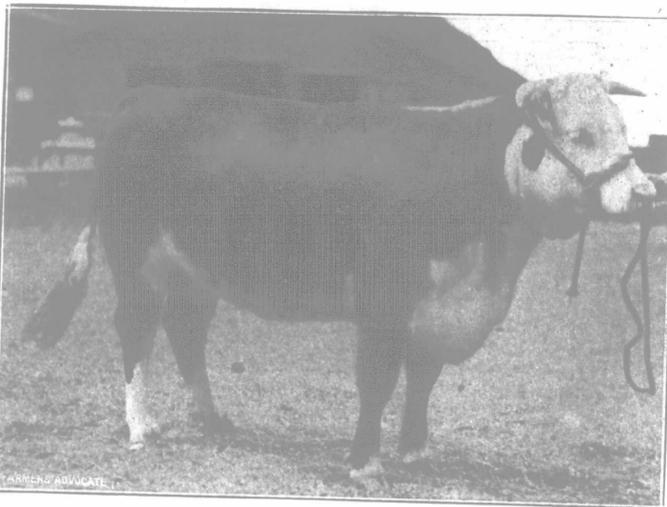
This is a wide subject, so comprehensive, indeed, that we can only enter upon it in a single short article like this. However, it is a matter of much interest to the rent-paying farmer in these times, for he must know that, with beef and mutton at their present prices, and milk and butter correspondingly dear, the sale of these—coupled with economy in production—has much to do in making ends meet at the end of an agricultural year. In the first place, the writer will endeavor to indicate why different sorts of stock ought to be differently fed, and why similar sorts, under varying conditions, or with different ends in view, ought also to be differently fed.

The food of animals is digested in the stomach, but assimilated into the system while passing through the intestines. In the case of horses and pigs the stomach is small as compared with the intestines; while, with oxen and sheep the reverse is the case. The scientific conclusions derived from the knowledge of these facts are that horses and pigs require nutritive food supplied in a concentrated form, while oxen and sheep also require nutritive food, but supplied in a bulky condition.

Now, food is given to animals in order to form bone, muscles, sinews and fat, and also to supply animal energy. The essential elements necessary for each of these must be found in the food consumed. Bone has for a basis lime. If we burn a few beans to a white ash, we find that this mineral residue yields, on analysis, mostly compounds of lime. Muscle and sinew are mainly composed of a substance called albumen, which is essentially the same as a principle found in all vegetable matter. Animals gain fat and energy from the starch, sugar and oil contained in their food. Food containing much vegetable albumen is called "fat-forming."

Food containing much starch, sugar, oil, etc., or "heat-giving,"

Common sense would indicate that the relative proportion of flesh-forming to heat-giving principles supplied in the food ought to vary under varying circumstances. Thus, there ought to be a larger proportion of flesh-forming material supplied to milk cows and growing calves than to full-grown oxen put up to be made fit for the shambles. The grain of the common cereals—oats, barley, wheat and rye, with maize and rice—are all heat-giving foods. Beans, peas and all lentils, also cotton, linseed, rape, and some other prepared cakes, may be classed as flesh-forming foods. As a practical application of the above



Miss Brae 26th.

Two-year-old Hereford heifer; reserve champion at Winnipeg, 1912. Exhibited by L. O. Clifford, Oshawa, Ont.



Champion Shorthorn Herd.

At Winnipeg Exhibition, 1912. Headed by the senior yearling bull, Pride of Albion, first in his class, junior champion, and reserve grand champion. Exhibited by J. H. Melick, Edmonton, Alta.

each pound of dry matter, while, with a ration of 1 to 8.6 only 2.4 pounds were taken. A cow will usually drink from 8 to 10 gallons per day, but if roots be supplied, the quantity will, of course, be considerably diminished.

With pigs, the usual proportion of water consumed does not appear to have often been recorded. In 1887, at Copenhagen, trials showed no advantage or disadvantage between excessive quantities of water and an ad libitum supply. On the other hand, experiments conducted at the Yorkshire College Farm at Garforth in the early part of 1900, showed a decided advantage in curtailing the water supplied to fattening pigs. Two pens of six pigs each were fed with a mixture of equal weights of barley meal and "sharps." In

facts in the everyday feeding of stock, let us take, for instance, the case of a milk cow. We feed her well, we expect her to remain in a healthy, thriving condition, and at the same time supply us with a large yield of good milk. We know this milk is model food, otherwise it would not alone keep a growing calf in healthy condition for weeks. It contains the mineral matter necessary to form bone. It contains casein or curd of milk, which is analogous to albumen, the main principle of lean of flesh. It contains butter, as well as sugar of milk, both of which go to form fat or animal energy when consumed by the calf. It also contains a large percentage of pure water.

Now, if a cow is to remain in full milk and produce good milk, she must be supplied with food the essential elements of which are capable of producing good milk. We would give the food in a sloppy condition and in a bulky form, making silage, pulped roots, chopped hay or straw, and such like, a basis, all of which are only more or less nutritive. This bulky food would help to distribute the more concentrated food through the large stomach and intestines. In this way there is more chance of the nutritive properties being assimilated by the animal. The concentrated food ought to be supplied in the form of lecithinated cotton cake, linseed cake, or bean meal, or a mixture of these, and for the reason that cotton cake and linseed cake both contain a large proportion of oil and other fat-forming matters, which would go to form butter, as well as sugar of milk. Cotton cake, linseed cake and bean meal also contain a considerable percentage of flesh-forming matter which would go to form casein or curd of milk. If the concentrated and bulky portions of the food supplied to a milk cow were mingled in certain definite proportions, most of the nutritive properties would be extracted and assimilated by the animal, and the excreta would be of very little manurial value.

Care should always be taken that food be supplied to stock in a palatable condition. Much food is wasted in producing what is called animal energy; that is to say, wasted in keeping all the functions of the body in a state of activity, in producing respiration, in circulating the blood, and in keeping an animal warm. And if such is the case under ordinary circumstances, what must the waste be when animals are exposed in badly-sheltered yards and open fields, with a biting east wind chilling them to the very bones?

England. EDWARD CONNER.

THE FARM.

Fixing the Farm Well.

Editor "The Farmer's Advocate":

The time will soon be here again when the farm wells are likely to become low in water, which is supposed to be a cause of typhoid fever. This is the time to clean them out and make any necessary repairs. The top is very apt to become rotten and unsafe before one is really aware of its condition, and, if the well is curbed, the top of the curb goes the same way. In such a case, a good way to repair the top is with concrete. Dig a trench about six inches wide all around the outside of the top of the curb, going down about four feet, if the soil is clayey, and if loose, down to a solid foundation. Into this trench pack concrete made with one part good cement to about five of coarse gravel. Whether it is advisable to use any stones in the mixture, I cannot say, as my first attempt was made in this way, and, although I wet the stones thoroughly and watered the concrete while drying, the ring broke up into big chunks the next winter, and the break generally occurred where there was a stone. What caused the breaking I do not know. The concrete was made rather dry (not sloppy, which I now think is better). The top of the well was left uncovered, and full of water. At any rate, I blamed the frost for the damage; but whether it got under the ring or acted on the water which may have soaked into the concrete, or whether the ring was weakened by the stones, I could never decide. But, in the next attempt the stones were left out, the concrete made a little stronger and wetter, and a top of inch boards put on the well. The concrete extended only to the surface of the ground, and, as the well is not used in winter, it often becomes level-full of water. It might be better to extend the concrete up about two feet, and bank up with dirt. However, I have had no trouble with it since, and have now no fear of the well caving in at the top. The dirt does not seem to run in to any appreciable extent, but if the water were used for human consumption, I would want to extend the concrete at least two feet higher. This could be done by driving the foot-boards down endwise between the wooden curb and the concrete ring, leaving a six-inch space, and banking up and adding the concrete alternately. A concrete curb can be put in the bottom of the well by making a smaller wooden curb to go inside the present wooden one, and fill in between with the concrete, which in this case might be mixed up almost dry. If the bot-

tom is sandy, this is a good way to fix it. After the concrete hardens (it will take longer than on top), the inner wooden curb may be removed and the well deepened by taking out the sand inside the concrete, letting the latter sink, taking the old wooden one with it, if necessary. By using an inner curb, the concrete can be extended all the way up, but perhaps it would be cheaper to use old brick, set on edge, and packed behind with gravel or sand; but if the well walls are solid clay, I doubt if any curbing is necessary, except at the top, and perhaps at the bottom, also. A concrete top can also be made, preferably in halves, and strengthened with wagon tires, the same as a silo.

Perth Co., Ont.

J. H. BURNS.

Reap a Surer and Quicker Return in Ontario.

The accompanying illustrations of standing wheat, submitted by John Warner, Haldimand County, Ontario, show what underdrainage and



Drainage Pays.

Note the crop of winter wheat growing in a ditch in a Haldimand County field.

good tillage accomplish in producing a crop. Mr. Warner is seen standing in the field of grain. He is five feet six inches tall, so the wheat is a good length. The other illustration shows clearly the advantage of drainage, the wheat growing right down into a ditch. Continuing, Mr. Warner writes: "The sooner the farmers of Ontario realize that it is not necessary to look to the West for big dividends, but to drain thoroughly and



A Fine Prospect.

A field of winter wheat on a drained farm in Haldimand County, Ontario.

reap a surer and quicker return than from Western sub-division investments, then will your efforts as the 'best friend of the farmers' be crowned with success. Find your paper a great help, and might add that, by taking your advice on a certain matter have been well repaid the subscription investment has been repaid twenty-fold."

A Satisfactory Root House.

Editor "The Farmer's Advocate":

Our root house is situated in the south-west corner of the stable, and is about 14 feet square and 9 feet high. It was originally put in for a box stall, but for over twenty years has been used to house the roots. The roots are put in from the barn floor, and fall in one corner. I have never found it necessary to provide any extra ventilation into the pile of roots, and the cellar has been filled some years right up to the ceiling. We find the first place the roots heat and spoil is where they fall into the cellar, and I always endeavor to keep them thrown back and as much dirt removed as possible, using from this portion first when starting to feed.

The floor is of earth, and the roots keep well on it, but I have found that it was necessary to strap the walls and board up with rough lumber, as otherwise the roots became frozen to the stone wall, and were spoiled for a foot or so into the pile. I do not think that it would make much difference whether the floor was cement or earth, but would suggest the latter as being less expensive.

My cellar is ventilated from the top by the intake chute, also by a window in the wall, both of which can be closed in frosty weather. This is all the ventilation that has ever seemed to be necessary. The diffusion of air through a pile of roots would be slight, and depend chiefly on the temperature of the air above the roots and that contained in the interstices between them. If air was admitted at the bottom of the cellar, it might move a little more freely through the pile.

When the root cellar is inside the barn, the danger of freezing the roots is not great, as the stock keep the air on two sides above freezing point, and it is only necessary to close the lid of the chute to keep cold air from blowing down from the barn above.

Huron Co., Ont. JAMES B. TIERNAY.

Use the Plow and Cultivator.

Editor "The Farmer's Advocate":

Our soil is a clay loam with gravelly subsoil. The method we follow in after harvest cultivation is to plow lightly, as soon as the crop is removed, about two and one-half to three inches deep, and as far as possible roll and harrow each day's plowing the same day. This is to conserve what moisture there may be in the soil. The sweep harrow is used two or three times, and if the soil is lumpy it is rolled again, the object being to get the surface soil as finely worked as possible to induce any weed seeds present to germinate. If the soil is not too hard the plowing is done with a gang. Otherwise the two-furrow plow is used, or the single furrow with a wide share attached. If there are any thistles or perennial weeds, the soil is allowed to lie for a while after being worked down until the thistles begin to show. The cultivator with wide teeth attached is then used both ways. This gives them a severe setback.

We have sown rape as a catch crop, but the results have not been very satisfactory. The trouble has been lack of sufficient moisture in the soil to start germination. When used as a catch crop it should be sown before the first of August, and there is not much use in sowing it at all unless there is an abundance of moisture in the soil, so that growth will be rapid. Where the land is intended for corn or roots, fall rye should give good satisfaction, if sown about the middle of August.

It will provide a fair quantity of pasture during the fall and spring. What is not eaten may be plowed down and will add humus to the soil. As a rule, it is not wise to sow a catch crop unless the season is moist enough to induce a quick, vigorous growth.

After-harvest cultivation, to be very effective in destroying weeds, must not be delayed after the crop is removed. It has the most effect on perennials. As a rule, there is not much moisture in the soil at that time to cause many

weed seeds to germinate, and with the exception of fall annuals, not many of these will be destroyed. It will, however, prevent many late weeds, such as ragweed, from ripening their seeds.

The shallow working of the soil in the summer puts the land in splendid condition for fall plowing, especially if the season be dry. It also helps to render the plant food in the soil more readily

available to the following crop, and as a general thing grass seeds make a better catch on land which has been cultivated shallow the previous summer.

Brant Co., Ont.

LESLIE TENNANT.

The Common Grain Rust.

Reports of rust in certain sections of country have brought forth considerable inquiry regarding this disease so common among cereal crops the world over. There are several species of the rust family, but the most important of these is the common black rust of grain (*Puccinia graminis*). This species attacks oats, wheat, rye, sometimes barley and several of the grasses. This rust has two host plants—a grain, and the common barberry tree (a host plant is one upon which an insect fungus or other plant lives to produce its own life cycle). A part of the life cycle of the disease is completed on the barberry, the remainder on the grain. Rust is a sporadic disease; that is, it is reproduced or spread by spores. On the barberry, the rust attacks the leaves, the upper portion first showing the disease, when a number of small, flask-shaped bodies break through the upper epidermis or leaf skin. As time goes on, a second stage of the disease is reached, and spores break through the under side of the leaf. It is these spores which germinate, and upon the different grain and grass hosts penetrate the stomata or small openings in the plant's outer skin, enter the grain plant and begin to grow. Two types of spores are produced on the grain or grass plants. The first type, called uredospores, are reddish, and thus the plants show a reddish tinge where affected. This is the stage at which the rust is generally first noticed. As time goes on, the careful observer notices that the affected areas are showing a darkened color. This is caused by the production of a different type of spore (teleutospores), which are dark in color, and which appear just previous to or at harvest time. The blackened appearance is familiar to all who have had experience with the rust. This last type of spore will not, as a rule, germinate until it has been exposed to outside weather for all or nearly all of the winter. These germinate and attack the barberry, thus completing the life cycle.

The injury is done by the mycelium or body of the fungus using up the sap of the oat plant as it travels upward, laden with food material for the development of the seed. It is the same thing as tapping a spring. With a large portion of the food supply cut off, the seed is shrunken, and the amount of damage done depends upon the severity of the attack. Sometimes the attack is largely confined to the leaves of the grain. In such cases the damage done is comparatively light. It is only when the stems are attacked that the rust assumes dangerous proportions.

Rust is always worst in seasons of much close, damp weather, when the atmosphere is laden with moisture. The spores must have moisture to germinate, and they are carried by the wind from place to place, travelling in a moist air. Plants in the low places in the field are more subject to attack than those on the higher land. Late grain, or grain weakened by wet soil, or held back by other causes, is more susceptible than early grain or grain on well-drained land. The only means of control, then, is to destroy all barberry bushes, sow resistant varieties, for there are some varieties much more readily attacked by the fungus than others; sow the grain early and under-drain all low, wet soil.

THE DAIRY.

The Gases of Emmental Cheese.

Why holes in cheese? What makes them, and what do they contain? Exhaustive research alone can solve this tangle, but it is believed that the investigation reported in U. S. Bureau of Animal Industry Bulletin No. 151, bearing the title at the head of this article, has provided both a clearer definition of the problem and a sound basis of fact.

The so-called "eyes" in Swiss cheese are, as is well known, its most prominent characteristic, and its commercial value is largely dependent upon the proper size and spacing of these eyes. While the hole is not the whole of it, much depreciation in value of this popular variety of cheese, in both domestic and foreign kinds, is known to exist because of defects in eye formation. Hence, to the biological chemist their formation is a fascinating subject, and to the cheese-maker a matter of great importance. In certain districts the dealers rely almost entirely upon these features, and, shortly after the eyes have reached their proper development, relieve the maker of further care. Therefore, the American makers of Swiss cheese are unable to attend to their cheeses in that mellowed old age upon which so much of the fine flavor of a true Emmental

cheese depends. Although this quick marketing may be deprecated, it nevertheless raises the relative importance and adds significance to whatever knowledge can be gained concerning the process of eye formation.

The experimental work described in this bulletin, which can be secured by those interested from the Secretary of Agriculture, concerns the chemical contents of these eyes, the gases of which are immediately concerned in the process of their formation, and offers the following conclusions:

The gases of normal "eyes" in Emmental cheese are exclusively carbon dioxide and nitrogen, and of these only the carbon dioxide is of significance.

The nitrogen accompanying the carbon dioxide in normal eyes is that of air originally occluded in the curd at the time of manufacture.

There sometimes occurs during the initial fermentation an evolution of gas, characterized by the presence of hydrogen. This is believed to be due to the gaseous fermentation of sugar.

The hydrogen from such an initial fermentation may sometimes linger to contaminate the gas of normal eyes.

The two fermentations are distinct, and are characterized by their gaseous products. The one is detrimental, the other that demanded of a good Emmental cheese.

High oxygen-absorbing power, combined with low permeability of the cheese to air render the interior thoroughly anaerobic, and consequently favorable to the growth of anaerobic bacteria.

A comparison between the amount of carbon dioxide evolved and the total volatile fatty acids shows that the activity of the propionic bacteria of Von Freudenreich and Jensen is not sufficient to account for all the carbon dioxide found.

It was found that cheese was capable of retaining a very large amount of carbon dioxide.

The possibility is suggested that there are two phases in the formation of normal eyes, a saturation of the body with carbon dioxide, and an inflation of eyes; and the bearing of this hypothesis on the production of gas by a specific cause, is discussed.

Autumn Feeding of Dairy Cows.

Editor "The Farmer's Advocate":

Silos are not in use in this district. The season is not long enough to have any degree of certainty about maturing corn suitable for silage, although occasionally we have a season such as that of 1911, that matures corn such as Compton's Early all right; so that, what little corn is grown for fall feeding is mostly fed as it is taken from the field, which usually lasts from two to four weeks. We find that we get best returns from feeding when the corn comes to the roasting stage, and we have not tried any of the millets.

Pastures are generally getting pretty well eaten down by the last of July. By that time, we plan to have some oats, peas and vetches (which do better sown rather more thickly than if grown for seed), ready for cutting, and which should be sown a portion every week or ten days, the size of the plot depending upon the size and capacity of the herd. This should last until the corn is ready, although we usually have some second-growth corn to help out through this season.

Corn and green fodder are always fed in the stable; and, if pastures are very short, the stock are kept in the stable the greater part of the day to increase the supply of manure for fall use. We prefer to have two fields for pasture, and change occasionally. Change of pasture is good for cattle, especially if the change is a good one.

We never feed off or even allow the stock on new-seeded meadow; it might be good for the stock, but ruinous to the next season's crop of hay or pasture. The feeding of after-growth clovers is mostly confined to that portion of last year's seeding that is intended for pasture the following spring, and which is better not cropped too bare.

Have not tried sowing such crops as rye, oats, turnips, or rape, on unseeded stubble. Would think the season too short, after the grain is harvested, to get good results. I might say that we are now seeding with rape a field of last year's seeding of clover and timothy, that is intended for roots next season. After getting a light top-dressing of manure last fall, we put on something like thirty cart loads to the acre and plowed in lightly, dragged it over with plank drag and a few turns with the smoothing harrow, running lengthwise with the plowing; got it ready for seeding, which was done with a disk drill, sown from grass-seed spouts turned to drop the seed in front of disks. After sowing, one scrape was given with harrow, and then rolled.

Colchester Co., N. B.

J. R. SEMPLE.

The Cow's Version of Her Position.

The keeping of a large number of boarder cows is not a subject which would rouse the owner's feeling to poetic parlance if he knew the loss he sustained, yet the following, which the writer, Berton Braley, in *Farm and Fireside*, titled "The Easy Mark," is quite a true exposition of the case:

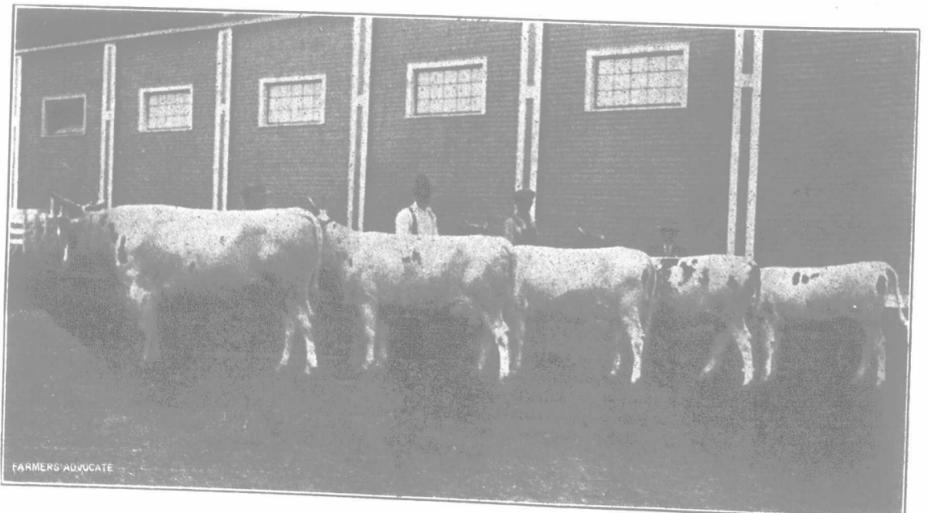
Said the scrub-bred cow to the high-bred cow,
"Say, you are an easy mark, I vow.
You eat no more than a scrub like me,
You're treated no better that I can see;
Yet you give that farmer three times as much
In payment for board and room and such;
Three times the milk, and it's better, too;
I'd hate to be such a fool as you!"

Said the high-bred cow to the scrub-bred cow,
"I'd like to shirk, but I don't know how;
I'm not intending to pay so well,
And why I do it I cannot tell;
I reckon it isn't for me to say,
I guess I was simply BORN that way!
No matter how hard to stop I try,
I keep on boosting the milk supply."

Said the scrub-bred cow to the high-bred cow,
"You're up against it, I'll allow;
You're padding the farmer's increment,
While I'm not making the dub a cent.
I know this much, if I were he,
I'd banish all scrawny cows like me,
Who eat as much as their betters can,
And bunco their board from the farmer-man."

"But I'm not the farmer, and so I'm here,
Eating my head off year by year,
And I'll do it as long as I can, I vow."
Said the scrub-bred cow to the high-bred cow!

The milk-dealers of London, Ont., have formed themselves into an organization called the Retail Dairymen's Association of London, in order to uniformly improve the sanitary conditions, as required by the local Board of Health. Owing to the high cost of labor and foods, rendering milk production barely profitable, it was found necessary to advance the price of milk from 6 cents to 7 cents per gallon, after Thursday, August 15th.



Ayrshire Herd at Calgary Exhibition, 1912.

Headed by the champion bull, Netherhall Douglas Swell. Exhibited by J. J. Richards & Sons, Red Deer, Alta.

Feed According to Production.

A business, if it is properly managed, is pushed to its fullest capacity. Each machine in a manufacturing plant turns out as much of the finished product as it is capable of turning out, and to do this it must have the required raw material in proportion. When cutting hay or grain on the farm, the horses are crowded up to the standing crop so as to cut a full swath; that is, the machine is fed all that it will take, or a quantity corresponding with its capacity. Perhaps no other living animal is more comparable with inanimate machinery or with business management than is the dairy cow. She is in a sense a machine, and to a larger degree than some seem to think, her output depends upon her feed; but there is another way of looking at it, viz., the amount of feed which may be profitably given the cow depends largely upon her production. The amount of food must naturally be regulated according to the yield of milk. A cow giving 60 pounds of milk per day requires more feed than one giving 20 pounds per day. Yet there are scores and hundreds of herds in the country in which each individual animal gets the same amount of feed, regardless of the amount of milk given. Like the machine, there is a limit to profitable consumption with the cow. If a cow gives three times as much milk as another on the same amount of feed, and the cow giving the larger quantity is fed sufficient to maintain the animal body without loss, the cow giving the lesser amount must make poor use of her food, must waste considerable of it in digestion, and must be an unprofitable dairy animal. Where all cows are fed alike, some of the cows must get an insufficient quantity and others must be overfed, very few in the herd getting the right amount for best results. The starved or partially starved animal must have a weakened mammary gland, and the decrease in milk flow is accelerated thereby. This not only has a detrimental effect upon the cow herself, but exerts a marked influence upon her progeny. The mammary gland of an overfed cow becomes fat, and in this way is the cow's productiveness injured, as well as that of her offspring.

When a half-dozen men sit up to a table, no two will consume the same amounts and reach the same degree of satiety. What satisfies one is only an aggravation, so to speak, to another. Nutrition or feeding should, then, always be individual; that is, food should be fed to the cows proportionate to the amount of milk given. Provided the cows are in good, thriving condition, the quantity of food given should be such that they neither gain nor lose in flesh.

Investigations carried out by Kellner showed that $1\frac{1}{2}$ to $1\frac{1}{4}$ pounds of protein, and a starch equivalent of from $4\frac{1}{2}$ to 6 pounds, are necessary, in addition to the nutrients supplied, to maintain life, for the production of some 22 pounds of milk. It may not be practicable in large herds to feed each cow a different amount, according to her milk flow, but this may be approximated by dividing the herd into groups, each individual in a group giving nearly the same amount. It is a comparatively easy matter to group the cows with respect to production, and thus with respect to feed. Every herd of any size must contain several animals which stand practically the same as regards production. These do all right fed the same quantities. But every herd must also contain groups of animals vastly different as to production. There is the 3,000-pound cow, which should be discarded, the medium 5,000 to 6,000-pound cow, the 8,000 and 9,000-pound cow, and perhaps the 11,000 and 12,000-pound cow. And there may be a few record-breakers above this amount. Grouping the cows according to production for feeding purposes, while not exactly individual feeding, is very near it, if the grouping is properly done, and cannot help being an improvement on collective feeding. It stands to reason that it takes more feed or energy to produce 12,000 pounds of milk than it does for 6,000 pounds, and that the cow producing the latter quantity requires more than the one from which only 3,000 pounds is taken.

Of course, this applies only when the cow is in milk. It has been found that, when cows are dry, a ration which contains $\frac{3}{4}$ pound of digestible protein and a starch equivalent of 6 pounds per 1,000 pounds live weight, is sufficient to maintain body weight and supply enough heat for the body. Pregnant cows require a little more digestible protein for the development of the fetus. A calf weighing 80 or 90 pounds at birth contains about 16 to 18 pounds of protein, and for the formation of this, about 25 pounds of extra protein are required in the cow's food during the last five or six months of pregnancy, which amounts to only

about two ounces, or a little more, daily. During the last stages of pregnancy, it is well to cut the bulky food of the ration down, in order to relieve pressure on the abdominal wall and lessen the danger of abortion.

During the summer months the cows are usually on pasture. This is the part of the feeding which cannot very handily be controlled according to flow, but, as the pastures dry off considerably in late summer, and supplemental feeding must be resorted to, this gives a fair chance to control feeding, even in the summer, in the best managed herds.

Feeding must also be done with a view to the quality, as well as to the quantity, of the finished product. Dirty mangers, musty food, and rank-growing, acrid or strong-scented herbage, have a very bad effect upon milk and butter, and too much care cannot be exercised to eliminate all such conditions from the feeding of dairy cows.

In feeding, it must also be remembered that a milk cow requires more mineral constituents in her diet than the beef animal does. Kellner estimates that a 1,000-pound cow, giving 20 pounds of milk per day, requires $3\frac{1}{2}$ ounces of lime and $2\frac{1}{2}$ ounces phosphoric acid, and higher yields of milk require proportionately larger quantities of mineral matter. Good hay, clover or green food usually amply supplies this need. These substances are necessary to promote growth of bone, and young cattle and heifers stand in especial need of them.

The success with the herd depends very largely upon the success of each individual going to make up the herd, and the success of the individual depends on the feed and care given, such feed and care to be regulated to suit the individual, not a general average for the entire herd.

Co-operative Breeding Associations.

Members of cow-testing associations are reminded that, while systematic weighing and testing of each cow's milk is the first step towards definite herd improvement, other measures are necessary, if a thoroughly profitable herd is to be obtained and maintained. In many cases the record of milk and fat serves to point out that some cows are only fit for beef.

If the herd is to be improved to any considerable extent, there should follow careful attention to the comfort of the cows, and a study of the feed question, so as to give each animal the most favorable conditions under which to produce milk.

It is impossible, however, to lay too much emphasis on the wisdom of breeding dairy cows to a first-class, pure-bred dairy sire. In many cow-testing associations the time is fully ripe for members to organize Co-operative Breeding Associations whereby good males may be purchased. Each sire may then be available for herds in which the total number of cows is from 40 to 70. In two years, or when their heifers are old enough to breed, the sires may be exchanged from one section to another, and again after another two years. Thus, if there are three sires in the Association, they may be used for six years with this system of exchange, without any inbreeding; if five sires, ten years.

It is far easier for a few men to club together to co-operate, and buy a good bull, than for one man to take all the risk and expense.

By the use of the pure-bred sire, suitable to the needs and taste of the district, an immediate and substantial increase to each man's income may be expected. An extra 800 or 1,000 pounds of milk per cow is not too much to look for (which no scrub or dual-purpose male would ensure), so that the association can well afford a good price for the right animal.

This will help the man away in the back district just as much as, perhaps more so than, the man nearest the market centers. Now is the time for him to seize this opportunity offered by practical co-operation. His stock and his farm will quickly increase in value if he bestirs himself in this direction.

Members should arrange to meet immediately and organize a co-operative breeding association, which promises new life and vigor to any district.

In the Province of Quebec there already exists an Act under which such associations may be organized. All members of cow-testing associations, officers or members of Farmers' Institutes and Farmers' Clubs, officers and members of Dairywomen's Associations, and owners of cheese factories and creameries, are invited to interest themselves in securing immediate organizations.

C. F. WHITLEY.

POULTRY.

Handling and Marketing Eggs.

The 1911 Yearbook of the United States Department of Agriculture discusses at some length the loss due to bad methods of handling eggs in the Middle-West States. The losses are due to practically the same causes there as here. As the bulk of Canada's eggs are produced by farmers, as is the case in the States discussed in the Yearbook, and as conditions are much the same, our poultrymen would do well to read the following, selected from the Yearbook, and act upon some of the suggestions offered.

In spite of the fact, however, that prices for eggs are better than they were formerly, the producers are not receiving as much for their eggs as they should, considering the ultimate prices paid by the consumers of these eggs. This is not the result of any combination on the part of buyers to keep prices down, for competition is usually sharp enough to cause as much to be paid as the buyers can afford. The real reason lies in the fact that the system of marketing and buying eggs in this section is faulty, and causes a good deal of preventable loss and deterioration. This is mainly because no incentive is offered for care and expeditious handling of the product. In other words, the careful farmer who markets good eggs, as a rule gets no more for them than his careless neighbor who markets poor ones. As a result of this loss, prices paid to producers must be depressed to cover it, and this accounts for the difference between the prices paid for these eggs and the prices charged the consumers.

At first glance, it might be thought that this loss and deterioration was slight and of minor importance. Quite the contrary, however, is the case. From a careful study made of the situation, it appears that the annual loss resulting from these sources in the egg trade of the United States totals about 15 per cent. of the value of the product, or \$45,000,000. In the State of Kansas alone, where the investigations of the Department have been principally carried on, the annual loss is estimated at more than \$1,000,000. The total receipts of three Kansas egg-buyers during July, August and September, 1909, were 706,569 dozen. At 15 cents a dozen, the value of the total receipts would be \$105,985.35. On the basis of 6 cents a dozen less for seconds and checks than for firsts, the loss due to this cause would be \$5,191.26. Of the receipts, 66,449 dozen rots were an absolute loss of \$9,967.35. The total loss, therefore, from eggs thrown out and those deteriorated in quality was \$15,158.61, or 14.3 per cent. of the original value.

To explain the reason for this loss and deterioration, it is necessary to outline briefly the usual method of marketing eggs in this section. The eggs, as previously stated, are produced on the general farm. The income from these is considerable and very welcome, but is, after all, incidental. The care and attention given the fowls and the product are, therefore, usually incidental, also. The farmer gathers the eggs whenever convenient—sometimes each day, sometimes two or three times a week. The eggs are brought to the house and kept until there is a sufficient number to take to the village, or until the farmer makes a trip to the village for some other purpose and takes the eggs along. No particular attention is given to the conditions under which the eggs are kept in the meantime. They may be put in a pantry or cupboard of the kitchen, where the temperature is comparatively high and where the eggs are bound to undergo considerable deterioration in quality or to reach a more or less advanced stage of actual spoiling. Even in these cases, where the importance of a low temperature is realized, and an effort made to secure this by placing the eggs in a cellar, there is a likelihood that the cellar may be damp, and the eggs in consequence become moldy. Likewise, no particular effort is made to obtain clean eggs by proper attention to the nests and by frequent gathering, or to separate the clean from the soiled eggs when taking them to market. Whenever a nest of eggs is discovered in the weeds or about the barn, they are usually added to the eggs in the market basket, without question as to whether they are partly incubated.

As a result, the farmer may start for town with a basket of eggs, part of which are perfectly fresh and wholesome, part of them dirty or smeared, and part of them shrunken or stale, or even wholly spoiled. During the drive to town, it is a common occurrence for the eggs to be exposed to the direct rays of the sun for an hour or two, and subjected, therefore, to a temperature greater than the normal temperature of incubation, 103 degrees. These eggs the farmer takes to the village store, and receives for them a certain price per dozen, which is usually given in trade. The village merchant is not a dealer in eggs from choice, but rather because he feels it necessary to take the eggs, in order to keep the trade of the farmer. If he does not take the eggs, he fears

that the farmer will offer them to one of his competitors, and will in consequence be likely to give that competitor the bulk of his trade. For the same reason the merchant believes that he must accept the eggs as they run, good or bad, fresh or stale, clean or dirty; for, if he does not, his competitors will. This system of buying by the storekeeper is known as the case-count system.

The merchant holds the eggs until he has enough to make a shipment to some egg-dealer or shipper from whom he gets regular quotations. The delay here may be anywhere from two days to a week, or even two weeks. Usually, the conditions attendant upon the shipment of these eggs up to the time they reach the packing house are such as to cause a still further deterioration in the eggs. After they reach the packing house, they are assembled in great enough numbers so that more attention and care is given their handling, and, although the eggs go through one or more sets of hands from this point before they are placed in storage or reach the consumer, the deterioration which they undergo is not so great proportionately.

DELAY IN MOVING EGGS.

It will be observed that the one unfavorable factor which stands out most prominently in this system of marketing is the delay in moving the eggs. There is delay in gathering the eggs, delay in taking them to town, and delay on the part of the storekeeper. Whenever these delays are co-incidental with high temperatures, serious loss and deterioration result. This is evidenced by the poor quality of summer eggs.

The spoiled and deteriorated eggs compose several well-recognized classes, most common among which are the following: Heated eggs, those caused by the development of the embryo in fertile eggs; shrunken eggs, those in which a part of the water has evaporated from the white, causing a large air-cell; rots, those which are totally spoiled; spots, those with localized areas of bacterial or mold infection; dirty eggs, those soiled with mud, droppings, or the contents of broken eggs; and checks, those slightly cracked.

While there is some deliberate delay in the fall, caused by farmers holding their eggs on a rising market, the majority of the delays are due simply to indifference, and consequently are preventable. The country stores are directly responsible for the delay, both on their own part and on the part of the farmer, because of the case-count system of buying which they employ. This system has nothing to recommend it, aside from the fact that it is a little less trouble to the storekeeper. On the other hand, it encourages carelessness and delay on the part of the farmer, because it inflicts no penalty for poor or bad eggs. It has even bred in some farmers (who would not expect to sell damaged vegetables or grain for full value) a feeling that an injustice is being worked on them if a buyer candles the eggs and refuses to pay for those which are rotten.

