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AND HOME MAGAZINE

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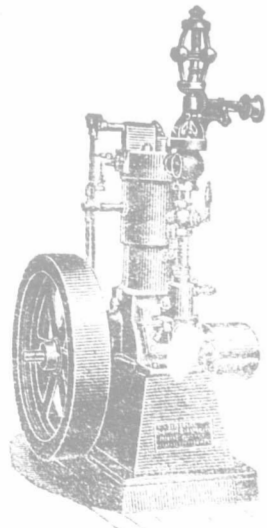
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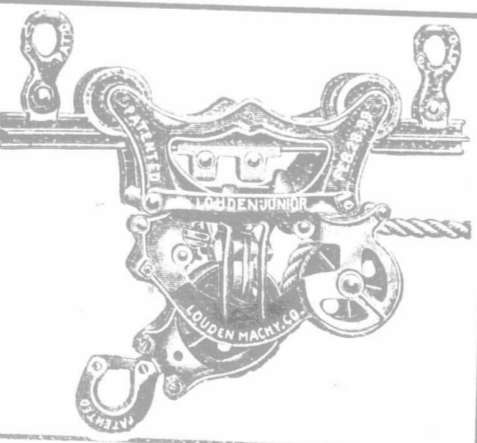
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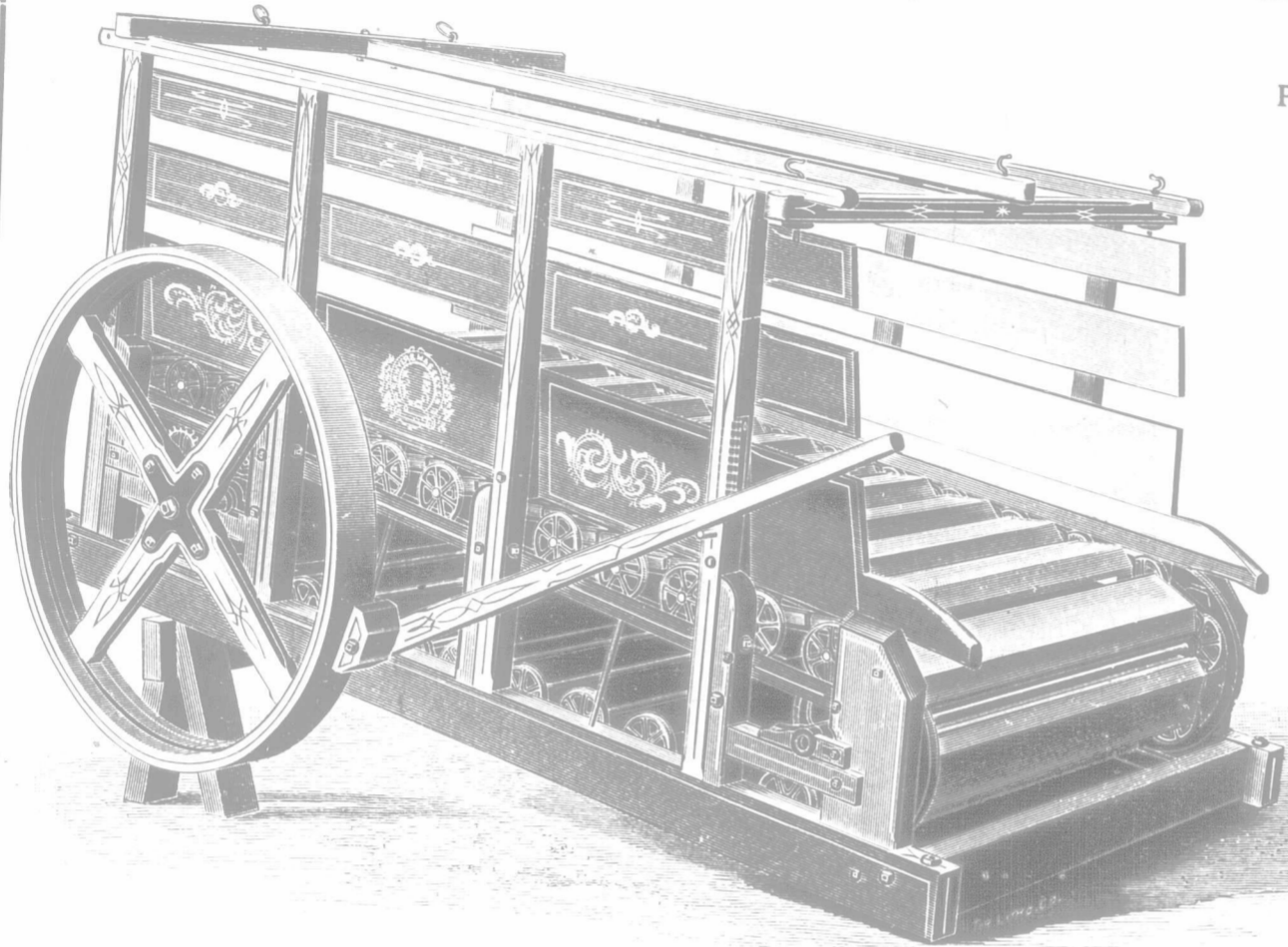


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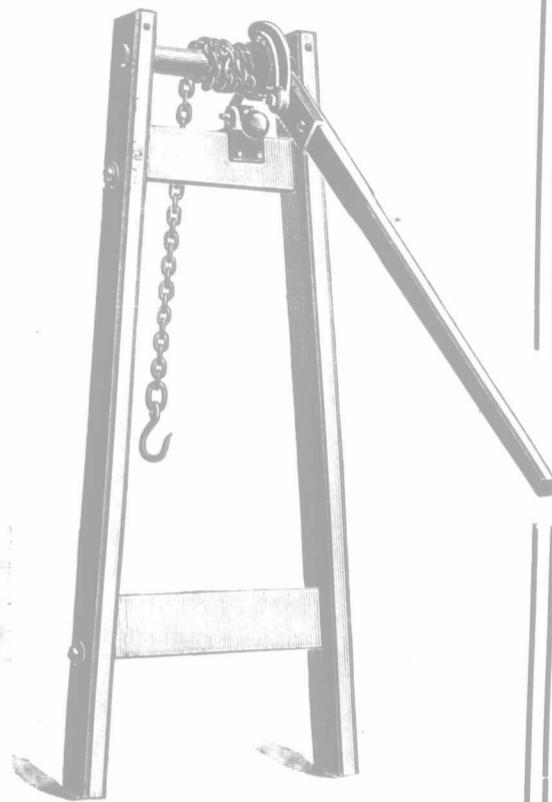
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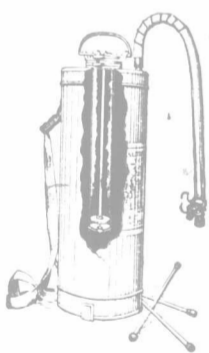
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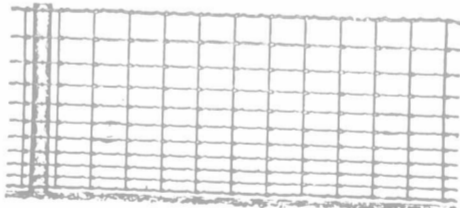
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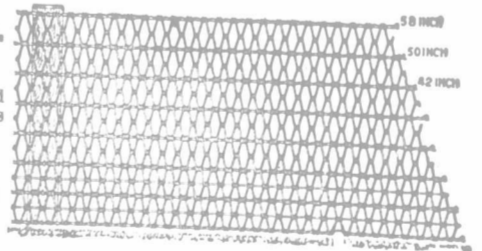
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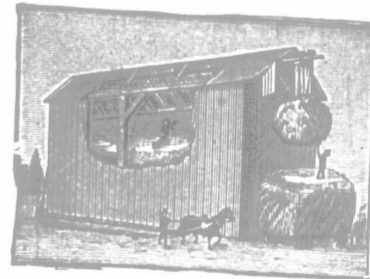
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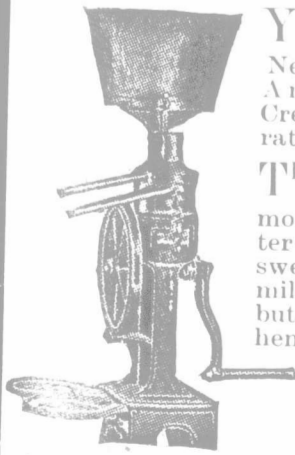
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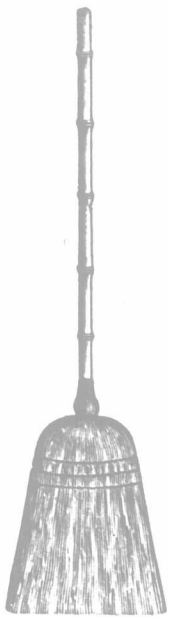
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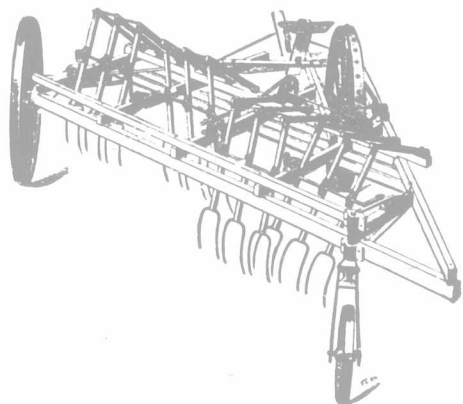
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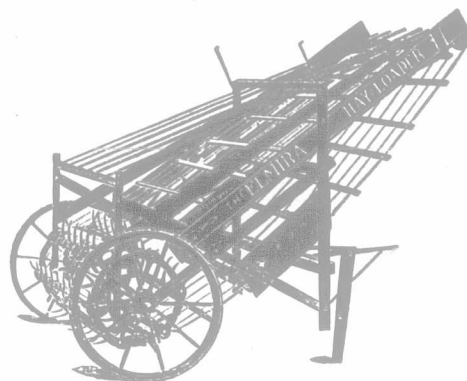


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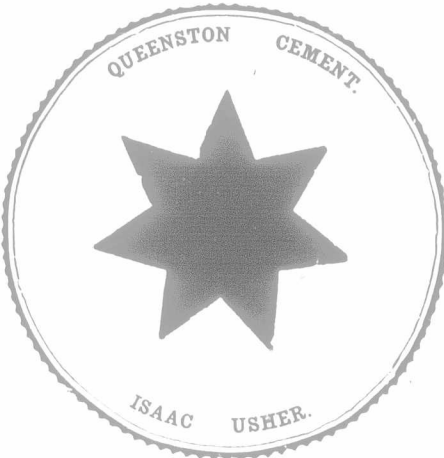
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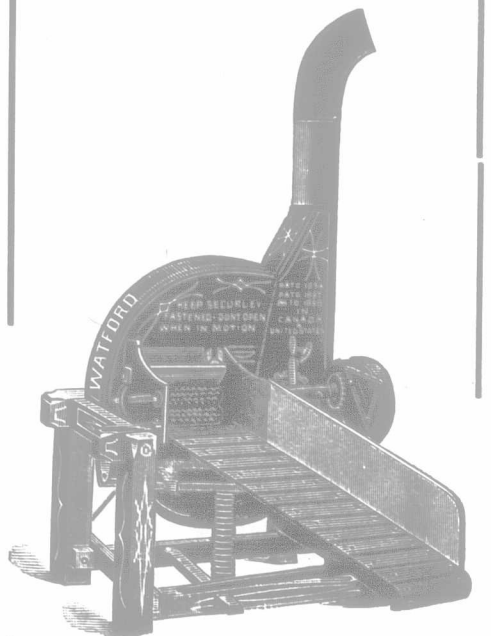
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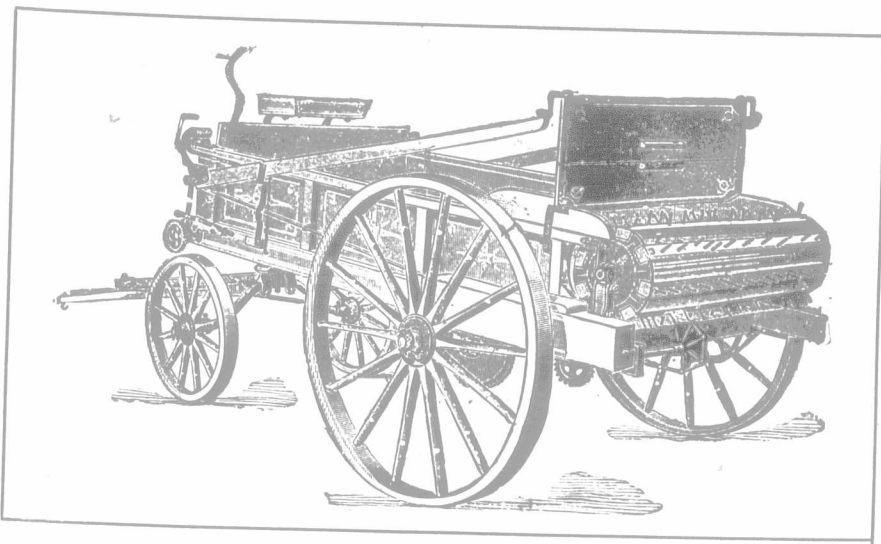
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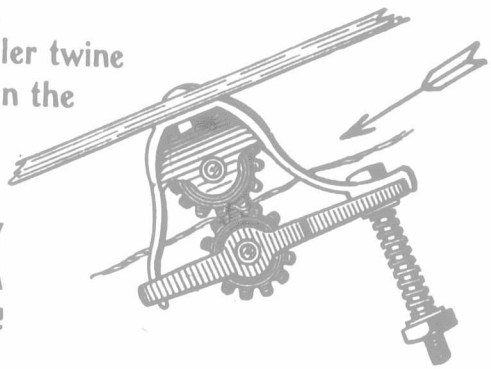


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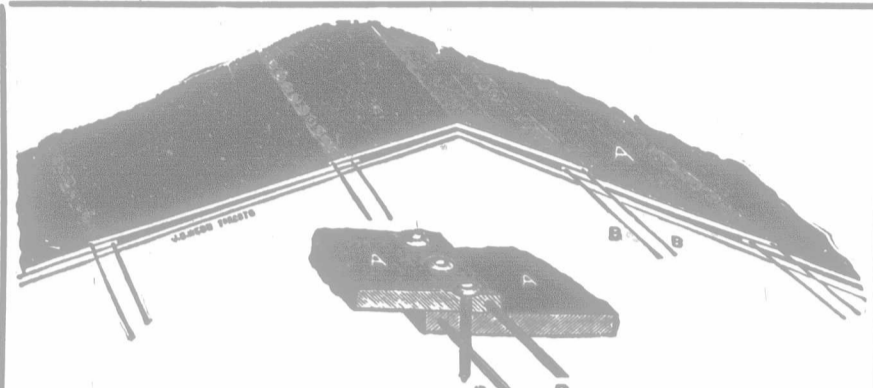
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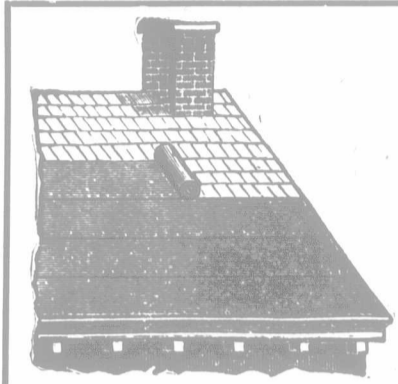
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**"THUMPS."**

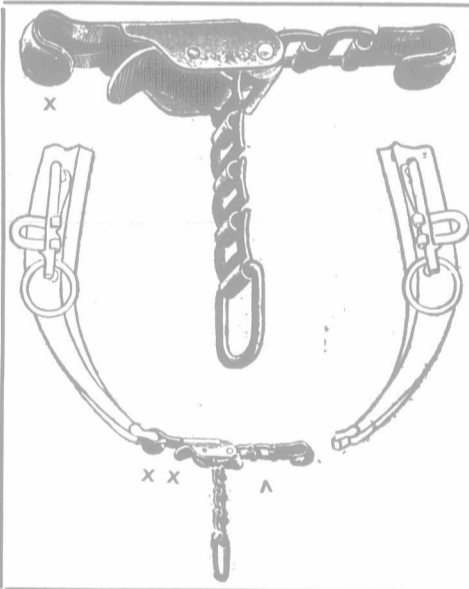
When pigs blow and puff like broken-winded horses, they have "Thumps." "Thumps" is caused by overfeeding of rich or coarse foods, which the pig's stomach cannot properly assimilate. Lack of assimilation means indigestion, and indigestion is the immediate cause of "Thumps."