As a result, therefore, of the delays and carelessness, coupled with high temperatures, there is, in connection with the handling and marketing of eggs in the Middle West, a great loss, which, because preventable in a great measure, is a wanton waste. This loss is borne both by producer and consumer, but falls mainly on the former. The consumers suffer considerably in being unable to secure good palatable eggs in sufficient quantity, and, in consequence, there is a curtailment of consumption. It is only fair to state, also, that these inferior eggs which find their way to the tables of city consumers, are often mistaken for a cold-storage product, and the storage industry is thus unjustly discredited.

SUGGESTIONS FOR IMPROVEMENT.

The following suggestions for the various persons interested in the egg trade are given:

For the Producer.

1. Improve your poultry stock.
2. Keep one of the general-purpose breeds, such as the Plymouth Rock, Wyandotte, Orpington, or Rhode Island Red.
3. Provide one clean, dry, vermin-proof nest for every four or five hens.
4. Conclude all hatching by June 1st, and sell or confine male birds during the remainder of the summer.
5. Gather eggs once daily during ordinary times, and twice daily during hot or rainy weather.
6. In summer, place eggs as soon as gathered in a cool, dry room.
7. Use all small and dirty eggs at home.
8. Market eggs frequently—twice a week, if possible during the summer.

In taking eggs to market, protect them from the sun's rays.

10. In selling, insist that the transaction be on a loss-off basis, for, if care has been given the eggs, this system will yield more money to the producer.

For the Country Merchant and Cash Buyer:

1. Candle, and buy on a loss-off basis.
2. Allow the producer to see you candle his

eggs occasionally, and return those rejected, if he wishes them.

3. Pack carefully in strong, clean cases and fillers.

4. Do not keep eggs in a musty cellar or near oil barrels or other odoriferous merchandise.

5. Ship daily during warm weather.

For the Railroad:

1. Provide a covered portion of station platform where egg cases can be stacked, and see that the agent stacks them there.

2. Provide refrigeration for the eggs on the local freight.

3. Where refrigerator cars are used on local freights, see that the doors are kept closed when not loading.

4. If refrigeration cannot be supplied, provide stock cars for this purpose during the summer.

5. Where box cars are used for eggs, do not allow freight, which may hurt their quality, such as oil barrels, to be loaded in the same car.

For the Car-lot Shipper.

1. Buy strictly on a loss-off basis.
2. Encourage the small buyers to trade on a loss-off basis.
4. Co-operate with other shippers and with officials in bringing about this system of buying.
5. Keep the subject agitated and before the people; in other words, educate them.

Frozen and Dried Eggs.

Frozen and dried eggs intended for human consumption are largely used for cooking purposes where inferiority may be concealed, as in baking cakes or making custards, omelets, pies, etc. The traffic in eggs sold for drying and freezing has greatly increased in the past few years. Strictly fresh, marketable eggs in the shell command a high price, and there is difficulty in meeting the demand for them; but large quantities of questionable eggs, often bought at very low prices, have been broken out for cooking purposes by disreputable firms, being preserved by freezing or drying until ready for use. Some dealers, however, manufacture a satisfactory product by the use of good eggs handled under proper conditions.

There is no objection to drying or freezing good eggs under proper sanitary conditions; in fact, there are some advantages to be gained by preserving eggs in this manner, although the manufacturing processes devised by man, as a rule, do not improve the quality of nature's work. Conditions of modern life and commerce must, however, be met, and dried eggs or eggs in a frozen condition may be shipped long distances, and require less space for transportation and storage than do eggs in the shell.

As a result of investigations instituted by Secretary Wilson, the United States Department of Agriculture has recently issued two publications that give practical suggestions for correcting some of the existing practices and conditions which are at least partially responsible for the unsatisfactory products now found on the market. These publications are Bulletin 158 and Circular 98 of the Bureau of Chemistry, entitled, respectively, "A Bacteriological Study of Shell, Frozen and Diced Eggs," and "Practical Suggestions for the Preparation of Frozen and Dried Eggs."

GARDEN & ORCHARD.

Box Packing Fruit.

If there is any one phase of the Western orchardist's work that has tended to bring him to the front ranks of the fruit-growers, it is the boxing of all his fruit. Catering to the tastes of the purchasers in a way which pleases their "fancy" and at the same time meets their needs or fits their peculiar circumstances, is one of the basic principals of trade.

This the Western orchardists have done, and by so doing they have gained for their fruit a name which has back of it not only the meeting of the superfluous demands of the exacting consumer, but also a quality that has been fully self-advertising to these customers.

It is principally due to box packing that this is the case. If we look at the market to which the fruitman is catering, we will see that it is really not the big packers, jobbers, not even the wholesalers, but really to the city consumer, his needs and wishes must first be catered to. His needs should have first consideration, and then, as far as possible, cater to his tastes, even though they may seem exacting.

The consumers of apples have long been accustomed to packaged goods. These packages are neat, sanitary, and in sizes that lend themselves to the peculiar conditions of the majority. But they are also attractive, and help the goods they contain to advertise their own worth. If the manufacturers cater to these people in this way, they do it because it pays. If it pays them to put up their goods in this way, will it not also pay the farmer? His orchard is really a great factory, turning the elements of nature into a

form in which they become of value to man as a food. Then, if the farmer is a manufacturer, he must keep abreast of the times and market his goods as a business man, in a businesslike way.

These statements being true, let us see how far the box-packed fruit meets the demands of its own selling agent.

The consumers' needs must be the paramount consideration (and we shall deal with the apples, as they are the big crop). The consumer needs his fruit in small packages, as his storage room is limited. Many not having cellars are compelled to use pantries, etc., and there his needs are met exactly by the box. It is small and easily stored, not cumbersome to handle or move; if it is necessary, easily carried up successive flights of stairs, none of which demands the barrel meets, and without the box he must buy in paper bags, which he has come to, shall we say, detest.

Not only does the box meet these, the first demands of marketing, it also insures to the customer good fruit, as each apple must be placed in the box separately by the packer, who will easily see and reject a decayed or poor-quality specimen. He gets the apples all one size, for a packer can't pack an apple that goes 125 to the box along with one that goes 80, 88, or 96 to the box. This has an economic advantage for the consumer. If there are children in the family, they will not waste half the fruit, for a youngster will invariably pick the biggest apple he sees, even if he can only eat about one-third of it. Then, too, grown people don't care, as a rule, to start in on a large apple after a hearty meal or late in the evening.

The consumer not only wants small apples for these reasons, but also because the small apple packing 2-3, running about 125 or a little less to the box, is more likely to have better color and better grain. The large apple is inclined to be coarse and poorer in color, less of them in a box, and therefore fewer pounds of fruit for the price paid, all of which appeals to the town and city customer.

Not only do we need to consider the consumer, but also the retail merchant. His object is to get goods for which he can secure a sale, with as little advertising as possible. Hence, if his stock, through its real value or the condition in which it is marketed, is an effective self-advertiser, that means money to him.

Will boxed apples do this? They most assuredly will. Apples in barrels he can't display in his window to advantage, because the package is too cumbersome. If he opens a barrel in his store, he must place it in front of the counter, and he loses considerable there through customers helping themselves. If he can't display them, he has to talk about them in order to make sales, and that makes fewer sales. Boxes he can open on the end, side, top or bottom. He can put them in his window and on the shelves behind the counter. The fruit is all wrapped, and looks neat, clean, and each apple sound. The fruit is in even rows, all apples are the same in size, and their color is even, owing to the selection by the packers. He has an article that may be displayed in many places in his store, and because of all these qualities helps a great deal to sell itself.

The Westerner has boxed his fruit, and by so doing he pleases the retail merchant, he satisfies the needs as well as the tastes of even the over-particular customer, he sells a better quality of fruit because he selects each apple. Consequently, he gets more for his goods. He sees it has paid him to box pack, and so he continues to hold his ground on any market he cares to enter.

B. C.

WALTER M. WRIGHT.

The Apple Situation.

By Peter McArthur.

Sir Jingo McBore, when he's gay,
Is a jolly old soul, so they say.
He gives his big purse
A "Ride a cock horse,"
Then pets it and puts it away.

* * *

The farm work has made me lose a lot of fun this year. I suspected it all along, but it was not until the young ducks forced themselves on my attention by falling into an open well, or, rather, a discarded well, that I realized how much I was missing. Sh-h-h! I know I shouldn't have an open well on the place, but I have been busy, and I am in no humor to take a lecture from anyone. I'll get it covered some time—and there are a whole lot of other things that are being neglected that I shall attend to about the same date. The other day I refused to take a scolding from Mr. Clement—though I deserved it—for not getting in a cover crop in the orchard. But I hadn't the time myself, and I couldn't hire anyone. I did my best, and I am not going to take any back talk from anyone. But to get back to the ducks. This summer, the most motherly Buff Orpington on the place brought out eleven ducklings, and her life is one round of worries and surprises. They pay no attention to her, except when they want to smuggle up to her to keep

warm. They are not interested in the things she scratches up for them, and anyone can see that she is worried to death about the reckless way they get their feet wet. She must be awake half the night listening for symptoms of croup, and how they have escaped the hives must be a mystery to her. When they got in the well, she was sure a judgment had fallen on them for their disobedience, and she didn't care who heard her say so. It took the city visitor half a day to rescue them, and, like the melancholy Jacques, he moralized it into a thousand similes. First, the old hen, like a fussy reformer, was trying to change the nature of the ducks and keep them from their natural element. Then, the ducklings, dodging out of his way when he was trying to dip them out of the well, were like farmers who will not trust those who are doing their best to help them. Then, there was something about the ducks taking to water, just as innocent investors take to watered stock. And to cap all, there was an excellent, beautiful moral, but I have forgotten the moral. Somehow, I always do. I didn't think of the ducks again until after a shower. They hurried past me in a wild chase for angle-worms, though each of them seemed to be filled beyond the Plimsol mark already. The way they yanked the worms out of the ground and fought and sputtered, reminded me of the Boston lady's description of a suffragist tea-party: "It was all giggle, gabble, and gobble." And after they had finally filled themselves, or, rather, had become so overloaded in their crops that they couldn't walk, they squatted in the sun and talked things over in a dreamy way, and wiggled their little tails, and paid no more attention to the scolding the old hen was giving them than I pay to the scoldings I get. I hope to get a few hours off to observe those young ducks carefully before they grow up and have settled opinions, and begin to talk the politics of the barnyard.

Sir Jingo, like you and like me,
In the public school learned A B C.
And he worked all his sums
On his fingers and thumbs,
But a college made him LL. D.

I wish I could listen to-day, instead of talking. Let me confess, right in the beginning, that I am all balled up. Some things that have come under my observation lately have convinced me that the producer of farm products is not getting a square deal, and I have been trying to think out what should be done about it. To begin with, we would have to think out just what would be a "square deal," and then how we could get it. Perhaps some of the men who have been farming all their lives have thought out this problem and can tell us just what would be right and how we could get it. If there are any such, I wish they would write and tell me about it, for I am feeling to-day like the Irishman who had fallen down a spiral staircase, "I am fatally twisted." For instance, I do not believe that a dollar a barrel is a fair price for standard apples. Yet the fruit on many orchards—orchards that have been pruned, sprayed and cared for—has been sold during the past week at that price. In some cases the apples are to be paid for at this rate when they are picked and delivered, and in others the crop was estimated on the trees and paid for in a lump sum. But a dollar a barrel was the offer made by the only dealer who visited the district. The fact that there is only one buyer is somewhat mysterious, and invites investigation, but the price paid is what galls me the most. When living in a city, I bought apples at prices ranging from four dollars to twelve dollars a barrel, and I have no reason to think that city prices have gone down. I learn from the best-informed sources that apples are going to be dearer in the cities and other markets than they were last year. Yet the producers of apples are selling for a dollar a barrel. And it seems to be a question of taking that or nothing. Farmers who tried to act independently have had amazing experiences in the past. One lost his crop because he could not get barrels, and another, after selling his whole crop through a commission house, found that he owed the commission men twenty-nine cents. That does not look very encouraging for me. For some reason, the buyer did not come near me, though he knew about the orchard. Perhaps I am like the parrot in the story, "I talk too much." But I can tell you right here that if I do not get a square deal on my orchard, the talking I shall do will be a caution. With free markets, commission houses working in competition for fair profits and a transportation system that gives similar treatment to all, I should be able to market my apples so as to get a fair share of those city prices. Anyway, I'm going to try.

Sir Jingo McBore, at the start,
As a house-painter, acted his part.
The house and the shed—
He painted them red,
And now he's a patron of art.

Of course, we might have a co-operative Association to handle our apples, but I do not see the necessity. As a matter of fact, I did try to talk it up, but soon found that it would mean a lot of trouble and expense for the organizer, and a large amount of public spirit on the part of the members to keep it going. Of course, it would pay in the end, if we got a good co-operative association organized and working, but in the meantime why should I not be able to market my apples, without such aid? The only justification I can see for an apple association would be the economies that could be practiced by selling in quantity. The members of the association could share the expenses of selling, financing and managing and make a saving for each, but the advantage gained in that way is the only one that seems to me to be justifiable. If it is necessary for us to unite in order to get fair treatment from the railways, the commission houses and others we have to deal with, then there is something wrong that should be remedied at once. The loneliest and weakest shipper should be able to get to the market with his products as cheaply as anyone else, and anyone who tries to hold him up should be punished. If co-operation is used for the purpose of effecting economies, it is all right, but if it is done for self-protection, it is wrong, and it seems to me that I have heard it urged that the great advantage of co-operation is to secure the rights of the shipper. As I shall have to ship my own apples, I shall have a chance to find out just what the conditions are, and that will be of more interest to me personally than any advantage I might gain through co-operation. If Sir Jingo McBore is putting a crimp in the apple business, I want to know it, so that I can properly celebrate him in song.

Sir Jingo McBore, when we're goaded
By care and our hopes have exploded,
Cries, "Tut! Fie, for shame!
You must all play the game!"
But he plays it with dice that are loaded.

THE FARM BULLETIN

Prophecies Which Failed.

Editor "The Farmer's Advocate":

A short time ago I hitched up my driving horse, and started off on a five mile drive, and as I drove along, my thoughts went back to the months of March and April. I began to think of the spring prophets of those months. The first had a gloomy look, as if he had lost his last friend, and he began like this: "If this miserable weather does not let up, we farmers of Essex will be ruined; there will be no oats or barley, in fact no spring grains of any kind, and we might just as well go out of business." I looked around me, and, as far as eyes could see on the one side, were beautiful fields of waving grain, the lovely green oats, waving in the wind, reminding one so much of a storm tossed lake. As I looked at the oats reaching almost to the fence tops, I thought—Oh spring prophets how little you know.

In another direction I saw a number of grand fields of ripening barley, which satisfied me of the fallacy of the first prophet.

"The other prophet was the corn prophet." He wore the similar long face of the first, only a trifle longer. He gave a deep groan and sighed as he told us he did not know what the farmers up here were going to feed their hogs, as there would be no corn at this late date of sowing, and suggested killing the young pigs. As I pondered on this prophet I glanced in another direction, and everywhere fine fields of corn met my eye, with a more beautiful shade of green than any artist could ever hope to produce. I will admit that our corn crop is far below our average crop, but I do not think our hogs are in danger of being prematurely slaughtered because of the scarcity of feed. As I urged on my driver, I thought what a miserable set of thankless ones we are, in this fair Canada of ours.

As I drove along I began to talk to my horse. Did you ever notice a person, when alone, get into that habit? I began to tell her of her faults—I wonder how many of us like to be told of our faults. I think "Dolly" has a good deal of human nature but I don't think she got angry at what I said; she acted too much like Peter McArthur's family driver. She is very much like Mr. McArthur's, only she is a little better than his; she has never stepped on her nose yet, and she can take a decent jog when she cares to, which isn't often. "Keep on the road you know is safe. You have been over it hundreds of times; and never mind that automobile, it won't hurt you if you give it all the road, there is no use of your acting up, for the auto isn't frightened of you, but you must give all the road and half the ditch for fear the road is too narrow. You didn't help pay the taxes for maintaining that same road but I did, 'Dolly', and if you were not

gentle enough for a child to drive, I should not be enjoying this little outing with you now."

I have read with much interest Peter McArthur's writings and I have been amused and helped by his descriptions of his orchard and his bonfires. If he lived in our county he would have to keep bonfires going from early spring till late in the fall, or he would be continually on nettles from the time tobacco was sown, till it was hung in the barn. It would keep him chopping all winter to keep fires going spring and fall. It would be worse than his hay field. I can sympathize with him as I have been in the hay field this summer. We hear so much about the new mown hay. It's all right, in a bottle of perfume, or in a thrilling, soul stirring poem, or even in the latest novel, but, as Mr. McArthur says, when you see the beautiful rain clouds gathering, and you strain every nerve in a desperate effort to get that last pile of hay put up, to shed that shower, and, when it comes, you drop down almost a total wreck, the perspiration dropping from your face, and you feel as if you could throw a book at any one who breathes the word new mown hay.

I should like Mr. McArthur to tell us if he has any new method of teaching a calf to drink out of a pail. I am sure we would like to know how he does it. I have often wondered whether he is a practical or theoretical farmer. By his picture I almost believe he is the latter.

Essex County, Ont. WOMAN FARMER.

Egg-laying Contest to be Repeated.

The 39th week of the North American egg-laying contest at the Storrs (Conn.) Experiment Station concluded with 1592 eggs laid, a decrease of 20 from the previous week. Some of the pens (5 birds each) of late beginners laid as many as 30, 28, 27 and 26 eggs each. For the most part, however, molting, broodiness, etc., kept the scores down. Eleven hens have passed the 700-egg mark. Yost's White Leghorn pen are yet in the lead with 838. Thos Barron's English pen (four birds now) follow with 794 eggs. All the 700-egg hens are White Leghorns, except the Beulah Farm White Wyandottes (Hamilton, Ont.) which were well up to the front with 786 eggs.

The result of the competition is, of course, still in doubt as to the winners; the data available for future fundamental labors in perfecting strains of heavy yielding types, is invaluable. One of the lessons taught tends to upset a theory long held as absolute, that of the so-called type controlling egg yield.

It has been established beyond a doubt that the types ascribed to each variety or breed of fowl, as the egg type, has failed to materialize to any such extent as would require a given conformation for egg production in a specific fowl. Long-bodied deep-keeled, short-bodied, narrow-backed, blocky-bodied—all kinds of shapes, sizes and weights are found in both the heavy and light layers. Some startling facts will be adduced from the findings in this competition, that will set at rest any conjectures as to the soundness of type theory for egg production.

The competition will not be concluded until October 31st, 1912. Poultrymen generally will be interested in knowing that it has been decided to repeat the contest in its entirety, beginning on November 1st next. Many of the present pens will remain, and their owners will add pullet pens, to establish the heredity of the strain, placing beyond question the right to inform the public of the inherent characteristics that make for greatly increased production. New pens of other breeds and varieties have applied for entry in this competition.

More interest will result from the second year's competition, with the two classes, hens and pullets, commanding attention. As an incentive to active co-operation the state of Connecticut has appropriated \$25,000 to the College and experiment station for the erection of a poultry building. An overflow entry list is anticipated before closing. Information required by prospective contestants can be secured by applying to the secretary, F. V. L. Turner.

Since the beginning of June wet weather has prevailed in the British Isles. Rain has fallen almost daily, and the quantity of water precipitated has been far above normal. On some days the fall was over two inches, and, of late, the storms have been increasing with no prospect of immediate improvement. Harvesting has been greatly delayed, and farmers are becoming anxious as to the outcome.

Announcements are out for the 14th annual convention of the Canadian Forestry Association, to be held at Victoria on September 4th, 5th and 6th, on the invitation of the British Columbia Government. The secretary of the Association is James Lawler, of Ottawa.

Agriculture in Easter Rosshire.

Editor "The Farmer's Advocate":

I attended an Agricultural Show in Inverness, but, as seen through Canadian spectacles, it was not a great success. There was quite a good show of horses, about one hundred being on the ground altogether. One feature of the horse show was that there were eighteen cart horses with their harness on. Most of them heavy animals, a good many just in fair working condition, none fitted up especially for show. The harness was all very heavy, we would think much too heavy. It was all in fine condition, in fact just looked as if it had come out of the harness shop that morning. There were not very many cattle though quite a few sheep, but only a few of them good. There were no pigs, no poultry, and no dairy exhibits or grain or roots, and the attendance was not very large.

From Inverness I went on to Dingwall, which was the home of the celebrated Rev. Dr. Kennedy, the farmers' Free Church Minister. A large monument has been erected to him near the church. I visited two farms which supply milk to the town. The first one I called at had seventy cows, mostly Shorthorn and Ayrshire grades, only a few of them would I consider good milkers. None were dehorned. They are not fed anything, but are on good pasture, and are milked three times a day. The milk is delivered twice a day at three pence a quart, and one and a half pence per quart for skim milk. There were generally eight or nine milkers to milk the seventy cows. This farm is quite near a large distillery, and in winter a large quantity of distillery grains is fed to the cows. The cows are milked about eight o'clock in the evening and the milk is set in large pans to supply the customers who require cream, and what is not sold is churned into butter. There are two light pony carts which peddle the milk and cream every night and morning. I think this farmer would do much better if he would start a herd of either Holsteins or Ayrshires. He rented the farm, but he had to put up quite a few of the buildings himself on the agreement that, at the end of the lease he was to receive pay for what he had done. Of course he would not get any interest for the money he had invested. He also had a fine up-to-date threshing machine, driven by an oil engine of fifteen horse power, which he liked very well. This threshing machine had a rubbing cylinder, which did not break up the straw and what he used for bedding he ran through another machine to break it up. A Canadian would naturally think that he had better have a toothed cylinder and cut the straw up at one operation. He told me that the oil engine, when working up to its full capacity, used about a gallon of oil per hour. We in Canada wonder at the tenants putting up buildings but I learned that many of the landed proprietors are really poor and hard up. They keep up too much style.

I visited another dairy farm where about forty cows were maintained, which two men and three women milked twice a day only. This farmer did not think it payed to milk three times a day. He had a few pure bred Ayrshires, one or two Dutch cows, and a few Irish, the others being Ayrshire and Shorthorn grades. This man also delivers the milk in town, night and morning, and he also supplies a large hotel in Strathpeffer, the great mineral water summer resort, which is over six miles from his farm. This milk he delivers with a small motor car. He has two registered Clydesdale Stallions and two very fine mares. There is an oatmeal mill on his farm, but it is so much out of repair that it has not done anything for years. There is water power to run his threshing mill which is also out of date and out of repair. There are a great many of the threshing mills on the Scotch Farms that are at least fifty years old and are away behind the times and generally out of repair.

The crops in Easter Ross are the best I have seen in Scotland. There are many fields of oats and barley so heavy that the late heavy rains have knocked them down very badly. But all the wheat was standing up nicely. Near Fearn I saw a field of beautiful turnips, which I was told contained sixty-four acres. The drills looked to me to be about three quarters of a mile long, and appeared to be as straight as a chalk line pulled tight. A man and a team were cultivating with a two horse cultivator, but it was not nearly as good an implement as we use in Canada. This man told me that they had another sixty-four acre field all in potatoes. He said that they got women and boys to pick up the potatoes for 2s. (50 cents) a day without board, and that last year they sold some potatoes for £2 10s. per ton. On this farm there were six span of working Clydesdale horses, and a great many cattle and sheep. On another farm I saw a twenty acre field of potatoes, and was told that they had altogether about forty-two acres of potatoes this year. Potatoes, mostly everywhere in Scotland, look uncommonly well. I measured some whose tops were taller than my umbrella handle. They are now out in full bloom, mostly of a rich

purple flower, and some fields at a distance look more like a large flower garden. I saw one field that you could not tell which way the drills ran. I saw many fields of oats that had straw enough to carry one hundred bushels per acre, if it had only stood up. But I was very sorry to notice that where everything else seemed to be so well managed and prosperous, some fields, in fact a good many fields, were badly overrun with sow thistle, and in a few years it will have entire possession.

Hay is a wonderful crop in Scotland this year, very heavy but they have to give it much more work than we do in Canada. Here it has all to be put up in small cocks, and after a time these have to be put in much larger ones, with bosses or hollow frames in the centre to allow the hay to cure. It would not keep otherwise, the climate is so damp. D. L.

South Perth Notes.

Editor "The Farmer's Advocate":

The remarks of your able correspondent from South Peel have reminded me that South Perth has now for a long time been unrepresented in your columns. But time flies quickly on the farm in the summer, so that amid the stress of other interests one is apt to neglect literary duties.

Probably owing to the severe winter and the prolonged cold in spring, this summer has only fairly begun, but already signs of autumn are apparent. The leaves of some maples are coloring, the sun sets more southerly, stubble is seen in the fields, and the thresher's whistle is heard. I have not seen any wheat threshed yet, but am told that while the sample is good it is not "turning out" any too plentifully. Barley, oats and hay, while not heavy, are somewhat better than last year. Corn and roots are doing well, and altogether feed is likely to be more plentiful. Small fruits are scarce, but apples are more plentiful than they have been for two seasons. I think this can be attributed to warmer weather at blooming time, thus giving a better chance for pollination by bees and other insects. The white honey harvest has just ended, with the closing of the basswood, which lasted two weeks, having been preceded by two weeks of white and alsike clover. Though late in coming the flow is considerably better than usual. New potatoes are not plentiful yet, the cold spring retarding the early ones, and the plentiful rains later induces a heavy growth of top, delaying the maturing of the tubers. Like all other crops, they vary from very poor to very good, depending on the care and attention given the preparation of the ground and the crop. There is not help enough nor knowledge enough on the average farm to grow maximum crops. There has been a heavy death list among this spring's foals. Spring litters of pigs have also suffered heavily, especially those kept in cement or stone pens or on cement floors. I doubt if cement or stone is the most economical stabling after all for any kind of live stock. I saw four yearlings that passed the severe winter in a single-boarded annex with large cracks in sides and roof, and open door on east side, with liberty to go in or out, yet although fed sparingly on fine hay and oat sheaves, and without water for two months, they were sleek and thrifty in spring and fattened up rapidly on the grass. J. H. B.

Effects of Cool Weather in Essex.

Editor "The Farmer's Advocate":

The unprecedented and unusually cool weather, following the heavy rains of a few weeks ago, has, in many instances, seriously injured the prospects of an abundant harvest in Essex, while in a few cases the very opposite result has followed. Corn has suffered severely. Farmers were caught with their cross furrows almost filled, owing to the corn being much later than usual in its growth, and therefore cultivating was but partially accomplished, leaving surface drained fields in a position easy to be destroyed. Tobacco in many sections is entirely annihilated. Tomatoes are also sadly damaged. Onions, which gave promise of an enormous yield, are largely turning to "thick necks," thus very materially lowering their commercial value, and also increasing the difficulty and expense of the harvester.

On the other hand, oats have been benefited and are an extraordinary crop, both as to quantity and quality. Cutting will be almost over by the time this appears in print. The cool moist atmosphere, while retarding the ripening of small fruits has increased its yield.

Apples have received beneficial aid and promise a good yield, especially in orchards which were carefully sprayed. Pasture is good, but stock suitable for marketing scarce. Hogs are not available, except in small lots. The land fever is not abating and Americans are still flocking into our county. A. E.

The Tanners' Section of the Canadian Manufacturers' Association have decided to advance the price of leather 10 per cent. at an early date.

Saskatchewan's Great Exhibition.

Despite the fact that, but four short weeks previous to the date of opening of the annual exhibition at Regina, the city was torn by a tornado, the provincial exhibition of Saskatchewan was a great success. The exhibits from displays of machinery to live stock left little to be desired, the live stock sections making a showing which merited more appreciation than they apparently received. Shorthorn cattle and Clydesdale horses were the feature.

Clydesdales.—The showing of Clydesdales at Regina was the best seen in the West this year. While the aged and three-year-old classes of stallions gave the male line-ups their great strength; the female classes, every one of them, were strong, and made as fine a showing of draft horseflesh as one could wish. The two-year-old fillies excelled, if that can be said of any one class. Among the exhibitors were: W. H. Bryce, Arcola; Colquhoun & Beattie, Brandon; Will Grant, Regina; Thos. Reggie, Condie; P. M. Bredt & Sons, Edenwold; Robert Sinton, and Peter Horn, Regina; Geo. O. Stutt, Brookside; R. H. Taber, Condie; R. W. Caswell and W. C. Sutherland, Saskatoon; B. F. Bray, Foam Lake; J. E. Martin, Condie; H. Smith and F. J. Robinson, Regina; James Lemon, Ralph, and Hugh McLean, Arcola.

Alex. Galbraith, DeKalb, Illinois, placed the awards. Awards—Aged Stallions: 1, Bryce, on Revelanta's Heir, by Revelanta; 2, Lemon on Baron Chapmanton, by Baron's Pride; 3, Bredt and Sons on Royal Robin, by Baron O'Dee; 4, McLean on Prince Robert, by Perpetual Motion; 5, Stutt on Mahomet, by Dryden. Three-year-olds—1, Colquhoun and Beattie on Critic, by Everlasting; 2, & 3, Robert Sinton on Dunurie Tidal Wave, by Revelanta, and Royal Purple, by Everlasting; 4, Caswell on Royal Shapley, by Prince Shapley. Two-year-olds—Taber, on Fyvie Stamp, by Baron Beaulieu. Yearlings—1, Sinton, on Free Trade, by Marquis of Breadalbane; 2, Stutt, on Mahomet's Heir, by Mahomet. Brood Mares with foal at foot—1, Bray, on Irene, by Labori; 2, Taber, on Queen of the Revels, by Revelanta; 3, Bredt & Sons, on Estelle, by Up-to-time; 4, Stutt, on Flower of Shallock, by Baron of Buchlyvie; 5, Taber, on Lady Smith, by Royal Favorite. Taber got first and second on foal by The Bruce; Stutt third, and Bredt & Sons fourth. Yeld Mares—1, Caswell, on May-ore; 2, Taber, on Queen of the Waves, by Netherlea; 3, Sutherland, on Dunmore May, by Baron of Buchlyvie; 4, Stutt, on Lady Electa; 5, Bredt & Sons, on Zuleika, by Everlasting. Three-year-olds—1, Bredt & Sons, on Dunrobin Pearl, by Celtic Land; 2, Caswell, on Amy of Darley, by Best of All; 3, Bray, on Pirene, by Baron Kerr; 4, Bredt & Sons, Mamie Gammel; 5, Taber, on Chalice. Two-year-olds—1, Bryce, Craigie Bell, by Bonnie Buchlyvie; 2, Grant, on Lady Hopetoun, by Baron Hopetoun; 3, Bredt & Sons, on Queen Alexandra, by Search Light; 4, Grant, on Nelly Lansdowne, by Lansdowne; 5, Taber, on Jessie Lawrie. Yearlings—1 and 2, Bryce, on Countess of Moray, by Bonnie Buchlyvie, and Doune Lodge Floradora, by Revelanta's Heir; 3 and 4, Grant, on Kismet, by Sir Chandos Laird, and Royal May, by Baron Allister; 5, Martin, on Cora B, by Baron Cedric.

Revelanta's Heir was made champion stallion and Fyvie Stamp reserve. The female champion went to Craigie Bell with Grant's Lady Hopetoun, reserve. For five best Clydesdales, any age, Bryce was first, Bredt & Sons second, and Grant third. The Canadian-bred classes were not strong. The championship for stallions went to McLean on Prince Robert, while in females Bredt & Sons won the championship on Queen Alexandra, a mare that stood well up in the open class. Grant was reserve on Nelly Lansdowne. For best team sired by a Clydesdale stallion, Caswell was first and Bredt second. For single mare or gelding, Bryce was first on Craigie Bell.

Percherons.—Percherons were judged by R. E. Drennan, who also placed the awards in Belgians. Pootmans & Sons, Regina; J. W. McInnis, Regina; E. Williams, Roleau, and R. W. Hammil, and Colquhoun & Beattie, exhibited.

In aged stallions Colquhoun & Beattie were first on Gasdon; Williams second on Izola, and Pootmans third and fourth on Gigot and Antron. Two-year-old stallions, Colquhoun first on Jaume, McInnis second on Rolland, Colquhoun & Beattie third on Joseph, and Williams fourth on Costilet.

Williams got first in year-old stallions on Suspense.

In Yeld mares Hammil was first on Lilly. She was made female champion. Williams won first on mare and foal with Sadie.

The championship for stallions went to Colquhoun & Beattie on Jaume, with their aged horse Gasdon reserve.

Belgians.—Belgians made a high-class exhibit, coming out strong in several classes. The major portion of the exhibit was put up by E. Poot-

mans & Sons, and A. Haazen, both of Regina. In stallions two years or over, Pootmans were first on Malino, Haazen was second on Gainenent. Pootmans were third on Maricmont, and P. Mang fourth on Berin. In two-year-old stallions, Haazen got first on Bienfait de Dane. The championship went to Pootmans on Malino.

In yeld mares, Pootmans were first on Alice D' Ambacht. Haazen was first on mare and foal on Belle Patte. Haazen got first, second and third in three-year-old fillies on Giselle, Gamine and Bruyere, a drafty trio. Haazen also got the first three places in two-year-old fillies on Charlotte, Louise de Laurent, and Derby. The championship went to the blocky mare in foal, Belle Patte, shown by Haazen.

Revelanta's Heir, the champion Clydesdale stallion, was made champion over all breeds. Light horses were placed by Dr. F. C. Grenside, Guelph, Ont.

In Hackneys, P. M. Brett & Sons, Edenwold, got championship for stallions, on Puritan. L. V. Kerr, Regina, got championship for mares on Jessinta. P. M. Brett & Sons also showed some high-class Shetland and Welsh ponies. The display of harness horses came from all over the West, and gave a grand exhibition.

CATTLE.

Shorthorns.—As was the case last year, Shorthorns made the greatest display in the cattle classes. W. H. English, Harding, Man., made the awards in all the beef classes. Exhibitors of Shorthorns were: R. W. Caswell, Saskatoon; J. H. Melick, Edmonton; P. M. Brett & Sons, Edenwold; H. L. Emmert, Winnipeg; Hon. W. C. Sutherland, Saskatoon; J. W. Barnett, Moose Jaw, and G. J. Sayer, from Illinois.

Caswell was first in aged bulls, with Kier Emblem. He also headed the list in two-year-olds with the great bull, Gainford Marquis. Emmert's Missie's Prince stood first in senior yearlings, and Caswell's Lavender Marshal did the trick in the junior yearling class. Caswell's Gainford Marquis was easily the senior champion, with his Keir Emblem reserve. The junior championship went to Emmert on Missie's Prince, with Caswell's Lavender Marshal reserve. Caswell's Gainford Marquis was made grand champion.

In the female classes, Caswell's Dale's Gift 2nd headed the aged class, Sayer's Mary Ann of Oakland 2nd, the two-year-old class, Emmert's Princess 4th the senior yearling class, Melick's Cloverleaf Mildred the junior yearling, and Melick and Emmert, respectively, in the calf classes. The senior championship went to Caswell's Dale's Gift 2nd, over Sayer's two-year-old heifer, Mary Ann of Oakland. Melick got the junior championship on Cloverleaf Dorothy, his senior calf, with Cloverleaf Mildred, his junior yearling, reserve. The grand championship went to Caswell's Dale's Gift 2nd.

In senior herds, Caswell was first with herd headed by Gainford Marquis, the females being Dale's Gift 2nd, Merry Maiden, Fancy 11th, and Gloster Sultana 2nd. Sayer was second on a herd headed by Uxor Prince; Brett & Sons third on a herd headed by Ironduke, and Melick fourth on a herd headed by Mutineer. In herds under two years, Emmert, on a very choice lot, headed by Missie's Prince, took first; Caswell was second on a herd headed by Lavender Marshall, and Sayer third on a herd headed by Sittyton Stamp. For four calves owned and bred by exhibitor, Emmert was first, and Brett & Sons second. For three the get of one bull, Melick was first on three by Avondale; Sayer second on three by Glenbrook Sultan; Brett third on three by Baron Robson, and Emmert fourth on three by Oakland Star.

Aberdeen-Angus.—The exhibitors of Aberdeen-Angus were the same as at Winnipeg and Brandon, which meant a close, hard fight. J. D. McGregor, Brandon; Jas. Bowman, Guelph, and C. V. Battles, from Iowa, were the competitors.