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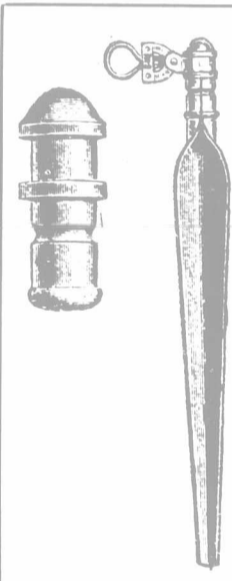
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# The Farmer's Advocate

## and Home Magazine.

"PERSEVERE AND SUCCEED."

ESTABLISHED 1866

VOL. XXXVIII.

LONDON, ONT., AND WINNIPEG, MAN., JUNE 1, 1903.

No. 575

### EDITORIAL.

#### Improving Our Beef Cattle.

It is gratifying to notice that Canadian farmers are waking up to a sense of the necessity of improving the quality of our beef cattle, in order that we may hold our own in the British market in supplying the class of product that commands the best prices and gives profitable returns for the expense of raising and feeding. Breeders of cattle of the beef breeds report an ever-increasing demand for good bulls, and that largely from farmers to breed to their grade cows to improve their general stock. Not for many years have the breeders who advertise in the "Farmer's Advocate" been sold so short of bulls at this season of the year as at the present time. The same condition, we understand, prevails among breeders in the United States, the buyers being largely farmers who keep only grade herds, and the beauty of it is that these farmers are not satisfied with ordinary or average bulls, but are looking for and buying the best available at any reasonable price. It may seem to some people to be unnecessary and extravagant to pay the price of a first-class sire to breed to grade cows, but when we recall that the men who win the best prizes at our fat stock shows with grade cattle buy and use only first-class bulls, and get extra good prices for their prizewinning animals, making it a very profitable business, we need not be surprised. The bull that is likely to make the most improvement in a pure-bred herd will make corresponding improvement in a grade herd over that of an ordinary one, and if his offspring are worth only a few dollars a head more when placed on the market, they soon make up the price of the sire. The man who buys a good one, even at a high price, usually makes a good investment, when the improvement in the quality of his stock is considered. The buyers of the best bulls at some of the recent sales in Ontario, paying from \$500 to \$700, have been men comparatively unknown to fame as breeders, but they have shown good judgment and business sagacity in beginning with the best procurable. An experienced and successful breeder expressed the opinion that the bull sold at the Markham sale last month for \$700 was the best bargain of the day, and if the bull is half the herd or more, as he certainly is, from the standpoint of the breeder, the case was not overstated, as the value of a first-class sire cannot be overestimated. While we advise all to buy the best their means and circumstances will justify, it is manifest that all cannot have the highest class, or as good as they would desire, and all that can be done in such cases is to secure the best available, having regard to the circumstances. There are many excellently-bred young bulls in the hands of small breeders, which, if they had been kept in creditable condition, would readily have found buyers, but not being in attractive condition, they fail to catch the eye of the prospective buyer, and are left on hand to become a burden or to be sold at a sacrifice. This is a sadly mistaken policy on the part of these breeders. What is worth doing is worth doing well, and it pays to keep animals intended for sale in salable condition, and to let the world know you have them, so that those who want may know where their wants can be supplied, but be sure to have the stock in such condition that intending purchasers may not be disappointed on seeing them. First impressions

count for a good deal, and the effort should be to make that impression a favorable one. It is useless to plead that a beast in thin condition is all the better for that for breeding purposes, for the man who goes out to buy a pure-bred wants to take home something that he will not be ashamed to show his neighbors, and there are only few who are sufficiently discerning judges to estimate the probable outcome of an animal in poor condition. It is poor policy to have stock intended for sale in such condition that they can only be sold at less than their true value. Even the ranchmen will not buy thin bulls. They want the evidence in the animals themselves that they are vigorous and capable of putting on thick flesh. With the settlement of New Ontario and the Northwest a great future is opening for the breeding of pure-bred stock in this country, and with the prospect for improved transportation facilities and more favorable freight rates, there is encouragement for Canadian farmers to take advantage of every opportunity to improve the quality of their live stock, which is their surest source of revenue. The public sales announced in our advertising columns, and the offerings of our regular advertisers, afford excellent opportunities for securing the material for improvement of the stock of the country.

#### Breeding and Judging Swine.

The Swine Breeders' Associations in Canada have done wisely in retaining the right to nominate the judges in their own classes at the leading shows, to the boards of which they are privileged to send representatives, and their delegates do well to nominate practical breeders to place the awards. It was, perhaps, good policy to allow the pork-packers to name their own judges in the special classes for export bacon hogs, for which they contributed the prize money, and it could hardly be expected that they would contribute on other terms, their object, doubtless, being to set the standard of the general type of pig required for their purpose, and by this means, together with the discussions brought out at breeders' meetings and Farmers' Institutes, information as to the stamp of hogs best adapted to the supply of our best market has been spread, and farmers have thus been educated along lines tending to their own advantage. But a comparison of the two classes, the breeders and the baconers, as seen at the principal shows, and the awards in each, would seem to suggest the wisdom, now that the standard of type has been set, of having the breeders represented on the awarding committee for the bacon classes as well as for the breeding section, for if breeders and farmers generally take the winners in the bacon classes as their model to be followed in their breeding operations, it will be but a question of a little time when they will find themselves in possession of a class of stock lamentably lacking in strength of constitution, slow feeders, and an easy prey to disease. The pork-packer knows nothing of the principles of breeding, and has no eye for constitutional defects; or for strength and symmetry of conformation. He views an animal only from the standpoint of his own business, and if it has sufficient length and not too wide or too thick a back, nor too strong a neck, it will pass muster, though the brute be narrow-chested,

knock-kneed and cat-hammed, walking on its heels and having a hollow-eyed head hung on a long and narrow neck. The limit of the life of a packer's pig, as a rule, is less than three-fourths of a year, and the stamp of animal above described may have vitality enough to last that long, but the breeder wants his built on a foundation and with a superstructure that will wear through years of usefulness and impart strength and vigor and good feeding qualities to their offspring, enabling them to make profitable returns for the food they consume. He knows from experience and observation that the pig that fills the bill for that purpose must have good width of chest, giving ample room for the vigorous action of the vital organs, the heart and lungs, the fountain of health from which comes the strength and power to resist the attacks of disease and to throw it off when it gets possession. The breeder's pig, in order to be a profitable feeder, must have a bright, active yet contented disposition, an intelligent appearance of countenance, a comparatively thick, muscular neck, smooth, salmon-shaped shoulders, a strong, moderately lengthy, slightly-arched back, with well-sprung and deep ribs, long, broad and level quarters, thick, full hams, and a good set of legs of a flat, flinty quality of bone, well placed under him, standing straight up on his toes, and walking away with activity and an apparent consciousness of strength and vigor. Experience has abundantly proven that all these qualities may be united without coarseness in any part, and the breeders have found that by mating sires and sows of this description they can produce a class of swine that meets the requirements of the market for bacon hogs without the loss of vitality and profitable feeding propensities, which would certainly result from following the lead of the faddists whose teachings have been mainly along the lines of extreme length and narrowness. In the breeding of swine, as in many other things, experience has proven that all extremes are error, and that the path of prudence lies between. The day of the dumpy, fat backed, lardy hog with heavy hanging jowls and spindle shanks has passed, and the day of the narrow-necked, solemn-visaged, flat-sided, rail-lengthed porker, standing on stilts of coarse-grained timber, is passing. The leading breeders who understand their business are saving our swine industry from both these extremes, and from the pitfalls into which blind leaders would lead them. They recognize the importance of the introduction of new blood and the avoidance of consanguineous breeding in order to the maintenance of robustness of constitution and vigor in their stock, and the result is seen in the character of their exhibits at the leading fall shows and at the winter fairs, doing credit to the intelligence and skill of the breeders, and bringing fame to Canadian hogs and hog products.

#### Siftings.

The weeds are beginning to grow; nip them in the bud.

In certain parts of the United States, where winter fattening of sheep is practiced, good profits have been made this year. In Australia, the great sheep-raising country, the flocks have become reduced to an alarming extent owing to drought. The sheep business shows signs of brightening up in this country.

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THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

PUBLISHED SEMI-MONTHLY BY  
THE WILLIAM WELD COMPANY (LIMITED)

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### Clover and Grass at Brandon Experimental Farm.

The clovers and some of the newer grasses which are under trial at the Brandon Experimental Farm were recently inspected by a representative of the "Farmer's Advocate." Although in an exposed position, they have all wintered well. Mammoth Red, Common Red, Alfalfa and Alsike clovers have each a good stand, and are shooting ahead in a very satisfactory manner. Bromus Arvensis, a new Bromus grass in Manitoba, has also come through the winter safely, and promises to be suitable for Western cultivation. Red-top, although not sufficiently thick for a good crop, is also doing well, and appearances indicate that it has come to stay. It has wintered equally as well as the other varieties; its thinness being entirely due to the seed being of inferior quality.

### Boers Going to Mexico.

Gen. Benjamin Viljoen, former assistant commander general of the Boer forces in the Boer war and member for Johannesburg in the Transvaal Volksraad, and Gen. W. D. Snyman, a prominent Boer commander, report that they have visited Mexico and completed an arrangement with the Mexican Government, by which 83,000 acres of the best land of the country has been secured for a home for immigrants from South Africa.

Gen. Snyman intends remaining in the United States, while Gen. Viljoen sails for South Africa to bring out the first expedition, which it is expected will number about 20,000 men. Fully 1,000 families will be required to settle. The land secured is a beautiful tract, known as Santa Rosalia, in the State of Chihuahua and near Orizaba on the Mexican Pacific Railway. Already men are at work there, and the first immigrants will be landed at Vera Cruz.

### The Western Stockman's Hope.

[From our Manitoba and Western edition.]

That the prospects of a good demand for pure-bred stock in Western Canada are bright, there can be no doubt. For some time the market for blue blood has been improving, and the consensus of opinion among breeders now is that the market is in a fairly satisfactory condition.

In looking backward to trace the evolution of events, it becomes reasonable to expect that well bred animals should by this time be finding favor in the eyes of the old-time wheat farmer. This is, of course, not a country where the beginner in farming, with small means, can extensively embark in pure-bred stock breeding. Over the greater area the dollars must first come from wheat; but after the farm has become well under cultivation, and comfortable buildings are erected, a worthy and commendable ambition is the possession of a small herd of pedigreed stock. The years of plenty which the pioneers of this country so richly deserved have come, and hundreds of farmers can now boast of that which is needful to gratify, it may be, their life's desire. In consequence, the well established stockman has sent out much of his surplus to become the foundation of new herds. Down in old Ontario has our Western buyer been present, and from the best herds of that Province not a few favorites have been secured at fancy figures, to supplement our already reputable herds or become the rock upon which to build a new one.

A noticeable and commendable feature of the present tendency on the part of many to begin breeding pure-bred stock is that they are beginning in a small way. This is desirable, because genuine success can only be expected where practical experience is the guide. Some of the greatest disasters which have befallen the pure-bred cattle industry of Canada and the United States were brought about by men of capital and no experience in stock, who desired to swing suddenly to the front in the realm of stockdom. What this growing country needs is more farmers to take an interest in high-class stock, either by starting a herd or purchasing superior blood to build up the stock already on their premises.

There can be no danger of over-production of well-bred horses, cattle, sheep or hogs in this country. The demand is sure to increase steadily. Not only will the improved conditions of the agricultural classes have this effect, but the rapid influx of settlers and the population of new districts makes the prospects encouraging, almost beyond comprehension. Moreover, our fertile soil, from which has been reaped so many bountiful harvests without apparent diminution of fertility, must in time give way, notwithstanding what is thought to the contrary. Nature's storehouse in the soil never did and never can continue for upwards of a half century under similar conditions to give to the sower the same returns for his energy; hence the time will come when the land must have a rest. Larger areas will be seeded to grass, and stock-raising will become more popular in Manitoba and the Territories.

The present state of our cattle trade with Great Britain demands that greater attention be paid to breeding in Canada. Much as may be gained by better finishing of all stock sent to the foreign market, top prices will never be realized until there is a general improvement in the breeding. Happily, however, there is a tendency for good bulls to be more appreciated and better patronized throughout the country, and as this is the chief medium through which improvement must be expected, the situation may be regarded as presenting some encouragement as far as Manitoba and sections of the West is concerned. Taking all things, therefore, into consideration, the signs of the times undoubtedly point to bright prospects for the breeder of pure-bred stock.

### Worms as Soil Renovators.

Earthworms are not soil formers, for they are seldom met with in soils that are destitute of organic matter. They are simply renovators. Every time a worm is driven by dry weather, or by other cause, to descend deep, it brings to the surface, when it empties the contents of its body, a few particles of fresh earth. At the same time it fertilizes the subsoil by opening up passages which encourage the roots of plants to grow deeper, these passages being lined with mucus, which provides a store of nourishment for the roots. On meadow land Darwin estimates that the worms amount annually to 100,000 per acre, and on good arable land to 1,000,000 per acre. [American Fertilizer.

## HORSES.

### Examination of Horses as to Soundness.

(Continued.)

Having examined the mouth, the examiner will pass his hand carefully and slowly upwards and backwards in the maxillary space (the space between the branches of the lower jaw), to ascertain if there be any hardening or enlargement of the submaxillary glands. Such a condition of these glands must always be looked upon with suspicion, as symptomatic of chronic catarrh or nasal gleet, or if the glands be enlarged, hardened and adherent to the bone, it indicates glanders. He must then look carefully at the throat and observe whether there is an enlargement of the glands, either below the ear or in connection with the anterior aspect of the windpipe; an enlargement of these glands, while not symptomatic of any serious disease, is still undesirable, and may be considered an unsoundness. He will then place his finger on the jugular vein to ascertain whether it is pervious, which can be told by the vein raising between the point of pressure and the throat. The vein may be obliterated and the animal show no untoward symptoms, but if he should be turned out on pasture or fed off the floor there would soon be enormous swelling of the head and throat; hence a horse with an obliterated jugular vein is decidedly unsound. He will then carefully examine the withers for existing or symptoms of pre-existing fistula, either of which should condemn him as unsound. Then examine the shoulder for tumors, abscesses or raw surfaces, any of which constitute temporary unsoundness. Passing downwards, examine the elbow for tumors or abscesses (called capped elbow), then pass down to the knee, looking for abnormalities on the forearm. The knee should be carefully examined for bony enlargements, broken knees, or scars that may indicate the previous existence of this condition. (It must be understood that the term "broken knees" does not necessarily refer to a fracture; bruises, cuts, etc., that occur from an animal stumbling and falling on his knees; the injury being more or less serious, all go under the name of "broken knees.") Symptoms of present or pre-existent broken knees must always be looked upon as a serious matter, as it indicates a tendency to stumble, and the condition may reoccur at any time. The inner aspect of the joint and the limb below the joint should be examined for swelling, soreness or thickening of the tissues, which indicate speedy cut (the knocking of the limb with the opposite foot); this habit, which is usually due to the conformation of the pasterns and feet, causes tumors or abscesses, and is liable to cause the horse to stumble. While an animal may have undesirable conformation of any point and still be sound, any abnormality that is caused by reason of that conformation must be considered an unsoundness. Passing the hand and eye carefully down the cannon bone he feels and looks for splints. A splint is small, single, and not quite close to the joint, is not usually considered an unsoundness, but if quite large, double (that is, appearing on both the inner and outer aspect of the limb), or so near the joint that there is danger of the articulation becoming involved, it should be considered an unsoundness. Next the fetlock joint should be examined for abnormalities, the most common of which are bursal enlargements, commonly called windgalls. These, if small and soft, are not considered serious, but if large and tense are very liable to cause lameness, and, hence, are an unsoundness; bony enlargements in this region must also condemn a horse. Between the fetlock and the hoof we must examine carefully for ringbone. A ringbone does not necessarily entirely surround the pastern, it may be apparent only on one or both sides, or may extend all around. We must remember that on each side of the lower extremity of the fetlock bone there is a normal protuberance, which is quite apparent in hot-blooded horses with little or no long hair in this region. These protuberances must not be mistaken for ringbone. The existence of a ringbone, whether or not lameness be shown, must be considered an unsoundness. We next examine for sidebone. This is a conversion into bone of the lateral cartilages, which are two irregularly-shaped cartilages surmounting the wings of the bone of the foot, one on each side. They can be easily felt just above the heels and extending along either side of the foot towards the toe for about 1½ to 2 inches. In the healthy foot they yield readily to pressure, and regain their normal condition quickly as soon as pressure is relieved. When diseased there is more or less of an enlargement, and they are hard and unyielding. Whether or not lameness be shown, the existence of sidebone must be considered an unsoundness. This condition is much more frequently seen in heavy than in light horses. We should look carefully for sores or eruptions of the coronet, and observe whether the wall of the foot be even and smooth. A ridgy or uneven wall must always be looked upon with suspicion. We must also examine for fissures running from above downwards (called false





(Photo by G. H. Parsons.)