McGregor's Leroy 3rd of Meadowbrook won the aged-bull class, as did his Expert of Dalmeny the two-year-old class. Royal Eric won the yearling class for Battles, while Bowman won the senior-calf class, and McGregor the junior. McGregor took the lion's share of the prizes in the female classes. The male championship went to McGregor's two-year-old Expert of Dalmeny, with his Leroy 3rd of Meadowbrook reserve. The female championship went to McGregor's Violet 3rd of Congash, with Queen Rose of Cullen reserve. Violet 3rd of Congash was given medal as best Aberdeen-Angus animal shown.

For three calves, owned and bred by exhibitor, Bowman was first, Battles second, and McGregor third. In herds, McGregor was first with herd headed by Expert of Dalmeny; Battles second with herd headed by Belmont, and Bowman third with herd headed by Magnificent.

Herefords.—L. O. Clifford, of Oshawa, Ontario, and J. H. Chapman, put up the show of Herefords. Clifford's Refiner was champion bull, and his Miss Brae 26th champion female. He won most of the money. Clifford was first in herds, and Chapman second. Three calves under one

year were placed, Clifford first and Chapman second.

DAIRY CATTLE.

The dairy breeds were placed by W. W. Ballantyne, Stratford, Ont.

Ayrshires.—There were three herds out. P. D. McArthur had a strong exhibit from North Georgetown, Que. F. H. O. Harrison, Pense, had a shorter line-up of good stuff, and A. Hammond, Grand Coulee, had out a few good individuals.

McArthur secured all the first prizes, including the championship, on his bull, Whitehall Free-trader, and the female senior and reserve championships on Amaryllyis of the Willows, and junior and grand championship on his yearling heifer, Dalpedder Lady Taylor, a very stylish heifer.

In herds, McArthur was first, and Harrison second. McArthur took first, Hammond second, and Harrison third, for three calves. McArthur was first and second for four the get of one bull, and had the same places for two the progeny of one cow.

Holsteins.—Three herds of Holsteins lined up. W. J. Cummings, from Manitoba, had a very strong line-up of females. A. B. Potter, Langbank, showed a utility herd largely of his own breeding, and B. H. Thomson, Boharm, Sask., was out for the first time with a very promising line-up.

The male championship went to Thomson on King Canary, while Cummings secured the female championship on his aged cow, Daisy Camilla 2nd.

In herds, bull and four females, Cummings was first, Thomson second, and Potter third. For three calves owned and bred by exhibitor, Thomson was first, Cummings second, and Potter third.

Jerseys.—Jerseys were shown by B. H. Bull & Sons, Brampton; O. A. Bates, Moose Jaw, and F. J. Robinson, Regina, Bull & Sons putting up much the largest exhibit, and winning all the best prizes, including championships and all special herd awards.

For 10 head pure-bred dairy cattle, P. D. McArthur, North-Georgetown, Que., was first, and F. H. O. Harrison and A. Hammond, Saskatchewan, second. For best four dairy cattle, B. H. Bull & Sons were first on a Jersey herd; P. D. McArthur second, on Ayrshires, and A. B. Potter third, on Holsteins.

The pig and sheep pens were well filled, the exhibitors including practically the same men as showed at the previously-held 1912 Western shows, and the awards, on the whole, being much in accord with former placings.

United States Crops and Prices.

Crop conditions in general, August 1st, average for the United States materially better (12.3 per cent.) than on the same date last year, and slightly better (0.3 per cent. than the average condition of recent years. The month of July was slightly more favorable for crops than the average July, and much more favorable than July of last year.

The acreage in field crops is about 1.2 per cent. smaller than last year.

The condition of various crops on August 1st, compared with their average condition (not normal) on August 1st of recent years, follows:

Apples, 122.1; spring wheat, 112.6; oats, 110.9; hay, 110.2; barley, 107.2; millet, 107.2; flax, 106.2; grapes, 106.1; tomatoes, 105.9; pears, 105.5; hops, 105.0; alfalfa, 104.9; timothy, 104.3; Lima beans, 104.3; hemp, 103.9; cantaloupes, 103.8; cabbage, 103.7; onions, 103.5; potatoes, 103.5; watermelons, 101.8; clover for hay, 101.7; tobacco, 101.2; raspberries, 100; pasture 99.9; sweet potatoes, 98.6; beans (dry), 98.5; sugar beets, 98.3; buckwheat, 98.0; corn, 96.6; blackberries, 90.5.

The yield per acre of winter wheat is 97.4 per cent. of a ten-year average, and of rye 103.7 per cent.

The indications are for a total production of all cereals (125,070,000 tons) of about 13.7 per cent. more than last year, 0.1 per cent. more than in 1910, and 9.8 per cent. more than in 1909. Potato prospects are for about 27 per cent. more than last year, 6 per cent. more than in 1910, but 5 per cent. less than in 1909. Hay prospects are for about one-third more than last year, and 6 per cent. more than in 1910 and 1909.

Prices paid to producers of the United States on August 1st of 1912 and 1911, respectively, averaged as follows: Corn, 79.3 cents, 65.8 cents per bushel; wheat, 89.7 cents, 82.7 cents; oats, 44.3 cents, 40.2 cents; barley, 66.8 cents, 69.3 cents; rye, 77.9 cents, 75.5 cents; buckwheat, 83.6 cents, 76.0 cents; flaxseed, 175.2 cents, 199.2 cents; potatoes 86.5 cents, 136.0 cents; hay, \$12.98, \$14.67 per ton; (the average of prices of above crops, which represent above three-fourths of the value of all crops, declined 7.6 per cent. during July, whereas in July, 1911, they advanced 8.7 per cent; they averaged on August 1st about 0.1 per cent. lower than on August 1st last year; on July 1st they averaged

17.5 per cent. higher than on July 1st last year); butter, 23.7 cents, 21.7 cents per pound; chickens, 11.3 cents, 11.2 cents; eggs, 17.4 cents, 15.5 cents per dozen.

VICTOR H. OLMSTEAD,
Chief of U. S. Bureau of Statistics.

Dry Farming is Good Farming.

Dry-farming means better farming, according to the official call of the International Dry-farming Congress, the annual convention of the dry-land farmers of the world, which meets Oct. 19th to 26th next, at Lethbridge, in Southern Alberta, in the heart of one of the greatest grain belts. The definition of the term "dry-farming," which is coming into such general use everywhere, and of which thousands have never learned the essentials, is most interesting, and, furthermore, it is logical, and the adaptation of its precepts has brought reward to those farmers who have looked to science to aid them where misfortune and hard luck, through unfavorable weather conditions, pursued their neighbors who farmed as their fathers and grandfathers did before them.

"Dry-farming," says the call, "is a scientific term used by colleges and authors to differentiate between the new system of agriculture and the older methods utilized in the rain-belts and irrigation districts. A special system of tillage of the soil for the purpose of moisture and fertility conservation is known to be necessary for at least 63 per cent. of the agricultural acreage of the world, and the Dry-farming Congress was brought into existence for the purpose of working out these problems and remedies for the troubles confronting farmers of the sub-humid districts, or in districts where there are frequent drouths or failing soils. Dry-farming is free from mystery of any kind. Any farmer on any soil and in any climate can increase his acreage production, crop quality, and bank account.

Canadian Holstein Records Recognized.

United States B. A. I. Order 186, governing the certification of recognized breeds of pure-bred animals, has been amended to include as a recognized record the Canadian Holstein-Friesian Herdbook, subject to the condition that all animals recognized as pure-bred for the purpose of free importation to the United States must trace in all their crosses to registered animals in the country where the breed originated, or to animals which are proved to the U. S. Department of Agriculture to have been imported from the country in which the breed originated.

Dr. Rutherford Joins the C. P. R.

Following the recent meeting, behind closed doors, in the C. P. R. offices at Winnipeg, when it was announced that the three principal railways of the West were co-operating with the Western Packing Companies in an expenditure to develop the live-stock industry of Western Canada, comes a newspaper report that the C. P. R. has established a new branch in its Department of Natural Resources, to be known as Animal Husbandry, to be taken charge of by Dr. J. G. Rutherford, formerly Veterinary Director-General and Live-stock Commissioner for the Dominion.

A Large Summer Class.

There were in attendance at the Ontario Agricultural College in the four weeks' summer course seventy-nine students in nature study, twenty-five in elementary agriculture and horticulture, fifty in art and constructive work, and four specials, making a total of one hundred and fifty-eight. Of these twenty-eight were men. In the first two classes (agricultural classes), out of a total of one hundred and four, fifteen were from Elgin County, and York County came second with eleven—the others were pretty well from all parts of the Province. Elgin County leads at present in the total number of school gardens.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of the correspondents and agents of the Bureau, that the condition of the cotton crop on July 25th was 76.5 per cent. of a normal, as compared with 80.4 on June 25th, 1912; 89.1 on July 25th, 1911; 75.5 on July 25th, 1910, and 80.6, the average of the past ten years July 25th.

For the second time within a year President Taft has vetoed a bill to raise the U. S. wool tariff, schedule K. of the Payne-Aldrich law, on the ground that it would inflict injury on wool-growing and manufacturing.

Hon. Martin Burrell, the Minister of Agriculture, Ottawa, has been on a visit of inspection to the Dominion Experimental Stations in the Maritime Provinces.

Dates of 1912 Fall Fairs.

J. Lockie Wilson, Superintendent of the Agricultural Societies Branch of the Ontario Department of Agriculture, has issued the following dates of fall fairs;

Aberfoyle	Oct. 1
Alexandria	Sept. 24, 25
Alfred	Sept. 24, 25
Alliston	Oct. 3, 4
Alvinston	Oct. 1, 2
Amherstburg	Sept. 23, 24
Ashworth	Sept. 27
Ancaster	Sept. 24, 25
Arnprior	Sept. 5, 6
Atwood	Sept. 19, 20
Bancroft	Oct. 3, 4
Barrie	Sept. 23, 24, 25
Beachburg	Oct. 2, 3, 4
Beaverton	Oct. 1, 2
Beamsville	Oct. 10, 11
Bellefleur	Sept. 10, 11
Berwick	Sept. 18, 19
Blenheim	Oct. 3, 4
Blackstock	Sept. 26, 27
Blyth	Oct. 1, 2
Bobcaygeon	Sept. 24, 25
Bolton	Sept. 30, Oct. 1
Bothwell's Corners	Sept. 26, 27
Bowmanville	Sept. 17, 18
Bradford	Oct. 22, 23
Brampton	Sept. 17, 18
Brigden	Oct. 1
Brinsley	Oct. 10, 11
Brockville	Sept. 3, 4, 5, 6
Bruce Mines	Sept. 25
Brussels	Oct. 3, 4
Burford	Oct. 1, 2
Burlington	Sept. 26, 27
Burk's Falls	Sept. 26, 27
Caledon	Oct. 10, 11
Campbellford	Sept. 24, 25
Carp	Oct. 2, 3
Castleton	Sept. 27, 28
Casselton	Sept. 16
Cayuga	Sept. 26, 27
Centreville (Addington Co.)	Sept. 14
Charlton	Sept. 17, 18
Chatsworth	Sept. 12, 13
Chatham	Sept. 23, 24, 25
Chesley	Sept. 17, 18
Clarksburg	Sept. 17, 18
Cobden	Sept. 26, 27
Cobourg	Sept. 18, 19
Coe Hill	Sept. 18, 19
Colborne	Oct. 1, 2
Collingwood	Sept. 25-28
Comber	Oct. 8, 9
Cookstown	Oct. 1, 2
Cookville	Oct. 2
Cornwall	Sept. 5, 6, 7
Delaware	Oct. 16
Delta	Sept. 23, 24, 25
Demorestville	Oct. 12
Desboro	Sept. 19, 20
Dorchester	Oct. 2
Drayton	Oct. 1, 2
Dresden	Sept. 26, 27
Drumbo	Sept. 24, 25
Dundalk	Oct. 10, 11
Dunnville	Sept. 17, 18
Durham	Sept. 24, 25
Elmvale	Oct. 2, 3, 4
Elmira	Sept. 23, 24
Embro	Oct. 3
Englehart	Sept. 12, 13
Erin	Oct. 17, 18
Essex	Sept. 24, 25, 26
Fair Ground	Oct. 1
Fenelon Falls	Sept. 10, 11
Fenwick	Oct. 8, 9
Feversham	Oct. 1, 2
Fergus	Sept. 26, 27
Florence	Oct. 3, 4
Flesherton	Sept. 26, 27
Fort Erie	Oct. 1, 2
Fort William	Sept. 17, 18, 19, 20
Fordwich	Oct. 5
Forest	Sept. 23, 24
Frankford	Sept. 19, 20
Frankville	Sept. 26, 27
Freleton	Oct. 2
Galetta	Sept. 25, 26
Galt	Sept. 20, 21
Gore Bay	Sept. 24, 25
Gordon Lake	Sept. 27
Guelph	Sept. 17-19
Grand Valley	Oct. 15, 16
Gravenhurst	Sept. 19, 20
Haliburton	Sept. 26
Hanover	Sept. 20
Harrowsmith	Sept. 12, 13
Harrow	Oct. 8, 9
Hepworth	Sept. 18, 19
Holstein	Oct. 1
Highgate	Oct. 11, 12
Huntsville	Sept. 24, 25
Ingersoll	Sept. 17, 18
Jarvis	Oct. 1, 2
Kagawong	Oct. 1, 2
Keene	Oct. 1, 2
Kemble	Sept. 24, 25

Kemptville	Sept. 19, 20
Kilsyth	Oct. 3, 4
Kinmount	Sept. 16, 17
Kirkton	Sept. 26, 27
Lakefield	Sept. 17, 18
Lakeside	Sept. 27
Lambeth	Oct. 1
Lanark	Sept. 12, 13
Langton	Oct. 11, 12
Leamington	Oct. 2, 3, 4
Lindsay	Sept. 19-21
Lombardy	Sept. 14
London (Western Fair)	Sept. 6-14
Lion's Head	Sept. 26, 27
Lyndhurst	Sept. 17, 18
Maberly	Sept. 24, 25
Madoc	Sept. 24, 25
Manitowaning	Sept. 26, 27
Mattawa	Sept. 18, 19
Markdale	Oct. 15, 16
Markham	Oct. 2, 3, 4
Marshville	Oct. 3, 4
Massey	Sept. 27
Marmora	Sept. 16, 17
Maxville	Sept. 12, 13
Meaford	Sept. 26, 27
Melbourne	Oct. 11
Merlin	Sept. 26, 27
Merrickville	Sept. 17, 18
Metcalfe	Sept. 16, 17, 18
Midland	Oct. 4
Middleville	Sept. 26, 27
Millbrook	Oct. 3, 4
Milverson	Sept. 26, 27
Milton	Sept. 24, 25
Minden	Oct. 1
Mount Forest	Sept. 17, 18
McKellar	Sept. 23, 24
McDonald's Corners	Sept. 27
Napanee	Sept. 17, 18
New Hamburg	Sept. 12, 13
New Liskeard	Sept. 26, 27
Newmarket	Sept. 17, 18, 19
Newington	Sept. 17, 18
Norwich	Sept. 17, 18
Norwood	Oct. 8, 9
Niagara Falls	Sept. 25, 26
Oakville	Sept. 26, 27
Odessa	Oct. 4
Onondaga	Sept. 30, Oct. 1
Oro	Sept. 17
Orangeville	Sept. 19, 20
Oshawa	Sept. 9, 10, 11
Ottaville	Oct. 4, 5
Ottawa (Central Canada)	Sept. 5-16
Owen Sound	Sept. 10, 11, 12
Pakenham	Sept. 23, 24
Paris	Sept. 26, 27
Parkhill	Sept. 24, 25
Perth	Aug. 30, 31, Sept. 1, 2
Peterboro	Sept. 12-14
Petrolia	Sept. 19, 20
Pictou	Sept. 25, 26
Pt. Carling	Sept. 18
Priceville	Oct. 4
Powassan	Sept. 25, 26
Port Hope	Sept. 24, 25
Port Perry	Sept. 19, 20
Rainham Centre	Sept. 24, 25
Renfrew	Sept. 18, 19, 20
Richmond	Sept. 24, 25, 26
Ridgetown	Oct. 7-9
Ripley	Sept. 24, 25
Roblin's Mills	Oct. 4, 5
Rocklyn	Oct. 3, 4
Rockton	Oct. 3, 4
Rockwood	Oct. 8, 9
Rodney	Sept. 30, Oct. 1
Roseneath	Sept. 26, 27
Rosseau	Sept. 25
Sarnia	Aug. 28, 29
Sault Ste. Marie	Sept. 16, 17, 18
Seaforth	Sept. 19, 20
Shannonville	Sept. 14
Shelburne	Sept. 24, 25
Sheguiandah	Oct. 2, 3
Scarboro (Half-Way House)	Sept. 18
Simcoe	Oct. 15-17
Six Nations	Oct. 2, 3, 4
Springfield	Sept. 24, 25
Spicedale	Sept. 19, 20
Spencerville	Sept. 24, 25
Streetsville	Sept. 25
Staffordville	Sept. 18
St. Mary's	Sept. 24, 25
Sturgeon Falls	Sept. 19, 20
Stirling	Sept. 26, 27
Sundridge	Oct. 1, 2
Smithville	Oct. 3, 4
Tara	Oct. 1, 2
Tavistock	Sept. 16, 17
Teeswater	Oct. 3, 4
Thamesville	Sept. 30, Oct. 1, 2
Theford	Oct. 1, 2
Thorold	Sept. 17, 18
Tillsonburg	Oct. 1, 2
Tiverton	Oct. 1, 2
Toronto (Canadian National)	Oct. 1
Tweed	Aug. 21-Sept. 9
Udora	Oct. 2, 3
Utterson	Oct. 8
Utterson	Oct. 1, 2

Vankleek Hill	Sept. 20, 21
Verner	Sept. 23, 24
Walkerton	Sept. 12, 13
Wallaceburg	Sept. 24, 25
Wallacetown	Sept. 26, 27
Walter's Falls	Sept. 17, 18
Waterford	Oct. 10
Waterdown	Oct. 1
Watford	Oct. 3, 4
Warkworth	Oct. 3, 4
Warren	Sept. 17, 18
Wellandport	Sept. 27, 28
Wellesley	Sept. 10, 11
Warton	Sept. 24, 25
Williamstown	Sept. 18, 19
Wilksport	Sept. 19
Windham Centre	Oct. 8
Winchester	Sept. 3, 4
Wingham	Sept. 26, 27
Windsor	Sept. 10, 14
Woodbridge	Oct. 15, 16
Wooler	Sept. 5, 6
Woodville	Sept. 13
Woodstock	Sept. 18, 20
Wyoming	Sept. 27, 28
Zephyr	Oct. 13
Zurich	Sept. 18, 19

GOSSIP.

THE ERADICATION OF THE CATTLE TICK.

The taking up of the western cattle ranges by homesteaders, resulting in a shortage in the supply of beef cattle for consumption by the millions of people largely dependent upon cattle grown in that region, has brought about a rise in price of steers at the great abattoirs of the country and a decided increase of cost of meat to the consumer in the cities.

Naturally, also, it has caused both the growers and buyers to look about for fresh pastures for the herds upon which their prosperity and business depends. The United States Secretary of Agriculture years ago saw the inevitable crisis and turned his attention to providing ample sustenance for the stock needed to supply the market, and which could no longer be furnished by the West.

The locality was found in the South and Southwest, but that country was infested with an insect that made cattle-raising unprofitable, if not impossible. So for the past six years the United States Bureau of Animal Industry has been conducting tick eradication work in all but one of the states of the infested region, in co-operation with the State authorities, and has freed 162,648 square miles of the Texas-fever tick and relieved that area of the restrictions placed by national quarantine on the shipment of cattle to other sections.

In a considerable additional area the work of eradication is well under way, but the territory already freed exceeds the combined areas of Georgia, Alabama, and Mississippi. The eradication of the tick is of prime importance to the agricultural interests of the infested section, but the benefits resulting therefrom would not be confined to them, in fact it would be enjoyed to a great extent by the rest of the country.

The progress so far made in the co-operative campaign by the Department and the State authorities, demonstrates that it is entirely possible to accomplish the complete elimination of the cattle tick, although a number of years of hard work will be required to entirely free the country of this pest.

It is of great importance that the efforts of the officials should be supplemented by the farmers, and to this end a Farmers' Bulletin giving "Methods of Exterminating the Texas-Fever Tick," in a practical manner that can be utilized by the farmer or stockman, who has already begun or who contemplates undertaking the complete extermination of this pest from his farm.

These methods may be improved upon as new facts become available, but they have already reached such a degree of perfection and have been giving such wide practical tests, that the main part of the task is to enlist a hearty, vigorous and conscientious co-operation on the part of the people—in other words, the work will progress from now on just as rapidly as the people desire it should and no faster.

HOLSTEIN RECORD OF PERFORMANCE TESTS FOR JULY.

Mature Class.—Netherland De Kol Witzzyde (7665) at 5y. 334d.; milk, 12,605.25 lbs.; fat, 429.63 lbs.; owned by J. M. VanPatter. Aaggie DeKol Witzzyde (6440) at 7y. 329d.; milk, 12,039.5 lbs.; fat, 407.21 lbs.; owned by J. M. VanPatter. Johanna Rue DeKol Lass (5828) at 6y.; milk, 12,696.5 lbs.; fat, 405.12 lbs.; owned by W. E. Lambkin. Three Year Old Class.—Kathleen DeKol (9782) at 3y. 17d.; milk, 13,703.5 lbs.; fat, 449.70 lbs.; owned by A. A. Johnston. Lady Fairmont Posch (10679) at 3y. 37d.; milk, 12,288.6 lbs.; fat, 380.90 lbs.; owned by F. I. Burrill.

TRADE TOPICS.

AN ORPHAN IN A FARM HOME.—Last winter, J. J. Kelso was addressing a meeting on the desirability of placing dependent boys in country farm homes, and at the conclusion a fine, well-dressed man asked to speak. "Mr. Chairman," he said, "I was just such a boy as the speaker has described. I had been in an Orphans' Home for some years, and one fine day in early spring I determined to run away. I walked several miles into the country, and then stopped at a farm to ask for something to eat. The good woman to whom I spoke,—whose influence and kind face I shall never forget,—invited me to stay, and I remained there for three years. Then a gentleman offered to take me as an apprentice, and I afterwards went into business and have prospered in this world's goods." His remarks, coming as they did from a living example, made a deep impression on the audience.

THE WESTERN FAIR, September 6th to 14th.—Exhibitors always report good results from showing at the Western Fair, London, Ont. Surrounded as it is by such an excellent farming country there is always a good demand for first-class stock of all kinds. The up-to-date farmer waits for the exhibition when he can see the best and make his choice. The exhibition of this year will be no exception to the rule, but every effort is being made by the management to surpass previous years. The prize list has been revised and made very liberal, not only in classification but in cash. The prize money will all be paid if the animals are worthy, even if there should be no competition in certain sections. Exhibitors are, therefore, always sure of being well treated at this old and reliable Exhibition. Prize lists, entry forms and all information given promptly on application to the secretary, A. M. Hunt, General Offices, Richmond St., London, Ontario.

THE WESTERN FAIR, September 6th to 14th, 1912.—The management of the Western Fair at London, Ont., have been very fortunate in being able to secure such favorable railway rates. The territory to which the rates apply over all roads extends as far east as Kingston and west to Port Huron and Detroit. The single-rates fare will go into effect the opening day of the Exhibition, Friday, September 6th. There will be three special excursion days, Tuesday, Thursday, and Friday, September 10th, 12th, and 13th, when only two-thirds of single fare rate plus 25c. will be charged. All tickets are good to return up to Monday, September 16th. This should afford a splendid opportunity for those having friends in London or vicinity to visit them during the Exhibition. This year will afford the opportunity of a lifetime to hear the famous Besses o' th' Barn Band. This is one of the finest brass bands in the world. They have appeared by Royal Command before the King and Queen at Windsor Castle. They have toured the world twice. On their last trip during the years 1909, 1910 and 1911, they travelled 46,000 miles and gave 526 concerts. All lovers of music should not fail to hear this famous combination. There will be many other new features this year, particulars of which will be given later. For privileges of any kind, prize lists, entry forms, or any information regarding the Exhibition, apply to the Secretary, General Offices, Richmond St., London, Ontario.

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The Farmer AS A Business Man

IN these modern days the farmer's medium of exchange is not the product of his farm, but money. Farming to-day is on a cash basis.

This being so, it is almost a necessity for farmers to make much use of a Bank for depositing money, for paying bills, for arranging credits, for discounting notes.

Farmers' business is invited by

The Bank of Toronto

One of the oldest banks in Canada established in 1855; one of the strongest—assets \$57,000,000; one of the most progressive, there being 110 branches in Ontario, Quebec and the West.

MARKETS.

Toronto.

REVIEW OF LAST WEEK'S MARKETS

At West Toronto, on Monday, August 27, receipts of live stock numbered 152 cars, comprising 2,981 cattle, 330 hogs, 464 sheep, 72 calves, and 18 horses; trade slow. Exporters, \$7.30 to \$7.40, but few sold; choice heavy cattle for butchers' purposes, \$7 to \$7.30; good, \$6.75 to \$7; medium, \$6 to \$6.50; common to medium, \$5.25 to \$6; common, light cattle, \$4.75 to \$5; cows, \$3 to \$5.35; bulls, \$4 to \$5.50; milkers, \$40 to \$70; calves, \$4 to \$8.50. Sheep, \$3 to \$5; lambs, \$6 to \$6.75. Hogs, \$8.60 fed and watered, and \$8.25 f. o. b. cars at country points.

The total receipts of live stock at the City and Union-yards last week were as follows:

	City.	Union.	Total.
Cattle	98	230	328
Cattle	905	3,192	4,097
Hogs	2,714	4,378	7,092
Sheep	2,024	2,548	4,572
Calves	613	277	890
Horses	—	120	120

The total receipts of live stock at the City and Union Stock-yards for the corresponding week of 1911 were as follows:

	City.	Union.	Total.
Cars	158	247	405
Cattle	1,638	3,722	5,360
Hogs	3,707	4,017	7,724
Sheep	2,361	1,003	3,364
Calves	479	108	587
Horses	24	63	87

The combined receipts at the two markets for the past week show a decrease of 77 carloads, 1,263 cattle, and 632 hogs; but an increase of 1,203 sheep, 303 calves, and 33 horses, compared with the same week of 1911.

Receipts of cattle were moderate, but enough to supply the demand. Sheep and lambs, especially the latter, were plentiful, more than the demand called for, the consequence being that prices were lower, in fact, the lowest for the season for lambs, and one commission firm had so many more than they needed that they made a shipment to Montreal. Prices for the best cattle, both butchers' and exporters, remained about steady, with the previous week, but the common, light, unfinished classes, sold at lower quotations.

Exporters.—In the export cattle prices were unchanged, as the highest quotation, \$7.60, was the same for both weeks, only that there were three carloads sold at that price to one for the previous week. There were 440 steers bought for export, as follows: Swift & Company bought 200 steers for the London market, 1,318 lbs. average weight, at \$7.48 average price, or a range of \$7.25 to \$7.60; also 150 steers for Liverpool, 1,260 lbs. each, at an average of \$7.34, or a range of \$7.15 to \$7.50. Coughlin & Company, commission dealers, bought for the S. & S. Company 90 choice steers for the London market,

1,300 lbs. each, at an average of \$7.50 per cwt.

Butchers'.—Choice, heavy steers, export weights, for local killing, sold at \$7.15 to \$7.35; loads of good butchers', \$6.75 to \$7; medium, \$6 to \$6.50; common to medium, \$5.25 to \$6; common and inferior light-weight Eastern Ontario cattle, sold from \$3.50 up to \$5; good cows, \$5.25 to \$5.75; medium cows, \$4 to \$5; common cows, \$3 to \$4; canners, \$2 to \$2.50; bulls, \$3.50 to \$5.50.

Stockers and Feeders.—A few lots changed hands as follows: Stockers, 500 to 700 lbs., at \$3.75 to \$4.50; feeders, 800 to 900 lbs., at \$4.75 to \$5.25.

Milkers and Springers.—A moderate supply at both markets met a steady market, at from \$45 to \$75 each, according to quality, but more good quality cows would have met ready purchasers.

Veal Calves.—There has been little change in the value for veal calves for several months. A fair supply met a good demand, as usual, at \$4 to \$8.50 per cwt.

Sheep and Lambs.—At the commencement of the week sheep sold from \$4 to \$5 per cwt. for ewes, and closed on Thursday at \$3.75 to \$4.75; lambs sold on Monday from \$6 to \$7.25, and on Thursday at \$5 to \$6.30, nearly \$1 per cwt. of a drop.

Hogs.—The general price paid for hogs during the week was \$8.50 for selects, and \$8.20 f. o. b. cars; but on Thursday 10c. more was being paid.

BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 98c. to \$1, outside points. Ontario, fall, new, 85c. to 90c. Manitoba No. 1 northern, \$1.12½; No. 2 northern, \$1.09½; No. 3 northern, \$1.06½, track, lake ports. Oats.—Canadian Western extra No. 1 feed, track, lake ports, 43c.; Ontario, No. 2, 42c.; No. 3, 41c., outside points; No. 2, 45c. to 46c., track, Toronto. Rye.—No. 2, 80c., outside. Peas.—No. 2, 90c. per bushel, outside. Buckwheat—70c. per bushel, outside. Corn.—No. 2 American yellow, 82c., track, Toronto; No. 3 yellow, 81c., track, Toronto. Flour—90-per-cent. Ontario winter wheat patents, \$3.80 to \$3.85, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.70; strong bakers', \$5. Barley.—For malting, 75c. to 78c. (47-lb. test); for feed, 60c. to 65c., outside.

HAY AND MILLFEED.

Hay.—Baled, in car lots, track, Toronto, No. 1, \$12 per ton. Straw.—Baled, in car lots, track, Toronto, \$10 to \$10.50.

Bran.—Manitoba bran, \$22 to \$23 per ton; shorts, \$26; Ontario bran, \$24 in bags; shorts, \$26.50, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—Market firmer for creameries. Creamery pound rolls, 28c. to 29c.; creamery solids, 27c. to 28c.; separator dairy, 26c. to 27c.; store lots, 22c. to 23c.

Eggs.—Market firmer, at 26c. to 27c. Cheese.—Large, 14½c.; twins, 15c. per pound.

Poultry.—Live spring chickens, 18c. to 19c. per lb.; live fowl, 12c. to 14c.; ducks, 12c. to 13c.; turkeys alive, 16c. to 18c.

Potatoes.—American potatoes per barrel, \$3.25 to \$3.50; Canadian per bushel, \$1.10 to \$1.25.

TORONTO SEED MARKET.

This season's crop of alsike has been harvested and threshed in many parts of Ontario, and farmers have been offering samples to the seedsmen for sale. The William Rennie Seed Co. quote the following prices: Alsike No. 1, \$8.50 to \$8.75; alsike No. 2, \$7.75 to \$8; No. 3, \$7 to \$7.35; No. 4, \$6.60 to \$6.75 per bushel, in each case.

HIDES AND SKINS.

E. T. Carzer & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 13c.; No. 2 inspected steers and cows, 12c.; No. 3 inspected steers, cows and bulls, 11c.; country hides cured, 11½c. to 12c.; country hides green, 10½c. to 11c.; calfskins, per lb., 13c. to 17c.; lambskins and pelts, 35c. to 40c. each; horse hides, No. 1, \$3.50 each; horse hair, per lb., 35c.; tallow, No. 1, per lb., 5½c. to 6½c.

WOOL.

Unwashed, coarse, 13c.; unwashed, fine, 14½c.; washed, coarse, 19c.; washed, fine, 21c.; rejects, 16c.

FRUITS AND VEGETABLES.

Receipts of fruits and vegetables were the largest of the season during the past week, and prices were much lower, being quoted as follows: The prices quoted are per 11-quart baskets unless otherwise specified. Apples, 30c. to 40c.; blueberries, \$1.25 to \$1.40; cherries, red, cooking, 90c. to \$1; red currants, 75c. to \$1; black currants, \$1.50 to \$1.75; raspberries, per quart box, 13c. to 15c.; gooseberries, 80c. to \$1; green peas, 40c. to 50c.; cantaloupes, per case, \$4 to \$5; cabbages, crate, \$1.25 to \$1.50; watermelons, each, 35c. to 50c.; peaches, per crate of six baskets, \$2.25 to \$2.50; tomatoes, Canadian, 75c.; Virginia onions, per bushel, \$1.25; American pears, per box, \$3 to \$3.50; oranges, \$4 to \$4.75 per crate; lemons, per crate, \$5.50 to \$6.

Montreal.

Live Stock.—The offerings on the Montreal market were a little larger, but demand continued on the indifferent side, and activity was absent. The general tendency of prices was towards steadiness, although in the case of top quality the price showed a decline, quotations being 6½c. to 7c. per lb., as against as much as 7½c. the previous week. Fine stock sold at 6½c. to 6½c., and medium ranged from 5½c. to 6½c., while common sold down to around 4½c., and canners' to 4½c. or 4c. Sheep were in fair demand, and prices were firm. Old sheep sold at 4c. to 5½c. per lb., while lambs ranged from 6½c. to 7c. per lb. There was a fair demand for calves, and prices ranged from about \$3 to \$7 for common, and up to \$12 for choice. The quality of the calves offering shows some improvement. Hogs were all taken readily enough, at 8½c. to 8½c. for Eastern hogs, while selects sold from 8½c. to 9c. per lb. The run was not large.

Dressed Hogs.—There was a good demand for dressed hogs, and the market was quoted at 12½c. to 13c. per lb. for choice abattoir-dressed, fresh-killed.

Horses.—Very few horses arrived in the city. Demand was, on the whole, exceedingly dull, this being one of the duller seasons of the year. It will be another month yet before demand springs up from lumbermen, this being the first sign of fall activity. Prices were: Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$375; light draft, weighing from 1,400 to 1,500 lbs., \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$125 to \$200 each; and inferior, broken-down animals, \$75 to \$100 each. Choice driving and saddle animals, \$350 to \$500 each.

Honey and Syrup.—The market for these products was not interesting from a standpoint of change and activity. Prices continued about as before, 10½c. to 11c. per lb. for white clover comb honey, and 8c. to 8½c. for extracted. Dark comb is 7c. to 8c., and extracted about the same price to a fraction higher. Maple syrup showed little change, at 7c. to 7½c. per lb. in wood, and 70c. to 75c. per tin, while sugar was 9c. to 9½c. per lb.

Eggs.—Prices have been unusually high all season, and are now quite firm. Harvest eggs will soon begin to arrive, but will have little effect on the market. Straight receipts ranged from 23c. to 24c. per dozen, while second grades were 21c. to 22c., and selects 23c. to 29c. per dozen.

Butter.—The market became a little overbought a couple of weeks ago with the result that there has subsequently been a slight drop, purchases having been made in the country week before last at a decline of about 1c. per lb. As the local market really never followed the country price in the last advance, there was a great deal of change in prices actually obtained. Prices were 26c. per pound for finest creamery, Montreal, with ½c. less for choice. Seconds were about 25½c. to 26c., and dairies 22½c. to 23c.; at St. Hyacinthe, 25½c.

Cheese.—Market for cheese remained wonderfully firm. Prices were about 13½c. per lb. for finest Western colored, and ½c. less for white; 12½c. for Town-

ships; about 12½c. for Quebecs, with seconds ½c. less.

Grain.—The market for oats showed practically no change during the week, and prices of No. 2 Canadian Western were still 45½c. per bushel in car lots, ex store. Extra No. 1 feed oats, 45c. to 45½c., and No. 3 Canadian Western, 44½c. to 45c. per bushel.

Millfeed.—There was no change in the market. Prices were \$22 per ton for bran in bags; \$26 for shorts; \$27 to \$28 for middlings; \$32 to \$34 for pure grain mouille, and \$30 to \$31 for mixed mouille.

Hay.—The market seemed to be down to a basis at which the threat of the new hay may be met. Prices were steady once more, at \$18 to \$18.50 per ton for pressed hay, carloads, track, Montreal, this being for No. 1 hay; No. 2 extra hay was selling at \$16 to \$17 per ton; No. 2 good, \$15 to \$15.50; No. 3 hay, \$13 to \$13.50, and clover mixed, \$12 to \$12.50 per ton.