**APOSTLE.**

Famous Shire stallion. Winner of a great number of prizes, including a first at London Shire Show, and sire of many prizewinners.

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quarter), and also for sand crack and quarter crack, any of which is sufficient to condemn him. The feet should be of equal size and similar in shape; any considerable difference in size and general appearance indicates that the smaller one may at some previous period have suffered from some inflammatory disease which interfered with the growth of horn, and, hence, the foot is smaller than its fellow, and possibly uneven or ridgy. The foot should now be lifted and the frog and sole carefully examined for thrush, quitter, canker, seedy toe, or other abnormalities. It is good practice to remove the shoe and pare the sole down in the quarters to search for corns. Corns may exist and not cause lameness or any symptoms which would lead the examiner to suspect their existence, but at the same time they are liable to cause lameness at any time, hence it is well to remove the shoe and search for them, as a horse with corns can not be considered sound. When it is considered necessary to remove the shoes for this purpose, it is well to leave it until after the horse has been exercised to test action and wind.

(To be continued.)

**The Argentine Horse.**

The origin of our native horse goes as far back as the year 1535, when the City of Buenos Ayres was founded for the first time by the Spaniards. History tells us that a short time after the settlement of the Spanish people, they were frightfully surprised by a sudden rebellion of the Indians, who in the most uncharitable way forced them to abandon the place, and this in such a hurry that they could not get hold of all their property, of which five mares and seven horses were left on the virgin land. These horses of Andalusian and Arabian blood, left all alone to themselves, grew wild in the naturally fertile surroundings, and reproduced with the greatest rapidity, to such an extent that a half century after, when the city was refounded, numbers of Indians were seen riding on horseback, and also large herds of wild horses running about on the prairies.

Though of a common source, the Argentine horse does not constitute a special breed with uniform features; but resembles the varieties of the original types with such characters as may be derived from the medium, and from natural as well as from artificial selection. Devoid of beauty, his color varies a good deal; those of chestnut and black being the most prominent ones. His height is from fourteen to fourteen and a half hands, the head is somewhat coarse, the forehead is flat ordinarily, though sometimes very convex; the ears either short or long; the eye medium in size, and of a fiery look, especially when the horse is in action; the face profile generally curved, resembling that of certain rams; and in some the nose appears somewhat prominent, but as a rule this is not the case. The outline and thickness of the neck are variable, as may be observed from the stiff and

lean neck of the Thoroughbred to the robust and flexible one of the Hackney.

The chest is unequally developed, being broad and robust in some horses, qualifying them well fit for the "pechada," a trick of the "gauchos," used against wild cattle, generally bulls. A "gaucho," riding on horseback, seeks for a favorable chance, and then, quickly advancing from behind, surprises the beast with such a sudden and unexpected hard blow that almost always the bull is instantaneously knocked down.

The withers are generally well developed, rarely too prominent; the back is ordinarily straight, the spring of ribs is medium, and the development of the belly changes a good deal, according to the manner in which animals have been fed, especially when colts.

The croup also varies quite a bit; here some horses with a sharp, well-defined middle line, and drooping sides; there some others with a smooth and round croup, the insertion of the tail being not too high nor too low, and the tip of the tail is usually well provided with very long hair.

The length and thickness of the limbs are generally medium; the hoof is small, and of hard consistency, particularly in hilly and mountainous districts, becoming broader and more delicate with horses raised in low lands.

The most striking anatomical feature of our horse is found in the limbs; its joints are built up in such a way, so briefly, if I may say, that despite the very tough work that sometimes the brute undergoes, his legs are kept strong and free from any troublesome disease of the articulations.

On the whole he is light built, fast, strong and very resistant, and is particularly adapted for military purposes, being equally useful in both cavalry and artillery. He could stand in the best of humor, exertion of seventy miles daily for several weeks under the weight of a soldier in war-like equipment.

It has been claimed that our horse is so undomesticated that in this sense he is not any better than a wild beast. This is by no means true, as the only statement regarding his temper that can justly be made is that he is full of life; availing myself of a very expressive slang phrase, I will say, the truth about him is that he has got the go, and, very naturally, this is seen when we think of him as a brute born to the prairies, enjoying the liberty of going about the pastures, doing nothing, and knowing not the inconveniences of systematic work; but otherwise he is noble, intelligent, patient, and accommodates himself to all kinds of eventualities. He eats, if there is anything to eat, otherwise he fasts, endures all cruelties of weather, and travels considerable distances to find a creek where he may satisfy his thirst.

There is no reason to throw any blame upon his temper, particularly when it is the fault of the rider. No body learns without having more or less trouble, and when we want to learn how to ride a bicycle we expose ourselves to repeated falls before we are able to keep the

The same case applies to the horse, and here with a good deal of disadvantage, for the horse is an animal made up like we are, with a nervous system as irritable as ours, and, consequently, we can never be sure upon his back. Among our people it is very common to have a record of repeated falls from a horse's back before they are able to ride with ease.

To strengthen my previous statement, I shall record that our native Indians were almost scared to death when they first saw the white people (Spanish) riding on horseback. They fancied man and brute as being a single body, which was a sufficient cause to horrify their simple and superstitious imaginations. Fifty years later, however, they became such excellent riders as to be capable of jumping upon a wild horse's bare back, devoid of any rein, and to ride him as safely as if he had saddle and bit.

Besides his aptitudes as an army horse, he is not less able in the work of the ranch, where his different abilities are shown in the throw of the "lazo," and in the driving of large herds of cattle and sheep, etc.

The data of our last census made in 1895, gave for our equine race the total number of 4,416,859, of which 4,016,297 are Argentine horses; 430,562 cross-bred; 15,577 pure or thoroughbred. Among the latter are represented almost all European breeds: Thoroughbred, Hackney, Cleveland, Percheron, Trekenen, Suffolk Punch, Standard-bred, Shire, Clydesdale, Morgan.

Our aim at present is directed to the improvement of the Argentine horse, so as to perpetuate his good qualities, and at the same time to add those which are lacking in him; the main one being his height, that disqualifies him on the foreign markets.

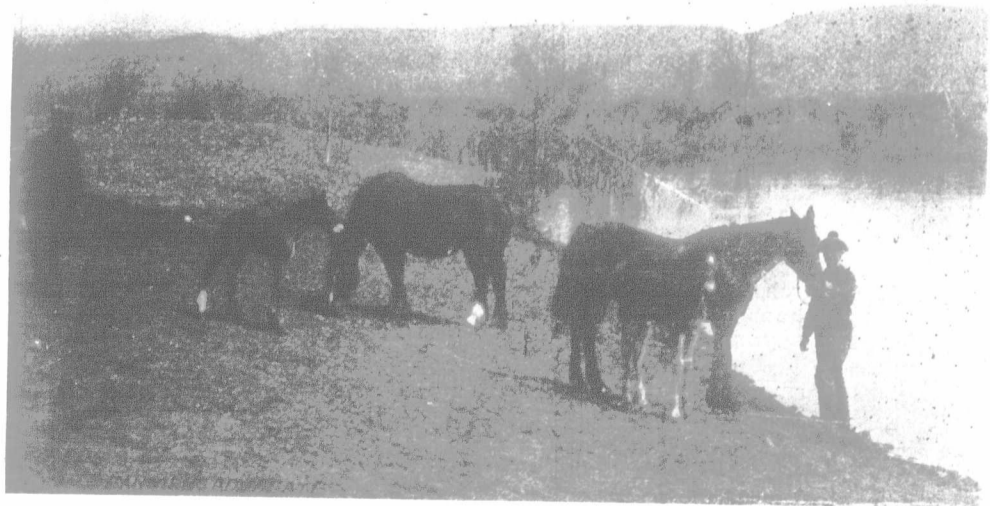
Our actual cross breeds, which, as a rule, have been made indiscriminately and without any rational or scientific base, have resulted in a good number of nice looking horses, of an average of fifteen hands in height; but in them the good qualities of our native horse are wanting, and their only use is confined to pull nice city carriages and for promenade rides.

The judicious improvement of the Argentine horse has already attracted the attention of many of our breeders, and if properly done will, no doubt, benefit our equine species, which, together with our cattle and sheep, are called to play an important part in our foreign trade as a source of national wealth.

ALBERTO C. FERNANDEZ.

**Cure for Sore Shoulders.**

Now that the spring work is over, there will be some horses, no doubt, that will have sore shoulders, caused either by scalding or ill-fitting collars; this spring it would no doubt be the latter, as it was very cool. A good cure for an ordinary gall is graphite. It can be had at any general hardware, and costs about five cents per ounce, but an ounce is quite a bulk. The way to use it is simple: Dampen the collar or pad, just where it will touch the sore, then sprinkle a little graphite on, and smooth it with your finger. This will prevent the sore from sticking to the collar, as it is very slippery stuff. At night, as soon as the collar is taken off, wash with salt and water made pretty strong, or a solution of carbolic acid, say one to thirty, and apply a little sweet oil; if salt and water is used it should be thoroughly brushed all around as soon as it is dry. Follow these directions and I am sure good results will follow, at least my experience has proven so. Some say air-slacked lime is good. I tried it once, and that was enough, as it seemed to burn the skin and make the sore far worse. Hoping this suggestion may give some poor horse relief, I remain for this time, YOUNG HORSEMAN.



**APRIL FOALS.**

On Bennie Bros.' ranch, near Castleberry, Man. The colt on the left was less than a day old when photographed.

### Department in Driving.

Not only was the recent horse show a magnificent display of equine excellence, but for the visitor who had his eyes open there were lessons to be learned in the manner of manipulating the reins, whip and other appurtenances used in connection with driving. It might not be worth while calling attention to these features, were it not for the fact that everyone who drives a horse wishes to do so correctly. The horse show may be said to be the center and fixer of fashions in driving, for there are congregated the best drivers that money can secure, and to do the proper thing in driving, one must follow examples set at the show.

One of the noticeable features of the handling of the horses was that they were well broken and trained without being sluggish and slow. Horses that took their paces in the ring with pounds of steam and abundance of vim, would, when brought to the standstill, keep their positions and behave with plenty of manners without losing interest in the proceeding or appearing tired or worn. Horses possessing this well-trained manner and intelligent appearance, however, were invariably of the carriage or coach breeding. The lighter breeds were too often dull and uninteresting, else restive and unmannered after they had performed in the ring, but even these classes gave evidence of careful training when in action. It was evident in every instance that the first lesson to teach a horse is to stand still when desired. The horse that has not been taught this lesson is not ready to appear in good company. The different paces that are taught will depend upon the care and training that a person cares to give, but in every case one should try to get the best performances that the horse is capable of. Many horses of naturally good manners and action are allowed to become careless and sluggish simply because they are not trained to display their style.

In the matter of handling the lines, it is always the proper thing to so hold them that the horse is under control. Many well-broken horses will go along an ordinary road without much guiding or attention, but one never knows what minute the best broken horse will take fright and get beyond control if the lines are hanging loose. Besides, the horse is inspired with more confidence if he feels that the driver is master of the situation. When a horse is brought to a stop some careful method of disposing of the lines should be practiced, and a good plan is, with the left hand to draw them around the end of the dashboard between it and the whip. The space between the whip and the dash is just sufficient to hold the lines in comparative firmness, and so prevent them falling under the horse's feet.

## STOCK.

### Twins Three Times.

To the Editor "Farmer's Advocate":

Although an advertiser of yours for some 12 or 15 years, I have never heretofore sent you any notes as to my flock of Dorset sheep or my herd of Shorthorn cattle. I do not now write you for the purpose of speaking of my sheep, except to say that our sales were very large this year, the largest in our history; the prices, however, not being large, but on the whole fair, and our sheep for the most part being exported to the United States, as, for instance, last month I shipped 12 to Wisconsin and 6 to New York, and some few months ago shipped some 20 for the purpose of beautifying the park in New York City, for, as a matter of fact, ours are beautiful sheep. But it is not for the purpose of speaking of my sheep that I now write, but in order to relate a somewhat unique experience in Shorthorn breeding. Last fall I had a young red cow give me a pair of red heifer calves. At the last dispersion sale in Hamilton I purchased a white Nonpareil cow, bred by the Earl of Rosebery, and imported last fall, which a few weeks after the sale gave me a fine pair of roan heifer calves, and a few weeks later a young Clarot cow gave me a red heifer and a bull calf. That is, in less than six months' time I was blessed with three pairs of twins, and all doing well, which is surely a wonderful record, when we consider that my herd is only a small one of some fifty head. Then, again, I had another wonderful experience, when a cow twenty years old last March gave birth to a calf.

I thought perhaps these items might be of some interest to your readers, and hence my writing you.  
JOHN A. McGEARAY,  
Dunlop's Farm, Ontario Co., Ont.

### Anent Cleanliness.

One should be very clean in his work. If a man has a factory, or a factory he very naturally wants to be clean for him to take particular notice of his work. There is a true rule will work in his work. There is a true rule, from in experience.

### The Oxygen Milk Fever Cure.

#### REMARKABLY SUCCESSFUL RESULTS.

Messrs. Tennant & Barnes, veterinarians, of London, Ont., during the past month have been putting to test the oxygen cure for milk fever discovered and successfully practiced by M. Knusel, of Lucerne, an account of which appeared in the "Farmer's Advocate" for February 2nd last, and which excited more than a passing interest among stockmen. They had had very gratifying experience with the iodide of potassium udder injection treatment, which proved a very great advance upon former methods, though to the progressive veterinarian it could not be said to have closed the chapter on the treatment of this dread bovine disease, consequently there was reason to welcome the advent of a remedy that would reach still nearer the ideal towards which every practitioner strives, and Messrs. Tennant & Barnes decided to give the oxygen treatment a trial. They secured a small cylindrical metal tank, holding 125 gallons of the chemically pure gas compressed, with a device for measuring. Up to the present time they have treated six cases. The "Farmer's Advocate" has, naturally, followed this trial with a great deal of interest, and take pleasure in submitting the results for the perusal of veterinarians and stockmen, and especially dairymen, to whom milk fever is the constant menace and despair.

Case No. 1 was a pure-bred Holstein cow, calved about 24 hours; down and unable to get up; semi-comatose, with all the other symptoms of milk fever. Saw her about 9 a.m. and injected about two quarts of oxygen into each quarter of the udder. Left at once. In four hours she was on her feet. Next morning found her all right, but gave stimulant. She made a complete recovery, milking as well or better than formerly, with no udder trouble; no other treatment nor diet restriction.

Case No. 2—Grade Shorthorn cow, very fat, heavy milker, calved 30 hours, unable to get up, delirious and very sick, heavy breathing and pulse imperceptible. Gave similar dose to No. 1, and in 20 minutes after the injections respirations dropped 15 to the minute, and became normal; delirium left, and in three hours she got up and went on doing all right and milking. In about a week's time she was sold on the public market for \$55.

No. 3—Jersey, seven years old, fat and a very rich milker; calved about 18 hours. Found lying flat on side, tremendously bloated; respiration fast and labored; pulse, 90; temperature normal (a bad symptom); completely comatose; as bad a case as they ever had in their practice. "It's nae use," said the owner, "she's deeing noo." Turned on the oxygen without measuring, until the udder was completely distended, and the teats were tied with braid to prevent its escaping; a desperate case and heroic treatment. In about half an hour cow swung on to her side and became perfectly conscious. In a short time was found lying in normal condition, bloat gone. Owner massaged udder thoroughly, and size slackened. About two hours after treatment she got up and walked over a pair of bars. Pulse down to 60 in a little over an hour, respiration natural; milked all right afterwards.

No. 4—Grade cow, calved 25 or 30 hours, down and unable to rise; at 10 a.m. paralyzed and moaning; same amount of oxygen given as in first two cases; in little over an hour was up and looking for calf; ate bran mash and hay in afternoon, and next morning all right.

No. 5 was a lighter case, but resulted equally satisfactorily.

No. 6—A very fat grade Shorthorn cow, and very heavy milker, calved about 18 or 20 hours. About 6 a.m. owner noticed her weak and staggering; had her bled and dosed with salts, but she went down rapidly and became totally comatose. At 9 p.m. owner, becoming frightened, called Drs. Tennant & Barnes, who, seeing it was a desperate case, filled the udder with oxygen without measuring it, distending it so that they had to put tape around points of teats to prevent escape of the gas. In half an hour respiration, though somewhat quickened, was otherwise natural, continued improving, and in two hours was conscious, lying in a normal position, and in four hours from injection of the oxygen was on her feet, and when seen next morning was all right.

In all the above cases there had been no preventive measures, and there was no other treatment, but mustard used. The udders were massaged and no milk removed for 24 hours, and they were not relieved to relieve the udder. Teats were washed and disinfected before inserting the oxygen, and care taken in admitting the oxygen. No other measures were taken in the feeding and watering. The results were remarkably encouraging, and more than justified the most sanguine expectations. That it will now be more generally put to the test may be confidently expected. Dr. Tennant remarked that he had some of the iodide of potassium treatment, but used the old methods of dealing with the disease.

### The Future of Ranching in the West.

There are few people but realize that with the phenomenal influx of immigration into the Northwest Territories there will have to be some radical adjustments and changes in its industries. This may be described in a general way as superimposing of modern intensive industrialism over old-time, simple and primitive conditions. It means the intensifying of human energy to the end of providing the means of subsistence, or of a competence, and at the same time the development of the potentialities of the country, by increasing many fold its productivity.

The characteristic industry of the Territories, or, at least, of a great part of the Territories, has been up to the present ranching. This is a primitive, pastoral pursuit, and it has been followed in a rather simple and primitive way. The public domain has been a species of No-Man's-Land; the cattle have been run everywhere, without let or hindrance, subject to yielding large returns in favorable seasons and small ones when the contrary has been the case. The increase of settlers of small means to take a share of the industry's profits has led to the necessity of a definition of rights. The "nesters," as they are sometimes called, have not been favorably looked upon by the men who have been long enough in the business to have large herds and who are popularly spoken of as the big outfits. Every new settler, of course, with a few cattle lessens the total of free domain available. They are inconvenient in another way. They usually settle on a river bottom, where the approach to water is easy and favorable, and their presence is a drawback to the cattle on the bench above, for they either fence off their homestead, or part of it, or drive away range cattle that have been in the habit of watering at that place. This is a very serious consideration, as the distance cattle have to walk for water is an important factor in their growth. If cattle are to be made large and fat on grass and water alone, they require these in abundance, and in close and easy proximity. On this account it might seem as though the big men had to go, and it is the case that many of the big outfits see before them the prospect of cutting their hands in two on account of the limitation of the range, and certainly this will be a necessity for those who are simply poachers on the public domain and do not control in some kind of proprietorship the land necessary to support their cattle.

It really, however, is neither a fact nor a necessity. On the contrary, it is the case that the big fellows are getting more numerous than ever, and their enterprises stand out in greater prominence. This arises from the fact that absolute proprietorship in lands is the only means by which the industry of ranching can be put on a permanent and stable basis. Owing to the somewhat anomalous position in which the Government stands in exacting the same price for lands whether they be arable or dry, or in giving only one hundred and sixty acres of homestead, whether arable or dry (they do not now sell at all), the small man cannot buy sufficient land to carry cattle enough to support him properly, and the capitalist in this case has the advantage. So we find that the number of large ranches is on the increase, rather than decrease, but they are chiefly proprietary ranches. We need only call attention to the names of Knight, McIntyre, Cresswell & Day, Preuit, the Cochranes and others, to illustrate this.

It is not necessary that either the large or small men should suffer. As a matter of fact they are not suffering. Their methods, however, are being changed, and the change is in the direction of a gain rather than a loss. The old-timer who is not a rustler, however, has to go. There is a frontier tradition among some of the real old cow-punchers that it is infra dig to do chores. These are such fellows as the one who was told to go to the river bottom and cut a pole or two, but came back on horseback, as he had gone, saying that the bronch' wouldn't stand, and so he couldn't cut the pole.

The chief change in methods for the rancher is the growing of fodders and hay to supplement the grass of the range. This will be necessary from the close grazing of more cattle making the grass more scant, and from the general need of making owned land yield as heavily as possible to increase the returns from capital invested. More labor will have to be grafted on to the investment. Men who still rely on the open range say already that their cattle do not now come off in as good finish or as heavy as they formerly did when there was wider choice of grasses and more water available. It might be said that the changes foreshadowed have already come, for it would be scarcely possible to find a rancher who intends to stay with the business who has not every year large stacks of hay or green food put up for inclement seasons at least. Nearly every man keeps up his weaners, his bulls, especially if they are Eastern ones, and such other cattle of different ages as show any signs of weakness. The feeding of these may amount to only one feed a day, the greater part of their support being from grazing in fenced home pastures, or it may be

their whole support. It has been demonstrated by experience that the country hitherto considered wholly arid and unproductive, especially by the old-timer, has possibilities for cultivation that make it a valuable help to the rancher. In nearly every river bottom good crops of tame hay and oats can be grown. In some places irrigation of meadows is possible at small cost.

There are manifest advantages arising from the new methods. The enclosing of cattle, provided they can get sufficient feed, is a gain in itself. It is well known by both cattlemen and sheepmen who have had experience in both intensive feeding and range pursuits, that the traveling of cattle and sheep is one of the chief causes for lightness and deterioration in size. The range beast, in both cattle and sheep, has "too many legs"; the animal on the cultivated farm develops short legs and a heavy carcass. The walking will be reduced both with respect to getting feed and with respect to getting water, and, as has already been pointed out, the long distances that cattle back on the bench have to walk for water keeps them poor.

A second important gain will be with respect to breeding. When a man has his stock within his own fence, he can save them from the injury of being bred to scrub sires, and the scrub sire is the active one, whether in grade bull or Indian cayuse, and gets most of the females. On both sides then—that of feeding and that of breeding—the gain to the ranching business and to the country is to be enhanced by the change that is overtaking the business. The total output will be increased and the quality will be improved. The dogie business is not a temporary feature, for stupid and mulish and awkward as the dogie may be dubbed by the traditional cow-puncher, he is a good spec., and can be turned into good dollars by the more careful methods that are going to make all kinds of ranch enterprise solid and safe. It is only natural to look for an increase in labor in the business. Increased labor and increased art are indissociably connected with the progress of any business. There must come not only increased labor, but increased knowledge, knowledge connected with feeding and the properties of foods, connected with cultivation, with breeding, and, perhaps, with disease. The laissez faire system develops hardness and good constitution in stock, for it is the survival of the fittest, and bringing stock under the hand of man invariably develops some weaknesses.

J. McCAIG.

**Sheep and Dogs.**

BY J. McCAIG.

Some sheepmen escape damage from dogs by very simple means. It is well known that the dogs go silently at their work of worrying, and that they are quickly frightened off by noises. On this account if small cowbells are put on two or three of the sheep in a small flock a dog will not go among them to stir up a panic or noise. In other cases, if sheep are kept near the house at night dogs will not molest them, though this is not always the case. Our own sheep are brought down every night after being turned out in the spring and shut in a large open yard, and liberated early in the morning. They come down themselves every night without being brought after a week or so. This proximity to the house might not save them if they were once attacked. Dogs return over the same run when once they have got started, and there is a stretch of country near our own which is visited every year, and the damage of the dogs can be seen over half a dozen flocks—the same ones each year. Sometimes the home dog is a protection, and reports any disturbance among the sheep if they are not far away. It has been claimed that the Dorsets are dog proof, and a Dorset breeder facetiously claims for his hardy stock that the only one he lost in a certain year was a fat ewe that died from getting overheated chasing the dogs out of the field.

The way in which the dog nuisance is met in most parts of Ontario is by a system of indemnity undertaken by the township councils. The returns from the general dog-tax, usually one dollar a year, are set apart for the payment of owners of sheep worried by dogs. They are usually paid two-thirds of the value of the sheep, but this depends on whether there is sufficient in the treasury or not, and the proportion of indemnity is usually nearer one half.

This remedy is wholly inadequate. In the first place indemnities are expensive. Prevention is more desirable. In the second place it is unjust, for the indemnity is contributed by all the owners of dogs, whereas the damage in a whole township is frequently done by half a dozen dogs. The tax is only useful to supply indemnity, not to discourage the keeping of inferior dogs, for a dollar a year is no deterrent. It may be said that it is generally impossible to fix the damage on particular dogs, for the worrying is generally done at night, and it is impossible for a man to catch a dog, and very difficult to identify him. Again, suppose an owner got the full value of sheep worried or killed, he is still the loser, because sheep have a weak nervous and circulatory system, and they suffer great damage by being

run and excited. Their normal heart action is thought to be destroyed, as well as their quiet feeding qualities, and they never thrive well afterwards.

In the valuing of sheep killed by dogs there is usually little allowance made for differences in quality. Sheep are generally valued at five or six dollars, no matter what they may represent in care and breeding, and in the cost of improving



**LORD BOBS.**  
Imported English sheep dog.

stock. On the other hand, suppose a man shoots a dog that is prowling out of his limits, to which there is a reasonable and strong temptation, dogs are not valued at two, or ten, or twenty dollars by a regular schedule, but the owner may put any value on them he likes. The price of a stray cur usually goes up to about fifty dollars after he is shot, and it will not be disputed that in many cases he is worth more dead than alive.

It may be safely said that the destruction of the dog stock of the country would mean less loss than occurs to the country annually in valuable sheep. All dogs are not bad; some are highly valuable, but the general interests should be better protected. If the killing occurs at night, then all dogs should be chained at night, and a penalty of twenty dollars inflicted for the infringement of the law. Owing to the difficulty of fixing the blame by either day or night, greater freedom should be given to owners to safeguard against damage or molestation of flocks, by allowing them to destroy dogs at any time, if not within sight of their masters, and trespassing. The tax should be raised to two dollars for dogs, and five dollars a year for bitches, which might operate to check the multiplication of the village species, for it is principally useless village dogs and, in some cases, well-bred hunting dogs, that do most of the running of sheep.

**English Sheep Dog.**

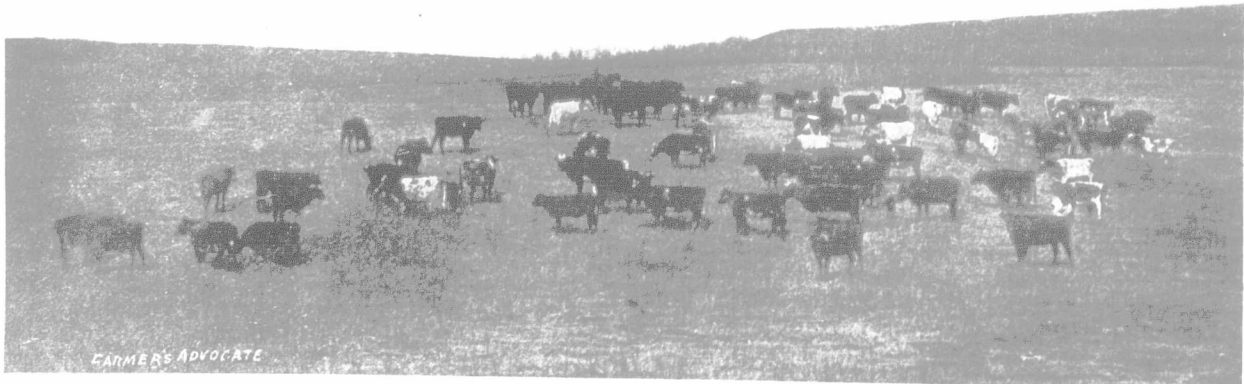
LORD BOBS, whose portrait appears on this page, is an imported dog, and probably one of the finest, if not the finest, now on this continent. He is a truly grand specimen of the old English bob-tail sheep-dog, of which no more intelligent or better worker with sheep lives. Lord Bobs at the show, and Bobs at home, has a distinguished ancestry, being son of champion Sir Ethelwolf (sold for £120) and grandson of two champions, champion Masterpiece and champion Wall-eyed Bob. "Bobs" was bred in Bristol, England, born May 22nd, 1900, and imported to Canada by a present resident of London, Ontario. He has been exhibited only once, at the Toronto Fair Bench Show, easily taking first. This, one of the old original breeds of England, is attracting great attention again after a long period of neglect, and is becoming quite fashionable both there

and in the States. As a worker he has been nobly doing his duty during England's long up-building, and is, and long has been, held in high esteem by England's shepherds and farmers.

**Selling Stock by Correspondence.**

Owing to the magnificent distances of this country, sales of pure-bred live stock are largely made through the medium of advertising and by correspondence, and on the whole with fairly satisfactory results. To make a permanent success of business by this method, the first essential is to be sure one has first-class stock of the most approved type to offer, and the second to let the fact be widely known through the advertising medium that reaches the largest number of people likely to be interested in what one has to offer to the extent of becoming purchasers. The next essential is to deal with customers on the lines of the golden rule, giving a fair and honest description of the stock and good value for the price received. The animals sent out to fill an order should be in good condition, so that they will make a good impression on the mind of the buyer on reaching their destination. This is the more important, because animals in transit, being excited by strange surroundings, and not regularly fed, naturally shrink in condition and look less attractive than when starting out on the journey. Buyers should make due allowance for this fact, and not too hastily condemn a new arrival, but rather suspend judgment until it has been rested, cleaned and filled out.

In shipping stock requiring to be crated, it is good policy and good business tact to make light, yet strong crates, of uniform quality of dressed lumber, giving a neat and attractive appearance, and conveying the impression that the shipper takes a pride in his business. Crates should be large enough to avoid cramping the animal unduly, but not larger than is necessary to its comfort, and as an advertisement the shipper's address, as well as that of the consignee, should appear on the crate, either in stencilled letters or on a business card tacked on the crate. Much writing may be saved the seller by the use of a printed circular of convenient size, to be enclosed in each letter answering enquiries, or it may be printed on back of regular letter paper, giving general information as to the breeding, prize record and character of the herd. The breeder who has had considerable experience in shipping stock has a much better idea of the rates of freight or express charges for a given distance than the average buyer, who often hesitates to place an order owing to uncertainty as to the added cost of transportation. The breeder can meet this difficulty to a considerable extent, either by pricing his stock, freight prepaid, or by giving in his printed circular a table of freight and express rates per hundred pounds to principal points in each of the Provinces and States from which enquiries for his stock are likely to come, and also giving approximate weights at different ages, so that the prospective buyer may be in a position to calculate nearly what the total cost will be. This printed circular may be utilized to excellent purpose in giving much information to correspondents that will facilitate business and greatly relieve the labor of correspondence. We are living in a live business age, and breeders and farmers will find it to their advantage to adopt as far as practicable the methods of successful business men in all lines. But one of the principal points to be guarded in the shipping of stock which the buyer has not seen, is to be sure that the animals are as represented, and of a class and character that will favorably advertise one's stock, and help rather than hurt his reputation, which is the most valuable asset in his business.



**SHORTHORNS WINTERED ON THE PRAIRIE.**  
Owned by Jas. Mitchell, Tumbell, Man.

### Our Scottish Letter.

Mr. Hanbury is dead. This is the weightiest piece of agricultural news at the present hour. His illness was brief; he was seized with influenza, pneumonia supervened, and in a few days the great worker was at rest. Mr. Hanbury belonged to the best school of British statesmen. He took his work in Parliament seriously, and devoted himself to the service of his country unsparingly. He first made his mark in the House of Commons as a keen critic of the estimates, and he early recognized that Government offices were not centers of infallible truth. Unlike many, he showed himself as competent in administration as in criticism, and he has left as his chief memorial an efficient Board of Agriculture up to the limits of the means placed at his disposal. These means were wholly inadequate. Mr. Hanbury brought to the management of public affairs the characteristic abilities of a Lancashire business man; he had small regard for red-tape, and none for humbug. Perhaps he spoke too much; if so, his object was to make farmers believe that the Board of Agriculture was their servant. No matter how incompetent may be his successor, the Board of Agriculture has been so efficiently manned by Mr. Hanbury that it cannot very well become inept and ineffective. Men of all shades of politics have united in paying tribute to the manly qualities of the deceased. He was a man.