Hides.—The market was fairly active, and the quality of the hides improved. Dealers have not reported so well of the market for a long time past. Prices were steady, being 11c., 12c. and 13c. per lb. for Nos. 3, 2 and 1 hides, respectively; calfskins, 17c. and 19c. per lb., respectively, for Nos. 2 and 1; lambskins, rather firmer, at 30c. and 35c. each; horse hides, steady, at \$1.75 and \$2.50 each, according to quality, while tallow was 1½c. to 3c. per lb. for rough, and 6c. to 6½c. for rendered.

Buffalo.

Cattle.—Prime steers, \$9.15 to \$9.50; shipping, \$8.50 to \$9; butchers', \$5.50 to \$8.75; heifers, \$4.50 to \$5.50; cows, \$3 to \$6.50; bulls, \$4 to \$6.25; stockers and feeders, \$4.25 to \$5.65; stock heifers, \$3.75 to \$4.50; fresh cows and springers, \$30 to \$70.

Veals.—\$4 to \$10. Hogs.—Heavy, \$8.45 to \$8.60; Yorkers, \$8.65 to \$8.85; pigs, \$8.60 to \$8.65; roughs, \$7.40 to \$7.60; stags, \$5 to \$6.50; dairies, \$8.25 to \$8.70.

Sheep and Lambs.—Lambs, \$4.50 to \$7.55; yearlings, \$6 to \$6.50; wethers, \$4.75 to \$5.50; ewes, \$2 to \$4.75; sheep, mixed, \$4 to \$5.

Cheese Markets.

Ottawa, Ont., 13c.; Iroquois, Ont., 13 3/16c.; Picton, Ont., 13 1/16c. to 13½c.; Napanee, Ont., 13c.; Kemptville, Ont., 13½c.; Belleville, Ont., 13½c.; St. Hyacinthe, Que., 12½c., butter, 25½c.; Cowansville, Que., cheese, 12½c.; butter, 26½c.; London, Ont., bid, 12½c. to 13½c., no sales; Canton, N. Y., 15½c.; Watertown, N. Y., 15c. to 15½; Vankleek Hill, 12c. to 13 1/16c.; Alexandria, 13c.; Kingston, 13c.; Brockville, 13 1/16c. to 13½c.

Chicago.

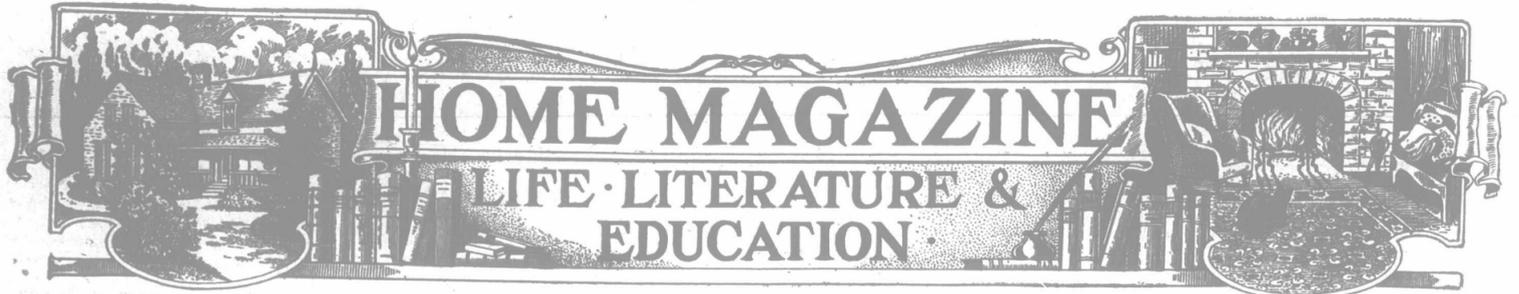
Cattle.—Beeves, \$5.75 to \$10.25; Texas steers, \$5 to \$6.90; Western steers, \$6 to \$8.30; stockers and feeders, \$4 to \$7; cows and heifers, \$2.60 to \$8.10; calves, \$6.50 to \$9.75.

Hogs.—Light, \$7.80 to \$8.40; mixed, \$7.40 to \$8.40; heavy, \$7.25 to \$8.25; rough, \$7.25 to \$7.50; pigs, \$6 to \$8.10; bulk of sales, \$7.70 to \$8.20.

Sheep and Lambs.—Native, \$3.20 to \$4.65; Western, \$3.40 to \$4.60; yearlings, \$4.40 to \$5.60; lambs, native, \$4.40 to \$7.50; Western, \$4.30 to \$7.60.

DEATH OF JAMES RUSSELL.

At the home of his brother, Andrew, Carville, Ont., on Friday, August 9th, after a prolonged illness, occurred the death of James Russell, formerly of Richmond Hill, who, in partnership with his brother, William, was for many years one of the most prominent and successful breeders and exhibitors of Shorthorn cattle at leading shows in Canada and the United States. Their record in prizewinning at the Centennial at Philadelphia in 1876, and the Columbian at Chicago in 1893, stands unequalled in the history of the breed in the Dominion, and speaks well of their judgment and skill as breeders and feeders of the class of stock they handled. Owing to ill health of the owners, the farm was last year sold to the City of Toronto for an industrial institution, and on February 9th of this year, the herd was dispersed by auction.



The Mower.

(Statuette by the Canadian Sculptor, Edgar L. Laur.)

"That fine swing of bronzed arms, and the wide, curving sweep of the scythe."

The Orchard Grass.

By Clayton Duff.

[Orchards overgrown with grass are not now in fashion. Ruthless pomological science has declared that the green carpet must go, since brown earth, for the greater part of the summer at least, is more conducive to the certainty of a sure crop of red apples. Nevertheless, there are many among our readers who will understand and enjoy the fine note of appreciation of Nature struck in this article on "The Orchard Grass," by the rising young Canadian writer, Clayton Duff.]

THE ORCHARD GRASS.

The tall ranks of orchard grass crowded the world under the apple trees. Above their waving heads the tops of the fence-pickets were barely visible, and the brown pools and gleaming stones of the stream below were seen only through the parting stems. But while they shut out the breadth and freedom of the landscape, there was something pleasant in such seclusion, like living beside a wood; for the orchard became a privacy of happy thoughts and childlike wonders and mysteries. The grass had its frolics, and whispered dreams all day long, and in its gentle keeping went on the varied enterprises that employ the little creatures of the fields and gardens. It was threaded with tangled trails by which still, brown birds crept in and out, and the hen with gypsy blood stole to her happy nest, and the terrier sniffed out the fastnesses of mouse and mole, and you fancied the king bird and the pewee swinging on their spray, saw the green byways converging to some secret glade where fairies danced at night.

In the first cold weeks of spring you would have thought those sere and lifeless tufts uncovered by the melting snow could never break into green again. No one could tell just when the renewal came, for it seemed as if, one day, the sward was brown and dead, and the next time you looked there was the grass leaping all around in lusty clumps, not a withered blade among its radiant, upspringing leaves. They were splashed in brightness against the dark, rough trunks of the apple trees, and flecked with twinkling shadows by the leafing branches; and down among their roots they held cool depths of green as they

laughed and danced with the breeze and the sun.

As the summer waxed, and the trees grew fat with leafage, the grass lost its first careless rapture in the intensity of growth. Its tender green darkened to a graver hue as a face becomes sobered by the earnest purpose of life. When the flower heads sprang above the leaves, its bristling ranks made you think of old pictures in family Bibles of the men of Israel marching with spears. In the evening and the morning it still was wild and glad with the daisies who came out with innocent faces to play on the borders of the orchard; it swung on its long, supple stem, and ran before the wind and stretched upward to the friendly trees weaving its arms about their trunks. But in the wide, staring noon, a secret kind of life seemed to fall upon the grass. The waves of shadow drifting across its face were like lonely thoughts; and you fancied a faint whisper always creeping through its companies. At night when the moon swung out below the eaves and the old trees leaned above the earth blissfully calm, within their shade the grass stood hushed and unstirred, something portentous even in its dream.

In the latter days a faint purple flush stole over the hay field. It came from the anthers of the grass flowers which hung on the green heads like a fluffy powder, light as a breath. The scythe was hung suggestively on the bough of a tree, and, at last, the blithe, pastoral sound of the whetstone ringing, wakes this still, sweet morning.

What a pleasant thing it must have been when the haymakers went forth in bands, and making hay was a kind of rustic festival! The solitary farmer on his modern mower is hardly a festal figure, but the spirit of less breathless days is preserved in the measured motions of my haymaker. Cutting hay in the primitive manner is one of the most ornamental forms of labor. That fine swing of bronzed arms, and the wide, curving sweep of the scythe, have a rhythm that could almost be set to music. And here in the cool of the apple trees, where the air is sweet with the wholesome fragrance of the falling grass, and the cheerful bustle of the summer morning rises like a song on every hand, work seems to lose all its old connection with the primal curse.

The severed stalks are tossed from the scythe in a deftly overlapping row. There is a pale shine upon them as they lie, and the weeds that fall, exposing the white undersides of their leaves, give a ghastly aspect to the prostrate ranks that harmonizes with the thought of death. Trees that were knee-deep in June, emerge a little nakedly in the open, but the infant shrubs and bushes that had been buried in the surging grass, gratefully resume a place in the sun.

As swath after swath comes down, the hidden life of the grassy world reveals its secrets. No compassion can quite restore the song-sparrow's nest that the scythe has uprooted unawares. But the loosely-woven basket of withered grasses and last year's leaves are carefully returned to the shady side of a windrow, and the distracted parents left to supply the succor most needed by their helpless babies. It is painful, in return for such a neighborly act, to be suspected by the frantic birds of the ruin in their familiar world; but virtue is its own reward. With more worldly wisdom than the song sparrows, a pair of chippy birds have elevated their cradle into a tiny juniper tree. What a picture when the tenacious branchlets are parted and reveal the fairy cup of rootlets lined with hair hanging in their heart! One blue egg sparsely flecked

with black, is left as a memento of a family that must surely have agreed in such an exquisite "little nest" as that.

Now it is known upon the housetops what the white hen has been doing in the closet. Finding a hen's nest is one of the most thrilling pleasures of life, and here, under the apple tree, is the artless depression in the stubble that, after generations of home training, some hens still prefer to the upholstered soap-boxes of civilization. The four clean, brown eggs, look so charming in their rustic setting, four poached eggs on toast would gladly be given up to let the hen carry out her cherished enterprise.

The sward looks raw where the hay was cut, but the white clover is hurrying to hide the scars with its humble blooms. When the grass has dried a while in the sun the tanned haycocks will be stored in the loft to await their ultimate destiny, the sustenance of a brindle cow. The world is wide and free again, but I miss my friend, the grass, with its ripples of light and shade, its dancing gaiety, its whispered mysteries, and its brooding peace under the moon and stars.

AN INTERESTING LETTER FROM ALBERTA.

To The Roundabout Club.—Greetings:

Apropos of an observation made by the Roundabout Club editor, in a complimentary article of June 20th issue, to the effect that "the only regret being that there are no results to publish from Provinces other than Ontario," . . . some slight interest may be attached to the acknowledgment that Alberta, and not Ontario, has been for several months the writer's Province of address.

It has occurred that possibly a few notes gleaned from this corner of the Dominion might be of interest to Roundabout readers, but before leaving the subject, I should like to remark that, when that particular copy of June 20th's issue travelled half-way across a continent, its eagerly-turned, familiar pages, brought a surprise as complete as pleasant. I had no inkling whatever of this photo plan being afoot, but appreciated, however, the interesting glimpse of the face behind the pen, in the case of all the other members.

It has been a novel and healthful experience to spend four months in a lumbering center in the Alberta Mountains, Kootenay Pass District. One attempts an herculean task to speak of the many phases of this great West land, and give Easterners, who have never travelled westward, ideas, anything but vague, so I shall confine myself altogether to this particular district.

The most striking and beautiful feature, when, passing through Medicine Hat, Lethbridge and Macleod, one still travels westward is, of course, the mountains. The level stretches of country that Regina centers have their charm; the rolling prairie lands around Moose Jaw, that city itself climbing a bluff and presenting a fine view from the depot, are most attractive; but fair to the eyes of the lover of wooded heights are the great foothills, the timbered sides, and the ragged peaks of the Rockies!

Facing them for 18 long miles of a drive, their snow-crowned beauty against a sky of blue and pearl fleeciness, presented, in the sunshine dazzle of a March morning, a sight exquisitely beautiful, never to be forgotten in the memory of a travel-wearied stranger. Crow's Nest, towards which the train still sped, Old Turtle, that again threatens the destruction of the little town at its base, Table and Castle mountains, so near—yet so far!—one ventures just one guess at

distances and then resolves never again to laugh at the old joke at the expense of someone else.

With daily renewed interest, we watched the transformation of spring. And it was a glorious spring! lengthening days of sunshine and warmth—Poor old Ontario, in the throes of mud, rain and floods!—the great depths of snow in the forests disappearing gradually, easily, the mountain streams brimming, but not overflowing.

Then, to watch the new, delicate foliage appearing among the dark green of pine, spruce and fir of the forests! From the hilltops, one followed the course of the creeks by the budding willows. Up the grassy slopes, groves of young poplar, so thickly growing, slender, and gray of bark, became something prettier, even than in their semblance, to young, bare orchards. Distance lent an added charm to the farther hills; the silver of standing dead timber blending with foliage and bark, contrasting with patches of snow, combined in the sunlight to produce a lovely picture, varied and most delicate in coloring.

The mountain streams are clear and cold, being snow-fed, and abound in salmon trout. When fording the south fork of the Old Man River, one obtained an idea not surmised from the bank, of the depth and strength of the current, the water at this point running comparatively smooth, and being so clear as to enable one to distinguish everything in its depth.

Travelling the narrow ridges that encircle the rocky sides of the peaks, and finding pasture even on their summits, are the mountain sheep, so brown of color as to be scarcely distinguished from the background of rock. Over the hills, deer in plenty, roam. If desirous of seeing them, one may choose between the lesser of two evils (?)—for mountain air induces sleep—to rise very, very early, or retire late. With sunshine come the flies, the deer for the better part of the day seeking shelter in the thick brush. Just now one may follow a path, worn smooth by the wild animals, to some favorite watering-place, or along an old Indian, or even fir-ranger's trail, and see the imprint in the soft earth of a tiny hoof, side by side with the larger. Or, is the long grass to the side laid low and recently trodden?—a bear has passed by, and woe to the unarmed traveller who, just now, would seek to injure or capture the queer little brown specimen ambling along so ridiculously!

Would you penetrate further into the great wilderness lying in these mountains, of timber-land and grassy plain, valley, hill, or rocky peak—a wilderness, to a great extent of which man has never penetrated?—and its paths are those of the wild animals. This is the final hiding-place of the mighty elk.

Space forbids to speak of the luxuriant growth and variety of the wild flowers, each attractive in its way, from wonderful mauve crocus of springtime to the roses that bloom until snow flies again.

To be sure, "snow-flying" time may not, in the vicinity of the mountains, mean anything very definite. On the evening of July 13th, we were favored with a white layer that lasted until sunrise. Previously, there had been traces of frost, the corn and beans being, alas, "cooked," but it is only fair to add that all other vegetables are doing well; potatoes particularly, are promising throughout the country—and, in Alberta, there are no potato-bugs!

Primarily, this part of Alberta, such as I describe, is adapted for lumbering and ranching purposes. Whether the



Amid Snowy Summits,—The Canadian Rockies.

"Vast quantities of snow lodge in the timbered slopes of the mountains, and feed lake and river."

taking out of the timber will eventually alter climatic conditions, making it more favorable for agricultural purposes, remains to be seen; the great elevation is even then a factor. It is a source of pleasure to know that the Government has reserved for natural park purposes many thousands of acres of land extending over a beautiful and peculiarly adaptable part of Alberta. A double purpose in this seeks to preserve for the prairies a great natural reservoir, for vast quantities of snow lodge in the timbered slopes of the mountains and feed lake and river.

That, ever so fine, line of distinction between Canadians, implied in the appellation "Westerner," calls for a brief opinion of the people one meets here.

They are different in their manner of living, many of them, only as pioneers differ from those of the time-settled towns and communities. Social conditions, of course, differ accordingly. The Easterner may not forget the newness of the country. He may wonder, grow interested, enthusiastic even, but must not be superficial in judgment. Let him remember the oneness of the nation, and bring to bear some of that staidness of character with which we Ontarians have been credited. It has been said that the authorities of this country are more zealous in a prosecution of a fishing or hunting-without-a-license case, than they are about the constant Sabbath-desecration, and, it must be admitted, one's observation cannot but confirm the statement. But to what extent are Easterners (so-called) responsible? They who now have found homes in the West, who received their education and training in Ontario's schools and churches, do they stand four-square for the principles that their Western neighbors trample upon?

Easterners and Westerners, what we need is to be more truly and intensely Canadian; to stand shoulder to shoulder, together, Canadianizing the strangers within our gates; to cherish a high national ideal, and conscientiously ever strive toward attaining that ideal.

In other words, let us say with Keats:

"In the long vista of the years to roll,
Let one not see my country's honor
fade;

O! let me see our land retain its soul,
Her pride, her freedom, and not free-
dom's shade."

Alberta. HONOR BRIGHT.

MAN'S DUTY AROUND THE HOME.

Editor "The Farmer's Advocate and Home Magazine":

In looking over a recent number of "The Farmer's Advocate," I read with much pleasure and amusement the article entitled, "Man's Duty Around the Home." Really it is wonderful what women do expect of "mere man" nowadays. He has got to be a skilled workman, and the master of many trades, if he wishes to come up to the high standard laid down by the up-to-date wife. First of all he must be an experienced chef, for he has to do a lot of kitchen work,— "lighting the fire," "making the tea," "getting a meal if necessary," and the preparing of many savory dishes, of

which chicken, beef and pork, form a leading part. He has to act the general housemaid, too, because he has "to hang the pictures," "lay the carpets, and even look after the beds," because he has to fill a straw-tick if necessary. But this is not all; he must tread lightly when he comes in the house (his own house), "hang his coat on his allotted peg," "place his boots neatly behind the stove," and then, I suppose, go quietly upstairs to bed. Such is poor father's lot, and, really, if ever a person made a mistake, it was he who wrote that oft-repeated song, "Everybody Works but Father," etc.

Woman's first home was in the Garden of Eden. There man first married

woman. Strange that the incident should have suggested to Milton, the "Paradise Lost." Man was placed in a profound sleep, a rib was taken from his side, a woman was created from it, and she became his wife. Really, I believe this first sleep became man's last repose, for she has kept him on the run ever since, and by all indications will continue to do so. But if women be given at times to that contrariety of thought and perversity of mind which sometimes passeth our understanding, it must be recollected in her favor that she was created out of the crookedest part of man.

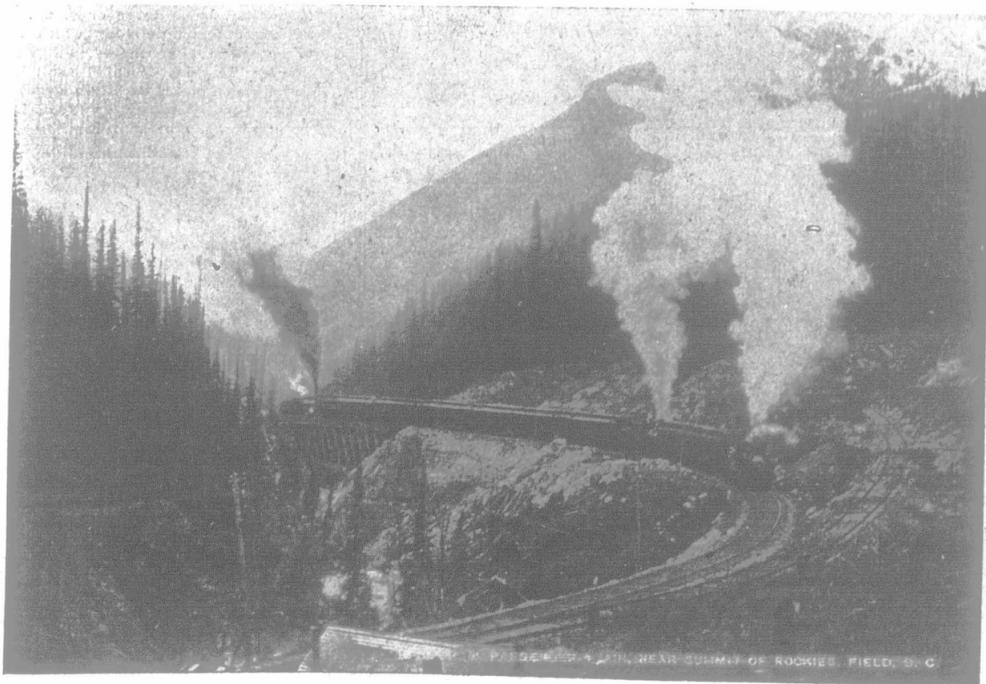
But such a subject as this, where home is concerned, we must not deal with in a too slighting manner, and will return from the "ridiculous to the sublime."

Home is generally what we make it, and the work connected with it either a labor of love, or one of drudgery, but I think it is not well to expect too much of us men, for we are really good fellows most of us, if you just take us in the right way,—but some women just don't know what that way is. I think when a man comes home at night after a hard day's work in the field, he should find his home a haven of rest—a place where he can remove his smock and overalls and throw himself down in an easy-chair and look over the evening papers and not be grumbled at.

Contrast with this a different picture: When he comes to the house he is met at the door by his wife, all in a fuss, and she runs off two or three records of the misdeeds of the servants or the children, and then those are brought out who were promised a whipping as soon as the "old man" came home to this scene of domestic felicity, and perhaps it ends up something like the case where a husband and wife sat at opposite ends of the tea table, and a bitter controversy came up between them, and the wife picked up a teacup and hurled it at her husband's head, and it glanced past and broke all to pieces a beautiful motto on the wall, entitled, "God Bless Our Happy Home."

But I must beware. Perhaps I am going too far and painting the scene too black, but I believe there are homes in our country where everything does not go just as smoothly as they should, and I believe the cause is mainly on the part of the wife, though there are exceptions, and now might we not look briefly at the other side of our subject,— "What is Woman's Duty Around the Home?"

Solomon says,—A good wife is from the Lord,—but took it for granted that we might easily guess where the other kind comes from, but there is no excuse for a man picking up the latter kind



Among the Rockies.

"Travelling the narrow ridges that encircle the rocky sides of the peaks."

when the world is so full of good, noble women, though mistakes are made sometimes. I have seen men on their wedding-day think they were annexing something more valuable than the Klondike, who have found it out—they got only an album and a fashion-plate, with a mother-in-law thrown in. If any should find himself in such unfortunate circumstances, I have no advice to give him, only, "Whistle to keep your courage up, and put into practice what the old lady said."—She said, "She had a great deal of trouble in her time, but she had always been consoled by that beautiful passage of Scripture, 'Gird and bear it.'"—Now, to return to women's duty—well, perhaps, after all, I better leave that for one of the sex, for it is never good policy to meddle too much in a woman's business.

SCOTTIE.

Glengarry Co., Ont.
[This is interesting. Are there not some more ideas on the subject? May we ask, however, as a favor, that future contributors will be kind enough to omit Scriptural references or quotations.—Ed.]

Some Old Time Echoes.

ON TREK IN THE TRANSVAAL.
VI.

At Escourt Still.

That pole did take another three days to get itself adjusted before we could start for Colenzo, but at last we were ready for our next move on. My entry of June 10th thus mentions the fact:

"The wagon actually ready for our start at last! This seemed too good to be true, and our new friends had quite the air of breaking it to us gently, lest the exhilaration of such hopeful news might act injuriously." Then follows a post-cart incident—the post-cart of old South African days being a time-honored institution (if anything movable could be called an institution). Without the post-cart there would have been no letters, no meagre supply of newspapers, and except for those who could purchase their own wagon and outfit, and employ their own drivers, no means of personal communication with friends at a distance. To travel by post-cart almost means taking your life in your hands, as perhaps the following little snapshots taken just before we left Estcourt may serve to show:

"1 p. m.—The post-cart has just come in with its jaded and battered-looking passengers, who were almost shot out at the door. They all have some pet bruise or chafe, or some angle of their person to guard from chance contact. The cook, at the sound of the driver's horn, rushes frantically at the sauce-pans, tears off their lids, and dishes up their steaming contents. Chairs are dragged hurriedly up to the table, our morning's calm is broken by the clatter of crockery, the rattle of knives and forks, and a racket of tongues, as the news is hastily exchanged in gasps between the mouthfuls which the poor things hastily swallow with quite a hunted air."

"There is no peace for the wicked," I heard one say; one, too, whose features gave promise of a power of patient waiting, which I would have bought off him at any price just then. He heard the horn of the post-cart as it drew up to the door, and knowing he should not have time to finish his bit of rather stodgy plum-duff, which, as everyone knows it is only eatable hot, he quietly pocketed it for a future occasion.

Our landlord apologized for some little mischance by telling me that his wife was away at the diamond-fields. She had been thrown out of the post-cart on her way up to them, and had broken her leg or her arm, I am not sure which. (This same individual actually met with a similar accident on her return journey, and whichever limb she did not break going up she contrived to break coming down. This I have been told as a fact since, and could easily believe it.) However slow-going everything else may be in South Africa, the post-cart is the one exception, I remark, as a few moments after it has left the hotel it appears on the opposite side of the river it has dashed through, and tears up the hill on the road to its next stage, Colenzo.

Its advent and its exodus has done me a world of good. It has been as reviving as a sniff of pungent smelling-salts, or a breeze on a stagnant, sultry day, a state of mind which may serve me in good stead presently.

It was on the morning of the 11th of June, after a really restful night at Colenzo, that we took our first out-door meal by the drift (or river) beyond Blue Krantz.

THE FOOT OF THE DRACHENSBERG.

"This is the point which separates Natal from the Orange Free State. When we reached it after nightfall we were very tired, very cold, and very stiff about the joints. Our horses had continued their acrobatic performances at every fresh start, and our starts were many. The loan of two well-trained horses by a Colenzo friend, which led off gallantly when the others were, as usual, restive and intractable, had saved us from many a mishap. . . . We have crossed at least twenty-two spruits, wet and dry. Under the head of spruits, understand the bed of a river or its tributary, a mountain course, or almost any track made by water forcing its way across the road. Sometimes the descent into these spruits is after a very break-neck, tumble-downstairs fashion, huge blocks of stone, great holes, mud-pits, and such like having to be encountered, before you plunge into the central hole, from which you get out sometimes, and sometimes you don't, until you are almost dug out, with your teeth set on edge by the rasping of the wheel-tires against the stones, with your ears deafened by the shouts of your men, "hup! hup! ah, now! ah, now!" and the cracking of the whip with the sound as of a gun fired off close by, while your eyes "see stars," as eyes will, when the head which owns them seems only held by a thread, as it were, in its usual place, for it has been treated like a football the while."

THE DRACHENSBERG OR DRAGON'S MOUNTAIN.

The very name sounds like a fairy tale. I seem here to be "living out" one or two of those which memory brings back to me from my childhood's store, as we wend our way up that grand old frontier of nature's piling. As we drew up at the "hostelry," cramped, cold, and tired, we counted upon rest and food speedily, but this was what greeted us: The door opened at once into a large, mud-floored room, with open rafters to the ceiling, from which all manner of things were suspended, settles around the room, and a long table in the middle. A youth, Dutch really, but to all outward appearance a Yankee lad, or an Old London "gamin," of the worst type, lounged upon the settle, with a pipe in his mouth, spitting ad libitum, and with a skill worthy of his Yankee prototype. He never rose until pressed to go and see if we could be accommodated, and then he lazily roused himself. "Yes," he ascertained, "the missus could have that room," pointing with a thumb to a door on the right; and "he," meaning Mr. G., that to the left. He'd "see if we could have tea." At last a maid, who might have been own sister to the "maiden all forlorn" in the story of the "House that Jack Built," brought us some lukewarm, undrawn tea, bad butter, bad eggs, and some bread. This unsavory meal cost us 2s. 6d. a head. Our bedroom was indescribably dirty. The mud floors we had had hitherto had been decently covered, our window panes clear and bright, woodwork polished, and bedding clean. Here cobwebs obscured the light; the windows could hardly have been opened for months; and as the three beds had probably frequently held double their number of occupants, the concentrated essence of stuffiness is beyond my power of description.

"There was a delay in obtaining the necessary oxen for the ascent of the Drachensberg, so we did not start until 11 p. m. of the 12th. A and I walked a good part of the way, but sheer weariness drove me at last into the wagon. We were now 175 miles from Durban. Our boys, with the horses, awaited us upon the top of the mountain. They and a band of Kaffir road-makers presented, as we approached them, a grotesque appearance from atmospheric causes. The Kaffirs, standing to gaze at us, leaning on their picks, looked gigan-

tic; and, being immovable from curiosity, seemed more like huge firs or poplars than human beings. Once over the Drachensberg we were in the Free State; out of a dense mist into a steady rain. Oh! the misery of it, boxed up in a little curtained wagon, with no space for one's legs. . . . We are struck with the better roads here, and the flatter surface we have to pass over, the stones being taken out where not wanted, and put where they are, or piled ready for removal.

Harrismith, 12th.—We reached this at 7.30 p. m. last evening, lighted by a bright moon, soon after paying our first "toll," a mile from the town. This toll, under Orange Free State laws, is a local arrangement, and makes of a bad bit of ground, a track fairly good.

Harrismith is quite an important little town, with a good Dutch church. The streets are laid out well, of good width, and drained after the simple Dutch fashion, by a dyke on either side to let the water escape.

The site of an English church is chosen and its foundations laid. We had service in the temporary building, with its mud floor and roughly-constructed benches. The roof, made of plates of zinc, and unboarded, gave us delightful peeps of a brilliantly blue sky overhead, but no one finds fault with gaps and air holes in this country, until the rainy season, when, of course, they have their inconveniences.

I have often wondered if the curious optical illusion from atmospheric or other causes with which we met from time to time in our long trek, had not something to do with the miscalculations made by our British troops in the beginning, anyway, of the Boer war? Here is an instance:

Flat as Harrismith is, there faces our hotel a high mountain, one of the many table-like formations of the country. Height, sizes and distances are very deceptive. There being a spare hour before dinner, I remarked casually, "I should like to stroll up that hill; I suppose I could do so in the time." This created much amusement. I was told that it would take me quite a day, and that I should probably lose myself, even if I had strength to undertake the climb at all. The others started off once, but returned worn out and weary, after a hopeless search for some Bushman caves, of which they had heard, as containing curious inscriptions, carvings, and relics of these daring little people, whose hands, small as they were, seem to have been against every man, as every man's hand was against them. Irritating as gnat-bites, one can fancy their attacks, as they darted their poisoned arrows from their tiny hiding-places, often dealing death from behind a stone barely large enough to conceal a good-sized frog, or out of a hole into which a hedge-hog could barely creep! The South African native is so lithe and agile that, be he large or small, he has a power of compression which requires to be seen to be believed.

In my next instalment I shall hope to introduce another Good Samaritan.

H. A. B.

To be continued.

Alone.

(An Irish Mother's Lament.)

The mist is creepin' up the hill, the gloom is stealin' down;
I look into the valley, where the bog lies brown;
I look and look along the path that's windin' to the door,
But there's n'er a one o' mine comin', n'er a one more!
Oh I mind when they were babes and I held them to my breast,
I mind the song I sang when I'd be hushin' them to rest,
I mind me well the day I stood and watched them from the shore,
And n'er a one comes back to me, n'er a one more!

Is it you, oh my children, I hear cryin' in the night?
Is it you callin', callin', when the dawn is gleaming white?
Is it you—or the weary wind that sighs around the door—
For there's n'er a one near me now, n'er a one more!—P. S. Weekly.

Hope's Quiet Hour.

Eating Butter and Honey

The Lord Himself shall give you a sign; behold, a virgin shall conceive, and bear a son, and shall call his name Immanuel. Butter and honey shall He eat, when He knoweth to refuse the evil, and choose the good.—Isa. vii. 14, 15 (R.V.).

In childhood I used to wonder over that text every time Christmas came round, though I never asked anyone what it meant. In the old and familiar Bible version, it seemed as though the effect of eating butter and honey was that the Messiah should know how to refuse evil and choose good, and I see that the old rendering is given in the margin of the R. V., so perhaps it works both ways. One who has eaten the good things which God provides will turn away from evil and instinctively reach out after good; and one who, from a strong sense of duty, refuses evil and chooses good, will be strengthened and gladdened by the riches and sweetness provided by the Father for His own children.

We are given free-will and called to turn our backs on evil—like our Leader—and choose good. The evil may seem profitable and delightful, and the good may seem poor and tasteless; but the world is governed by a just Judge, and those who choose evil soon find that life has lost its flavor, while those who choose good find sweetness hidden even in the most bitter cup. The man who can really know from glad experience the truth of the Shepherd Psalm, is the man who has followed the Good Shepherd trustfully, even when He led straight through the deep darkness, which seemed from the outsider's point of view like the valley of death. It is only a dark shadow, soon passed through, and one who keeps close to the Shepherd hardly knows the meaning of fear. The green pastures and still waters are always provided when a soul really needs to be restored, the table is spread by the Shepherd in the face of enemies who are helpless to disturb the peace of His sheep. Looking back, it is plainly evident that all through life—"goodness and mercy" supply all needed food and happiness for those who follow the example of their Leader. Even in the most desert-like days of life, He tenderly anoints their weary heads with the oil of gladness, and holds a cup of refreshment to their thirsty lips.

Let us follow the example of Him of Whom the prophet said: "Butter and honey shall He eat, when He knoweth to refuse the evil, and choose the good."

There is so much honey that may be eaten, if people will only refuse injurious sweets and choose natural, God-provided happiness.

I am sitting at present on a big stone beside the clear waters of Lake Simcoe, enjoying the musical lapping of the tiny wavelets, the sweet pure air, the golden sunshine, and the pleasant shadow of a tree behind me, the song of the birds and—best of all—the glad fellowship with God and with you.

There is a good deal of honey to be found in this little summer resort, where I have spent five happy, restful days. Yesterday I saw several people enjoying it. There was the young wife who—after a year of married life—had spent, for the first time, a week apart from her husband. He came up on Saturday (a "week-ender"), and they drifted off together constantly all day Sunday, as happy as if their love-making were a brand-new treasure. Then there was another young married couple, tramping along the beautiful lake-shore road to a church three miles away. They were good comrades, very evidently, and cared enough about the worship of God to walk six miles, on a hot day, in order to kneel together before the Throne. Then there were three little negro children sitting on a stile with their arms, lovingly around each other. Three little girls, in gay Sunday frocks and with shining Sunday faces. Then there was another picture to be seen in the garden of the summer hotel—a young and proud father (another "week-ender"), with his

wife beside him, one small boy on his knee and two or three others crowding as close as possible.

Shall I describe any more? There are plenty of people gathering the wholesome sweets of life around you—people who live in a land of cream and honey, and who don't despise God's good gifts.

Those who have turned their backs on the world's Great Leader, and have wilfully chosen evil and refused good, have thrown away their power to enjoy satisfying sweetness.

A man who tastes the forbidden fruit, deciding that he will know by experience the pleasures of evil, turns himself out of the Paradise provided for him on earth. A soul defiled by reading low books, thinking impure thoughts or seeking evil companionship, will shrink away ashamed from fellowship with those who are clothed in the white robes of purity. Evil pleasures—which leave a lasting bitterness behind—destroy one's taste for the everyday happiness which those who continually "choose the good" may enjoy thoroughly. If you wait to make misery for yourself, and heap up difficulties and temptations to block your own progress, sow a generous crop of wild oats. One who has investigated the condition of "the man farthest down" in England, describes poor creatures who eagerly snatch a foul crust from the garbage heaps, or sleep at night in a filthy shelter where men are herded together like pigs. He says that the chief cause of this awful condition is drink and other degrading vices. Those who choose evil and refuse good, taste very little of life's milk and honey.