In the narrower sphere of Scottish agricultural life death has been busy. The doyen of Scottish agriculture, Sir Robert Menzies, Bart., has been taken away. He was well over fourscore years of age, and to the last an ideal Highland chieftain. For many years he was a director of the Highland and Agricultural Society, and rendered excellent service there in connection with forestry. He believed Scotland could produce as good wood as any country in the world, and at the first forestry exhibition he showed a beautiful bedroom suite made entirely of Scots birch from the birks of Aberfeldy. Almost the last of a type once very common in the Highlands, this generation is not likely to see Sir Robert Menzies' equal again.

To not a few of the older Canadian fanciers of the Clydesdale, Mr. David Buchanan was well known. He succeeded his father as tenant of the fine farm of Garscadden Mains about twenty-five years ago, and in his hands its prestige as a well-managed holding was not impaired. A keen judge of Clydesdale horses, his services in that capacity were in much request. He owned a fine race of mares, and bred quite a number of high-class horses. Champion honors came to his lot at the Royal International Show at Kilburn in 1879, when his three-year-old Druid 1120 beat Mr. Riddell's famous Darnley 222. He subsequently sold this horse to Colonel Holloway. A few years later he became owner of Knight of Snowden 2212, a grand horse also, but he died when three years old. The cause of Mr. Buchanan's death was apoplexy, and it is a sad coincidence that within a week of his death his widow also passed away with startling suddenness. She was much the junior of her husband. He was in his 71st year, while Mrs. Buchanan was but 45.

Another notable man in the Clydesdale world, Mr. William Riddell, died two days after Mr. Buchanan. He was the eldest son of Mr. David Riddell, Blackhall, Paisley, and all his life had been engaged in his father's business. No one was better known at horse fairs and shows all over the British Isles. He had a genial, kindly manner, and was deservedly popular with all classes.

The political world is not in a ferment, but some members of Parliament who take an interest in agriculture are by no means pleased with Mr. Ritchie's first budget. Last year, with the laudable object of broadening the basis of taxation, a registration duty was put upon corn. This duty was defended on various grounds, and it was entirely successful, bringing in about £2,000,000 of revenue, and not leading to any advance in the price of bread. For reasons which men with ordinary intelligence can only guess, the new Chancellor of the Exchequer has repealed this tax right away. The action is tantamount to a confession that the opponents of the tax were altogether in the right and the Government entirely in the wrong. Was the duty really a British interest; it provided a basis for a special preferential treaty with Canada; it benefited those who are reaping the benefits of the British market to contribute a little to the upkeep of British interests, and it afforded a broad basis for raising revenue under exceptional circumstances. All this goes by the Board, and the only reason for his action given by the new Chancellor of the Exchequer is that the Corn Registration Bill had itself to misrepresentation. Mr. Chapple is very sorry about the business. He regards it as a betrayal of the agricultural interest by a Government which owes its position largely to the support of agriculture. I am bound to say that Mr. Chapple has some cause for

The past month has been a great time for shows. Two of the finest displays of Shorthorn and A.-A. cattle have been seen at Dublin and Belfast respectively, and in Scotland the west country breeds have been grandly represented at Kilmarnock and Ayr. The Shorthorn championship at Dublin went to Mr. John Handley, Greenhead, Milnthorpe, Westmoreland, a tenant farmer, who owns one of the best Shorthorn herds in the north of England. His bull, Pearl King, is a great dark roan, showing uncommonly true breed character, and he cannot be beaten except by the best, if at all. At Belfast a Scots exhibitor scored highest with a Lovat-bred bull, Victory, for which a very long price was paid at the Inverness spring sale of 1902. Mr. Matthew Marshall, Stranraer, is the owner of this bull. He has quite a large number of high-class animals about him, and his show cattle are well brought out. Kilmarnock and Ayr shows were unusually strong in Ayrshire cattle, Clydesdale horses, Hackney and harness horses, and blackface sheep. The Ayrshires this year are certainly being judged with some regard to the size of their teats and sound commercial properties. The class at Ayr for cows four years old and upward bore this out. We have seldom seen so many really high-class, big, commercial-looking cows paraded before the judges. The Ayr Derby was this year won by Mr. Alexander Cross, of Knockdon, Ayr, who has a fine herd of well-bred cattle. He showed largely in the Derby, and won several other prizes besides the first. Mr. John Drennan, Hillhouse, Galston, was in evidence with fancy big cattle. In this connection the milking competition is worthy of remark. The average of butter-fat in the milk tested for two days was 3.25 per cent., the highest being 4.325 per cent. None was below the three per cent. standard, taking the whole day's milking, but one was rather below, taking the first morning's milking by itself. A scheme has been started for the purpose of encouraging farmers to keep milk records. The Highland Society has laid aside £200 for the purpose, and the machinery is being set in motion. Very likely more money may be required, but it is well a start has been made. In the Clydesdale section it has again with the two shows been a case of Baron's Pride first and the rest almost nowhere. The champion stallion at Kilmarnock was Mr. Kilpatrick's beautifully handsome horse, Baron o' Bucklyvie. The champion female was the same owner's three-year-old mare, Lady White, by Hiawatha, and nearly all the prizes in the class of three-year-old fillies were taken by the produce of Hiawatha. At Ayr every first prize but one was taken by a get of Baron's Pride, and the exception was the first-prize two-year-old colt which was got by one of his sons. The championship for colts went to Messrs. A. & W. Montgomery's yearling colt, Baron Fergus, own brother to the celebrated Benedict, now in Mr. Bass' stud at Fort Wayne, Indiana. This colt was also first at Kilmarnock. The reserve at Ayr was the same owner's three-year-old Royal Edward, which last year was champion both at Kilmarnock and Ayr. Mr. Kilpatrick's Baron o' Bucklyvie was second in his class to Royal Edward, an award which created some feeling. In the female section all the first-prize winners and nearly all the second-prize winners also were by Baron's Pride. The championship went to Mr. Thomas Smith's Royal Ruby, from Blaen Point, Chester, the Cawdor champion of 1902. All the first-prize winners but one were owned by Mr. Smith, who has a wonderful stud of Clydesdales. The exception was the first-prize brood mare, Lady Garnet, which is owned by Mr. J. Ernest Kerr, Dollar.

Harness horses have greatly improved at Scots shows in recent years. Most of the best are still bred in England, but quite a number of extra good ones are beginning to appear in the north. Mr. Wm. Scott, Thornhome, Carlisle, had the championship at Ayr and Kilmarnock, with a home-bred three-year-old filly named Bryony. She was reserve junior champion at London. The driving classes were led by two great horses, Mr. Alexander Morton's Bravo, a superb dark brown horse, which on the last day of April was sold by public auction at Mr. Morton's sale for £378, and Mr. O. Rosenvinge's Wild Lucy from Hexham. This lovely mare and her neighbor were sold by public auction in Northumberland a year ago for £300. At Mr. Morton's sale a pony mare made £195, and 22 ponies sold for an average of £37. At Mr. Scott's sale a week earlier, 20 harness horses and colts made an average of £30.8s. 2d.

Quite a number of Canadians are now setting out for home with selected Ayrshires and Clydesdales. Mr. Boden, who acts for Mr. Reford, has a number among others, the first-prize two-year-old colt at Ayr. He is named Fizzaway, and like most of the best of his kind this year, came from Mr. James Howie, Hillhouse, Kilmarnock. Mr. Howie, of Hillhouse, Quebec, sailed a week ago with a good shipment of Clydesdale horses. Ayrshire and Hackney were prizewinners at the Angus show at Perth, and the Denny show of the same date at Dundee. There has been in good demand this year for Scotch-bred horses. "SCOTLAND YET."

### Slopping Pigs.

Swine are the only stock on the farm that are commonly fed sloppy food, and it is undeniable that they are the most frequently troubled with digestive derangement. This suggests the question, is there any good reason why the feeding of pigs should differ so widely from that of other farm stock? Why not give them their feed dry, and their drink in a separate trough? Some of the most healthy and thrifty pigs we have ever seen were treated in this way, making rapid gains in weight. If this theory be correct, what an immense amount of labor might be saved by the use of self-feeding devices for the dry feed, and troughs supplied by pipes from a spring or tank, and having a float to regulate the height of the water in the trough. For young pigs requiring milk this plan may not be feasible, though it is a question whether they might not better have their milk straight and their meal by itself, but in the case of older pigs that have passed the milk stage, or where the supply of milk is not sufficient to go round, it is quite practicable. It is nature's way to let the animals do their own mixing of their feeds, and it is well in some things to let her have her way. It will cost but little to try this plan. It will not occasion any serious loss if it is not a success, and we shall be glad to hear from any who may try it as to their success or failure.

### Mangels for Brood Sows.

A writer in the Agricultural Gazette, England, says: Raw mangels should not be fed to in-pig sows when near farrowing, because of the ill effects they often exert upon the unborn pigs. These, in many cases, though apparently all right at birth, are frequently the victims of a sort of sleeping sickness, refusing to attempt to suckle, and dying in their sleep when only an hour or two old. This ailment is not so apparent when exposure to the air and hot sun have thoroughly ripened or dried up the juices of the roots, but the writer has seen many cases in which even then the use of the raw roots has been followed by the ill effects referred to.

### Carbolic Acid for Abortion.

A Montana ranchman, who had suffered heavy losses from abortion among his herd of cows, fifty per cent. having aborted in one year, writes the Breeders' Gazette that by mixing carbolic acid with their salt he reduced his loss the first year to three per cent., the second year to two per cent., and this year, up to March, had not a single case. Here is his prescription: Feed your bulls and cows barrel salt in troughs, where they can have constant access to it, pounding the lumps fine, and to each one hundred pounds of salt use one pound of crude undiluted carbolic acid, or four ounces of acid to twelve quarts of salt, and mix thoroughly.

### A Free Translation.

A student who used to teach primary grades in Chicago public schools, tells of his experience with a small boy in one of the First Ward schools. Jimmy was called upon to read, and getting up from his seat, recited in a singsong voice this legend from the second reader: "See the cow. Can the cow run? Yes, the cow can run. Can the cow run as swiftly as the horse? No, the cow cannot run as swiftly as the horse." Now, Jimmy," said the teacher, "do you understand that?" "Sure thing," responded Jimmy. "Well, then, close your book and tell me the story in your own words." This was Jimmy's version: "Get on to de cow. Kin her jenny legs run? You betcher life she kin. Kin de cow do de horse a-runnin'? Nit! The cow ain't in it wid de horse."

### To Prevent a Horse from Jumping.

Some horses are difficult to catch when at pasture, and others are prone to jump. These objections can be overcome by simple means. A surcingle should be placed about the body of the horse, together with two short straps that pass through the surcingle and around each fore leg, the latter being buckled so that when the horse stands upright the strap will fall about halfway to the knees. This arrangement, which allows the horse to walk quite freely, prevents its running as well as jumping. A similar plan is to connect the fore legs of a horse by straps secured just above the knee, but those who have tried both plans agree in a preference for the one first described.

### Agricultural Progress.

Editor "Farmer's Advocate":  
Sir,—The agricultural historian of the future will have to give a large place to the work and influence of the "Advocate" in the betterment of agricultural life in Canada. Wishing you every success, I am,  
Yours very truly,  
E. B. ELDERKIN, President,  
Maritime Stock-Breeders' Association, Amherst, N.S., May 15th, 1903.

FARM.

**Buying a \$100 per Acre Farm.**

This question was discussed by Mr. Henry Wallace at a Farmers' Institute meeting in Iowa this winter. It being a live question in Eastern Canada, we publish Mr. Wallace's remarks as they appeared in "Wallace's Farmer":

First, a good deal depends on what is meant by high-priced land. Price and value are not always synonymous. Land at \$100 per acre may be cheaper and more easily paid for than land at \$50, \$25, and even \$10. There are a great many things that give value to land; its natural fertility, its physical condition, its contiguity to primary and terminal markets, its neighborhood, nearness to churches and schools, the character of the neighbors, the character of the buildings, and other matters too numerous to mention.

When land sells for \$100 per acre, the probability of a young man with nothing but the labor of his hands to sell in the market acquiring a farm of this kind is quite remote. There are, however, hundreds of young men who will do this very thing in the next fifteen or twenty years. Even though they may be without money, if they are the right sort of stuff they will accomplish it; not, however, by selling pure strength and awkwardness.

The price of farm labor now runs from \$20 to \$30 per month, including board. At the minimum price the farm hand can save from \$100 to \$150 if he really wants to do so, and at the maximum price from \$200 to \$250 per year. If he sells not merely his hands, but the service of an intelligent brain; if he is really up to his business and takes the same interest in a farm, and especially a live-stock farm, that the owner does, he can demand about what wages he likes, because he is worth whatever any man of this character really asks, and the man who has an eye to business will not let a man of this kind go at any reasonable price. Every dollar of this added price is added profit, for it costs no more to clothe and keep a good man than it does a poor one.

It will be a comparatively short time when the really up-to-date hired hand can be the fortunate possessor of \$1,000 of his own earnings, and he should then consider whether it is not better to rent a farm at cash rent for a term of years than to work for another. When he has secured \$2,000 over and above his team and farm implements, he can safely buy a farm and go in debt. If a man has demonstrated himself able to pay rent and still lay up money, he can pay interest, particularly if he can buy a farm at a time when farms are dull sale. We would not advise any man to buy land on the boom, for while first-class farms will always bring good prices, there will be times when they sell for less than they are selling for now, and the man who has shown himself capable of earning money and properly investing it, can very well afford to wait and not run the risk of the loss of his capital.

Just here is where a great many men who have accumulated money by working out and then renting make their mistake. They are too anxious to buy, and buy when land is on a boom, when everybody else wants to buy, and then lose their capital in a period of depression, which can always be counted on, and have to begin again at the foundation with the handicap of past failure to keep them down. In fact, it is not an easy thing for a man with nothing but the service of his hands and brain to sell to get a \$100 per acre farm of his own, but thousands of men have done it in the past, and thousands will do it in the future. The man, however, who, like Job's hireling who waited for the shadow—that is, mid-day—on the sun dial, the only clock used in those times, and waited for sundown, hoping for the time to quit work, that man will not do it. Neither will the man who takes no interest in the work of his employer, but simply puts in his time and demands his money. That man will fail in any business proposition, but no quicker in farming than anything else.

**An Instrument of Utility.**

The race horse and the racing bicycle each have their uses, and each in turn bears the same relation to the rest of its kind. We hear less of bicycle racing to-day than when the wheel first became popular. To-day the bicycle is more strictly an instrument of utility. Its usefulness in economizing time, in getting quickly from place to place, or as a vehicle of pleasure, are all so deeply impressed upon the public and have become so commonplace that we scarcely think of them as extraordinary. Yet there are more and more who are used every year, and new riders are constantly learning the value of the bicycle as a means of easy and speedy locomotion.

**Spraying for Mustard.**

The ease with which a growth of mustard can be destroyed by spraying with copper sulphate makes the continued permission of its growth almost criminal negligence. The effectiveness of the spraying is proved beyond doubt, and the cost is a mere bagatelle. To the average person it does not much matter how the destruction of the mustard is effected, so long as the operation gives the results. It is generally believed, however,



MILITARY CAMP FIRE.

How the pot was boiled at Camp Barr, Saskatoon, Sask.

that copper sulphate has a disorganizing effect upon vegetable tissue if kept long enough in close contact with it, and, fortunately, the leaves of mustard are so constituted that the bluestone easily remains upon them and penetrates the tissues. Smooth-leaved plants having a closer texture than those like mustard are not so affected.

The weed is most successfully combated in a field of oats, barley or wheat, although it can be sprayed in peas or clover if these crops permit it to appear prominent. Just as the furthest advanced plants are about to bloom is the time to give the application of bluestone solution, and a bright, clear day affords a better opportunity for the working of the chemical than a dull day, and if rain follows immediately after spraying, the operation will have to be repeated.

The solution is made by placing about ten pounds of bluestone in a coarse bag and suspending it in about three gallons of boiling water. The crystals will entirely dissolve in from fifteen to twenty minutes. Strain the solution into a pump-barrel, and fill up with forty to forty-five gallons of water. This will be about sufficient for one acre. In applying the solution a good plan is to put the barrel with the pump in a light wagon and drive slowly through the fields, so that all the plants will be wetted by the spray which is spread from behind the wagon. An extension rod and nozzle should be used to facilitate the work. The results are largely dependent upon the thoroughness of the work, and if the grain crop should happen to change color a little, it is no cause for alarm, as it will quickly recover.

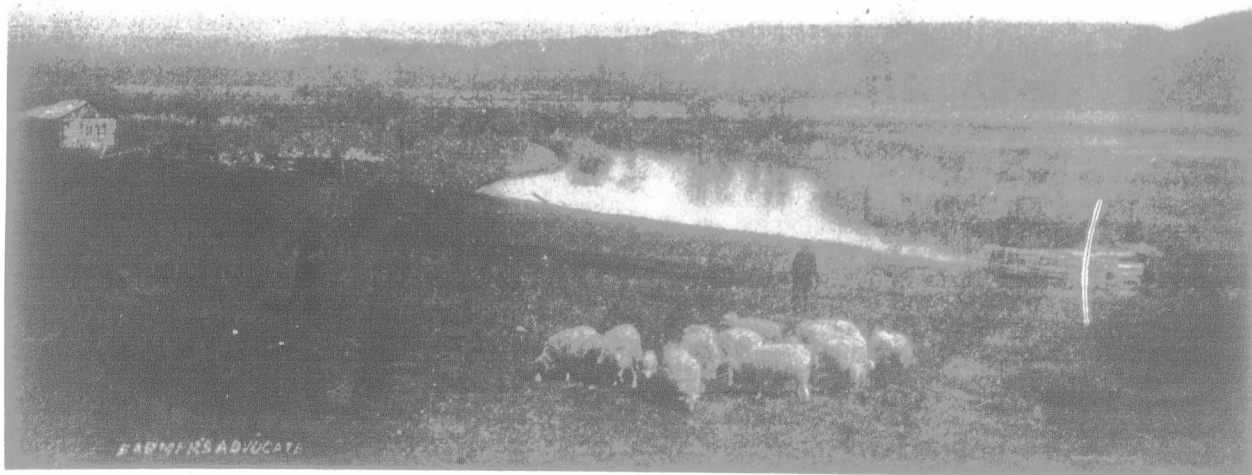
**The Lawn.**

There seems to be a growing disposition on the part of most people to beautify their farms by keeping fresh green lawns and planting trees and shrubs. Perhaps the agitation in connection with keeping boys and girls upon the farm has something to do with it. At any rate the disposition is quite prevalent, and everyone is glad to see it. When one sees a well-arranged lawn, it looks like an easy matter to so lay one out as to give a good appearance, but when it comes to doing the actual work incongruities are sure to creep in to mar the general effect. There is no code of rules to guide one in arranging a lawn. The object is to give a natural effect, and nature never imitates, but her every condition is original. There are, however, certain features of landscape gardening which are more suitable for the fronts of farm buildings than for city lawns, which are too often taken as models in the country. Generally speaking, the former are less restricted and lend themselves to arrangements requiring greater scope than the city properties afford. A small bed of flowers, surrounded by a plot of well-trimmed grass, adds considerable beauty to a city home, but a similar arrangement before a farmhouse might give the impression of limitation not reconcilable with the breadth of the country surroundings.

To get the best arrangement of trees and lawn it is essential that the buildings be a reasonable distance apart, and from the road, not so far, however, that the space between the road and the house cannot be utilized for grounds, nor so near as to give a cramped appearance. As little as possible should be seen of fences, and small attention need be given to flowers, but nothing is so consistent with a country home as a broad, well-sodded and shady lawn. By sowing low-growing grasses, such as redtop, blue grass and white clover, a good sod is obtained without much cropping, thus doing away with continued lawn mowing, which would otherwise require all the spare time to be had.

After getting a sod and the laying out of paths should come the setting of trees and shrubs. This planting is a feature that needs to be enlarged upon on most farms. It gives the grounds a park-like appearance, and everyone recognizes that a natural park is an ideal place in which to live. Pines, spruces, cedars, maples, elms, basswoods, beeches, and any other favorite trees should have a place, and shrubs should be chosen that will furnish bloom throughout most of the season. The planting of these shrubs and trees gives the best effect when they are planted indiscriminately but judiciously. It is a good idea to have a part of the lawn reserved for games, and the planting arranged in other sections. The trees, being taller than the shrubs, should form the background, while the latter can be set more forward in clumps.

On most farms where improvement of this kind has been done, considerable taste has been displayed, and it is simply to emphasize the importance of introducing more scope into the arrangements of the lawn that this note is sounded. A little reach of imagination off into a country where wide-spreading trees and beautiful flowering shrubs abound, in which nest all kinds of birds, where limitation and restriction are conditions unknown, and then trying to work out a realization of this image on the lawn, will often tend to beautiful arrangement and an effect that is most inviting.



ASSINIBOINE VALLEY.

In the Castleberry district, thirty miles north of Russell, Man.

### Thinning Sugar Beets.

Prof. R. Harcourt, of the Ontario Agricultural College, concludes his report on the sugar beet investigations of last year with these conclusions:

"Sugar beets of a very high quality can be grown in Ontario, and a sufficient yield per acre can be secured to make it a paying crop to the farmer."

"Beet pulp, one of the by-products of the sugar factory, is a valuable cattle food."

"Limestone containing about 97 per cent. of calcium carbonate can be procured in abundance in the Province."

The following is given on the subject of thinning and cultivation:

**BEFORE THINNING.**—As soon as the plants can be traced in the row, surface cultivation of the soil between the rows should be commenced, to clean the land and preserve moisture, to admit air more freely into the soil, and in every way to hasten the most rapid growth of the young plants. This cultivation may be accomplished by hand, but more quickly by means of a horse hoe. In cultivating, it should be remembered that the young plants are easily injured, either by a covering of earth or by being loosened; therefore a strip of two inches on each side of the plants in the row should not be disturbed by this early cultivation.

**THINNING.**—The thinning should be commenced when the young plants are developing the fourth leaf and finished as soon as possible. In thinning, the aim should be to leave a good, strong healthy plant every seven inches in the row. With a narrow hoe (about five inches wide) block out the row of young plants, leaving little patches from one to two inches wide. Select the most vigorous plant, hold it firmly in place, and remove all others by hand. Care must be exercised in the thinning, for the plants, unlike turnips, must not be roughly handled.

Mr. (the inspector) will be around about the time your beets will be ready to thin, and will give you any further instructions you may desire.

**CULTIVATION AFTER THINNING.**—After thinning, cultivate thoroughly and often, in order to open up and loosen the soil, and thus allow the free admission of air; to form a soil mulch which will check the too rapid evaporation of the soil moisture; and to produce growth. Cultivation should cease when the plants become so large that the work cannot be done without breaking the leaves.

If for any reason the beets have not come up regularly in the row, or wireworms have eaten them off, let me know at once the amount of seed you will require to reseed the blanks and I will have it forwarded immediately.

### Fencing.

In many parts of the country the month of June is quite largely devoted to fence building. In fact it is so largely devoted to this work that many fences are now standing that serve for little more than to utilize the material of which they are built. Ideas concerning fences are changing, and the change is rational. Conditions of farming are now such that larger fields of fewer varieties of crops are grown, in place of small fields of a great variety of crops. In most sections oats, barley, clover hay, and corn and roots, are the staple crops, fall wheat and peas being seldom grown. This arrangement leaves the farm in four large fields, with a smaller area for pasture. It is not necessary, however, to divide the barley and oat fields with a fence, and, in fact, about the only fence that is necessary is one to keep the cattle under control while in pasture, and one on either side of a lane. If it were a good practice to keep the same field in pasture year after year the fence problem would easily be solved, but as we must rotate the crops things become more complicated. Temporary fences, however, overcome the difficulty, and if these be used to enclose a pasture and rape fields no other is needed, excepting the boundary and lane fences. This temporary fence can be used from year to year and can easily be put up or taken down.

This system would not allow of the stock running on the stubble after harvest, but that is just what we should not do, for several reasons. The most satisfaction is secured where oats and barley are seeded with red clover, which is allowed to get a good growth when the grain is taken off and the fall pasture which is made would otherwise furnish is supplied from a field of rape. Now that labor is scarce, pasture is expensive, and soiling crops are taking the place of pasture, it is well to make sure that a fence is really needed, that it is going to give return for labor expended before the expense of building is incurred. Land occupied by fences is expensive. It is a nesting place for all kinds of insects, and yields comparatively nothing. The fences, if they shorten the field, necessitate more turning in cultivating and cutting, and hence, waste a waste of time. The broad field with every foot of land producing is the ideal form, a thing that is, in the restricted areas interested in, with the best and most interest, which are so often seen in the older parts of Eastern Canada.

### Agricultural Knowledge.

A Plea for a More Thorough Method of Instilling its Principles into Our Country Pupils.

Formerly agricultural education was not so necessary as at the present time. Then the farmer did not have to combat noxious weeds, parasitic diseases or insect pests; he was not brought into keen competition with the whole world. Today no calling requires so much thought as agriculture. Canada is pre-eminently an agricultural country, and if agriculture is to hold the position which its importance indicates, it must receive more attention than it does at the present time in our country schools.

A boy at school cannot be developed into a practical farmer, but he can have his curiosity aroused about the meaning and purpose of everything that the farmer does. At present our school programmes seem to be shaped without consideration of the wants of the farm. Fortunately the more thoughtful and experienced teachers are now turning to nature study as a means of counteracting the cramping effect of a too exclusively bookish education. Agriculture affords the very best kind of nature study, and with a teacher who is thoroughly interested in the progress of agriculture, who has acquired a knowledge of the principles and sciences involved, and the most rational methods of imparting this information, the deepest interest can be aroused. Small children can learn the names and characteristics of the various common birds, insects and smaller animals, and to distinguish between those beneficial and those injurious to agriculture.

The higher forms could deal more with the classification, life history and habits of insects, birds and animals; collection and classification of grains, grasses, weeds; use of sun, air, frost, dew, etc., to the farmer; classification and adaptation of soils, drainage and its uses. The time devoted to flowers, trees and shrubs on the school premises is well spent, and must have a splendid influence in arousing a deep interest in the mind of each pupil, and this changing of the dull, dreary surroundings of many public schools into such bright, cheery, attractive spots, will create in the child a love for rural life and rural pleasure, at the very time when habits are being fixed and occupations chosen.

Seventy-five per cent. of our exports are farm products, produced by men with no special training save the tradition of the past. If schools and colleges gave what is needed by the practical farmer more farmers would be in attendance, a new sentiment in favor of agriculture would be created, and the very erroneous conceptions which the public now entertain of agriculture would be removed.

There are those who think that the way of a man of genius is hedged in on the farm; that there is no opportunity for him to make a name for himself; that if he must gain riches and honor he must seek more congenial occupations. If this view were entertained by those who are strangers to the farm, it would not matter, but when this heresy finds its way into the firesides of Canadian homes and makes the sons and daughters tired of their rural surroundings, it is time for the public school teacher, who, in most instances, is herself a farmer's daughter, to speak out and do her part in creating a sentiment in favor of agriculture, and showing the boys and girls what they have in prospect when they turn their backs upon the homes of their youth. It is time that other callings and professions were known to the farmer's boy in their true light, and that he realized that the industrious, thoughtful, honest farmer stands a far better chance of success than his seemingly more fortunate countryman in the city. If the public schools do their part in arousing in the minds of the pupils a noble ambition to become progressive and successful agriculturists, they will do a great deal toward counteracting the cityward trend of the rural population, and will have led Canadians to realize that the farmer is one of the most valuable citizens of the British Empire, a man to be respected, appreciated and honored by every member of the community. Until this takes place, the agriculturist will not receive the place in society that his calling deserves, and where it rests in the Old Land. The nobility of England do not consider it a compliment to be classed with the doctors and lawyers, but are proud to be called agriculturists.

RUSTICUS.

### Don't Get Fresh.

It makes animals more lively, strong and resistant of resisting disease. Their flesh is harder and the functions of the body more regular. Their digestion is better, and they can feed on things that otherwise might be injurious to them. Moreover, with the assistance of salt, they extract more nourishment from a given quantity of fodder, since the flow of the digestive fluids is more copious. Give salt with food.

### Advertising.

No one needs to have his attention called to the enormous development of the business of advertising. It is efficient on every side. It is associated with every successful business enterprise. In farming, the practice has been confined almost exclusively to the stock breeder and the speculator, but the question arises whether men in other branches of farming should not utilize more printer's ink in securing markets. The question is easily answered for those in some lines whose stock-in-trade consists of grain, hay, beef cattle, bacon hogs and all such staples as have quoted prices in the market reports for their different grades. On such goods little could be made by advertising, but there are other classes of farm products that might be brought before the public. Mr. David Buffum illustrates a case of this kind in the Saturday Evening Post. He says: "Many years ago circumstances threw into my hands the care and management of a large dairy. The cows were of good quality, but the butter was no whit better than the average. It was marketed at the country store, and in turn sent to the city by the storekeeper. It brought twenty cents a pound, which was the price current for 'farmers' butter' at that time; and, in honesty, that was all it was worth. My first move was to call the attention of my butter-maker to certain principles which, though simple and few in number, must invariably be observed if good butter is to be made. The result was that we soon began to turn out a very fancy article indeed. I now had a lot of sample half-pounds very nicely put up and sent among the people whom I wished to secure as customers, each package accompanied by a printed letter, stating that I was prepared to send by express butter of this quality at thirty-five cents a pound to any one ordering ten pounds or more at a time. Smaller orders than this I did not care for, on account of the cost of expressage. In less than a month we had orders, at this price, for all that we could make; and from that time on the demand was greater than we could supply."

It is some such method as this or by selling on a local trade board that one must adopt in order to secure top prices and avoid the wasteful practice of trading. Such a condition puts one in a position to fix their own price rather than to ask a dealer what he is willing to give.

Inasmuch as farming differs widely from other forms of business, it is necessary that whatever advertising is done should be distinctive and original, and may be of any special line which the farmer has to sell at any or all seasons of the year or of some want that he wishes supplied. The profits on most farm products are very small, and advertising would soon eat these up, unless it were such as to demand the attention of all whom the advertisement reached. Indiscriminate advertising is too expensive for every farmer, but he who has superior goods is in duty bound to himself to make it known to a wide circle of prospective buyers, and this can only be done by advertising, as the people in one's own locality are seldom the best purchasers. The same authority quoted above makes this plain by instancing a case of his own in selling a flock of sheep. The situation is described in his own words:

"I had a large flock of Southdown sheep to sell, and I wished, if possible, to make a clean sweep of them and close out the whole flock at once. I therefore put an advertisement in a journal that had a large circulation among stockmen, calling attention to the pedigrees and individual merits of the sheep, and stating that if the whole flock was taken a low figure would be named.

"I do not think any of my immediate neighbors ever saw this journal, but through that bureau of general information, 'the store,' it became known that the sheep were for sale. One of my neighbors had long kept what he called Southdowns—that is, unregistered mongrels in which Southdown blood predominated—and this gentleman came to me and offered eight dollars a head for the flock, and take the hull on 'em, good, bad and indifferent.' Common sheep at that time were quoted in the stock-market reports at from two dollars and a half to four dollars a head.

"I fancied that my neighbor turned pale while making this generous concession to the merits of pure-bred stock, and he apologized for his conduct by saying that he didn't know but he was a blamed fool, but he wanted them sheep bad. I saved him from further folly by declining his offer. He told me that no one else in the neighborhood would give me any more, and he told the truth. But in this fancy-stock business I had never depended on the neighborhood for a market, and a few days later I sold the sheep to a distant flock owner for twenty dollars a head.

"This, to be sure, was not a large price, individually, for Southdowns, though it is a very good one when it is remembered that it included the whole flock, some of which were aged, and some lambs running with their dams. I mention it, however, not to show that it was a large price, but to show the vast difference between it and what could have been realized without advertising."