Perhaps the text only means that the mysterious Promised One, though "God with us," would be a real human Child, eating the ordinary food of infants in the East. "Butter" is rendered "curds" in the margin. I am probably straining my text—as preachers often do—putting into it a meaning that was never intended. But you must put up with anything you can get when "Hope" is off holiday-making. At least history will bear me out in saying that God has given the world a "sign," showing by countless millions of examples that those who refuse good and choose evil are taking the road to unhappiness; while those who "refuse the evil and choose the good" may seem to be turning their backs on happiness, yet it keeps very close to their hearts—even in this life. We don't need a messenger from the unseen world to convince us that goodness pays better than wickedness. Riches can't make a man happy if he has to face the lashing of his own conscience, the contempt of the world, or the fear of being found out—even if the fear of God be stifled entirely.

But nobody chooses evil and refuses good deliberately. Take a drunkard, for instance. Surely no man ever decided to wreck his life on the rock of Intemperance. If you are in the Niagara River, above the Falls, you don't need to swim downstream if you want to commit suicide. All you have to do is to let yourself go along the path of least resistance. And unless you struggle hard against evil and for good, never resting satisfied with the progress already made, you are slipping backward—though you may be quite unconscious of the fact. It is not enough to wish to be good. Probably everyone wishes to be good—that is as natural as for a plant to turn to the light. We should love good for its own sake, and hate even the sins we fall into. Balaam did not dare to curse Israel, yet he was eager to get the promised reward. How disappointed his first answer was, "The LORD refuseth to give me leave," and how delightedly he seized on the smallest excuse to do what he knew was wrong. In his heart he chose the evil course which would make him rich, though fear of God's anger kept him back from open disobedience. Unless we love good for its own sake, we shall miss the upward path; though fear of consequences may keep us outwardly respectable, and the absence of any temptation to commit crime may make us self-satisfied. The question we have to face is: "Are we really struggling against the evil that tempts us?" Perhaps we care too much about popularity. Are we determined to think about God's opinion of us and not worry about the opinion of our neighbors? Perhaps we are inclined to be selfish. Are we trying to conquer

this tendency in little ways, seeking the pleasure and good of others, instead of always looking after Number One? Perhaps we live in a rush of work or pleasure, forgetful of God, neglecting prayer and Bible-reading, acting as though this life were all, giving scarcely anything to God. Are we fighting against this absorbing temptation of worldliness, and trying—on Monday and Saturday, as well as on Sunday—to walk with God in the world?

Every real prayer, every kindly word or action that springs from love to God or man, is a direct refusal of evil and choosing of good. Every meaningless prayer—coming from the lips, but not from the heart—every attempt to gain something at the expense of another, every insincere seeking for admiration by doing good in order to be seen of men, is a choice of evil and a refusal of good. The habit of many days becomes in time second nature, and character is forming, slowly but surely, unnoticed by us.

"Heard are the voices,—
Voice of the sages,
The world, and the ages,
Choose well; your choice is
Brief and yet endless.
Here eyes do regard you in eternity's
stillness,
Here is all fulness, ye brave, to reward
you.
Work, and despair not."

DORA FARNCOMB.

The Ingle Nook.

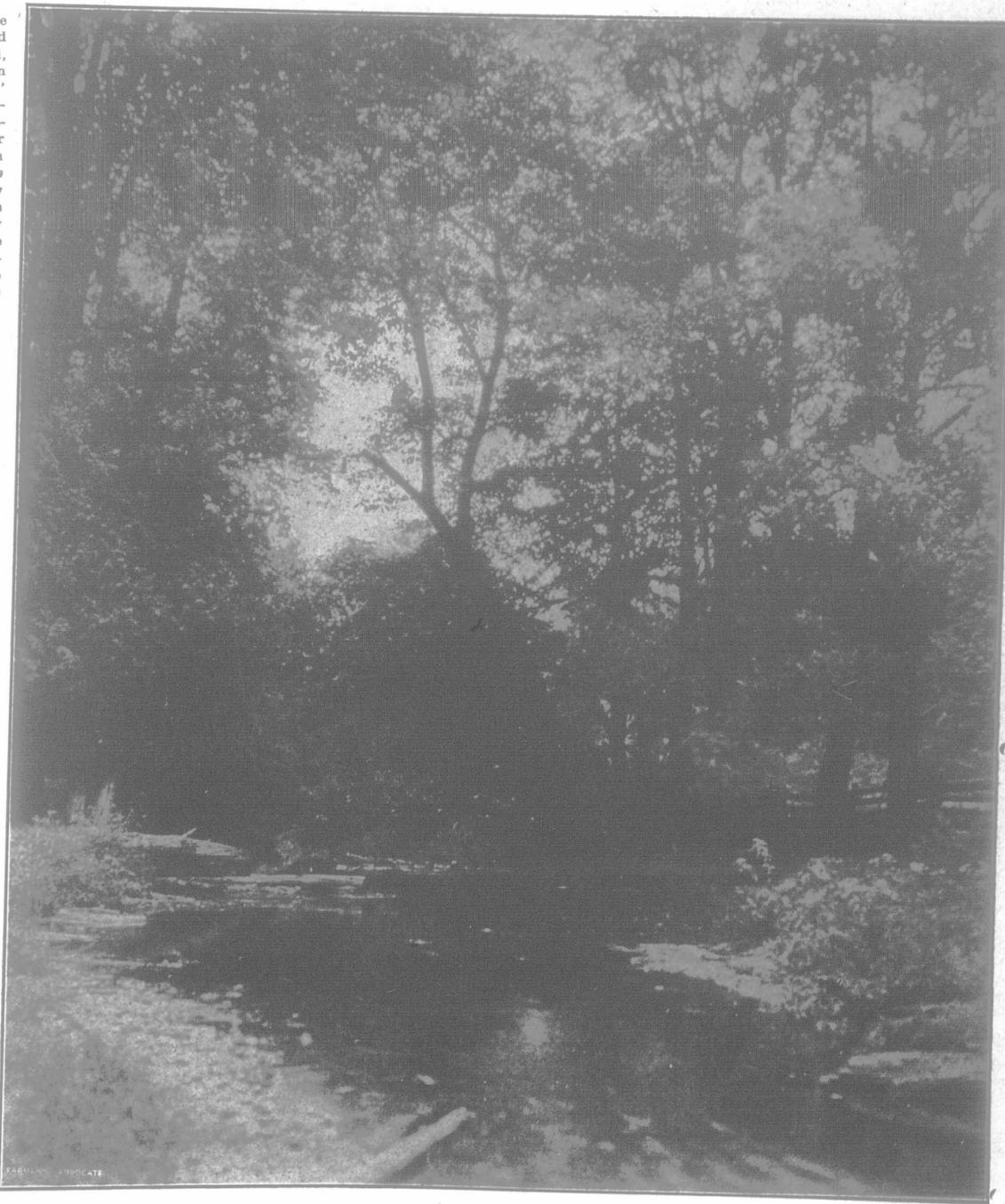
[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month in this department for answers to questions to appear.]

Dear Ingle Nook Friends,—Already I have crumpled up three sheets of paper and tossed them into the waste-paper basket. It really seems as though words will not come to-day, and so I am spoiling everything, but there is a reason for it, so perhaps you will forgive me. You see, I just came into the office this morning after a three-weeks' holiday, and if any of you have ever known what it was to have just one three-weeks' holiday at home in all the year, you will know just how it feels to be trying to get back into the old rut again. Instead of realizing nothing but the work in hand, you keep seeing the faces of the home folk, going over all the little precious though unimportant events of your brief visit, in short, "living it all over again."—Well, that's what I have been doing, in spite of myself, for the last half hour,—jumbling up home-folk and berry-patches, and familiar old fields, and a certain dark streamlet with lily-pads upon it, and wild roses in bloom along its shores, in a wild hodge-

podge that would be very delightful were it not that I have said good-bye to it all for another year. So now you can sympathize with me, can you not?

Perhaps you, too, have come from a short holiday, short enough, perforce, in the busy summer season. I can see you going home. Half-way down the length of the lot the dog meets you; behind him come the children running, with red faces, eager to clamber up into the buggy and ride home; at the door of the kitchen beyond stands the elder daughter, waiting to welcome you, and you feel that you can heartily echo the words of old "Farmer John," who declared that the best thing about going away from home was the coming home again.

When I got back to my office "home" this morning the reception was scarcely so cheery; books and papers and a desk give a welcome that is altogether too retiring, at first glance, to satisfy a home-sick soul. Then—and this is what I want to tell you—my glance fell upon a whole heap of Ingle Nook letters on the desk, and I can't express the warm feeling it gave me to see them. It was just as though each were stretching out a hand of welcome, and so I sat down and began at this particular pile first of all. Here were "people" that I knew. Here were friends who always said kind things. What though some of the envelopes contained only questions? Would not the very answering of them bring back, as always, kind letters of appreciation?



August Days.

—And so, dear Ingle Nook friends, you helped to make the home-sickness less stinging, and I want to tell you so, and to thank you for it.

On the way down from the North yesterday three things struck me particularly.

In the first place the crops in nearly all the districts passed, seem very much better than anyone could have predicted during the long, cold spring, or the period of drouth that succeeded it. Things usually turn out that way,—better than we have expected,—if we only have patience. But that is the hard part,—the having patience. We are seldom willing to walk. We want to fly, and instead we often have to creep. Oh, let us have patience, patience! Perhaps, all the time, things are working out better than we think.

At Owen Sound I saw two camps of Indians right down among the piles of lumber by the bay,—and surely that was a striking sight enough. There they were, men, squaws, papooses, jolly and care-free looking as our native people always are, but appearing so strangely out of place in that mill-produced environment. They had a tent or two, and a little shack loosely built with clap-boards, that evidently contained a "really, truly" stove, for, from a stove-pipe that protruded from a hole in the roof, a column of smoke was puffing merrily. The whole population, however, stood outside to watch the train, and I had time to notice that the women had scarves around their heads and wore bright colors, that they looked, indeed, exactly like the forest folk whom I had last seen at the Ojibway camp away up near Fort Matachewan. How I longed to get out and snap a few photos!—but trains are so incorrigible. Then one could not fall to wondering just how far the contact with civilization is changing the nature of our Indians. Most certainly one would never have expected to find any of them actually camped among mills and lumber piles, on the very outskirts of a thriving town.

At Stratford, the "coat-dress" began to appear on the train. I don't know whether it has pushed its way farther north or not, but if not, it is safe to predict that it will do so next year. Aren't you dreadfully tired of wearing dresses that fasten up the back? Then just think of it!—a coat-dress with a plain, straight skirt, and a jacket-waist that slips on precisely as one would put on a coat!—No more twisting and turning and reaching down and then up! No more chasing about to find someone to settle a refractory button or put in a fearfully necessary pin! No more coming to a ghastly realization, in church, that one has forgotten the "middle buttons" entirely! No more saying nasty things inside on finding that one has buttoned a whole row "wrong," while voices are already calling up the stairs, "What in the world are you doing? We are all going to be late!"—Yes, blessed be the coat-dress, and the waist with a peplum, that fastens in front. May they long abide with us.

Now, just a recipe or two to end this ramble. While I was away I picked up a very easy recipe for pickling onions, and here it is: Sterilize the sealers and fill them with small, white onions, the regular pickling onions are best. Cover the onions with pure white-wine vinegar, and seal. You may add a very little salt if you like, but no cooking is necessary.

Another for cucumbers is as follows: Peel and slice the cucumbers, sprinkle them very lightly with salt, using just as much salt as though preparing them for the table, and let stand in a granite dish over night. Next morning drain the slices as dry as possible and press them into sterilized sealers, packing them well down into each sealer. Now pour in white-wine vinegar to cover, and seal. Cucumbers done this way become a little soft, but retain their flavor. They may be served just as taken from the sealers, or covered with sweet cream. So much for this time.

JUNIA.

POEM FOR MRS. BUCHANAN.

Dear Junia,—Although I have read many letters with pleasure and received great benefits from your Circle, I have been too "shy" to write until I saw, in a recent issue, the letter of Mrs. Buchanan, who started a poem she had seen but could not get. Having that poem in my possession, I decided to write and send it, so will be quite honored if I see it in your worthy columns, as there may be another as glad to get it as I. With best wishes for all the Ingle Nook, I will sign myself—

A CHILD OF NATURE.

Wentworth Co., Ont.

A WOMAN'S ANSWER.

Do you know you have asked for the costliest thing

Ever made by the hand above—
A woman's heart, and a woman's life,
And a woman's wonderful love?

Do you know you have asked for this precious thing

As a child might ask for a toy,
Demanding what others have died to win,
With the reckless dash of a boy?

You have written my lesson of duty out—

Man-like you have questioned me,—
Now stand by the bar of my woman's soul
Until I shall question thee.

You require your mutton shall always be hot,

Your socks and your shirts be whole;
I require your heart to be as true as God's stars,
And as pure as is heaven your soul.

You require a cook for your mutton and beef,

I require a much greater thing,
A seamstress you're wanting for the socks and shirts;
I look for a man and king.

A king for the heavenly realm called home,

And a man that his Maker, God,
Shall look upon as He did on the first,
And say, "It is very good!"

I am fair and young, but the rose will fade

From my soft young cheek one day;
Will you love me then, 'mid the falling leaves,
As you did 'mid the blossoms of May?

Is your heart an ocean so strong and deep

I may launch my all on its tide?
A loving woman finds heaven or hell
The day she becomes a bride.

I require all things that are grand and true,

All things that a man should be;
If you give all this I would stake my life,
To be all you demand of me.

If you cannot be this, a laundress and cook

You can hire, and little to pay,
But a woman's heart, and a woman's life,
Are not to be won that way.

Very many thanks to you, also to J. W. Brayley and Mrs. W. J. Todd, who also contributed this poem. It strikes a fine note, does it not?

CLEANING TAN SHOES.

Dear Junia,—For a number of years I have taken pleasure in reading your paper, but have never written before. I have found many valuable hints, so have come to ask you what will take grease spots out of tan shoes? Sincerely thanking you for any trouble my question may cause you.

Middlesex Co., Ont.

ANXIOUS.

Scientific American gives the following method for removing grease from leather: Dab the spots very carefully with spirits of sal ammoniac, using just enough of the spirits to prevent discoloration of the leather, then wash with clear water. When dry, treat the shoes with tan shoe polish. Tan shoes are much harder to keep clean than black ones, hence are not so satisfactory for general wear, especially in the country.

SILK HEAD SCARF.

Dear Junia,—I have been a silent reader for nearly four years, and during that time have derived a great deal of benefit from your most charming circle of chatters.

Could you give me information through your paper as to the washing of a white silk knitted head scarf which has become slightly soiled? I am timid about washing it for fear of its shrinking or turning yellow. Also, could you publish a pattern for an embroidery dress suitable for a girl of eighteen. The skirt to be made in full-length embroidery rather than the two-skirted effects so much worn now. Thanking you in advance.

Huron Co., Ont.

If I were you I should first try dry cleaning the scarf in this way: Mix starch and powdered borax together, half and half, rub well into the scarf, roll up in a towel and leave for two or three days, then shake out. Repeat if necessary. If this fails, wash the scarf in gasoline out of doors, and dry on the line. Keep gasoline away from fire or lights, or even from hot sunshine, as it ignites very easily.

We regret to say that we have not the pattern you request. A very easy way for making up the embroidery is, however, to tuck the upper part of the skirt, then arrange the waist in surplice effect, with the embroidery edge facing inward. A small vest of the embroidery, or of insertion, may be used to fill in the V. You may have tucks on the shoulders, and perfectly plain sleeves put on with insertion between the sleeve and the body of the waist.

Sometimes the embroidery runs across the waist, front and back, then down the sleeves, the two edges almost meeting on the outer side of the arm, while a piece of tuck material or insertion is placed between. For this design, a kimona waist pattern is used.

RED SKIN.

Dear Junia,—I have read many valuable articles in "The Farmer's Advocate," especially "How to Act," which gave a lot of sensible and instructive help necessary for all to know.

It would be an untold relief to me if you could give me some advice in regard to the case I am going to state.

My face is very red continually, and very, very easily irritated. My friends tell me it is because my skin is thin. Can you tell me if there is anything I could put on to thicken the skin?

Thanking you in advance, hopefully.

RAEBURN.

Try a good, cold cream, which you can buy at a drug store, for your face, then, if that does not do any good, consult a specialist in skin and complexion troubles. Some of these specialists advertise in our pages quite frequently.

MULBERRIES—STAINING.

Dear Junia,—I am wanting some information, so I thought I would write you. This is lovely weather after that hot spell, is it not? I live on a farm, so I am busy picking berries and currants these days. I would like if someone could give me some recipes for mulberries. We have a tree, and it is just loaded this year.

Any person who loves birds and wishes to study their habits should have a mulberry tree in her garden. The birds simply live in it. This is the first year we have got any to cook for a long time. I don't know whether the birds are scarce or the berries are plentiful.

Every person knows when making a dumpling of any kind how the fruit always squashes out; you always have more paste than fruit. I have found a way out. Put your fruit into a pudding dish and then mix your dough up like a thick batter and spread over your fruit and steam. I like it much better than the old way.

Now for my questions. Will you please tell me what you have to mix together to make a paint dark oak color for outside woodwork?

Our house is stone; windows painted green and white. Now, I don't think the front door would look nice green,—do you? The door is set back in, that is, not on a level with the wall, and

there are two long windows on each side of door, also window above door. The door has been painted dark oak before, and grained, but it is colorless now. Would it be all right to paint it dark oak and not grain it?

My brother has taken your paper nearly ever since it was first published, I think, and I always look for the Ingle Nook.

COUNTRY LASS.

Wellington Co., Ont.

Preserve the mulberries, or can them, just as you would other berries, except that you must add enough lemon juice to take off the flat taste. Vinegar would do, but is not as wholesome as the lemon juice.

You will find it more satisfactory to buy the stain all ready for use than to bother with mixing the ingredients yourself. All the standard paint companies, such as advertise in this paper, manufacture stains as well as paints. Write them for all information.

All-white window frames would go very well with a dark oak door. Graining will not be necessary for the latter. With some shades of stone a "weathered oak" stain, which is greenish, would look well for both window-frames and door, but it would be difficult to remove the green and white paint which is already on your windows, so that the stain could be applied.

Come again, Country Lass. There is something especially cheery about your letter. I am glad you love the birds. Have you a little bird book to aid you in finding out the names of them?

PICKLED WALNUTS.

Dear Junia,—Could you publish a recipe for pickling walnuts? What time of year should they be pickled, or is it too late now? I would like to try some this year. Thanking you for all valuable information which we get from the Ingle Nook, and hoping soon to see an answer, I sign myself,

Middlesex Co., Ont.

BEAVER.

Use walnuts while they are still green and tender, so that you can prick them easily with a fork. This stage arrives, as a rule, early in July, so that your request came a little late for this year. However, here is the recipe. You can save it for next year. To each pint of vinegar allow 1 ounce black pepper, $\frac{1}{2}$ ounce allspice, and $\frac{1}{2}$ ounce bruised ginger. Prick the walnuts and put them in a brine composed of 1 lb. salt to each quart water. Let them remain in this brine for three days, changing the brine three times. Now put them in the sun until they turn black, then drain and put them into jars, allowing sufficient room to cover them with the vinegar, which has been scalded with the spices. Cover closely and close the jars. The pickles will be ready in six weeks.

RHUBARB PICKLES AND CATSUP—CHEESE TARTS.

Dear Junia,—I, too, have come for help. Would you please publish, through your valuable columns, a recipe for rhubarb catsup. It was published in your columns in 1910, but I have lost the issue, and would be very much pleased if you would publish it again if it is not too much trouble. I will send a recipe for filling for cheese tarts, which we all like very well.

One cup of sugar, 1 cup of butter, 1 cup of currants, 2 eggs, 1 teaspoon of vanilla.

BROWN HAIR.

Huron Co., Ont.

I have looked over two years' numbers of "The Farmer's Advocate" for a recipe for rhubarb catsup, but have not been able to find it. I have found, however, among the issues of 1910, a recipe for rhubarb pickles, which is possibly the one you want. Here it is: One quart rhubarb, 1 quart vinegar, 1 quart chopped onion, $\frac{1}{2}$ lbs. brown sugar, 1 tablespoon salt, 1 teaspoon each of allspice, cinnamon, cloves, and ginger, $\frac{1}{2}$ teaspoon red pepper. Stew slowly for three hours.

I am quite sure that rhubarb catsup might be made by stewing the rhubarb with a little vinegar, and adding spices precisely as for tomato catsup.

I suppose the most of you know that if you keep the flowers off rhubarb the stalks will keep comparatively tender.

Rhubarb treated thus and grown in rich ground, should be quite usable even as late as September.

QUESTION OF ETIQUETTE.

Dear Junia,—I don't come to you very often, but when I do it is always to ask questions. I should like very much your help in a little matter that has troubled me. A short time ago I was asked by my hostess to help her daughter in serving ice cream to a group of people assembled on the lawn. I started serving those on my left hand. The first two happened to be young ladies who were very intimate friends of the family. I kept right on serving the ladies and gentlemen just as they came, but the daughter of my hostess went at once to a young lady, who was a stranger and the guest of the evening. She then went by the young men and served only the ladies at first.

Now, who was right, my friend or myself, and how should it have been done? I will be very grateful to you if you can find space to answer my question. Sincerely,
 ULYSSES.

The ladies should always be served first, and the older women before the younger ones. If, however, a young lady who is a complete stranger be present, as the guest of the evening, it is quite proper to serve her at once, but if very old ladies are present, one should see that they are also served at the same time. As there are usually more than one waitress, this can be easily managed.

TREATING AN OLD HAT—WEDDING CARDS, ETC.

Dear Junia,—Will you kindly answer the following questions for me?

How could I clean the top of a natural-colored straw hat which has become soiled? The straw is somewhat like a Milan, but much heavier, and very stiff. The crown is made of mohair braid, and I would not like to have to take it off.

When wedding cake is sent to a friend at a distance, how should the card in the box be written? as,

MISS NORA J. BROWN.

MR. and MRS. JOHN SMITH.

or,

MR. and MRS. JOHN SMITH.

MISS NORA J. BROWN.

When sugar is placed in the saucer in the form of lumps, should these be lifted into the cup by the fingers, or a spoon?

Have received many valuable suggestions from the Ingle Nook, and thank you for the help in advance.

VESSIE IRENE.

Oxford Co., Ont.

Milan straw may be cleaned by rubbing it first with corn meal and lemon juice, then with dry corn meal. If, after this, it is found to be sunburned, it should be treated with one of the prepared hat-cleaners, which may be bought at a drug store for ten cents. If very much burned, it will be better to stain the hat with one of the prepared hat stains, which may also be bought at any good drug store. The Maypole Soap Company, 144 Craig street west, Montreal, prepare a very good stain. If hat enamel is used, it may be necessary to give a finishing coat of liquid shoe polish to remove the varnish-like gloss. Of course, this remark only applies to black.

The first method for the cards is preferable, if but one card is used. It is quite customary to enclose two cards, a larger one engraved, "Mr. and Mrs. John Smith," and a smaller one with the maiden name of the bride, "Miss Nora J. Brown."

The fingers are used, as a rule, in dropping the sugar into the cup.

NOTE RE SHANTUNG SILK.

Dear Junia,—Very many thanks for your instructions regarding the laundering of my Shantung silk dress. I washed it again, and ironed without damping, as you suggested, and it is as nice as ever. Thanking you again for your kindness, I remain, yours very sincerely,
 MRS. W. F. H.
 Simcoe Co., Ont.

I am publishing this little note in order that it may emphasize this method of doing up Shantung or Pongee silk, which seems to be a problem to so many people.

BUFFALO CARPET BEETLE.

Dear Junia,—Can you tell me what will exterminate buffalo moths? They are a small insect, dark in color, and covered with a fuzz. We suppose they are the buffalo moth. They are very destructive, especially in wool goods. I have had to take up carpets. What kind of a miller causes them?

N. B.

SUBSCRIBER.

Evidently the insect which is causing you so much trouble is the "buffalo bug." A full description of it, with full directions for eradication, were given on page 1065 of our Home Department for June 6th. Will you kindly refer to that issue.

Hair on the Face.

None but the woman with hair on her face can realize how distressing this blemish can be. It can, however, be removed by the expert. For further information see advertisement of the Hiscott Dermatological Institute elsewhere in this issue.

The Beaver Circle.

OUR SENIOR BEAVERS.

[For all pupils from Senior Third to Continuation Classes, inclusive.]

The Story of a Partridge's Nest.

Dear Beavers,—I wonder how many of you have ever seen young partridges, or found a partridge's nest. I have never yet come upon a nest, but once I espied, through the branches of undergrowth in a thick wood, a flock of the young birds. Exactly like very tiny, somewhat striped, brownish chickens, they looked, and I had just time to notice

"Country Life in America." It was written by Mr. Julian Burroughs, son of that fine old man, John Burroughs, whose books I hope you have read.

"While looking for arbutus one day last April," says the writer, "my father stumbled upon the nest of a ruffed grouse, or partridge. The nest being near the road to Slabsides (the little house which John Burroughs built for himself, and in which he lives), and having but two eggs, afforded us a rare opportunity to observe the mother grouse throughout the laying and nesting period.

"Our going to the nest every day made the old bird, already wild from having been shot at the fall before, still more wild. She would boom up and hum away through the trees when we were some distance from the nest. Always, however, the eggs were covered with leaves that the old bird managed to draw over them as she sprung off, and when we happened to come to the nest when she was not at home, as we often did during the laying period, we found the nest entirely filled with leaves until it was level with the surrounding forest floor, thus making its discovery by any eye impossible. Because of the animals that hunt by the sense of smell—foxes, weasels, skunks, and raccoons—we were in constant dread of finding the eggs destroyed.

"At first the eggs were added irregularly, but towards the last there was a new egg every day until fourteen in all were laid, when on May 9th incubation began. When the mother grouse began to incubate, her behavior at once changed; instead of booming up and away, she would sit flattened out on the nest until we were within fifteen or twenty feet of her, when she would suddenly dart off the nest, going with great swiftness through the brush, half running, half flying, "quit-quitting," whining like a puppy, and often dragging her wings. As during the laying period, the eggs were always covered with leaves. Every time on leaving the nest at our approach the grouse took the same course, going up a bank and over a big rock, where she would invariably stop to look back at us. The instinct of the grouse to feign inability to fly when her

hatched, and every one at exactly the same time. For a grouse chick to be a day late in hatching would be fatal; there must be no delays, no waits for the tardy, no stragglers. Such is the all-pervading wisdom of nature!

"When I went to the nest on the evening of the twenty-fourth day, the old bird allowed me to approach very near before she darted off the nest, going in a new direction and whining loudly. I paid her no attention, for out of the nest spilled a mass of brown grouse chicks, instantly hiding in the leaves which they so closely resembled in color that it was with great difficulty that I was able to gather them up and replace them in the nest, where they at once snuggled together under my hand. The nest was full of empty shells, each neatly opened in a line about the large end, the cap in many cases still hanging, like a lid, by the little piece of shell that the chick does not pick behind the head. These empty shells I removed, and because it was cool, and the young still damp, evidently having been out of the shell but an hour, I hurried away.

"The next morning on my return I approached the nest very cautiously, trying to secure a picture of the mother grouse. She would not let me come near enough, however, and I contented myself with taking some pictures of the chicks, the old bird meanwhile employing all her arts to get me away from the nest. Coming back three hours later the flock was gone, having begun their travels through the woods. May they prosper and outwit the enemies that await them in every forest aisle!"

Senior Beavers' Letter Box.

Dear Puck,—I have just finished the reading of the Beaver Circle. We live within five or six rods from a lake. We have lots of fun fishing in the summer time. I am glad it is summer holidays. I tried the examinations for the Junior Fourth Class, and passed. I averaged sixty on every subject, so I will be in the Fourth Book as soon as school starts. I will close with a riddle.

What is the difference between an automobile, a sigh, and a donkey? Ans.—The automobile is so dear, and the sigh is oh, dear, and the donkey is you, dear.
 LOUIS SHALES (age 10, Jr. IV.)
 Perth Road, Ont.

Dear Puck and Beavers,—I am sending you the drawing of our school-garden and my garden: radish, China pinks, lettuce, and popcorn. I am not joining the garden competition, as I have no camera. I wish Helen Parry would correspond with me. I wish James MacQuarrie would tell us about British Columbia; don't you, Beavers? I will close now. Your trustful little friend.
 MADELINE WALTERS
 (Age 11, Class IV.)
 Littlewood, Ont.

P. S.—My father takes "The Farmer's Advocate." He would not be a day without it.

Dear Puck and Beavers,—As I have just been reading some of the letters in the Beaver Circle, I thought I would write also. We have been taking this paper for some time, and find it very interesting. I noticed where Miss Helen Parry wishes someone to send some more riddles. As this is my first attempt, I will send her some.

What is it, the more you take away the larger it grows? Ans.—A hole.
 What has only one foot? Ans.—A stocking.

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

What never asks questions, but requires frequent answers? Ans.—A doorbell.

What comes after cheese? Ans.—Mouse.

Who was the first whistler? Ans.—Wind.

I will close, hoping my letter will not be thrown in that awful w.-p. b.

AJICE V. FRASER (age 14).
 Martintown, Ont.

Dear Puck and Beavers,—We take "The Farmer's Advocate," and I like to read



Writing a Letter to the Beaver Circle.

how very nimble of foot they were when chirr-r—the old partridge seemed to become aware of our presence, and fluttered off, trailing her wings. Before you could say "Jack Robinson!" not a young one was to be seen. Where they had gone we did not know, nor did we search to find out, thinking that such a well-managed departure deserved to be left to its success.

Now, perhaps you would like to read a story of a Partridge's Nest which we have copied from a beautiful magazine,

young or nest is approached, whining and dragging her wings, has long puzzled naturalists as to how it has ever been developed. At any rate it is a pretty ruse, the mother offering herself to draw the danger away from her young, and one that she plays in agonized seriousness.

"On exactly the twenty-fourth day the eggs hatched, the remarkable thing about it being that there was no dragging along of the hatch as is generally the case with our domestic hens; every egg

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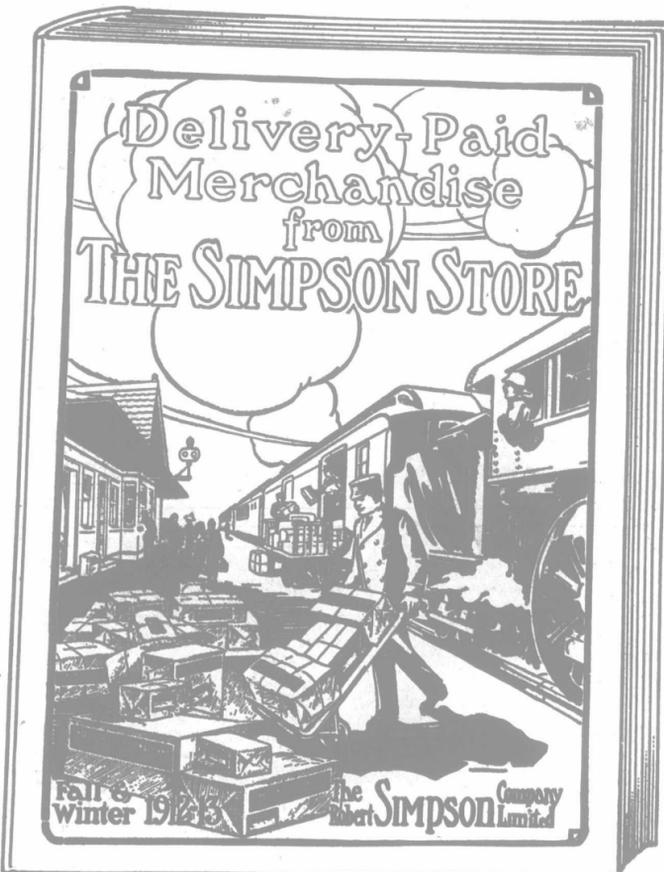
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the letters. As this is my first letter I will not make it very long.

I am going to tell you about a bird that I saw this week. Will you please tell me the name of it? It is a dark, grayish-brown bird, and makes its nest in the ground. It lays four eggs, with specks of grayish-red.

I have three brothers and three sisters. I go to school about half a mile away, and I like my teacher fine; his name is Mr. Rydall. We live on a farm, and I have a cat named Periwinkle, and my little sister has a cat named Tidley Winks. My letter is getting pretty long, so I will close, hoping that this will escape that greedy w.-p. b.

MAGGIE STRANG (age 11, Sr. IV.),
Hurondale, Ont.

P. S.—Please tell me what number I am.

The bird you mention was probably a

field sparrow, but you have not described it very closely. When writing about birds, always tell the size, as closely as you can, also all the markings, and colorings on head, wings, breast, etc. When describing the eggs, give the size and color, and if there are spots, tell how they are distributed.

I do not find your name on the garden competition list at all, Maggie. If you sent a letter applying to be put on the list, it must have gone astray. Have you a garden of your own, that you made all yourself for the competition? If so, please let me know at once, so that I can enter your name.

Dear Puck and Beavers,—I have just finished reading the charming letters of your Circle, and I, like some other Beavers, hadn't pluck enough to write. I have five brothers and no sisters.

Three of my brothers and I go to school. I am in the Senior Fourth Book, and so is my brother younger than I. Our teacher's name is Miss Brydon. We have a river running through a place about ten rods back of the school and all the boys go down to swim, and we have a dandy time. My letter is getting long. Hoping this will escape the monster w.-p. b., I will close.

ALLDON PATTERSON (age 13),
Barrie Hill, Ont.

Dear Puck and Beavers,—I have written to the Beaver Circle twice before, and both my letters were published, so I thought I would write again.

I am going to tell you of a picnic that was held in a bush on the 19th of June, 1912. It was a nice day, and a lot of people were present. Mr. Day, of

Guelph, was there, and spoke on "Under-drainage."

We had our supper, and then they had people racing. I enjoyed myself very much.

I tried for the Senior Third Class, and passed, before summer holidays. I was glad when school stopped.

We have a driver; her name is Polly. When papa goes to catch her she will run away from him, but she won't run away from me. She holds up her foot when she wants to be fed or watered. We have twin calves; we call them Dick and Ben. We have a patch of strawberries, and we had quite a lot of berries this year. I will close with some riddles.

Eyes like a barn door, ears like a cat, if you study all your life-time you will never study that. Ans.—An owl.

Around the house, and around the

house, and in through the keyhole.
 Ans.—The wind.

In and out, and in and out, and never
 moves. Ans.—A rail fence.

MISS VERA V. SPEER
 Tara, Ont. (Sr. III. Class).

Dear Puck and Beavers,—Here I am
 standing at the gates of your great Cir-
 cle which I find so interesting that I am
 writing a letter.

Puck, you must like to read, as you
 have so many letters to read. I like
 to read. At present I am reading "The
 Wild Flower Book for Young People,"
 and find it very interesting and instruc-
 tive. There are a great many wild
 flowers mentioned which I have never
 seen. I, like Helen Parry, think it
 would be very nice to have a story com-
 petition. As this is my first letter to
 your charming Circle, I must not impose
 too much on your good nature, and will
 close with a few riddles.

How far is it from February to April?
 Ans.—A march of thirty-one days.

Why is a book like a king? Ans.—
 It has many pages.

What is the oldest piece of furniture in
 the world? Ans.—The multiplication
 table.

Wishing Puck and the Beavers ever
 success.

ANNIE McCONACHIE
 (Age 12, Sr. IV. Book).
 Lythmore, Ont.

OUR JUNIOR BEAVERS.

[For all pupils from First Book to
 Junior Third, inclusive.]

Jamie's Opinion.

By Grace Stone Field.

If I were a little boy's mother,
 I know what I would do;
 I'd never say "Stop!" or "Hush!" or
 "No!"

I never would fuss and fidget so,
 When my little boy was noisy, you know;
 If I were a little boy's mother.

If I were a little boy's mother,
 He might play cars with the chairs;
 Or build tall houses with library books
 And stay in the kitchen when Bridget
 cooks,

(No matter how bothered Bridget looks)
 If I were a little boy's mother.

If I were a little boy's mother—
 Oh, dear! My mother said:
 "So many apples are bad for you;
 Jamie, you mustn't eat more than two."
 And now I know she told me true—
 She always knows best—my mother.

**Junior Beavers' Letter
 Box.**

Dear Puck and Beavers,—Papa takes
 "The Farmer's Advocate," and I thought
 I would write a little letter. I have a
 little sister; her name is Bessie. We
 both go to school. For pets I have a
 cat and a dog. The cat's name is
 Tim, and the dog's name is Toby. He
 helps me to bring the cows. I hope
 you will print this, as I want to sur-
 prise papa. I guess I will close.
 GEORGE D. HOPE (age 8).
 Roseville, Ont.

Dear Puck and Beavers,—I am going to
 school and am in the Third Class. We
 live a mile and a half from Smithville.
 I have a dog named Carlo; he is an
 English collie. My father has taken
 "The Farmer's Advocate" for 32 years.
 I like to read the Beaver Circle very
 much. I will close with a riddle.

Which is the drake, the white duck or
 the gray duck? Ans.—Neither one, for
 they are both ducks.

ELMER G. CLARK.
 Smithville, Ont., Box 24.

Dear Puck and Beavers,—My father has
 taken "The Farmer's Advocate" for
 about two years, and thinks it a good
 paper. I live on a farm of about 85
 acres. We have a little colt about
 three weeks old, and we call it Fan.
 Our farm is not hilly. There is a rail-
 road that goes two miles south of us,
 and there is going to be a station there,
 which will be very handy for this neigh-

borhood. I tried for the Senior Third,
 and I passed. I guess my letter is
 long enough.

HAROLD PASCOE (age 9).
 Solina, Ont.

Dear Beavers,—I thought I would write
 a composition on a cat. The cat is
 one of our domestic animals. It belongs
 to the tiger family. You can't hear it
 walk; it has pads on the bottom of its
 feet. A cat has long whiskers on each
 side of its mouth. When the cat puts
 its head into a hole, if it can get its
 whiskers in, it can get the rest of its
 body in. Its coat is of fur. A cat's
 proper food is milk and flesh. It can
 see better at night than in the day-
 time. The cat keeps away mice and
 rats. I think this is all I have room
 for this time. Good-bye.

IRENE TOWRIE (age 10, Jr. III.).
 Tillsonburg, Ont.

Dear Puck and Beavers,—My father has
 taken "The Farmer's Advocate" for a
 number of years and likes it fine. I like
 reading the Beavers' letters very much.
 For pets I have two cats; their names
 are Tom and Bill. They catch lots of
 mice for me. There is a pond on our
 farm. We have a raft on it, and at
 night we go in bathing. I have a pair
 of water-wings. I can swim pretty well.
 I also have a rifle, and I am a pretty
 good shot. Well, Puck, I will close,
 hoping this escapes the w.-p. b.

CHARLIE HAMILTON.
 Copetown, Ont.

Dear Puck and Beavers,—I am going to
 write a letter to the Beaver Circle. I
 almost forgot to write. I read the
 Beaver Circle, and like it fine. I go to
 school every day that there is school.
 I have a bicycle, and I take it there.
 We boys have great times in school. I
 tried for the Third Book. I have a sis-
 ter; her name is Annie. She went to
 High School the past year, and tried for
 the Second Form and passed. She is
 very glad that she passed. Next year,
 my brother and my other sister are
 talking of going; their names are Kath-
 leen and Warden. My father has taken
 "The Farmer's Advocate" for two years.
 I will give a few riddles.

If I were in the sun and you were out
 of it, what would become of the sun?
 Ans.—Sin.

Why should we never sleep on the rail-
 way? Ans.—Because trains run over
 sleepers.

Spell blind pig in two letters. Ans.—
 Pg—pig without an i (eye).

What is the first thing a man sets in
 his garden? Ans.—His feet.

I will close, wishing the Beaver Circle
 success.
 GEORGE HUSTON
 Ekfrid, Ont. (Age 11, Class II.).

My Comforter.

The world had all gone wrong that day,
 And tired and in despair,
 Discouraged with the ways of life,
 I sank into my chair.

A soft caress fell on my cheek,
 My hands were thrust apart,
 And two big sympathizing eyes
 Gazed down into my heart.

I had a friend; what cared I now
 For fifty worlds? I knew
 One heart was anxious when I grieved—
 My dog's heart, loyal, true.

"God bless him," breathed I soft and
 low,
 And hugged him close and tight.
 One lingering lick upon my ear
 And we were happy—quite.

Suppose.

By Walter Kelley Morley.

Suppose the blossoms heaped upon men's
 biers

Were strewn along the highways of
 their life;

Suppose the praises chanted in dead ears
 Were whispered tenderly in hours of
 strife;

Suppose the hearts, that pour their bit-
 ter tears

Upon our graves, had lent their strength
 in years

When just one heart could turn a losing
 fight,

And make us strong by Love's supernal
 might;

Suppose! Only suppose!
 —N. Y. Independent.

COMFORT SOAP
 "IT'S ALL RIGHT"
 It Costs so Little
 and Does so
 Much
POSITIVELY THE LARGEST SALE IN CANADA

**HARAB
 DIGESTIVE TANKAGE**

THE PROTEIN HOG FOOD

FILLS A LONG FELT WANT

Fed along with your other hog foods, it supplies what is lacking—
PROTEIN—the flesh and strength developer.

**ENDORSED BY EXPERIMENTAL FARMS AND USED
 BY THE LARGEST HOG FEEDERS.**

MADE IN CANADA
 BY

THE HARRIS ABATTOIR CO., LIMITED
 Toronto, Ontario

Ask your dealer, or write us direct for prices, etc.

**McLEOD'S
 SPECIAL
 FLOUR**
 McLEOD'S
 FLOUR
 IS
 ALWAYS
 RIGHT

McLeod's "SPECIAL" is a very high
 grade blended flour, ground from the
 finest of Ontario Winter wheat. A most
 excellent flour for bread and pastry baking.
 It is a most economical and satisfactory
 flour for family use because it requires less
 shortening for pastry and requires less
 water for baking, and you may always
 have the assurance of uniformity in quality
 and that the highest, and that McLeod's
 "SPECIAL" will make every loaf of bread
 a loaf of satisfaction, because . . .

**McLEOD'S FLOUR
 IS ALWAYS RIGHT**

The McLeod Milling Company, Limited
 Stratford, Ont.





"Highly Recommended."

"I would certainly recommend that you get a Gurney-Oxford, Mary. Mother had one, and when I furnished my house, I got one. Every maid I ever had has been enthusiastic about the Gurney-Oxford."

"What are its good points?"

"Well, the best is that it cooks and bakes like a dream. I never tasted such golden brown biscuits or such flakey pastry as my Gurney-Oxford turns out, and roasts, fowls and puddings are always a success."

"Is it easy to operate?"

"My dear, it's simplicity itself. The Gurney Economizer, which you cannot get on any other range, regulates the fire simply by putting one small lever up or down. You never heard of anything so simple. And by a system of divided flues the oven is always uniformly heated. You know what that means—biscuits, bread, roasts, not one half overdone and the other half underdone, but properly done all through. Yes, my dear, you take my advice as I took mother's, and get a Gurney-Oxford Range."

The Gurney Foundry Co. Limited
TORONTO - CANADA

MONTREAL HAMILTON WINNIPEG CALGARY VANCOUVER

ONTARIO LADIES COLLEGE WHITBY ONTARIO

Offers the highest educational facilities and the most charming home life under healthful and inspiring surroundings. Seven resident University Graduates give instruction in the Literary Department. The Departments of Music, Fine Art, Elocution, Commercial and Household Science are equally far in advance in staff and equipment of those found in the ordinary Ladies' College. Proximity to Toronto gives City advantages without the distractions incident to city residence. Buildings and grounds, new gymnasium, swimming pool, etc., unequalled by any Ladies' School in this country. All physical exercises in the gymnasium directed by an expert Lady Physician. Send for Calendar during July to Prof. W. J. Greenwood, B.A., Mitchell, Ont., and during Aug. to Dr. J. J. Hare, Whitby, Ont.

"The Farmer's Advocate" Fashions.

Polly Ann.

By Harriet H. Clark, in St. Nicholas.

Polly Ann was a born story-teller, there was no doubt about that. There were many things to prove it.

In the first place, she could always get an audience. Walk around Myers's block any hot summer day, and in the shade made by the tall chimney of the iron-foundry you could see them, the audience, crowding around; an audience diverted for the time being from the discomfort of the hot day and torrid sun,—from its thirst for "lemmerade" and perhaps its hunger. Polly Ann standing, with shining eyes, makes them see the things she sees, but where Polly Ann has seen them no one knows. Ask her, and she will answer: "When I shuts my eyes I sees 'em, and then I tells 'em to the childers."

This day the last late barefooted, unclean little piece of humanity has arrived, and, standing on the outside of the circle, hears Polly Ann's sweet voice—for sweet it is with a quality quite apart from Slumtown, where she lives—saying: "And as the princess came down the shinin' way, the flowers bowed their 'eads and the birds 'stopped singin',—she was so beautiful! But when she smiled, all the birds sang together, and a little wind came and made the flowers move like little bells, and—and you could hear them, too, and the way was shinin' and—" Polly Ann's voice died off into silence. The ecstasy of her vision had quite overcome her.

"Go on, Polly Ann. Tell more. What happened then?"

But Polly Ann, the usually eager, willing story-teller, just shook her head and put her hand over the soiled dress that covered her little rapidly-beating heart, and said: "The words hurt me."

Sympathy arises in the hearts of her followers and listeners, and the words are repeated to the outskirts crowd, "Some-thin' 's a-hurtin' Polly Ann." They didn't know, poor little street waifs, that it was Polly Ann's soul "a-hurtin' her."

Now shrilly, above the street noises, not so fierce as earlier in the day, comes a woman's voice: "Polly Ann! Polly Ann! I want ye." And Polly Ann, still somewhat overcome, gathers her small body together and speeds to answer the call.

It is not by any means an unkindly face that looks down at her from the third story front, as she raises her head to seek the meaning of the summons: "Come up quick; there's somebody a-wantin' of you."

Polly Ann, with her quick perception, notes a shade of surprise, apprehension, or she hardly knows what, in the face and voice.

All the way up the long two flights, to wonder and imagine who it was "a-wantin' of" her. When your imagination is keen and your mind accustomed to forming pictures, you can evolve in that time almost anything, and some things that almost have fear in them. So much so, in fact, that Polly Ann had to stop just outside the door and clasp her beating heart again, that did not know whether to hope or dread. For, be it known to you, kindly mothers and sweet daughters, Polly Ann had been an orphan for eighteen months now, and the woman with the shrill voice, but not unkindly, was just "a-keepin' her" till "somebody turned up or somethin' happened."

So before her trembling hand turns the knob, put yourself in Polly Ann's place just for a moment, and with your heart beating alternately hope and fear, pause before you open the door to find out if "some-thin'" is going to happen.

If the hope in Polly Ann's heart had been that the opening door would reveal the "princess," her hope was blasted; or even if her fluttering thought had formed a prince, she knew that this was not he, or this plainly-dressed man, who looked up quickly as she came in, bore no resemblance to those majestic beings in fair clothing that her mind had often pictured.

"A gentl'man from the s'ciety."

Polly Ann made a brief and bobby curtsy, and the man unfolded a paper and read things; strange wordings, meaningless phrasings to Polly Ann, at least, who told fairy tales, but the purport seemed to be that the "s'ciety" had found her a home. There were some



6746 One-Piece
Night Gown,
Sm 11 34 or 36,
Medium 28 or 40,
Large 42 or 44 bust.



7511 Square Yoke Night
Gown 34 to 46 bust.



7512 Boy's Sailor Blouse
Suit, 6 to 10 years.



7540 Girl's One-Piece
Dress, 6 to 14 years.



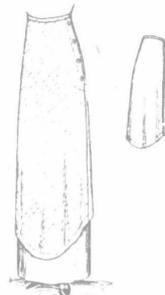
7505 Girl's Dress, 10 to
14 years.



7501 Girl's Five-Gored
Petticoat, 8 to 12 years.



7531 Semi-Princess
Gown, 34 to 42 bust.



7521 Two-Piece Apron
22, 24 and 26 waist.

Please order by number, giving age or measurement, as required, and allowing at least ten days to receive pattern. Price ten cents per pattern. Address, Fashion Dept., "The Farmer's Advocate," London, Ont.

**Take A Scoopful
Of Each—
Side By Side**

Take "St. Lawrence"
Granulated in one
scoop—and any other
sugar in the other.

Look at "St. Lawrence"
Sugar—its
perfect crystals—its
pure, white sparkle—
its even grain. Test it point by point, and you will see that



**Absolutely
Best**



**Absolutely
Pure**

is one of the choicest sugars ever refined—with a standard of purity that few sugars can boast. Try it in your home.

Analysis shows, "St. Lawrence Granulated" to be "99.99/100 to 100% Pure Cane Sugar with no impurities whatever"

"Most every dealer sells St. Lawrence Sugar."

ST. LAWRENCE SUGAR REFINERIES LIMITED, - MONTREAL.

65A

**GRAND TRUNK RAILWAY SYSTEM
FARM LABORERS' EXCURSIONS**

\$10.00 to Winnipeg via Chicago

Plus half cent mile from Winnipeg to destination, but not beyond MacLeod, Calgary or Edmonton. Returning half cent mile to Winnipeg, plus \$18.00 to destination in Eastern Canada.

AUGUST 20th—From Toronto to Sarnia Tunnel, inclusive, via Stratford, and all stations South thereof in Ontario.

AUGUST 23rd—From all stations North of, but not including Main Line Toronto to Sarnia Tunnel, via Sarnia; all stations Toronto and North, and East of Toronto to Kingston and Renfrew.

AUGUST 28th—From all stations Toronto and East, and East of Orillia and S. otia Junction.

AUGUST 30th—From all stations Toronto to North Bay, inclusive, and West thereof in Ontario.

The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg-Saskatoon-Edmonton.

New Fast Express Service between Winnipeg, Yorkton, Canora and Regina.

**Canadian National Exhibition
TORONTO**

Single Fare for Round Trip

Good going August 24 to September 9 inclusive. Return Limit September 10, 1912

Special low rates on certain dates

ASK ANY GRAND TRUNK AGENT FOR FULL PARTICULARS

International Poultry Food

Prevents Cholera and Saves the Little Chicks

A little chick is just like a little baby—its health depends on its food. Improper feeding opens the way for disease. Chickens Cholera, Roup, Apoplexy, can be prevented and cured by feeding INTERNATIONAL POULTRY FOOD.

My chickens had Cholera until some of their combs were turning black. After using a few feeds of "International Poultry Food," I never lost another fowl, and Cholera has left my premises.—J. F. BARNETT.

Give all your chickens a daily feed of "International." It keeps them well—fattens up the broilers—makes hens lay all the year round—keeps the cocks vigorous—and insures raising the little chicks. If you want to make money out of your fowls, feed "International Poultry Food."



25c., 50c. and \$1.00 a box. At dealers everywhere. Write for free copy of our \$3,000.00 Stock Book, the greatest book ever written for farmers.

INTERNATIONAL STOCK FOOD COMPANY
Limited
TORONTO

70

Registered Seed Wheat for Sale

Dawson's Golden Chaff grown according to the rules of the Canadian Seed Growers' Ass'n for the last 12 years. C. R. GIES, Heidelberg

Dawson's Golden Chaff Wheat

Highest yielder at experimental farm last sixteen years. Average yield 541 bushels. Withstood last winter well. Free of weeds. \$1.50 per bush; over ten bush., 5% discount; over twenty bush., 10% discount. W. C. PEARCE, IONA, ONT.

GIRLS WANTED

Girls from the country, without experience, are making over five dollars per week in biscuit and candy departments. For information apply: THE McCORMICK MFG. CO., LONDON

BOYS WANTED

Boys from fourteen to eighteen can make good wages. For particulars apply: THE McCORMICK MFG. CO., LONDON

understandable things about "age limit" and "exception to the rule," which were far beyond the horizon of Polly Ann's knowledge. But the outcome was this: an immediate washing of hands and face, a combing of brown hair which might have been so soft and pretty, a squeezing of feet into half-worn shoes, and the donning of her only other dress, and Polly Ann was ready to step out into the world, no longer Polly Ann of Fennimore Alley, but a little human being of some importance, stepping out into the great unknown.

Nine years old, fatherless, motherless, portionless, and only one hope, and that in the "society."

It is sometimes a good thing to have an active imagination, because it helps you to forget other things; puts one in quite another world, in fact.

So Polly Ann was rather lost in her dreams while trolley and elevated whizzed her along, only the quiet touch on the shoulder now and then reminding her of her gray-clad companion, or guardian, whichever you may care to call him.

They finally crossed the busy street and went into a building with a wide, high doorway and a swiftly-flying elevator, and Polly Ann began at last to wonder if she were really going to see the "society." A man was seated at a high desk in the room they entered, and a type-writing machine was going clickety-clack under the rapid fingers of a girl in black. It did not look like the "society" to Polly Ann, but then it might be concealed behind "most any" of those big closed doors she saw on every side.

The guardian man said: "This is the child." The man at the desk looked up, but the type-writer never stopped, and it rather got on Polly Ann's nerves to hear it keep on unceasingly. It seemed to say, "Polly Ann, Polly Ann!" And when the silent desk man finally looked up and said, "What is your name?" it made her jump to have him ask her, because the type-writer seemed to be saying it so rapidly and sharply already.

Then the man said: "Miss Mills!" The type-writing machine stopped, and the girl in black gave attention.

"Take this case," he said. "The child's name is Polly Ann." And then the type-writer really did say "Polly Ann," but the girl stopped. "Last name?" And the absent-minded or busy man at the desk said: "Oh, yes, last name?" and looked over his glasses first at Polly Ann and then at her companion, who said, "Dawson," and also, "age nine, no father, no mother, homeless," till Polly Ann found herself crying, because of the type-writer, perhaps, "taking such notice" of her affairs, perhaps because nobody else seemed to take any notice of them.

But Polly Ann was called out of herself by the rapidity of events, for like a moving panorama the hot office passed, and a hurrying street of people, cabs, heavily moving vans, and whizzing trolley-cars appeared; a huge railway-station and more hurrying people presented themselves before her vision.

And then, to the sound of bells and the rushing of steam, Polly, seated alone on a red plush car-seat, was moving away, whither do you suppose?

It was a comfort to have a blue-coated man say, "Sit still, little girl; I'll tell you when to get off." Polly looked eagerly for him after that, every time the train stopped. It was such a comfort to have him passing to and fro; such a comfort to feel that someone knew she was there, that somebody knew where she was going.

Now I will tell you something that Polly Ann did not know at that time: There was somebody waiting for her at her journey's end. How beautiful it would have been to know it, we, who have had somebody waiting for us sometimes, know.

While the flying train was carrying her swiftly past little towns, green fields, and woods that seemed to Polly's eyes, used only to city sights, like dream pictures, there was a woman in a little white house in a little green yard—a tidy little place, I assure you, quite on the outskirts of the village—waiting for her.

As she moved rapidly about her work, putting the house in its last spick-and-span Saturday-afternoon order and cleanliness, she was thinking of Polly Ann.

"Folks will say I'm crazy, I s'pose, when they know. But why shouldn't I?"

**WOMAN'S RIGHTS AND
BAD BREAD**

No woman has any right to her husband heavy, sour, pasty bread when she can avoid it by using

**WHITE SWAN
YEAST CAKES**

Ask your grocer for a 5c. package (6 cakes) or send for a free sample to the WHITE SWAN SPICES AND CEREALS, LTD., Toronto, Ontario



Hairs on the Face

This blemish can only be permanently removed by Electrolysis. The treatment is not painful when performed by competent operators. We employ none other. The use of depilatories, cutting, pulling, burning or rubbing with stone only increases and strengthens the growth. We assure satisfaction in each case. Come for treatment during the Exposition (Aug. 24-Sept. 9). Moles, Warts and Red Vains also successfully treated. Descriptive booklet "F" mailed on request.

Hiscott Dermatological Institute
61 College St., Toronto. Estab. 1892

SAVE-THE-HORSE SPAVIN REMEDY
(Trade-Mark Registered)



Whether on Spavin, Puff, Tendon, or any kind of lameness a permanent cure is guaranteed. NARRAGANSETT, Ont., Dec. 11, 1911.—Troy Chemical Co., Binghamton, N. Y.—Dear Sirs: Last June I purchased a bottle of Save-The-Horse for a bog spavin and thoroughpin, which I drew on while stoning with a stone machine; after a cure was effected I had one-third of the bottle left. I went West this fall, two days after the fall while playing in a rough pasture. The Veterinary blistered and poulticed her until I came home, two months ago, and she was still unable to put her foot under her. The Veterinary said it was a rupture in the coffin joint, so near the toe as it was possible to get. When I came home I discarded his treatment and used the remainder of Save-The-Horse and she is nearly sound. This mare is a dun gray percheron, 3 years old, and weighs 1500 lbs. Please send me your opinion and another bottle of your cure, G. O. D., at once from your Canadian office. Yours truly, ALEX. CHAFFARD.

16 Years a Success
\$5. And every bottle sold with an iron-clad contract to cure or refund money. This contract has \$50,000 paid-up capital back of it to secure and make its promise good. Send for copy, also latest book and testimonials from breeders and business men, the world over on every kind of case. TROY CHEMICAL CO., TORONTO, ONT. Druggists everywhere sell Save-The-Horse with a signed contract to cure or refund money.

While we are complaining of the high cost of living, let us remember that we are living much better than we used to. Who would go back to old methods? We wish to live still better, and to move on towards better things, but to gain this we must use the best tools, apply the best methods, and advance in our practices, as well as in our desires. We must be alive to the best and most economical methods of living if we wish to be with those who do not complain of the high cost of living.—Canadian Implement and Vehicle Trade.

**Rolls
The
Ground
Better**



T. E. Bissell Company Limited
Elora
Ontario, Can.

No neck weight.—Perfectly rigid frame.—RUNS EASILY.—

**The
"Bissell"**

Land Roller will work your soil, no matter how stiff and lumpy, better than you've ever had it done before. Write Dept. W for catalog. 54

GROW BIGGER CROPS OF FALL WHEAT

Your land is too valuable to be allowed to produce only half a crop. To "increase your average" is good, but to "increase your yield per acre" is better.

Harab Animal Fertilizers

Build up your soil with true plant food obtained from animal products, increase your yield per acre, and give you entire satisfaction.

ASK YOUR NEIGHBOR. HE HAS TRIED THEM.
Call on our nearest agent for particulars, or if you do not know him write us direct.

HARAB ANIMAL PRODUCTS

MADE IN CANADA BY
The Harris Abattoir Co. Ltd., Toronto, Ont.

FERTILIZER DEPARTMENT

Agents wanted for unoccupied Territory



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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for advertisement inserted for less than 50 cents.

EXPERIENCED Canadian farmer (married) wishing position taking charge of farm. Apply: Box 21, FARMER'S ADVOCATE, London.

FARM FOR SALE—Dairy farm where dairying pays. Average prices for past seven months are: Sweet milk, \$2 per cwt.; sweet cream, 36-67 cts. per lb.; butterfat; sour cream, 30 3/4 cts. per lb.; butterfat. For full particulars, write: Fred. M. Johnston, Dowling Lake, Alta.

FARM for Sale—212 acres rich clay, 190 acres under good cultivation, balance bush and pasture. Barn 60 x 50, cement foundation; cement piggy and henry; cattle shed outside. Commodious 11-room brick house, orchard, plenty hard and soft water. Situated alongside the corporation of Bradford; convenient to high and public School and churches. One mile from G. T. K. station. Apply: Drawer 276, Bradford, Ont.

FARMS for Sale—Improved Wellington County farm. Now is the time to inspect. No obligation or expense. Jones & Johnston, Guelph.

FARM FOR SALE—180 acres, 1st concession Delaware, 3 miles from Southwold Stn., 14 miles from London. Excellent grain and dairy farm; well watered; 6 acres apple orchard; brick house and suitable outbuildings. Apply: Joseph Weld, "Farmer's Advocate," London.

ON SHARES—100-acre dairy farm; good soil and buildings; small house; cement silo; all stock and implements supplied, except horse. Address: W. G., "Farmer's Advocate," London.

STRAYED from the farm of W. H. Falkner, 9th Con., Dumfries, one 1-year-old black colt, one 3-year-old brown colt. Anyone giving information leading to the discovery of the above colts will be suitably rewarded. W. H. Falkner, Galt P.O., phone 562 r 12.

VANCOUVER ISLAND, BRITISH COLUMBIA, offers sunshiny, mild climate; good profits for men with small capital in fruit-growing, poultry, mixed farming, timber, manufacturing, fisheries, new towns. Good chances for the boys. Investments safe at 6 per cent. For reliable information, free booklets, write Vancouver Island Development League, Room A, 23 Broughton Street, Victoria, British Columbia.

WANTED—Cash paid for Military Land Grants in Northern Ontario. Please state price and location. Box 88, Brantford.

223 ACRES, York County, Township of Vaughan, 15 miles north of Toronto, good soil for grain or fruits; well watered, good buildings, two good dwelling houses; one mile from Yonge street, convenient to church, school, post office. Terms cash. Apply: Mrs. Fullerton Gibson, Richmond Hill, Ont.

WANTED an experienced Farm Manager capable of establishing and operating a four-hundred-acre Stock Farm, located along lake shore in Elgin County. Apply writing full particulars to BOX 25, FARMER'S ADVOCATE, London, Ont.

The funeral of Mrs. Isabella M. Stewart, the Christian Scientist leader who introduced Christian Science into Canada twenty-five years ago, took place in Toronto on August 7th.

POULTRY AND EGGS

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

CHOICE S.-C. White Leghorn Cookerels for sale, \$1.00 each. Geo. D. Fletcher, Binkham P.O., Erin Sta., C.P.R.

JULY SALE—2,000 baby chicks; 10,000 hatching eggs; 500 yearling hens; 50 yearling males. Chicks, \$20.00 per 100; eggs, \$1.50 per 15. \$7.00 per 100; hens, \$1.50 to \$2.00 each; males, \$3.00 to \$5.00 each. B. P. Rocks, White Wyandottes, R. C. R. I. Reds and S. C. White Leghorns. Write to day for illustrated catalogue. L. R. Guild, Box 16, Rockwood, Ont.

TELEPHONES

For information and estimates for local telephone systems,—

For guaranteed construction material and telephone equipment,—

Write:

Canadian Independent
Telephone Co., Limited

20 Duncan Street, Toronto, Ontario

Ask for No. 3 Bulletin.

MERCHANTS PRODUCE CO.

Butter Eggs Poultry Honey
Beans Apples Potatoes, etc.

Our constantly growing trade demands large supplies of choice farm produce. We need yours. Write for weekly market letter.

57 Front St. E., Toronto

Established 1880

And if she likes me and I like her, and she is a neat little thing—why, perhaps after a while she will love me, and after school hours I'll see her a-comin' up the road swingin' her books, and she'll be my little girl."

The shadows of the afternoon lengthened. The clock told briskly that it was five o'clock. Then the woman set the table. She put on her own plate and cup as she had done for so many years, and opposite her another plate, over which she hesitated a moment, and then, passing rapidly back to the pantry, brought another with little rosebuds on it. "Perhaps," she said, "I'm buildin' air-castles and it won't turn out at all as it seems it ought to, but just this once, anyway, I'm goin' to put this plate on for my little girl, and if she turns out to be what I seem to be expectin' her to be, then every night for years and years, mebbe, I'll be settin' this place for my little girl."

Hardly was the table finished and the kettle pushed back a little, when there was a sound of wheels stopping by the white gate.

It took but a minute to put on her hat, to walk out, to reply brightly to the driver's salutation, "Good evenin', Miss Sims," and to climb into the back seat of the wagon drawn by a single fat gray horse.

"Be'n a fine day."
"Yes, just warm enough."
"You didn't tell me who you was expectin' to-night."

"Just a little girl."
And then, as if to make a clean breast of it and let the village take its course, she said: "I'm goin' to adopt a little girl; leastways, I'm goin' to try one and adopt her if everything's satisfactory."

"Well, well, be ye?"
And as if there were now quite enough to think about, no further words were exchanged until the railway-station was reached.

The blue-coated man had told Polly that in ten minutes she would get off. Polly clutched her little bundle. She felt almost as if she would shriek. Get off and be all alone in a strange place! For, in the three or four hours she had been in the train, her eyes had become familiar with it, and some of the people who had stayed on, and the blue-coated man was ever a comfort. The tears rose in her eyes, but before they could drop, the train had stopped, she had stepped onto the platform, and the blue-coated man was saying to a woman, "This is the little girl, ma'am."

Be Polly Ann, yourself, just for a few minutes; feel your little hot ear-begrimed hand clasped in a strong, kind hand, climb in behind the old gray horse, drive along the country road, with the sweet

smell of the field-flowers telling you a new story, stop before the little white house, walk up the path, and—be—at home!

Polly Ann said, "O—h!" such a long "Oh" of surprise and wonder that such things could really "happen," and she, Polly Ann, be awake, looking and walking, and not "story-telling" or dreaming.

The washing for supper was a comfort; the little table, so cozy and clean, was beyond belief; the rosebud plate, "most too good to eat off of."

The kind face opposite smiled encouragement, for somehow Polly the storyteller was dumb. But her eyes seemed to grow bigger and blacker as they rested again and again on the smiling face.

The dishes were washed, the clock had announced seven, and Polly joyfully obeyed the words, "We'll sit on the porch till bedtime." And now, in the beauty and sweetness of the summer evening, Polly's lips were unlocked to ask a question: "Will I have to go away to-morrow?"

There was just enough longing in the eyes and voice, just enough hunger, to make that woman say, "Why, Polly Ann, I b'lieve it's all comin' true, and you are goin' to be my own little girl." Oh, just to creep into folding, tender arms, when you are nine, and have a child-heart made for love and mother-care! (It isn't bad for a lonely grown-up woman to hold a little girl like that, either.)

The moon when it came up saw a beautiful sight: a motherless little girl and a childless woman, just clasping each other, and rocking, and rocking, and rocking.

News of the Week.

The typhoid epidemic in Ottawa is abating.

The Grand Trunk terminal at Brockville, Ont., is to be removed to Prescott.

Welland, Ont., is to be lighted by hydro-electric power.

The Ontario Government has decided to launch upon an energetic fight for the stamping out of tuberculosis.

Silver to the amount of \$25,000 was shipped on August 10th, by the Teutonic, to England, to be made into British coin.

As a result of the International Wireless Congress recently held in London, Eng., all lake- and ocean-going vessels will henceforth be required to be equipped with wireless telegraphy apparatus.

A Chinese graduate of McGill University, Montreal, Mr. Peter Hing, M. A., B. C. L., has been appointed Judge of the High Court of Justice of two Provinces in China.

Over 1,000 men are at work on the Toronto Exposition grounds, making ready for the opening of the great Fair. Three hundred thousand dollars are being spent on improvements, the most impressive of which will be the new Dominion Government Building, and the new entrance gates. Preparations are also being made for the scenic spectacle, the "Siege of Delhi," which will be held before the grand stand each night.

The Panama Canal Bill was passed, on August 9th, by the United States Senate. By its provisions, all vessels passing through the canal must pay toll, with the exception of American vessels engaged in the coastwise trade, and all American vessels in foreign trade whose owners agree to turn them over to the Government in case of war. No railroad-owned vessels are to be allowed to use the canal.

Of the four militant suffragettes put on trial at Dublin for having committed serious outrages at the time of Mr. Asquith's visit to that city, two, Gladys Evans and Mary Baker, have been sentenced to five years imprisonment. The offence for which Miss Evans was convicted was setting fire to the Theater Royal. Miss Baker's misdemeanor was throwing a hatchet which injured Mr. John Redmond, the leader of the Irish Parliamentary party.

How to Become Rich.

Editor "The Farmer's Advocate":

In the Boston American an article appeared written by Ella Wheeler Wilcox, entitled, "Will You Pay the Price?" She says: "Perhaps you want great riches. You can have them by becoming a grafter, a miser, a schemer, and by shutting away all sympathy, kindness and humanity, from your heart. You can acquire wealth enough by such methods to make you hated and despised by all right-minded people, and to make you sought after by the brainless spongers of earth who will want to receive money favors at your hands. Are you willing to pay the price?"

This is only a short extract from the article, which is written in her usual forcible style. It is certainly strange that so many people, in the mad pursuit of riches, appear to lose sight of the fact that they are breaking down their constitutions by overwork and will fill early graves as a natural result of their indiscretion or folly. A suitable epitaph for this class would be: "He Was in Haste to Become Rich."

In view of the fact that so many men, in their strenuous, determined efforts to become wealthy, destroy their chances of happiness, both here and hereafter, would it not be wise for us all to pray in the language of Solomon, "Give me neither poverty or riches, but feed me with the food convenient for me."—Prov. 30.

Certainly every person should practice industry, and seek to earn a comfortable living for himself and family, but the trouble is people are apt to run to extremes. How much better to have less of this world's goods and more freedom from anxiety, worry, and responsibility.

There are those who do not hesitate to take advantage of others or obtain wealth by dishonest means. Who is there who has not some in his or her life been deceived and fleeced by dishonest, unprincipled men who make a living by obtaining money by false promises or misrepresentations?

It is true that the thirst for riches is becoming more and more apparent. Business men in the large cities rush to and from their work, scarcely taking time to eat, sleep, or breathe properly. Ask them why they don't take a vacation, and they answer, "Can't afford it; haven't time."

Surely the love of money is the root of all evil. I said to a young man of my acquaintance who was home on a visit recently, "I suppose you will soon be getting married." "No, indeed," he answered, "I can't afford it." Yet this young man has been earning good wages for many years, and is not a spendthrift by any means.

Not many years ago a farmer who appeared to be doing well here, but wanted to do better, sold a good farm and emigrated with his family to the Northwest. He invested his money in land which proved to be worthless, and we are informed that the loss affected his mind, and he is now in a lunatic asylum. He was in haste to become rich.

"Increasing wealth is attended by care, and by the desire of greater increase."—Horace.

Some time ago an advertisement appeared in one of the American magazines, which ran thus:

"DON'T MISS THIS CHANCE!

Send me one dollar, and I will mail you a valuable recipe by return mail, telling you "How to Become Rich."

Address M. C., 25 street, New York.

A farmer's wife read and re-read the advertisement. She was poor, but had all her life longed to become rich. "Here is my chance," she said to herself, "I believe I shall answer this. I have a dollar, bill which I intended to buy a pair of shoes for Bessie with, but when I find out how to become rich, we shall have plenty of dollars."

"I won't say a word to John now about it, for he would likely tell me not to throw away my money. He is always so suspicious, and says that women are very easily deceived. I am going to risk it anyway." She mailed a money-order to M. C. that evening, and lay awake for hours after she went to bed planning what she would buy when she became

rich. She would buy a new hat and dress for herself, nice clothes for the children, a new buggy just like her neighbor's, and, yes, a new suit for John so he could attend church.

Just a week after the longed-for letter came. She opened it eagerly, and read: "Work night and day, and never spend a cent."

Wasn't she an angry woman?

If parents would train up their children to practice strict economy in little things, such as saving their cents instead of spending them for candy, etc., they might have a snug bank account in the course of a few years. Work and save; that is the way to become independent, but don't starve your soul or allow the love of money to take first place in your hearts, and exclude all that makes life worth living.

Our Canadian farmers have an excellent chance to save money, and enjoy life at the same time. Good management, industry, and economy, should be practiced in order to attain success.

Parents, encourage your boys to take an interest in the farm and stock. Ask their opinions sometimes; they may be able to teach you something occasionally. Your children should be intelligent.

Some years ago a farmer died leaving a large family. The eldest son, a lad of twelve years, took full charge of the large farm. He has succeeded admirably. All the work was promptly done, just as well as if his father had lived. Recently he has bought more land, enlarged his stock, and has proved himself to be an ideal farmer. He has found out by experience that there is money on the farm.

Charlottetown, P. E. I.

GOSSIP.

Huntlywood Farm, at Beaconsfield, Quebec, formerly owned by the late Senator Drummond, and the home of a noted flock of Southdown sheep, now the property of Messrs Drummond Bros., with A. Monroe as manager, advertises in this paper a few choice Southdowns for sale.

Hackneys sold high at an auction sale at Hopwood, Lincolnshire, the last week in July, when an offering of F. J. Batchelor, of Avelchurch, made an average price of \$945, the highest price being 925 guineas (\$4,960), for the six-year-old chestnut stallion, Admiral Crichton. The chestnut mare, Beckingham Lady Grace, sold for 900 guineas, and two other mares for 600 and 550 guineas, respectively.