Next to treating farming as an exact science should come the consideration of its business aspect, and of first importance in this connection is the art of securing good markets or supplies of whatever kind through the agency of judicious advertising in journals which reach the people most likely to purchase what one has for sale.

**Clover Midge.**

In some parts of Ontario the clover midge was quite prevalent last year, and there is every reason to expect that it will be active again this season. This is an insect that feeds upon the seed as it develops in the head. The adult is a very small fly, much smaller than a mosquito. The females lay their eggs in the hairy spines of the flower of the red clover. Later these eggs hatch, and the young larvæ enter the flower, sometimes preventing the later buds from blooming. When they become numerous they entirely prevent the growing of clover for seed. They pass the winter in cocoons about the roots of the grass, and emerge in the spring as adults. Treatment consists in pasturing the field until about the middle of June, or cutting the first crop early, then cutting later for seed. Plowing after the crop is off also tends to reduce the numbers. Lime and kaint applied after the crop is cut will kill many of the larvæ. Wherever this pest is found some measure should be taken to reduce their numbers, as they become very troublesome when allowed to propagate from year to year. Alsike and white clover has not been affected by the midge as yet.

**Sow Some Rape.**

An ideal seed-bed for rape is one that has been well cultivated the previous summer and is in the best condition for root growing; but most seasons a good crop may be had by the spring preparation of stubble or sod. In both cases the land should be rolled and harrowed immediately after plowing, so that the moisture may be retained. A fair crop may be grown on clean land by sowing broadcast from four to five pounds seed per acre, and covering with a light harrow; but the best crops are grown by sowing in drills, as turnip seed is sown, and cultivated with the horse hoe. When done in this way, one or two pounds of seed per acre is sufficient.

The seed may also be sown in drills on the level, with the grass-seed attachment of the grain drill, by closing part of the openings and sloping the rubber tubes into the shields of two or three of the hoes. The rows in this case will, with the ordinary drill, be only about 21 inches apart, which is too narrow to work a horse hoe to the best advantage, but if worked narrow at first to keep down weeds until the rape gets a start a good purpose will be served.

**The Sugar Beet Outlook.**

The following correspondence indicates that the beet sugar enterprises in Ontario are this season securing the necessary acreage without difficulty, and that the prospects generally are encouraging. Many of last year's patrons are this season growing a larger area. What the writers state regarding the chief need of the industry at the present time is deserving of special attention:

WALLACEBURG.

We estimate the acreage that will be grown for our factory this year to be about 4,000. Many of our patrons are growing larger acreage than last year. This applies particularly to the farmers who grew one, two or three acres the past year. The outlook is more encouraging at the present time, from the fact that the weather is more favorable, and from conditions generally, we hope to cut more than double the quantity of beets manufactured into sugar the past season. The chief need of the industry at the present time, in our judgment, is a large number of small farmers who understand the business of beet culture more thoroughly, and who can take hold of the beet growing properly and look to it for results rather than other classes of farming. In other words, we will have to follow the example set by those in Germany, France and Belgium, by giving the crop the most thorough cultivation and careful attention possible. A large number of foreigners are coming this way and settling on the

land, and if our experiment turns out well this year we will have no difficulty in the future in getting ample supplies of beets.

The Wallaceburg Sugar Co.

DRESDEN.

Our sugar beet acreage this year totals up 4,288 acres, which aggregates about the same as last year. Several of our patrons of last year are growing beets much more extensively this season. For instance, Messrs. Weir & Weir, of St. Mary's; Mr. John Watt, of Pelee Island; and Hon. Lewis Wigle, of Leamington. We regard the outlook as very encouraging, on account of the warm and dry spring. The chief need of the industry at present is labor educated in growing and cultivating the crop.

The Dresden Sugar Co.

ONTARIO SUGAR CO.—FACTORY BERLIN.

Our beet acreage this season will be 4,800 acres, which is an increase over last year, and some of our patrons are growing beets more extensively this year. I consider the outlook as encouraging to the farmer, by reason of the large returns where he handles a reasonable acreage; that is, just such quantity as he can handle with his own family or hired help. It is encouraging from the sugar end by reason of the very high quality of beets produced, and the fact that sugar has been made at a profit this year, notwithstanding the very low price of sugar. The chief need of the industry at present is a thorough knowledge by the farmer of the benefits derived from the growing of beets and the manufacture of sugar in the Province of Ontario.

James Fowler, Secretary.

**British Columbia's Need.**

During the past seven years I have many a time arraigned the Government of British Columbia for neglecting the agricultural development of that Province. By Government, I mean the one that happened to be in power at the time, as the changes have been so frequent during that period as to emulate the elusive thimble and pea—now you see it, and now you don't.

Facts are said to be stubborn things, and as the last census gave us a population of 175,000, it is only fair to infer that 150,000 of these must be consumers of agricultural products, and taking \$6,000,000 as being the amount at which the importation of such products are valued, it is easy to see that each one is sending away to foreign countries the sum of \$40 for food, all of which should and could easily be raised in the Province. Great Britain is the largest importer of food stuffs in the world, but she is also the largest exporter of manufactured articles, and has probably more money invested in foreign countries than all others combined, consequently it is more profitable for her to purchase certain classes of food than to grow them. But in British Columbia it is quite the reverse, and if the latter had the same population as the British Isles, and imported agricultural products for them as now, it would take \$1,600,000,000 annually to pay the bill. These facts are worthy of the most serious consideration, not only by political economists, but more especially by every man who has the interest of the Province at heart and is also desirous of improving his own material welfare. Consumers have more to gain than the producers, and, therefore, the sooner they awake from their lethargy and take an interest in such matters the better.

That it is the duty of the Government of every country, if established, as said to be, for the good of the people, to ordain the cultivation of the earth for the employment, maintenance and education of the people, will be allowed by every person capable of reason and reflection; and, also, that every land owner, by the very act of taking possession, imposes on himself the burden that is inseparably attached to the land, removes it from the Government, and becomes the cultivator in its stead; and, further, that if the utmost benefits are not derived from the cultivation of the earth by the best known means of the present time, it is the duty of every Government to ascertain the fact, search the cause, and to apply the remedy.

I. G. V. FIELD JOHNSON.

**A Plea for the Home.**

To the Editor "Farmer's Advocate":

Sir,—I have just been reading the reports sent out from the O.A.C. The result is to strike while the iron is hot. I am very much pleased with addresses by C. C. James and Miss Livingstone; both touch practically that vital point—our country homes. Mr. James is all right on the "farmer's wife" question, but it is not so much the women's work that worries me, for we can either worry on or help ourselves to better, as our mature sense may lead; but, oh! our boys and girls, that is where it hurts. Any place but the beautiful, God-given country for them, and is not our present public-school system just aiding in laying a very injurious foundation in respect to that? No more leaving work is taken up, only entrance work; then if the children have any ordinary brightness they will pass the exam. at 11 or 12 years of age; then comes the home-killer, sending them away among strangers to live the greater part of their young lives, for what? To get a little more education. Why? The home schools don't take advanced pupils any more. How long are we to wait for our progressive Government to give us the consolidated schools?

Now, you are the farmer's helper to better things. Help us in this all you can through your worthy magazine. I thank you for what did appear in the "Advocate" in regard to this question. Be sure and let us know all about the new course that will soon be introduced at Guelph, for I think it will be a boon to our country girls, and will help to brighten their lives and develop their abilities if taken advantage of. I often think that women have themselves to blame in being so conservative. Look at the farmer. He will, as a rule, invest in the very newest, up-to-date, improved machinery that can be got, but the women will do with old utensils just to save. And so on in many other ways; and seeing that she has always done so, men think she is contented. They do not know of the dead and buried ambitions, because of the daily silent plodding on, and for this reason I would like to see our daughters and sons given a chance to be better men and women, and worthy of so goodly a heritage as our own glorious Canada.

Huron County, Ont. A FARMER'S WIFE.



BRANDING IN ALBERTA.

At the round-up on a ranch at High River, Alta.

**A Neglected Field.**

There is one general field of knowledge too much neglected in our schools and colleges, which offers to the students endless pleasures and occupations through the trained and quickened senses of sight, hearing, and touch. I mean the wide field called natural history. . . . Charles Darwin, the greatest naturalist of the last century, said that with natural history and the domestic affections a man might be truly happy. Not long ago I was urging a young naturalist of twenty-six to spend the next summer in Europe. He thought it was hardly right for him to allow himself that indulgence; and when I urged that the journey would be very enjoyable as well as profitable, he replied, "Yes, but you know I can be happy anywhere in the months when things are growing." He meant that the pleasures of observation were enough for him when he could be out of doors. That young man was poor, delicate in health, and of a retiring and diffident disposition; yet life was full of keenest interest to him.— [President Eliot.

**Coming Our Way.**

That grain men of the United States see great possibilities in Western Canada has been strikingly demonstrated of late. Now comes a further evidence in the incorporation of J. D. McMullan, E. N. Osborne, F. J. Smith, C. T. Jaffray and H. O. Trill, grain merchants, all of Minneapolis, under the title of the Colonial Elevator Company, Winnipeg, with a capital of \$350,000. They propose to run and operate grain elevators and warehouses and carry on a milling business in this country.

### Bones and Tankage.

To the Editor "Farmer's Advocate":

In your last issue I gave some figures showing the amount of wood ashes, our natural potash manure, that are being shipped out of the Province of Ontario each year. I now wish to call attention to what we are exporting in other raw materials, particularly those rich in phosphoric acid. Unfortunately, these figures are not for the Province alone, but for the whole Dominion:

Material.	1901.	1902.
	tons.	tons.
Bones .....	3,230	2,457
Tankage, etc. ....	2,700	3,536

The bones contain from 20 to 25 per cent. of phosphoric acid and 3 or 4 per cent. of nitrogen, and the tankage about 25 per cent. of phosphoric acid and 5 per cent. of nitrogen. If we estimate the value of the bones at \$12.00 per ton, and the tankage at \$14.00 per ton, which is a low valuation even for these unmanufactured materials, we have a total of \$155,536.00 worth of phosphatic manures exported each year. This does not take into account the thousands of tons of fertilizing constituents which are carried away every year in the export of live stock, dairy products, and grains; nor does it include the many tons of bones and scraps of one kind and another which are practically wasted in both town and country the Dominion over. It is made up principally of the residue from pork-packing houses and bones gathered through the country.

We can get nitrogen in abundance by plowing down certain crops, and potash is largely returned to the land in the straw, but three-quarters of the total phosphoric acid in cereals is contained in the grain; seven-eighths of the ash of bone is made up of a salt of phosphoric acid, and milk ash is rich in this same constituent. Thus it is that, even with the best methods of farming, phosphoric acid is being sold off the farm each year in considerable quantities. It is true that much of our soil contains large quantities of phosphoric acid, which thorough cultivation tends to bring into an available form, but it is by no means inexhaustible.

Bones may be brought into a condition in which they are comparatively readily available by putting them in a heap, or better, in a box, mixed with wood ashes, and the whole kept moistened with water. In a few months the bones will be decomposed and the mixture may be spread evenly over the ground. Such a mixture will give excellent returns on a great variety of crops, but particularly on clover meadows or on turnips.

R. HARCOURT.

Ontario Agricultural College.

## DAIRY.

### Finding the Leaks.

An acquaintance of mine had one hundred and two cows on his dairy farm. The farm was not paying, and he asked me if I could find where the trouble lay and point out a remedy. After a careful examination of his farm and equipment, I told him I doubted if all of his cows were paying him a profit.

He was surprised, and said that though the cows varied in quality they were all good cows. The test, however, which consisted in milking each cow separately until her milking qualities were fully ascertained, disclosed the fact that eleven out of the one hundred and two were being kept at a loss, while several others were barely self-supporting!

The weeding out of these worthless animals made it possible to dispense with the services of one of the farm hands, and a further test proved that the cows would give just as much milk and keep in better health on a considerably less expensive ration—a thing their owner should have known long before.—[Saturday Evening Post.

### Creamery Promoters.

Mr. J. W. Hart, Superintendent of the Weston Dairy School, writes the "Farmer's Advocate," cautioning the public against promoters who are endeavoring to organize cream-gathering creameries in parts of Ontario and Quebec, many of them in unfavorable locations, with unsuitable buildings and badly-arranged machinery. Separators are first introduced into a locality, and then promoter No. 2, with his stock-book for the creamery, follows. A few years ago many localities paid exorbitant prices for the establishment of creameries in that way, thinking to save themselves the trouble of looking carefully after the details themselves, thus entrusting the job on blue to someone for whose credentials they never asked. The Ontario Minister of Agriculture has lately sent a competent expert to assist localities in their such projects, and the Department has also experts employed for visiting such places and such other purposes.

### The Why of Cream Ripening.

Cream ripening is one of those farm operations that is entirely dependent upon the mysterious microbe. Everyone knows that cream should be kept cool until just before it is churned, and then warmed up so as to sour it, but why should it be kept cool, and what makes it go sour? The microbe demands it. When milk is drawn from the cow there are comparatively few bacteria in it, but these organisms being everywhere present in the air, soon gain access to the milk, and find it just suited for their growth. Not all microbes are partial to the same conditions in milk. The question of temperature is a constant source of contention with them. The species that gives ripe cream its clean acid taste, and butter its buttery flavor, thrive best at from 55° to 68° F. Above this temperature germs that produce a putrid flavor multiply, and down in the forties a bitter flavor-producing species prosper. Along about 50° or 55° F. there is comparative inactivity, hence the cream can be kept at this temperature for some time, and when it is desired to make it sour so that the butter will have a pleasant flavor, the temperature is raised so that the flavor-producing bacteria can develop. During this rise in temperature the cream is kept stirred, so that there will be an even temperature and an even growth of bacteria.

In bringing the cream to a higher temperature, there is always the danger of some species developing that cause objectionable flavors in the butter, hence the value of a starter. A good starter consists of some good skim milk, heated to about 150° F. for twenty minutes, then cooled quickly as possible to about 70° F. A little of mother starter, sold in packages like yeast cakes, is then added to this, and the whole is covered and set away for a few hours. The mother starter furnishes germs that produce desirable flavors and sourness, so that only the necessary bacteria are present. This starter is added to the cream when it is brought out to be warmed up, and seeds it with germs of the desirable kind, which having a start develop fast, and so predominate in the cream and counteract the effects of other species. Sometimes no mother starter is used, and in many cases buttermilk makes a good starter, in both cases success depending largely upon surroundings and the skill of the manipulator. Nearly all flavors are due to the development of some kind of bacteria, which in the process of growth produce by-products which cause flavor. To control these germs so as to make the desirable species predominate, is much the same as driving up the cows so that the old brindle will be ahead. Familiarity with the herd and a knowledge of the characteristics of each individual is essential for this, and so also in the managing of bacteria in cream to produce the desirable species.

### Spring Cleaning in Stables.

Everyone knows that nasty stably smell that is peculiar to all poorly ventilated and dirty stables. It is not pleasant, it is not healthy, and it frequently remains with the milk until it is made into butter. Like many another disagreeable feature of farming, it is too often regarded as inseparable from the surroundings. That it is not so, is attested in many well-regulated stables. At one of the experiment stations recently a company of dairymen banqueted in the cow stable, and no one suffered from the inconvenience of bad odors so often found in such places. Cleanliness in stables is one of the lessons we seem to have forgotten. Expensiveness of labor has not made it possible to maintain the scrupulous cleanliness that is to be found in some dairy sections, but certain it is that much improvement could and should be made upon the conditions existing in the average stable. At least once during the summer the cobwebs and dust should be swept from the ceiling and walls, and the whole stable thoroughly cleaned and white-washed. Whitewash not alone gives the walls a clean appearance, but it destroys lice and injurious bacteria, and fills the smaller cracks and openings, thus tending to prevent drafts. A stable cleaner of this kind requires but little time, and means more comfort during milking throughout the year, and when associated with this cleaning regimen dry earth is used on the floor, as an absorbent much of the disagreeable odors of the stables is driven off.

W. H. McNaught and Manager Orr, of the Toronto Industrial Exhibition, have issued a special appeal to Canadian manufacturers to fully utilize the splendid buildings that will this year be at their disposal. The space will be about double that yet before available at a Canadian exhibition, and under the arrangement with the Dominion Government, part of their grant will be applied to the utilization of the freight charges generally set by manufacturers to this country, to encourage the exhibition of products of the future.