LOOKING OVER THE GATE.

That shrewd Aberdeenshire breeder of the last century, Amos Cruickshank, of Sittyton, once said: "I always use a bull that looks over the gate instead of through it." He had no data to support his belief that constitutional vigor influences the prepotency of a sire, but it seemed natural, and his success in producing vigorous and thick-fleshed Shorthorns was above that of any other man of his time. Scientists talk on both sides of this question, and there is often much doubt as to whether the most vigorous animal puts the most clear-cut stamp upon his offspring. Dr. Davenport, a present-day authority on breeding, in the absence of sufficient data, falls back upon common sense, and that is just what Cruickshank did. There are not a few farmers who refuse to buy a pig unless he has a tail resembling a corkscrew; and that is not so foolish as it may seem. An animal that is full of energy is what they want, and they have learned to read the signs. In the absence of convincing data, the gate test and the kinky tail test are not to be ignored. Many traditions have a scientific explanation.—London Agricultural Gazette.

"See here, Rastus," said the new arrival at the hotel, "do you mean to tell me that this egg is fresh?"

"It was when hit was laid, suh," replied the waiter.

"And when was that, pray?" demanded the guest.

"Ah dunno, boss," replied Rastus. "Diss yere is mah first season at diss yere hotel, suh."



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Breeders and stockmen cannot afford to miss this old and reliable exhibition.

Live stock parade daily. Two speed events each day.

Full programme of attractions.

Dog show commences Tuesday, September 10th.

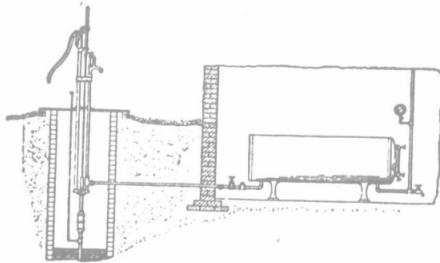
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MAKE the crop PROFITABLE and you will at the same time increase the VALUE of your farm. If you bring up the PRODUCTIVENESS of your soil to grow 40 bushels of wheat to the acre your land will be worth TWICE AS MUCH as your neighbor's -- who doesn't fertilize and there fore grows less than 20 bushels per acre. There is no money in poor crops and run down farms.

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will produce maximum crops and create reserve capital for you by building up the fertility of your soil, making a profit for you at both ends. We furnish many different compositions of plant food, to fit the requirements of all kinds of soil and all conditions.

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are known as crop producers and every analysis is guaranteed to be as represented. They are easily applied because they are so finely ground. They can be sown with a grain drill before planting or scattered by hand from the wagon if you have no drill, and then harrowed in.

At Dashwood, Ontario, Louis Walper says: "I had one of the biggest crops ever seen on this farm, following the use of 'HOMESTEAD' fertilizers."

"At Thetford, Ontario, Wilson Bros., say: "We are well satisfied that it does not pay to sow wheat without them;" and Mr. H. Wilson of the same place writes: "Each year I sow a piece without fertilizer and the difference is so great I am fully convinced it does not pay me to sow wheat without the 'HOMESTEAD'."

At Arkona, Ontario, Mr. J. A. Gordon says: "I have used 'HOMESTEAD' fertilizer about five years. The first year I shut it off once across the field and my neighbor said he could see that strip 8 rods away; and it could be seen two years afterward in the meadow, so I think it pays all right."

Every farmer should read our 52 page book on Fertilizers and "How to Fight Drouth with Fertility," sent free, postage paid. Write us today and tell your friends to do the same.

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A First-class
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Natural temper steel blade.
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QUESTIONS AND ANSWERS. Miscellaneous.

CANADA'S POPULATION BY RELIGIONS.

How do the leading religious denominations in Canada stand according to the last census? ENQUIRER.

Ans.—Of the Protestant denominations the Methodists rank first with 916,886 members; next in order the Presbyterians, 842,442; then Anglicans, 680,620; Baptists, 316,477; Lutherans, 92,524; Congregationalists, 28,293. Of the smaller bodies, it might surprise some to know that in Canada there are 10,407 enumerated as Buddhists, and Confucians, 5,115. Christian Scientists number 2,619; Roman Catholics aggregate 2,229,600; the Salvation Army is credited with 10,308; Disciples, 14,900; Evangelicals, 10,193; Friends (Quakers), 4,100; Moravians, 4,701; Latter Day Saints, 6,891; Doukhobors, 5,775; Jews, 16,401, and Adventists, 8,058.

IMPLEMENT DISPUTE.

I bought an implement last spring and was to pay for it in three payments. I used it one month, then had no more use for it. A neighbor needing the implement took it on the same terms. I allowed him a discount on first payment. Now he refuses to pay the second payment, saying he has nothing to pay with. No agreement was made in writing, as we were friends, and I thought it would be all right. What can be done about it? J. E. H.

Ans.—If, as the neighbor states, he has nothing to pay with, you may have trouble getting your money. You should have had an agreement, or promissory notes, covering the transaction. The easiest way is always the best. If he has no money to pay, you may be able to secure the implement. If he cannot be induced to make any settlement, consult your local legal adviser. You can enter an action.

COW LOST HER CALF.

Cow, eight years old, in good condition, milking well, was due to calve the first of January. She was out on pasture in a cold north-east rain, and came home apparently in a very heavy chill, which resulted in a very bad attack of mammitis. We gave her two pounds of Epsom salts, and bathed her udder with hot water and with camphorated oil. Again in twelve hours we gave her drench of one and a half pounds salts to take down fever. She has gone almost dry, her appetite has been very poor, she will only pick at her food. Nine days from the first attack she showed signs of internal pains. She travelled around for some time, and dropped a bag resembling the bag that a calf comes in, and it was filled with a jelly-like material about a honey color, and almost as thick as liver. She then appeared better, but discharged quite a lot of a thick bloody substance. The same night she dropped her calf, which was very much discolored, and the afterbirth does not look natural; the buttons or black dogs are of a light green color. Is this abortion, or is it caused from the purgative? Is it safe to put other cows that are in calf in the same stable until fumigated? Is it safe to breed her again, or would you advise letting her go to beef? J. J. M.

Ans.—The cow certainly aborted, but as to whether it is contagious abortion or not we are not prepared to state definitely. It is not likely that it is, as the severe chill and illness, accompanied by the purgative, which must have followed the administration of repeated doses of Epsom salts would likely be sufficient to cause the expulsion of the fetus. It does not seem as though it was the fault of the cow. Her illness undoubtedly provoked it. However, to be safe, would keep her separated from the other cows for a time at least, and would thoroughly disinfect her hind quarters and the stable in which she stood, especially if other cows are to be put into it. It is much better to be on the safe side. If a good milker, or a valuable cow, would breed her again after giving her ample time to recover from her severe attack. If she is just an ordinary cow, it might be as well to feed her off, as the trouble may have materially weakened her constitution, and she would not be worth the risk of another breeding and possible return of the trouble.

DOES WHEAT PRODUCE CHESS?

Some time ago I heard a discussion as to whether chess would grow from winter-killed wheat or not. M. B.

Ans.—Many people erroneously believe that chess (*Bromus secalinus*) springs from ordinary winter wheat (*Triticum vulgare*). It is utterly impossible for such to be the case, as the two plants are of entirely different species, and different generi. It would be equally sound to believe that oats could be sown and barley produced. The fact is, chess is much harderier than winter wheat, and where the winter has killed out a large number of the wheat plants, the chess comes on rapidly, being uninjured by unfavorable weather. It grows vigorously, and is a very large stooler, a large number of stalks coming from a single grain, especially where there is no wheat to interfere, and in such places makes a strong showing. This wonderful growth of the chess in the "killed-out" patches gives many the impression that wheat turns to chess. A little of the chess may escape practically unnoticed in the seed wheat sown, and under conditions which kill the wheat, may make quite a showing in the crop. No; wheat never changes to chess, nor chess to wheat. They are entirely separate plants, and have no such strong mutable powers.

ONTARIO'S GREATEST SHIRE STUD.

The beautiful farm of Porter Bros., Appleby, Ont., about five miles north-east of Burlington Station, G. T. R., when visited by a representative of this paper a few days ago, was found looking its best. In this section of Ontario the soil is particularly adapted to grain-growing, and the crops were looking exceptionally well, even corn, that is very far from being nearly up to the average in most parts of Ontario, is around here looking good. On the day of our visit, the Messrs. Porter were busy garnering a fifteen-acre field of fall wheat, which was an exceptionally heavy crop, and everything pointed to a plenty for the coming winter's feeding of their splendid stud of Shire horses, Shorthorn cattle, and Hampshire swine. This well-known stud of prizewinning Shires was found up to the usual high standard, both in condition, breed type, and quality, particularly the last year's Toronto and Ottawa champion stallion, Proportion (imp.), the high-class quality son of the famous Nailstone Ragged Jacket. He is in extra nice condition, and looks like adding additional honors to his already long list. Baron Kitchener, the winner of many honors, is also looking as fresh as a two-year-old. They are certainly a grand pair of stallions, with a great big lot more quality than Shires are wont to show. Baron Kitchener is now, for the first time, offered for sale. In mares and fillies, the same selection in the matter of quality is in evidence. Imported Tuttlebrook Fuchsia, the big, quality mare that has won the tri-colored ribbon since coming to Canada, is in fine bloom, and is the dam of a right yearling filly and filly foal, full sisters, sired by Baron Kitchener. They are grays, and as near alike as two peas. Tuttlebrook Sunflower (imp.), and Tuttlebrook Ladylike (imp.), are a pair of bay three-year-olds, the former first and champion at Guelph last winter, also first at Toronto and Ottawa, the other second to her all around. They are certainly a grand pair. In two-year-olds, there are Tuttlebrook Flirt (imp.), Wilsford Sophia (imp.), and Tuttlebrook Bloom (imp.), the former a black, the other two bays. They are the kind popular in this country, and the kind that wins. In yearlings, there are two, one by Baron Kitchener, and out of Rose; the other by Proportion, and out of Viola. They are a big, growthy pair, and all or any of them are for sale. The Shorthorns are Scotch-bred, and headed by the Jilt-bred bull, Heather King (imp.). They represent on tribe lines the Waterloo Princess, Cruickshank Lovelys, Princess Royals, and Fancys. For sale are two bulls past the year in age, and one six months, one of the former out of Imp. Fancy Lady; the other out of a big-milking Salina-bred cow; the younger one is a Princess Royal. All are sired by the stock bull. They are for sale, as well as a number of heifers. In Hampshire swine, for sale, are both sexes, sired by their grand champion boar, and out of big, smooth sows. Look up their exhibit at Toronto Exhibition.

QUESTIONS AND ANSWERS.
Miscellaneous.

TRAINING THE COLLIE.

Some years ago I remember having read an article in your paper on the training of collie dogs, and although we have kept all issues since a dozen years, I have failed to locate it. Would you kindly publish an article on the training of a young collie for general farm use, giving all the information available, and incidentally answering the following questions:

Is a puppy of five months too young to begin work? What will destroy fleas on a dog? How should a kennel be built? Should he be trained to lead on a rope?

Ans.—It is absolutely necessary to teach the pup to mind from the start. This is done by firmness and kindness. Pat him when he does right, and do not scold or punish him when he does wrong. Let one man handle the dog. Some prefer teaching them while from three to six months of age; others prefer to allow them to be a year old before training. Perhaps we could not do better than reprint the article referred to in the query. It was printed in 1905 and was written by A. J. Ewen, Wellington Co., Ont.

“Commence with the dog at the age of three months, in some secluded place, hearing no words intended to guide him except his own name: he should know nothing of ordinary words in use towards dogs, and should not have been handled by other persons. The first thing to teach him is to lead, placing a string around his neck, four or five feet long, in such a manner as not to hurt him, and hold upon the cord till he ceases struggling to get away. One lesson should be given each day. The first lesson should be given to let him know he cannot get away, and in teaching him to come by pulling on the rope and saying ‘here,’ using no other word that may confuse him. After he fully understands the meaning of the word ‘here,’ he will come to you when it is used; and as he comes to you, voluntarily or not, say ‘ho,’ and caress him. A lesson of thirty minutes, working him slowly and patiently, will be sufficient for each day. Proceed with the lessons till he will come from any part of yard at the word ‘here.’ He has now learned the word ‘ho’ means you are through with him.

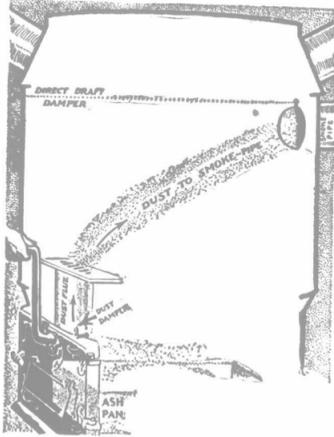
“You must now teach him the words ‘go’ and ‘halt.’ To do this, place yourself in a position opposite where he would desire to go; for instance, the opening of the enclosure you have chosen for the lessons; say ‘go,’ calling and urging him along. When he gets part of the way say ‘halt,’ and at the same time pull upon the string, stopping him, and say ‘halt’ again. Proceed thus till he has learned the meaning of the words. To teach the above four words, it will take from one week to ten days, according to sagacity of the animal.

“To teach at the word ‘speak’: By holding up something which he wants very much; for instance, food, when he is quite hungry. If you wish him to go out, show him the door and say ‘go out;’ the word ‘go’ will start him, and in a little while he will become familiar with the word ‘out.’ Let him have a regular place to sleep, and teach him its name. If you already have a dog trained to drive, take the pup out with him to drive in the cattle. He will thus learn that they will run from him. Say nothing to him while he is with the other dog, unless he attempts to go to the heads of the cattle; this you must not permit. After two or three times take him out without the other dog and allow him to run after the cattle, provided they are used to being driven by other dogs. It will not do to let him run where there is danger of being turned upon. If he runs them too fast say ‘steady,’ and as you use words with him only when they mean something, he will be apt to pay attention and go slower; if he does not, say ‘halt,’ and then ‘go,’ then ‘steady.’ He will gradually understand its meaning. Accustom him to the words ‘fetch’ for sheep, and ‘get’ for cattle. So, when you say go and get the cattle he knows you mean the cattle, instead of the sheep or horses. Teach him to know the left from the right, and to obey orders in that respect by the motion of your left hand and the word ‘left’: then by the motion with the right

More Facts About McClary's
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There's no dust nuisance about the “Sunshine”—when you rock down the ashes the dust is drawn up dust-flue then directly across to smoke-pipe where it belongs. Look at the illustration and remember to open both “Dust” and “Direct Draft” dampers—these simple devices make the “Sunshine” the cleanest furnace for the home.



See the famous “cup joints” here—the frame of the ash pit—the two sections of the fire-pot and the dome all jointed together by our “cup joint.”

There's a layer of asbestos cement in each joint—this unites all sections in a permanent way, yet leaves room for the expansion and contraction of the metal.

No wonder that this “Understudy of the Sun” is called the “Sunshine” furnace—Since it diffuses pure warm June air throughout the house.

You don't have to wear overalls when attending to the “Sunshine” furnace—It has a big roomy ash-pan. All the ashes are guided directly into the pan by ash-chutes. A minute or two performs the job. Yes, the “Sunshine” is the clean furnace.

The “Sunshine” Furnace burns either wood or coal. Coke, too, if you prefer it. The “Sunshine” distributes a greater percentage of heat units—the Baffle plates (a new McClary device) decidedly increase the heating efficiency of the furnace.

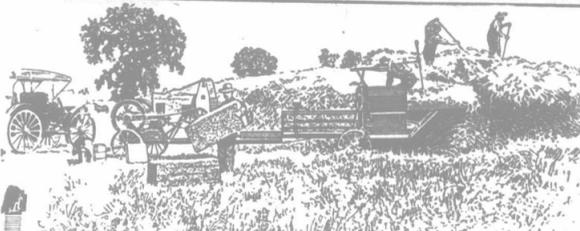
But—see the McClary agent of your locality. Ask him to show you all the features and exclusive devices which make the “Sunshine” Furnace worthy of the name—The Understudy of the Sun.

If you do not know the McClary Agent, write us at our nearest address and we'll forward you a letter of introduction by return.

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Bale Your Hay and Sell It

THERE is always a ready market at a good price for baled hay. It occupies only about one-fifth the space of loose hay. It can be handled easily. It prevents waste and it retains its full food value. Many farmers are making hay the big cash crop of their farms, not only because of the high profits it brings at the present market value, but because as a rotation crop it renews the richness of the soil. These farmers make all the profit themselves. They get a price for baled hay which far more than covers the cost of baling. They are able to ship it to the markets where the price is highest. A big majority of these farmers

Use IHC Hay Presses

the only presses on the market which fill the need of the individual farmer. Like all other IHC machine lines, our hay press line is complete. You can get IHC pull power presses requiring either one or two horses; IHC motor presses using 3, 4, or 6-horse IHC engine. Both styles have three separate bale chamber sizes, 14 x 18 inches, 16 x 18 inches and 17 x 22 inches.

The IHC pull power press has a greater capacity than any other horse press of its size. It is also easier on the

horses; the steppover is the lowest and narrowest made and the horses are pulling no load when they cross it. The IHC hay press has an adjustable bale tension which insures compact bales. It is fitted with a roller tucker that turns in all straggling ends, so that the bale is neat and smooth in appearance. The bale chamber is so low that the attendant can tie the bale without walking round the machine.

The IHC motor press consists of a bale chamber and an IHC engine, mounted together on substantial trucks. It is easily moved from place to place, can be backed to the stack or barn and is always ready for work. The engine does not need a man to watch it. Give it a supply of fuel and water and see that it gets plenty of oil and it needs no other attention. There is no danger of fire because there are no flying sparks, nor is there any smoke or soot to interfere with the comfort and efficiency of the workers. The engine is detachable. Two extra wheels, an axle, and a belt pulley are furnished, so that when not baling hay you have a regular portable IHC engine, which can be used the year around to run a small thresher, saw wood, pump water, generate electric light, grind feed, or separate cream or to run any farm machine for which it supplies sufficient power. Two perfect machines in one. Now is the time to get ready for your haying. Make it a big money crop. Call on the IHC local agent in your town or write the nearest branch house for an IHC hay press catalogue.

CANADIAN BRANCH HOUSES:

International Harvester Company of America
(Incorporated)

At Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton

IHC Service Bureau

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizer, etc., make your inquiries specific and send them to IHC Service Bureau, Harvester Building, Chicago, U.S.A.



hand teach the word ‘right.’ By these motions and an appeal to the intelligence of the dog by your countenance and eyes, you can start him for the fields in any direction you choose, and he soon learns to do your bidding. Of course, it is presumed that the dog, to begin with, is bred from working stock.”

UNLABELLED SEED.

While planting my garden this spring I came upon an unlabelled package of seed. Supposing it to be sage seed (which it resembled very much), I planted it. The inclosed is the result. Can you give me a name for it?

H. S. P.

Ans.—The plant is a weed of the mustard family and should not be allowed to produce seed. The specimen was in very poor condition upon arrival, but is clearly a weed, and quite like wild radish. Hand pull all the specimens, and if seed is produced in them, burn them to prevent spreading.

HORSE OWNERS! USE GOMBAULT'S CAUSTIC BALSAM.



A safe, speedy and positive cure. The safest, best and most effective ever used. Removes all bunches from horses. Impossible to produce scurf or bluish. Send for circulars. Special advice free.

THE LAWRENCE-WILLIAMS CO., Toronto, Canada



Seldom, See
A big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Side, Knee or Throat.

ABSORBINE

Before After will clean them off without laying the horse up. No blister, no hair gone. \$2.00 per bottle delivered. Describe your case for special instructions and Book \$1.00 free.
ABSORBINE, JR., liniment for man and horse. Removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Varicosities, Old Sores, Ailays Pain. Price \$1 and \$3 a bottle at druggists or delivered. Manufactured only by **W. F. YOUNG, P.D.F.**, 258 Lyman's Bldg., Montreal, Ca.

Messrs. Hickman & Scruby
COURT LODGE, EGERTON, KENT, ENG.

EXPORTERS OF
Live Stock of all Descriptions
Draft horses of all breeds a specialty. Intending buyers should write us for particulars, as we can place before them the most attractive proposition they have yet experienced. We can send highest references from satisfied buyers of nearly all breeds.

NOTICE TO HORSE IMPORTERS

GERALD POWELL

Commission Agent and Interpreter
Nogent Le Rotrou, France

will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking, and pedigrees. Many years experience; best references. Correspondence solicited.

Shires and Shorthorns

In Shire stallions and fillies, from the best studs in England, we are offering some rare animals at rare prices. Scotch Shorthorns of either sex or age of highest breeding and quality. **John Gardhouse & Son, Highfield Ont.** L.-D. phone.

Michael Gallagher was ill, and his wife had received instructions from the doctor to keep him quiet and give him light food.

"You must not let him get excited," the doctor had said, "and if he gets restless and feverish again to-night you must put a thermometer under his arm and tell me what temperature it records when I call again to-morrow."

The woman promised to obey instructions, and the doctor went on his way. When the medical man called the next morning he was surprised to find that the patient seemed much worse.

"Did you take his temperature last night, as I asked you?" the doctor inquired.

"Yes, sorr," said the woman. "O' phut the bharonometer under his arm, just as you said, and it wint round to "Dry," so O' give him some beer, poor soul!"

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You who really want your roof waterproof to stay—get

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QUESTIONS AND ANSWERS. Veterinary.

FATALITY IN PIGS.

Pigs, four months old, fed on chop composed of two parts barley and one part corn, and given skim milk to drink, were kept shut up in barn. There were eighteen of them. Two of them began to mope around; on the second day they began shaking their heads, turning around and squealing at intervals, and died on the third day.

W. E. B.

Ans.—It would have required a careful post-mortem to enable a man to definitely determine the cause of death. The food consumed, and the symptoms given, indicate constipation. If any more are showing sickness, purge with 3 ounces Epsom salts, add to the chop 3 parts shorts, and allow free run on grass for at least a few hours daily. Give once daily about a dessertspoonful for each pig of equal parts Epsom salts, sulphur, and powdered charcoal.

V.

STOMACH STAGGERS.

An 11-year-old horse, kept in stall all the time and doing very little work, when being driven a month ago suddenly staggered and fell, but soon got on his feet again and appeared all right. In about four weeks after this he had another similar attack, but the symptoms were more severe.

S. McM.

Ans.—This is called stomach staggers, or blind staggers, and is an affection of the brain, caused by stomachic irritation. Standing without exercise and good food predisposes to the trouble, but some horses become predisposed without appreciable cause. It is dangerous to drive a horse that is predisposed, as he may fall at any time in any place. The extraction of 4 to 6 quarts of blood from the jugular vein, and the administration of a purgative of 8 drams aloes and 2 drams of ginger, followed by 1 dram iodide of potassium three times daily for about ten days, gives relief, and usually prevents a recurrence for a month or two. Regular exercise and only moderately-high feeding also tends to prevent attacks.

V.

Miscellaneous.

SHEEP COUGH.

I have a flock of sheep and there seems to be a cough amongst them. Some cough real badly, others do not cough so much, and nearly all of them discharge from the nose. I notice some of them that cough like to get their head through a gate or fence and rub their throat, and the more they rub the more they cough. Those which have the cough seem to be in very poor condition. They have been on good natural grass pasture, and have a good run, free access to good rock water, and lots of salt. I dipped them for ticks two weeks ago. Have had cough all summer. The sheep consist of a number of grade Leicester and a number of pure-bred Cotswolds. Would you advise me to get rid of all of them and start a new flock, or can you prescribe something for them? I have only kept sheep here about two years on this farm.

H. P.

Ans.—It is not an infrequent occurrence for an individual or two in the flock to have a cough, due to cold or catarrh, but when the entire flock is affected there must be some cause for the trouble. Sheep require a dry pen for the winter months. It need not be very warm, but must be clean and dry. Cold rains bring on coughs. It is better to house them during long-continued cold rains. Try tarring each sheep's nose. It is best done by salting in a narrow trough daubed on the edges with pine tar. In getting at the salt, the sheep get the tar on their noses. The trouble is likely catarrh, and unless it reaches alarming proportions, would not discard the flock. Try to keep them from being exposed to cold and wet until the cough is cured. Dip only on warm days. Flaxseed tea three times daily and 1 dram sweet spirits of nitre and 15 grains of powdered digitalis twice a day, are sometimes given for catarrh.

Are you anxious to save time and money on the work you are doing on your farm at present, and to get larger crops from your farm or orchard? If so, let us send you, FREE OF CHARGE, our pamphlets on the use of

Stumping Powders

USED FOR

Removing Stumps and Boulders
Digging Wells and Ditches
Planting and Cultivating Orchards
Breaking Hard Pan, Shale or Clay Subsoils
Etc., etc., etc.

Figure yourself what clearing your farm is costing now, or what you are losing in crops through not clearing. Write us about arranging demonstrations.

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Auction Sale Every Wednesday Private Sales Every Day

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CLYDESDALES AND HACKNEYS

Our winnings at all shows are your guarantee that whatever you buy from us will be the best in the land. You cannot afford to buy without first seeing our importations. Address all correspondence to Bedford Park P.O., Ont. Telegrams to Toronto. Telephone North 4483, Toronto.

ONTARIO VETERINARY COLLEGE

Affiliated with the University of Toronto, and under the control of the Department of Agriculture of Ontario.
College re-opens Oct. 1st, 1912.

N.B.—Calendar on application.
[E. A. A. GRANGE, V. S., M.Sc., Principal.]

Clydesdales, Imp., Just Arrived Our new importation has arrived safely, and we are now in a position to supply the trade with stallions from 1 year old up to 4, with more draft character, big, strong, flat bone, and better breeding than any other firm in the trade. Prices and terms as favorable as any other importer in Canada.
BARBER BROS., GATINEAU PT., QUEBEC, NEAR HULL.

A Few Choice Glyde Fillies—I am offering several choice and particularly well-bred Clydesdale fillies from foals of 1911 up to 3 years of age, imp. sires and dams. Also one stallion colt of 1911, imp. sire and dam. These are the kind that make the money.
HARRY SMITH; Hay P.O., Ont. Exeter Sta. L.-D. Phone.

BLAIRGOWRIE IS OFFERING AT PRESENT:
CLYDESDALE MARES, imported and Canadian-bred, from one year up to 5 years; also a pair of Canadian-bred stallions, rising three years. Young cows with calves by side, and heifers well on or in calf. Children's ponies, well broken and quiet, from 1½ to 14 hands.
Myrtle, C. P. R. Stn. L.-D. Phone. JOHN MILLER, JR., Ashburn, P.O.

CLYDES, SHIRES, PERCHERONS
Now offering 8 imp. Clydesdale fillies, rising 3 years; 1 imp. Clydesdale stallion 12 years, a good one, and several stallions 2 and 3 years; one Shire stallion, sure foal-getter; two black Percheron stallions, 6 and 8 years, and one Thoroughbred stallion. All will be sold at bargain prices.
T. D. ELLIOTT, Bolton, Ont. Long-distance Phone.

ORMSBY GRANGE STOCK FARM, Ormstown, P. Que.
My fall importation, which will be the largest yet made by me, will be personally selected, will arrive last week in September. Good colors, heavy bone, best of pedigrees and reasonable prices. Wait for them if you want good ones.
D. McEachran.

We still have on hand a few good Clydesdale Stallions with both size and quality, all prize-winners and breeding of the best blood in Scotland. Prices and terms the best in Canada.
John A. Boag & Son, Bay View Farm, Queensville, Ont.
On the Toronto & Sutton Radial Railway Line. Long-distance Phone.

MT. VICTORIA STOCK FARM, Hudson Heights, P. Q.
We have some very choice young stock for sale, both sexes. Clydesdales and Hackneys from champion sires and well bred dams, at reasonable prices.
T. B. MACAULAY, Prop. E. WATSON, Mgr.

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.
Porter Bros., Appleby, Ont., Burlington Sta. Phone.

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The Roofing That Needs No Painting



Amatite ROOFING

THE Amatite mineral surface will hold its own against the weather for a long time. You don't have to look over your Amatite Roofs to see whether they need painting every year or two.

The cost of paint, therefore, is done away with—all that trouble and nuisance and bother is gone. Simply lay your Amatite, nail it down, take away your ladder and forget that you have a roof.

A sample of Amatite will be sent free on request, together with a handsome little booklet, giving details. Address our nearest office.

Creonoid Lice Destroyer and Cow Spray

Creonoid sprayed on cows keeps away flies. Use it before milking and cows will yield better.

Everjet Elastic Paint

Save money by using this black paint wherever the color is no objection. Elastic, heat-proof, durable. Use it for "rubber" roofings and all exposed iron and wood.

THE PATERSON MFG. CO., Limited
MONTREAL TORONTO
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St. JOHN'S, N.B. HALIFAX, N.S.

The scene was the golf links, and the parson and the doctor were having a friendly match—at least, the match had been friendly till the former found himself seven down at the ninth hole. In fact, the parson was taking his beating badly.

He kept thinking of all the things he ought not to say, and the medico, guessing his feelings, chortled audibly.

"My hole again!" said the doctor, for the tenth time, as he holed out a fourteen-yard putt.

His reverence could not contain himself any longer.

"Sir," he burst out, "I hope I may live to read the Burial Service over you!"

"Indeed!" said the doctor, with a dry chuckle. "Well, it would still be my hole!"

Get the Engine That is Easiest To Keep Running

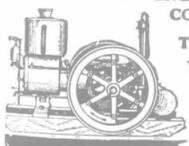
SIMPLEST engines to operate—that's the reason most farmers choose and recommend

Chapman & Stickney Gasoline Engines

No expert engineering knowledge needed to run them, no intricate parts that easily get out of order. If you want most service, write for our FREE books of "Engine Facts and Experiences."

ONTARIO WIND ENGINE & PUMP CO., Limited

TORONTO
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Aberdeen-Angus—A few bulls to sell yet; also females. Come and see them before buying. Drumbo Station. Walter Hall, Washington, Ont.

GOSSIP.

PERCHERONS FOR CANADA.

Gerald Powell, Nogent-le-Rotrou, France, writes "The Farmer's Advocate": "On July 15th, I shipped from Havre, 12 mares for Alberta, and for T. H. Hassard, of Markham, Ont., 14 stallions and mares, an extra good bunch, both in stallions and mares, there being several prizewinners, including Jonas 87160, a black three-year-old stallion, bought off Victor Guibout, a winner at several shows, also an extra good two-year-old gray stud, Kartonnier, who won fifth prize at Alencon, the Percheron Society Show, there being 81 in the ring. No doubt these horses will be shown at Toronto next month."

A NOTED HERD OF IMPORTED SCOTCH SHORTHORNS.

With their 1912 importation of Scotch Shorthorn bulls and heifers safely landed in their splendid stables at Burlington, Ont., the firm of Mitchell Bros. are in a position to supply the Shorthorn breeders of Canada with either an imported or Canadian-bred stock bull, a position not duplicated by any other firm of breeders or importers in the country. It is now many years since J. F. Mitchell first crossed the briny frog-pond for Shorthorns, and since then many importations have been made, particularly of late years, when Mr. Mitchell has been almost the only Canadian with the courage to delve into importing of Shorthorns with the high prices in vogue in Scotland. With their large herd of something over one hundred head of imported cows, their daughters and granddaughters, and a number of recently-imported heifers, bred on the most fashionable tribal lines to select from, the firm are in a particularly favorable position to meet the demands of the breeders of this country in either imported or Canadian-bred cows, heifers, or bulls, and that this fact is being fast recognized is well proven by the large and rapidly-increasing number of sales of breeding and show animals that every year brings. In high-class show condition and individual excellence the herd was never so strong as just now. It was a master stroke of judgment exhibited by Mr. Mitchell when he selected as chief stock bull, from the renowned herd of A. T. Gordon, the immensely thick, mellow, good-doing bull, Imp. Bandsman, of the breed's best-doing tribe, the Cruickshank Butterfly. This bull has proved a veritable wonder as a sire of show-ring calibre. In service and for sale, as some of them are, are such high-class and rightly-bred bulls as Imp. Royal Warrant, a Campbell Rosebud, and a half-brother to Bandsman, being sired by the famous show bull, Newton Chrystal. He is a roan, deep-ribbed, well-fleshed, and a beautiful handler. Another, same age, senior yearling, is Right Sort (imp.). He is a roan Bruce Mayflower, bred by Gordon, and sired by Red Rosewood. This is a show bull all over. Another, same age, is a red, Newton Friar (imp.), a Marr Flora, bred by Duthie, and sired by Violet's Victory. He is a bull of grand type and quality. Another senior yearling that has show-ring championship form, is the white, Bandsman's Choice, a Duchess Gwynne-bred son of Imp. Bandsman. This is one of the greatest senior yearling bulls in the country. The younger bulls for sale are the best lot ever bred in the herd. There is not a cull among them. One is a roan nine-months-old Duchess Gwynne, by Bandsman; another is a red C. Butterfly, by Bandsman; another is a roan Nonpareil, by Bandsman; two others are Orange Blossom-bred sons of Imp. Village Duke, and still others are Lavinia-bred sons of Imp. Village Duke. These, with several others, make a selection of high-class young bulls whose individuality and breeding cannot be beaten. The same standard of excellence is manifest in the female side of the herd. Many of them are in fit for Toronto and London shows, where the Messrs. Mitchell will be pleased to show them to interested breeders. Look them up at Toronto and London Exhibitions.

She—"Pardon me, sir, for walking on your feet."
He—"Oh, don't mention it. I walk on them myself, you know."



Is Your Purse Full?

YOUR farm is the purse from which you take the necessities and luxuries of life. What provision are you making to keep your purse full—to insure a constant supply of food, clothing, heat, light, protection, and worldly wealth?

No purse can stand a steady drain—no soil can produce constant yearly crops—without an adequate income. The purse must be supplied with money, the soil with plant food. It is easier, and far cheaper, to maintain a fertile condition of the soil than it is to build it up after it is once exhausted. Be wise—begin now to use faithfully an

I H C Manure Spreader Corn King, or Cloverleaf

Use your I H C spreader to distribute stable manure and saturated bedding while it is still fresh. Spread in light coats so that the plant food elements of the manure may combine quickly and thoroughly with the soil and become available for the use of growing plants. Spread quick-decaying straw to increase the moisture holding capacity of the soil.

If you would have the spreading well done, do it with an I H C manure spreader. Make the quantity of manure usually spread by the fork do twice the amount of good by distributing it properly with an I H C spreader, leaving the ground more evenly fertilized. The driving mechanism of the I H C spreader is strong and thoroughly protected. The aprons, both endless and return, run on large rollers. The feed is positive. The manure is spread evenly, light or heavy as may be necessary, the quantity spread never changing until the feed is changed.

See the I H C local agent and have him show you the spreader best suited to your needs. Get catalogues and full information from him, or write the nearest branch house.

CANADIAN BRANCH HOUSES: International Harvester Company of America (Incorporated)

At Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, N. Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John's, Weyburn, Winnipeg, Yorkton

I H C Service Bureau

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizer, etc., make your inquiries specific and send them to I H C Service Bureau, Harvester Building, Chicago, U.S.A.



ORCHARD GROVE HEREFORDS

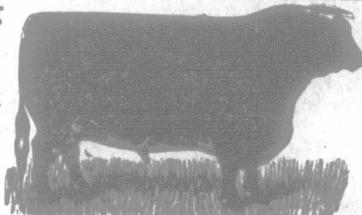
Champions of 1911 shows, winning both senior and junior herds at Winnipeg, Brandon, Regina, Edmonton, Toronto and London; also fifteen championships. Young stock, both sexes, for sale at reasonable prices. Long distance Phone. L. O. CLIFFORD, Oshawa Ont.

Present Special Offering

- 20 High-Class Scotch Shorthorn Heifers
- 10 High-Class Young Shorthorn Cows
- 5 High-Class Scotch Shorthorn Bulls

At moderate prices, including Marr Missies, Emmas, Cruickshank Nonpareils, Duchesses of Glosters, Village Rams, Bridesmaids, Butterflies, Kinellar Claretts, Miss Ramsdens, Crimson Flowers; also a number of the grand old milking tribe, which have been famous in the showing.

ARTHUR J. HOWDEN & CO. Columbus, Ontario



SHORTHORNS

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application.

H. CARGILL & SON, Proprietors, Cargill, Ont., Bruce Co. JOHN CLANCY, Manager



Scotch Shorthorn Females for Sale

I am offering at very reasonable prices, females from one year to five years of age. The youngsters are by my grand old stock bull, Scottish Hero (imp.)—55042—(90055), and the older ones have calves at foot by him, or are well gone in calf to him. Their breeding is unexcelled, and there are show animals amongst them. A. EDWARD MEYER, Box 378, GUELPH, ONT.

SALEM SHORTHORNS

Headed by Gainford Marquis, undefeated bull of three countries. See our show herd at the leading fairs, starting at Winnipeg J. A. WATT, SALEM, ELORA STA., G. T. and C. P. R.

Scotch Shorthorns

FOR SALE. One promising 12 months Imported Bull Calf, a Marr. Flora, recently imported; 12 bull calves from 6 to 11 months old, all by Imported Sire—some good ones among these; also 30 choice cows and heifers in calf, at reasonable prices. MITCHELL BROS., Burlington, Ont.

THIS IS A GOOD TIME, AND I HAVE A GOOD PLACE, TO GET A HIGH-CLASS SCOTCH SHORTHORN BULL CALF by my great Whitehall Sultan sire, or a young cow in calf to him, to start a herd that will be glib-edged, SHROPSHIRE RAMS AND EWES, too, at low prices. CHILDREN'S PONIES. A CLYDE DALE FILLY, such as I can send you, is one of the best things any man can buy. Just write me and say as nearly as possible what you want, and I will surprise you with prices on goods that are genuine. ROBERT MILLER, STOUFFVILLE ONTARIO

When Writing Advertisers, Please Mention "The Farmer's Advocate"

1854 Maple Lodge Stock Farm 1912

Have some **SHORTHORN HEIFERS** two years old from cows giving 50 pounds milk per day, and in calf to my stock bull, Senator Lavender.

Grand young **LEICESTERS** from imp. Wooler of Sandy Knows, champion at Toronto, and imp. Royal Coonaught.

A. W. SMITH, MAPLE LODGE, ONTARIO
Lucan Crossing, G. T. Ry., one mile.

SPRING VALLEY SHORTHORNS

Herd headed by the two imported bulls, Newton Ringlander, =73783=, and Scottish Pride, =36106=. The females are of the best Scottish families. Young stock of both sexes for sale at reasonable prices. Telephone connection.

KYLE BROS. - - Ayr, Ontario

Shortshorns, Berkshires, Cotswolds

Nine bulls from 9 to 11 months, cows, heifers and heifer calves; over 30 head on hand. No Berkshires to offer at present. A few shearing ewes for sale.

Chas. E. Bonnycastle,

P. O. AND STA., CAMPBELLFORD, ONT.

ORDARDALE SHORTHORNS—Shortshorns of all ages, pure Scotch and Scotch topped, imp. and Canadian-bred, choice heifers, choice young bulls, also the stock bull Lord Fyvie (imp.); anything for sale.

Dr. T. S. Spreule, M. P., Markdale, Ontario

OAKLAND SHORTHORNS I

Present offering is five choice young bulls, from 7 to 22 months old, reds and roans, out of good dual-purpose dams, and sired by our champion Scotch Grey bull 7262. Visitors find things as represented. Good cattle and no big prices.

JOHN HLDER & SON, HENSALL, ONTARIO

Fletcher's Shorthorns

Herd headed by (Imp.)—Royal Bruce =55038= (89909) a choice lot of heifers for sale, bred or calves at foot.

Geo. D. Fletcher Binkham P. O., Ont.
Erin Sta., C. P. R.

Shorthorns of Show Calibre

At present one nice red bull 12 months old (of the Bellona family) for sale at low price. Heifers of breeding age all sold.

Geo. Gier & Son, Grand Valley, Ont.

SHORTHORNS & CLYDESDALES

Write us for what you require.
W. G. PETTIT & SONS, Freeman, Ont.
Burlington Junction, G. T. R.

Clover Dell Shorthorns

Real bargains in females. Dual-purpose a specialty. **L. A. Wakely, Bolton, Ont.** Bolton Sta., C. P. R.; Caledon East, G. T. R. Phone.

Shorthorns—Nine bulls and a number of heifers for sale at very reasonable prices.

Robert Nichol & Sons, Hagersville Ont

Dugan, the roofer, was sent to a millionaire's palatial home, to try to find a leak in the roof.

As he entered the front hall, the butler whispered to Dugan:

"You are requested to be careful of the hardwood floors as you go upstairs, they've just been polished."

"Sure, there's no danger as me slipping on them," Dugan replied. "O! hov spikes in me shoes."

WAS TROUBLED WITH HIS HEART

HAD TO GIVE UP WORK

Mr. Alfred Male, Eloida, Ont., writes: "I was troubled with my heart for two or three years. I thought sometimes that I would die. I went to the doctor, and he said he could not do anything for me. I had to give up work. My wife persuaded me to try Milburn's Heart and Nerve Pills. The first box relieved me, so I kept on until I had taken seven boxes, and they cured me. I would not be without them on any account, as they are worth their weight in gold. I advise my friends and neighbors who are troubled with heart or nerve trouble to try them."

To any of those suffering from heart or nerve trouble we can recommend our Milburn's Heart and Nerve Pills with the greatest confidence.

Price 50 cents per box, or 3 boxes for \$1.25. If your dealer does not have them in stock, send direct to The T. Milburn Co., Limited, Toronto, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

CUTTING HIGHWAY WEEDS.

Can a pathmaster or township council compel a man to cut burdocks and other weeds along the roadside in front of his farm on road allowance? W. R.

Ans.—The law in most municipalities makes cutting highway weeds compulsory. In some municipalities the cutting of these is allowed to go as statute labor. Make inquiry as to what the by-laws are in your municipality governing this.

CHICKWEEDS.

What are the inclosed weeds? J. H.

Ans.—Both the plants you send belong to the chickweed family. The one marked No. 2 is Spurrey. It is characterized by the numerous thread-like leaves growing in whorls at the joints. Its seed is a common impurity in grass seed. Cultivating the stubble starts the Spurrey seed in the fall; the young plants are killed by the winter. The other plant is a chickweed, but without root or developed seed it cannot be determined. Probably the same remedial treatment applies to it as to Spurrey. J. D.

LIGHTNING RODS.

There is an agent for lightning rods in this neighborhood who puts up grounding wires of copper, on steel roofs, by soldering the wire on the four corners of the roof of building and running the same in the ground to damp earth. There is another agent who claims you are obliged to put rods on the steel roof to be safe. Please tell us, in "The Farmer's Advocate," which is right, if either, and if a steel roof is any safer from lightning than a wooden roof? J. A. M.

Ans.—If good connection is made between the wire and metal roofing, and also good ground connection secured, reasonably good protection should be afforded when wires are dropped from the four corners of the barn. The wire should be loosely stapled to the weather boards, and the rod run deep in the soil. Of course, the rods properly placed on a wooden roof are a good protection. Without being properly grounded, neither roof is protected.

GOSSIP.

Shipments of Clydesdales from Glasgow for Canada the last week in July were 31 head, consigned to T. H. Hasard, Markham, Ont.; Ben. Finlayson, Claresholm, Alta.; and Bilton Derbyshire, Leamington, Ont.

Alex. Hume & Co., Menie, Ont., the widely-known importers and breeders of Ayrshire cattle, write: We will be pleased to meet all our old friends and customers, and others, at the leading fall fairs. The July, 1911, bulls we are offering are from some of our very best females, with good records, and their daughters. All are bred from our imported Auchenbrain-bred bull, champion at London, 1911. Some of the dams are imported cows. Having had a large percentage of bull calves this year, this is a favorable opportunity for purchasers. These calves are fit to head either pure-bred or extra good dairy herds. We are offering them at bargain prices. Now is the time to buy.

CANADIAN HOLSTEIN OFFICIAL TESTS FOR JULY.

Thirty-three official tests are reported for July. In the mature class the outstanding figure is the great cow, May Echo, who, after winning highest honors in the Record of Performance yearly test, now goes into the list of thirty-pound cows, with 31.34 lbs. butter. By a curious coincidence, her daughter, Lawncrest May Echo, heads the junior two-year-olds with 15.32 lbs. In the senior four-year-old class, Cornelia Boutstje De Kol stands first with 23.06 lbs., and the junior three-year-old class, Lyndia Inka Veeman leads with the fine record of 24.58. Roxie Concordia is the best of the senior two-year-olds, with the good record of 17.85 lbs.—G. W. Clemons, Secretary.

Ideal Green Feed Silos

Make Money for their Owners

The most prosperous and experienced dairymen all over the Dominion agree that a good silo is a necessary part of the Dairy equipment of any cow owner who wants to realize a reasonable profit from his herd.

A little investigation must convince you that it will pay you to erect a silo.

The next question is "What silo?"

You cannot afford to experiment.

You want a silo that by many years of use has proved its worth.

The IDEAL GREEN FEED SILO has been longest on the market. Thousands of prominent and successful owners are thankful for the day they erected an IDEAL GREEN FEED SILO on their farms.

Be sure and get our new Silo Book.

De Laval Dairy Supply Co.,

LIMITED

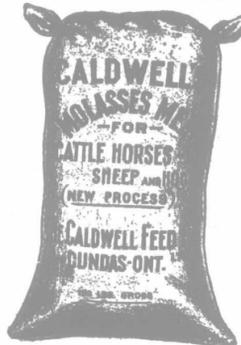
OLDEST AND LARGEST SILO MFRS. IN CANADA
173 William St., Montreal



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CALDWELL'S MOLASSES MEAL

A Short Cut to Results



"You are a loser if not a user."

ARE you fattening your stock for show or sale?

NOTHING can equal our Molasses Meal for this purpose.

USED by all the larger showmen and owners of thoroughbred stock.

PUT up in 100-lb. sacks and sold by the ton. Write for prices and literature to:
The Caldwell Feed Co., Limited
DUNDAS, ONTARIO

Spruce Lodge Shorthorns and Leicesters

Will price cheap young bull from 6 to 14 months; also 1 and 2-year-old heifers, some from imp. sires and dams. Leicesters at all times of both sexes for sale. Phone. **W. A. Douglas, Tuscarora, Ont.**

City View Ayrshires—Bonnie's Messenger

32762 at head of herd, both dam and gr. dam R. O. P. cows. One yearling bull a d calves of either sex. Will sell a few cows. **JAMES BEGG, K. R. No. 1 St. Thomas**
One and a half miles from all stations.

STONEHOUSE AYRSHIRES

Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers.
HECTOR GORDON, Howick, Quebec.

Burnside Ayrshires Champions in the show ring and dairy tests. Animals all ages and both sexes for sale.
R. R. NESS, Howick, Quebec Long-distance 'phone in house

Ayrshires of production, type and quality. I can supply Ayrshires that will please the most exacting critic. Young bulls or females of any age, the kind that swell the bank account.
R. M. Howden, St. Louis Sta., Que. L.-D. phone.

Hillcrest Ayrshires—At head of herd is Ivanhoe of Tanglewild, a grandson of the champion Ayrshire cow, Primrose of Tanglewild, R. O. P. test 16,195 lbs. milk and 625.62 lbs. fat; 60 head to select from. Inspection invited.
F. H. HARRIS, Mt. Elgin, Ont.

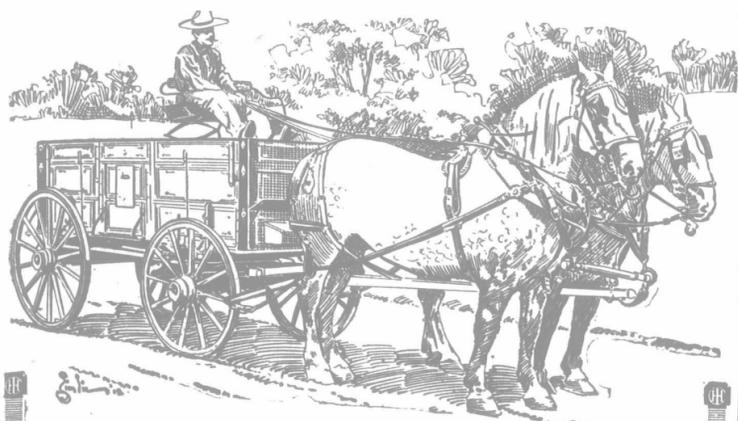
Ayrshires and Yorkshires—We now offer at bargain bull calves dropped in July, 1911. All bred from (imp.) sire and from either imported or home-bred. Some choice February pigs; also young pigs.
Alex. Hume & Co., Menie, Ont.

FIRST CHEQUE FOR \$50 buys a son of Victor Hugo (highest-priced bull of the breed), and from an Herd tuberculin tested.
McMILLAN & LEGGAT, TROUT RIVER, QUE.
Bell Telephone, Huntingdon 81-21. Carr's Crossing, G. T. R.; Huntingdon, N. Y. C. R.

Balaphorene A. J. Jerseys—Found. lion stock, St. Lambert, Coomassie, Combination; stock from a grandson of Him of Dentonia; also a grandson of the great Blue Blood of Dentonia, for sale. W Wyandotte eggs, \$1 per 13. **Joseph Seabrook Havelock, Peterboro Co., Ont.**

Don Jersey Herd
Offers young bulls and heifers for sale; heifers bred to Eminent Royal Fern.

Brampton Jerseys Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being some calves for sale. Production and quality.
D. Duncan, Don, Ont., Duncan Str., C.N.R.
Phone Long-distance Agincourt.
B. H. BULL & SON, Brampton, Ont.



Buy Certainty With Your Wagon

There is no longer any need to speculate in wagons. Before you buy a wagon you can be sure of the quality of wood in hubs, spokes, felloes, axles, bolsters, stakes, and boxes; of the weight and quality of metal in tires, skeins and ironing. I H C wagons

Petrolia

Chatham

are the easiest running, longest lasting wagons you can buy because the lumber used is carefully selected—first grade oak and hickory for wheels, the finest yellow or bay poplar for box sides, and the very best long-leaf yellow pine for box bottoms—all free from shakes, checks or other defects which would interfere with their giving the best service.

The construction of I H C wagons is worthy of the good material used. The air-dried lumber is machined swiftly by accurate, automatic machines, doing the work uniformly well and at a cost away below that of turning out wagon parts by old fashioned methods. The saving thus made is returned to you in better quality of material. All joints fit snugly. Skeins are paired, assuring easy running. All ironing and other metal parts are extra thick and strong.

Go to the I H C local agent who handles these wagons and ask him to prove our claims. Remember, that our responsibility does not cease when the sale is made. You are the person who must be satisfied.

The I H C local agent will show you the kind best suited to your needs. See him for literature and full information or write the nearest branch house.

EASTERN CANADIAN BRANCHES
INTERNATIONAL HARVESTER COMPANY OF AMERICA
(Incorporated)

At Hamilton, Ont. London, Ont. Montreal, P. Q.
Ottawa, Ont. Quebec, P. Q. St. John, N. B.

I H C Service Bureau

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizers, etc., make your inquiries specific and send them to I H C Service Bureau, Harvester Building, Chicago, U.S.A.



LAKEVIEW HOLSTEINS!

Bull calves sired by Dutchland Colantha Sir Mona, and out of heifers sired by Count Hengerveld Fayne De Kol.

Telephone. E. F. OSLER, BRONTE, ONTARIO

Fairview Farms Herd

is where you can secure a son of Pontiac Korndyke, admitted by all breeders to be the greatest Holstein sire that ever lived. Look what his daughters are doing. Two of them with records over 37 lbs. each. Then, look at the work his sons are doing. HE IS THE GREATEST PRODUCING SIRE OF THE BREED, THROUGH HIS SONS. Every son of Pontiac Korndyke that has daughters old enough to milk is a sire of good ones. We can offer you several young ones that will give you great daughters.

E. H. DOLLAR,
HUEVELTON, N. Y.

Near Prescott

SUMMER HILL HOLSTEIN CATTLE and YORKSHIRE HOGS

Our senior herd bull, Sir Admiral Ormsby, is the sire of the world's record 2-year-old for yearly butter production. Also sire of the three highest record four-year-olds in Canada. The dam of our junior herd bull made 34.60 lbs. butter in 7 days, and gave 111 lbs. milk per day. Come and make your selections from over 70 head.

In Improved English Yorkshires we have won 95 per cent. of all first prizes at Toronto Exhibition for ten years. We are still breeding them bigger and better than ever.

Buy Summer Hill Yorkshires, the big, quick-maturing kind, and double your profits.

D. C. FLATT & SON, R. F. D. No 2 Hamilton, Ontario, 2471, Hamilton.

Holsteins, Yorkshires, Hackneys

Our herd of over 30 Holstein females, from calves up, are for sale. Come and make your own selection. In Yorkshires we have a large number of young sows, bred and ready to breed, of the Winnie and Bloom trices. No fancy prices asked.

A. WATSON & SONS, R. K. No 1, St. Thomas, Ont. L.-D. phone from Fingal.

EVERGREEN STOCK FARM

Present offering: Two young bull calves; good individuals; nicely marked and well bred; the dam of one of them being Unclay Abbecker, the cow that topped the consignment sale of the Oxford District Holstein Breeders' Club. Priced right for immediate sale.

A. E. Hulet, Norwich, Ont.

Maple Hill Holstein-Friesians—Special offering: Bulls from one to fifteen months old. The growthy kind that will give good service. One from a son of Evergreen March, and all from Record of Merit dams. Write for particulars.

Bell Telephone. G. W. CLEMONS, St. George, Ont.

IMPERIAL HOLSTEINS

I can supply bulls ready for service and younger ones, also heifers out of R. O. M. cows, female relatives have records and sired by Tidy Abbecker Mercena, whose seven nearest averaging 27.19 pounds.

W. H. Simmons, New Durham P.O., Oxford Co.

Woodbine Holsteins—Herd headed by King Segis Pontiac Lad, whose sire's dam is the champion cow of the world. Sire's sire is the only bull that has sired five four-year-olds that average 30 lbs. each. Dam's sire is the bull that has sired two 30-lb. three-year-olds. His two great grand sires are the only bulls in the world that have sired two 37-lb. cows. Bulls and bull calves for sale.

A. KENNEDY, Agr, Ontario.

QUESTIONS AND ANSWERS. Miscellaneous.

HOLE IN TEAT.

We have a young cow with opening in the side of one teat, which allows the milk to leak while milking. Is there any way it can be stopped? Please let me know through your valuable paper.

J. G. C.

Ans.—Holes in the teats are difficult to close during the lactation period, but often may be cured while the cow is dry. A correspondent some time ago advised, through these columns, the use of ordinary harnessmaker's or shoemaker's wax. Warm the wax just enough that it will drop, or until it is quite soft. Press the hole full of this material and allow it to harden. The wax is said to harden and close the opening, and the cow may be milked right along without difficulty. It is worth a trial.

SHEEP AILING.

A few of our sheep last spring had a very severe cough, and one of them has it yet. The throats of some of them swelled up and they lost some of their lambs. They cough as hard as a child with whooping cough. Most of those affected have regained their lost flesh since going to pasture. Can you name the disease, and give remedy?

E. C. W.

Ans.—This is likely a kind of catarrh, caused in the first place by exposure to cold and wet. A cough also accompanies inflammation of the lungs, but this disease usually proves fatal. Keep the sheep's noses covered with pine tar. This may be done by giving them salt in a trough with a small opening daubed with the tar. Of course, they must run on grass in summer. Shelter them from the cold fall rains. Flaxseed tea is sometimes recommended for cough in sheep, and some give 1 dram of sweet spirits of nitre and 15 grains of powdered digitalis twice daily for catarrh.

BLACK MEDICK—PLANTING RASPBERRIES.

1. Am enclosing a species of clover. Please give details as to kind, and value, if any. It grows wild in fields here.

2. Would raspberry bushes do as well planted in fall, about September 20th, as in spring?

3. Are the shoots that grow between raspberry rows the kind to plant?

T. L. D.

Ans.—1. The species of clover enclosed is yellow trefoil, also called black medick (Medicago lupulina). In Europe, the seed of this plant is often sown in pasture mixtures, but in this country, where it is present in the seed of red clover or alsike, it is looked upon as a weed. It has in many parts become quite troublesome in alsike grown for seed. It is of very little value in this country, and should always be treated as a weed.

2. Raspberries may be planted either in fall or spring. Spring is preferable for black caps.

3. These will do very well.

AN ALFALFA WEED.

Please identify the inclosed weed. I found it growing in a field seeded last spring with alfalfa. Is it a bad weed, and what is the best way to get rid of it?

E. H. W.

Ans.—The weed is rocket, a European weed, which has been introduced into Ontario in alfalfa seed imported from that continent. It resembles wild mustard, but the pods are shorter, upright, and have a broad, flat beak. The flowers are not as deep a yellow as those of wild mustard, being more of a yellowish-white, and the petals are distinguished by being netted with a purple-colored veining. The seed is olive-brown in color, and is about the size of bird rape, and somewhat flattened. Where it makes its appearance in alfalfa it should be carefully hand-pulled before going to seed, or cutting the alfalfa before the seeds of the weed can mature, would keep it from doing further damage. The plant being an annual will die out if it is kept from seeding. As this weed belongs to the well-known mustard family which has done so much damage, it is advisable to take every precaution to keep it from producing seed.



Purebred Registered Holstein Cattle

The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for FREE Illustrated descriptive booklets. HOLSTEIN-FRIESIAN ASSO. F. L. Houghton, Sec'y, Box 127, Brantford, Ont.

Holsteins of Quality

Write us to-day for our proposition, telling you how any good dairyman may own a registered Holstein bull from a Record-of-Performance cow without investing a cent for him.

MONRO & LAWLESS, "Elmdale Farm" Thorold, Ontario

The Maples Holstein Herd

offers a splendid lot of bull calves, all sired by Prince Aaggie Mechthilde and all from record of merit dams. For pedigrees and prices write

WALBURN RIVERS, Falden, Ontario

Maple Grove Holsteins—Herd headed by King Lyons Hengerveld, the greatest 30 lbs. back butter-bred bull of the breed in this country. For stock of this kind, address:

H. BOLLERT, Tavistock, R. R. No 5, Ontario

Maple Line Holsteins and Yorkshires—Herd headed by Homestead Colantha Sir Abbecker 2nd, whose dam, sire's dam, g. dam, average 29.61 lbs. butter 7 days. For sale at bargain prices; choice bull calves from R.O.P. cows. W. A. BRYANT, Middlesex Co., Cambridge, Ont.

Ridgedale Farm Holsteins—We have four bull calves left for sale, from high-testing dams; sired by Imperial Pauline De Kol, whose 15 nearest dams average 26.20 lbs. butter in 7 days. Shipping stations: Port Perry, G. T. R., and Myrtle, C. F. R., Ontario County. R. W. WALKER Utica, Ont.

Glenwood Stock Farm 5 BULL CALVES, fit for service, out of big milking strains, at low figure for quick sale. THOS. B. CARLAW & SON, WARKWORTH, ONT., Campbellford Sta.

HUNTLYWOOD SOUTHDOWNS

A few choice sheep always on hand. HUNTLYWOOD FARM, Beaconsfield, P.O. DRUMMOND BROS. Owners. A MUNRO, Manager.

An old bachelor, through no fault of his, was looking at a baby, and was expected to admire it, of course. "Well, Mr. Blinks," said the proud young mother, expectantly, "is it not very lovely?" "Yes—er—that is to say—er—um—about how old must such a baby be, Mrs. Tompkins, before it begins to look like a human being?"

"Tommy," said his uncle, "how would you feel if I were to give you a penny for being a good boy?" "I think," said Tommy, "that I should feel a little faint at first, but I'd try to get over it."



American and Canadian Scientists tell us the common house fly is the cause of more disease and death than any other agency.

WILSON'S FLY PADS

kill all the flies and the disease germs too.



IMPORTANT WARNING!

THE ONLY GENUINE AND ORIGINAL EXTRACT OF WILD STRAWBERRY IS "Dr. Fowler's"

This grand remedy has been on the market for sixty-five years, and is, without a doubt, the best medicine known for the cure of

DIARRHŒA, DYSENTERY, COLIC, CRAMPS, PAIN in the STOMACH, CHOLERA MORBUS, CHOLERA INFANTUM, and ALL SUMMER COMPLAINTS.

If an unscrupulous druggist tries to talk you into taking any other preparation when you ask for "Dr. Fowler's" refuse to take it, and insist on getting what you ask for. Price 35 cents per bottle. See that the name, The T. Milburn Co., Limited, is on the wrapper, as we are the manufacturers and sole proprietors.



STOP THIS WITH COOPER'S FLY KNOCKER

It pays to keep your stock free of flies—contaminated cows give 1/2 more milk; horses work harder and on less feed. Costs less than 1/2 cent a head per day. Use Cooper's Fly Knocker and save money. Easy to use—economical—efficient—safe. Quarts (Imperial) 50c; Gallons (Imperial) \$1.25. Special circular free—tells what others say about Cooper's. Any dealer or WM. COOPER & NEPHEWS - - TORONTO

Southdown Sheep

The market to-day demands quality. It pays to breed what the market wants. Can you do this more cheaply or quickly than by heading your flock with a right good ram of this most perfect of mutton breeds? Orders taken for a few sturdy young rams for fall delivery.

ROBT. McEWEN, Alloway Lodge Stock Farm Byron, Ontario

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs—Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons** Harriston, Ont.

Friend—"You and your husband seem to be getting on well together just now. I thought you had quarreled?"

Wife—"Can't do that these days, when our dresses fasten down the back."

CLEAN HANDS



15c a Tin.

Don't let them fool you with a cheap imitation SNAP is the ORIGINAL and BEST HAND CLEANER. Will remove grease and stains of all kinds.

QUESTIONS AND ANSWERS. Miscellaneous.

TURKEYS DIE.

Would you kindly tell me, through "The Farmer's Advocate," what to do for turkeys with cholera? They get stupid, and don't eat for a week or more, and finally die.

M. H.

Ans.—The trouble may be caused by exposure to cold and wet, lack of grit, sour, uncooked food, or access to stagnant water. Give scalded milk to drink, and feed on hard-boiled eggs, stale bread crumbs, and boiled rice. Avoid sloppy food. Isolate diseased birds and disinfect the premises.

HARVESTING BEANS.

We have a ten-acre field of beans, and as it is the first attempt at bean-raising extensively in this section, we would appreciate any instructions given through your valuable paper re their harvesting and threshing. Should the beans be all ripened before harvesting begins, and how are they harvested? If by machinery, what kind is best? How are they put up after cutting, on sticks, or in coils, and how long are they generally left, under favorable conditions, before storing? How is the unthreshed product stored, in stack or mow? Is the common grain thresher used in separating them?

E. J. S.

Ans.—As soon as the bean crop is out in flower cultivation should cease, and as soon as the pods are ripe harvesting should begin. The plants are pulled with a bean-puller, made to fit the ordinary corn cultivator. The puller pulls two rows at a time, leaving both rows in one. The plants must now be shaken out. This may be done by hand, with a fork, but many use the side-delivery rake. This is quicker, and saves labor. Two men with a puller and side-delivery rake will handle from five to seven acres daily. The crop must be thoroughly turned from time to time until thoroughly dry, when it may be hauled to the barn and mowed. It is better not to thresh for considerable time after harvesting, as the crop sweats in the mow, and if threshed at once the beans are apt to heat in the bin. Bean-threshers are used for threshing, as the common grain-thresher splits quite a percentage of the beans, and for this reason is not satisfactory.

KEEPING CREAM SWEET.

I am sending cream to the factory twice a week. Would like to know the best way of keeping it sweet during the summer months. I have a good cellar, but so many say this way is best, and some another. Hope "The Farmer's Advocate" will be able to help me out through some simple but inexpensive way.

N. M.

Ans.—We presume you have no ice. If you have ice the problem is solved. Where no ice is stored, some keep the cream in a cellar, but many cellars are not kept at sufficiently low temperature to keep the cream sweet for the length of time desired. If you have a spring near the buildings with running water, it is a good plan to build a little building over it and arrange it so that the water runs through a tub or barrel containing the cream cans. Some use this method even where well water is the only source of cooling, keeping the cans under cover where water from the well passes through the tub in which they are set. This involves a little work, as water must be pumped several times daily to keep the cans cool, but the water pumped may be utilized in most cases to water the stock. Perhaps one of the best methods is to hang the cream cans down the well. This involves very little labor. Have a hinged trap-door in a tight well platform, and fasten one end of the rope to support the can to the pump, or to a scantling in the well platform, or where a large amount of cream is kept, a small windlass may be devised. Use sufficient rope to let the cream well down to the water. This will keep it cool. Care must be taken not to spill cream or milk into the well and thus pollute the water.

MAPLE VILLA OXFORD DOWNS AND YORKSHIRES

This fall I have the best lot of lambs I ever bred. I have plenty of show material, bred from the best stock procurable in England. Order early if you want the best. Ram lambs, shearlings and ewe lambs. Yorkshires of all ages.

J. A. Gerswell, Bond Head P. O., Ontario
Bradford or Beeton stations. Long-distance 'phone.

IMPORTED SHEEP

Those wishing an imported ram, a few choice imported ewes or a few show sheep to make up their show flock, should write me, after this date, to

MOLESCROFT, BEVERLEY, E. YORKS, ENGLAND

G. HODGSON,

Brantford, Ontario

Shropshires and Cotswolds!

In SHROPSHIRE I have for sale 35 imp. shearing rams and ewes from some of England's best flocks, a lot of fine home-bred rams and ewes bred from Minton and Buttar ewes. In COTSWOLDS a lot of rams and ewes, and an extra good lot of lambs. A few of each breed fitted for showing. Order early and get a good choice. Prices very reasonable.

Claremont Station, C. P. R., three miles.
Pickering Station, G. T. R., seven miles.

John Miller, Brougham, Ont.

FARNHAM FARM OXFORDS and HAMPSHIRE

The Oldest-established Flock in America
Our present offering is a grand lot of yearling rams and ram lambs of both breeds. Also a few fitted yearling ewes and ewe lambs by our imported champion rams, and some from imported dams; also 50 fine yearling field ewes. Prices moderate.

HENRY ARKELL & SON, ARKELL, ONTARIO
'Phone connection Guelph.

Cattle and Sheep Labels

Size	Price des.	Fifty tags
Cattle	75c.	\$1.00
Light Cattle ..	60c.	1.00
Sheep or Hog ..	40c.	1.00

No postage or duty to pay. Cattle sizes with name and address and numbers; sheep or hog size, name and numbers. Get your neighbors to order with you and get better rate. Circular and sample. Mailed free. **F. G. JAMES, Bowmanville, Ont.**

SPRING VALLEY SHROPSHIRE

I am offering for sale shearing and ram lambs, shearing and ewe lambs, of highest quality and breed type. Prizewinners among them. Bred from imported stock. Order early.

THOS. HALL, BRADFORD, ONT., P. O. & STA.

Hilton Stock Farm Holsteins and Tamworths.

Present offering: 6 yearling heifers and several younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes; pairs not akin.

R. O. MORROW & SON, HILTON, ONT.
Brighton Tel. & Stn.

Large White Yorkshires

Have a choice lot of sows in pig. Boars ready for service and young pigs of both sexes supplied not akin. All reasonable prices. All breeding stock imported, or from imported stock, from the best British herds. Write or call on:

H. J. Davis, Woodstock, Ont.
C. P. R. and G. T. R. Long-distance phone.

FOR SALE: A NUMBER OF CHOICE YOUNG Large English Berkshire Pigs

Bred from prizewinning stock on both sides. They are of that bacon type you are looking for. Prices cheap for quick sale.

WESLEY HARRIS, EFFINGHAM P. O., ONTARIO, R. R. NO. 1 FENWICK

Large English Berkshires

Present offering: Sows bred and ready to breed. Two choice year-old boars; also young stock of both sexes. All from imported stock. Prices reasonable.

G. J. LANZ, Hampton, Ont.

Duroc Jersey Swine

A choice lot of boars for service. WANTED—Twenty dairy calves, seven to twenty days old, grades or pure bred; state price F.O.B.

Mac Campbell & Sons, Northwood, Ont.

When writing mention Advocate

ELMHURST LARGE ENGLISH BERKSHIRES
Present offering: Select sows. Choice boars ready for service also younger stock, the get of Duke of Somerset imp., and out of imported dams. Satisfaction and safe delivery guaranteed. **H. M. VANDELLIP, Breeder and Importer, CAINSVILLE P. O. Langford station, Brantford and Hamilton Radial.**

Newcastle Tamworths and Shorthorns

Present offering: Seven boars from 6 to 10 months old; boars and sow pigs 6 weeks to 4 months; sows bred and others ready to breed, from such noted stock as Colwill's Choice, Canada's champion boar, 1901, '02, '03 and '05, and Imp. Cholderton Golden Secret. Also a few choice Shorthorn heifers in calf; beef and milk combined. Show stock a specialty. Prices right.

L.-D. 'Phone. A. A. Colwill, Newcastle, Ont.

Registered Tamworths

Merton Lodge is offering Tamworths, either sex, from six weeks to four months old. The true bacon type, having great bone and length. We pay express charges and guarantee satisfaction.

W. W. GEORGE, Crampton, Ont.

Hampshire Pigs

PRESENT OFFERING—7 Sows in pig from imported stock. Write for prices. Long-distance 'phone.

J. H. RUTHERFORD, Box 62, Caledon East, Ont.

Hampshire Hogs

We have the greatest prize-winning herd of Hampshire Swine in Canada, bred from the best strains of the breed; stock of both sexes not related. **Hastings Bros. Crosshill P. O., Ont., Linwood Sta., C.P.R., Newton Sta., G.T.R. Telephone in residence.**

Morrison Tamworths

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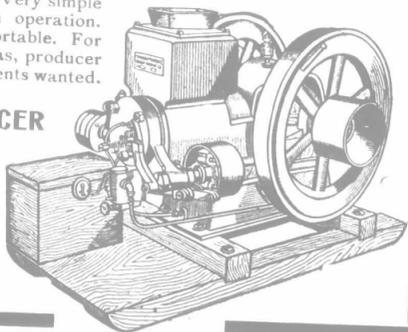
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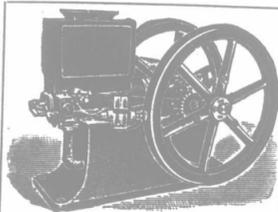
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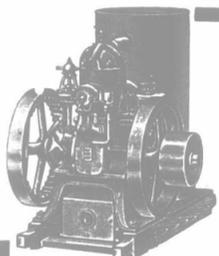
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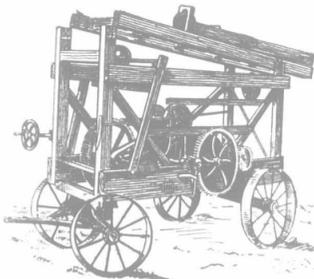
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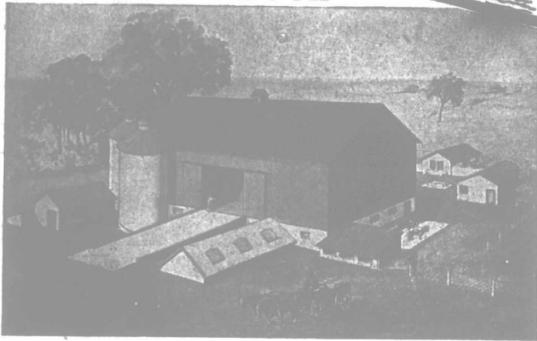
Poet—"I called to see if you had an opening for me."

Editor—"Yes, there's one right behind you, shut it as you go out, please."

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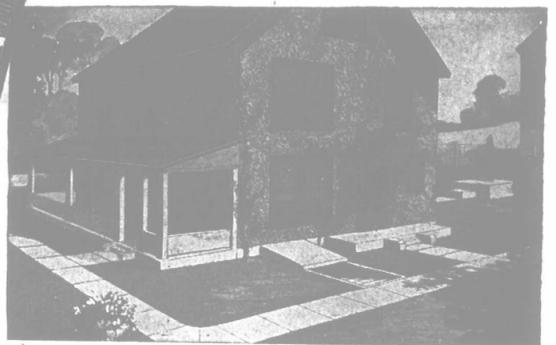
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