### Feeding Grain on Grass.

The question is sometimes asked if it pays to feed cows grain when on the grass, and this question opens the whole field of discussion on the profitable feeding of cows. This question cannot be answered universally, on account of varying conditions, such as the price of grain, the market value of the product, the individuality of the cow, etc., but a clear understanding of the principles of feeding for the highest production may help to settle the difficulty. In the first place cows eat to live, but some are more expensive livers than others, hence a difference in the amount of feed required by different cows. The first use a cow makes of her food, then, is to sustain life, and if she eats more than is necessary for this purpose she either converts its elements into fat or milk; we are discussing now the cow that produces milk. Looking at the matter in this light, it would appear that we should endeavor to get cows to eat the maximum amount of feed rather than try to see how little they require to live upon, and our saving should be made by feeding an excess to increase profits, rather than by underfeeding to make a saving of the feed. If we consider the cow a milk-making machine, which requires a certain amount of feed to maintain itself, and which converts the excess of this amount into milk, we would be much more inclined to liberal feeding; but with this liberal feeding should go a culling out, as some cows, like some men, appear to live to eat. Dairying is not a mechanical business, and close study of its problems invariably increases its profits.

### Water Content of Butter.

The moisture content of our butter is one of the most perplexing and exasperating problems that the dairyman has to solve. It is not simply a question of getting butter of the proper per cent. of water, for that is fairly easily accomplished by careful working, but a peculiarity of our butter is that it is often too wet when it contains less water than when it is too dry. Some light has recently been thrown upon this subject by Prof. Storch, who claims that this apparent inconsistency is due to the arrangement of the water, or its division into small or large particles, as the case may be. The small particles, though aggregating very little in a given sample of butter, may account for a "slushy" texture when in another sample where the aggregate of moisture is nearly double, but in larger particles the butter may to all appearances be dry and firm. Prof. Storch intimates that this variation may be due to the conditions of ripening the cream rather than to the working of the butter.

To assist in determining this question is clearly the duty and privilege of every buttermaker. Close observation will, no doubt, throw much light upon this subject, and will help to improvement in the general quality of our butter. The moisture content of our butter now is far below the per cent. allowed by the British adulterated butter law, and there is no reason why we should not sell water for the same price as butter-fat, when the two are properly mixed and demanded by the market. In fact, if we are to compete with other countries, we must maintain as high a water content as our competitors do, else we are at a greater expense of production and under a self-imposed handicap.

### Dominion Cool-curing Rooms.

The four cool cheese-curing rooms maintained by the Dominion Department of Agriculture at Woodstock and Brockville, Ont., and St. Hyacinthe and Cowansville, Que., to illustrate the advantages of curing cheese at a uniform temperature, not exceeding sixty degrees, were opened on May 18th for the summer's work. The capacity of these curing rooms is of course limited, and in consequence only about the same number of factories as last year are able to contribute cheese, although the owners of many other factories were desirous of doing so. There has in the past been some doubt as to the practical utility of cool curing, owing to the cost of erecting suitable buildings, and the impression that they would only be of benefit during the hottest weather. People have hesitated to incur the expense of building cool curing rooms for fear they would only prove useful for about two months in the middle of summer; experience has shown that this is not the case. It has been found a decided advantage to be able to control the temperature of the curing room whenever the temperature outside exceeds sixty degrees, practically a period of six months, or from the first of May to the end of October.



## GARDEN AND ORCHARD.

**The Fruit Marks Act.**

Sir,—Noticing that Bills to amend the Fruit Marks Act are being introduced in the House of Commons, many fruit-growers consider it an opportune time to draw the attention of legislators and the public to some grievances which exist under the Act, and possibly to suggest remedies for some of these evils.

No one questions the fact that great improvement in the packing of fruit has resulted from the passing of the Act of 1901. As far as known, all fruit-growers are in fullest sympathy with what was ostensibly the purpose of its designers. The purpose of the Act, as clearly stated and understood at a conference between the Hon. the Minister of Agriculture and representative fruit-growers and dealers, was so to frame it as to consider the interests of the growers in preference to those of the dealers when these interests conflicted:

To prevent fraud in packing by having the contents of all closed packages to correspond fairly with the face or shown surface of such package;

To give the packer's name and address in full as a guarantee of good faith;

And to stipulate that certain marks to be defined were not to be used unless the contents of the package graded up to a certain standard, all other marking to be at the discretion of the shipper.

These provisions would have adequately protected the public from fraud, would not have been onerous on the grower or shipper and would have been entirely acceptable to the great majority of fruit-growers and to fair-minded dealers.

The beneficial results have been derived principally from section 7 of the Act, which provides that the face of any package shall be a fair representation of the contents, and from clause "A" of section 4, which provides for the name and address of the packer being placed on all packages. These are the vital points of the Act, and constitute within themselves a sufficient safeguard for the public, and with the penalties imposed for infractions a sufficient deterrent to such packers as may be fraudulently inclined. These demands are not too much to expect of the ordinary fruit-grower, who can readily understand the difference between honest and fraudulent packing and who cannot but understand the importance of fruit going forward under his name having a uniformity of excellence.

These improvements in the trade and satisfactory conditions, as before stated, have been effected entirely under certain sections of the Act as originally passed in 1901, but in the dying hours of the session of 1902 amendments to the Act were railroaded through the House without explanation or due consideration, and being quite uncalled for either by the public or fruit-growers. The objectionable features of these amendments are principally embodied in clause "C" of section 4, which arbitrarily demands that a farmer shall grade to a specified standard which must necessarily vary materially in different sections, and in the idea of various individuals, and then brand with a fixed mark to designate the grade or quality, which no other class of the community is called upon to do and to which no class but the farmer would submit.

It is, therefore, widely regarded as an unwarrantable interference with the fruit-growing industry and with the rights of a citizen, and the farmers of the Dominion should as one man rise and protest against this injustice being perpetrated on a section of their calling and resent the indignity thus thrust upon them.

Penalties are provided for failing to comply with all the conditions required, and heavier penalties for attempting to do so when the judgment of the farmer fails to conform to that of the Inspector, although it may be the judgment of an experienced and honest packer against that of an Inspector whose efficiency is questionable, and the farmer is at once branded a criminal without the privilege of trial by jury. Thus trade is seriously hampered by terrorizing the grower, who, rather than take the risk of marking his packages and incurring the odium of being fined, is induced to sell his fruit to the speculator much below its value or allow it to remain in the orchard.

This compulsory grading and branding is not only impossible as applied to all packers under varying conditions, but it is both absurd and useless. Being the marks of the owner who is an interested party, these marks demanded by the Act would not be considered by any court, and would, consequently, have no commercial value in case of a dispute between buyer and seller.

There should be no compulsory grade marks, and responsibility for grades should not rest on the farmer but on qualified and competent inspectors, who should be available to do inspection work when required, and issue certificates as in other lines of business. These certificates would be final in case of dispute as to quality.

The Act might in the opinion of many shippers define No. 2 or No. 3 fruit, but it should be entirely optional with a shipper whether he has his fruit graded to a Government standard or not. Millions of bushels of wheat change hands annually without inspection, and when it is inspected the owner does not indicate the quality, but the Inspector makes his examination and issues his certificate. In such cases the person requiring the services of the Inspector pays the established fees.

WM. F. W. FISHER,  
Secretary Burlington Horticultural Association.

**The Codling Moth.**

One of the worst of the insect pests that affect the apple is the codling moth. The full-grown insect is a chocolate colored moth, about three-fourths of an inch in length. They are active about the time the young apples are formed. They are not noticed in the orchard during the day, as they get in their work in the evenings. They lay their egg on the surface of the young fruit. The eggs of the first brood are mostly deposited in the calyx or blossom end of the apple, for the larvæ of the first brood almost invariably enter the apple from the calyx. The egg hatches in about eight days, and the young grub begins to gnaw its way into the apple, working toward the core. There are two ways of destroying the pest, and both should be employed. First is by arsenite poisons, sprayed on the trees, along with the Bordeaux mixture, just after the blossoms fall, using about five or six ounces of Paris green to 40 gallons of Bordeaux. The idea is to get the poison on the surface of the apple, so that when the young grub begins to gnaw its way into the apple it will be destroyed. But for those that are not reached by the poison, the next step is to trap them by means of bandages tied around the trunks of the trees. When the larva once enters the apple it cannot be reached by any poison. It continues feeding as the apple develops for several weeks, burrowing mostly around the core, until it has attained a size of three-fourths of an inch in length. It has now completed its larval growth, and, leaving the apple, seeks for some suitable hiding place, usually a crevice in the bark, where it spins a kind of silken cocoon, in which it changes to a pupa. In about two weeks it emerges as a moth, and its life cycle is completed.

By tying a bandage of burlap or any old sack around the tree, you provide it with just what it is seeking for when it emerges from the apple, a suitable hiding place. These bandages may be made of strips about ten inches wide, and long enough to go twice around the tree, and are tied with a piece of twine. They should be examined occasionally from the time the apples are half-grown until late in the fall, and the grubs destroyed. If both these measures were followed by all apple-growers, the codling moth would be almost, if not entirely, stamped out. There is a difference of opinion as to the number of broods in a season, but it is safe to say there are at least two, except, perhaps, in the most northern sections. The second brood are the most destructive, boring large, unsightly holes in the sides of the apple, and from which a dark colored streak often extends.

It is, therefore, important to prevent the second brood as much as possible by the use of the bands. Good results are often reported from the pasturing of sheep or hogs in the orchard. It is claimed that the affected apple often drops from the tree with the larva still in it, and as it is immediately eaten by the animals the larva is destroyed. As a supplementary method, this is well worth trying.

**Two Orchard Pests.**

During the recent series of orchard meetings in the Georgian Bay district, several new and interesting questions were brought up for discussion. For instance, at the meeting held at Banda, April 2nd, two samples of injuries to trees were shown, with which the experts were not familiar. Mr. A. McNeill, Dominion Fruit Inspector, kindly offered to investigate the matter and report the result through the press of the district. These results are now submitted: In Mr. Fleck's young orchard the trunks and branches were thickly covered with scars, not unlike the wounds made by hail, but occurring on the under side of the branches as well. Mr. McNeill reports that this injury is caused by the Buffalo tree hopper (*Ceresa bubalus*). This insect, which looks not unlike an animated beechnut, with two sides somewhat longer than the third, makes its appearance about the middle of July, and continues to live upon the juices of plants of various sorts till the end of summer. It seldom does much harm, although the scars made in the young wood for the deposit of eggs are somewhat unsightly. Dr. James Fletcher, Entomologist and Botanist of the Dominion Experimental Farms, says that there is no effective remedy for the Buffalo tree hopper. The other injury appeared first as a dark discoloration on one of the larger branches. This discoloration extended, and the wood died under the discolored bark. By the third year the limb was entirely girdled and the portion above the injury dead. This was, undoubtedly, a case of canker. The best remedy, if the limb be small, is to cut it off well below the injury and burn it. If a larger limb or the trunk of a tree be attacked, it is advisable to cut out all diseased parts, well into the healthy tissue, wash with the Bordeaux mixture, and when the wood is somewhat dry, paint with linseed oil paint. The wood should be kept well painted to protect it from the weather until the wounds heal over.

Dept. Agriculture, Ottawa.

**Protection of Fruit Trees.**

In our issues of 1st and 15th of April last, we referred to a supposed new method of destroying insect pests and fungous diseases on fruit trees by filling a hole bored in the trunk with a mixture, the ingredients of which were supposed to be dissolved in the sap and carried up to the limbs and leaves, and we quoted the remarks of Mr. Dearness, Professor of Botany in the Western University, and Prof. Shutt, Chemist at the Dominion Experimental Farm, upon the subject. We have received a letter from Mr. M. Owen, proprietor of a process for protecting fruit trees against injurious insects and fungous growths, in which he disclaims the use in his process of the method and materials referred to by us, which were the insertion of a quantity of a sulphurous pulverized compound into a hole bored into the trunk of the tree. He disagrees with the opinions of Professors Dearness and Shutt. Upon the question of opinion as to the efficiency of any method such as we referred to we must now leave the matter with our readers. Mr. Owen is, however, entitled to the benefit of his statement that his method and materials are not the same as those we referred to.

**The Blenheim Orange Pippin.**

This well-known English apple is worthy of a place in the list of commercial varieties of this country. It is usually classed as a fall apple, and, generally speaking, this classification is right, although in the northern sections of Ontario it might well be called an early winter variety.

The tree is a healthy, thrifty grower, quite hardy in most localities, and has a spreading habit of growth. It does not begin to bear well until the tree has attained considerable growth, but bears fairly well after. The fruit is large and clean, and does not scab or spot. When fully matured it presents a handsome appearance, is very uniform in size, so that there are very few culls. The flesh is a little coarse, but it cooks well. Its chief value is for export to the English markets. It seems to be quite a favorite with the English people, and any year that the English crop is short, it will pay probably the best of any for fall shipment. Last fall it was often quoted as high as the King in London and Liverpool. It is a firm apple and ships well in its season. It is a very nice apple to ship in boxes, owing to its fine appearance and uniformity in size. It is said to do best in a moist climate and near large bodies of water, but it is found to succeed well over the most part of the Province of Ontario.

It should not be planted, however, in exposed places, where it will be exposed to high winds, as the fruit is liable to be blown off when near maturity. It does not cling to the tree as well as some varieties, and just here is a point for planters to consider: The placing of different varieties to the best advantage, with regard to exposure. The Spy and Ben Davis will probably suffer the least loss from heavy winds, and these might occupy the most exposed positions, while the Pewaukee, King, Wealthy and Blenheim should be sheltered. But, notwithstanding these minor defects, if autumn apples are to have a place on the commercial list, there is probably none more worthy than the Blenheim Orange.

**Alkali Wash for Orchard Trees.**

Early in June is the time to use an alkali wash to good advantage in the orchard. There is nothing better than lye made from hardwood ashes, and it can be used pretty strong. Where the trees are large they should first be scraped to remove the shell bark from the surface, and one of the best methods of applying the wash is by the use of an old wood splint broom; one that is pretty well worn suits very well. Tie a wire around it to keep it in shape, for the lye will soon soften it. The trunk of the tree should be scrubbed, and as far up and out on the limbs as possible, being particular to scrub off any moss and places on the limbs that seem to have a black sooty appearance. It will remove bark lice and destroy them wherever it comes in contact with them. It seems to have a tonic effect on the bark, and is a very effective preventive of borers. The borers usually lay their eggs on the trunk of the trees about the first week of June, or thereabout. In the case of the round-headed borer, mostly near the ground, while the flat-headed borer is likely to deposit its eggs higher up. But the effect of a strong alkali wash applied to the trunks is to prevent the borers from depositing their eggs. The wash will be still more effective for the prevention of borers by the addition of a little crude carbolic acid. In the case of the borers, prevention is better than cure, for these insects spend three years in the larval stage, and in that time work great mischief. Four or five bushels of good ashes will make enough lye for a large number of trees. Take the lye when it will float a potato, and add water until the potato sinks. This will not be too strong for large trees, but should be diluted still more for young trees.

### Damage by Field Mice.

A great deal of damage is reported from many localities this year from the ravages of field mice. Their visitations seem to be periodical, this time beginning in the east and spreading westward. They seldom attack the bark of large trees, but are capable of doing extensive damage to young ones. They nest in the long dry grass around the fences, from which they burrow under the snow to the trees, and the rows nearest to the fences usually suffer most. Girdled trees can often be saved by bridging; that is, connecting the upper and lower edges of the wounds by means of scions, and covering the ends of the scions with grafting wax and the wound with fresh cow dung, or a mixture of fresh cow dung and wet clay. The girdled trees should be examined and attended to early, as soon as the snow goes off in spring. In many cases the trees can be saved without resort to grafting. They will often gnaw off the outer bark and leave the most of the inner or cambium layer. Where this is the case the wound should be immediately covered with the above mixture, and a piece of canvas wound around over it and tied. Where the wound is quite close to the ground it is a good plan to bank it up with earth after dressing the wound.

In the way of prevention there are several methods, and probably the reason that so much damage was done this year was that none of them were practiced, owing to the fact that the pests have not been troublesome for some time, and so people were not prepared for this year's visitation. One of the most effective measures is to wrap pieces of tar paper around the trunks from the ground up, as far as the snow is likely to reach, and tie them with a piece of twine. With one to cut the paper and strings, and another to wrap and tie, it does not take long to protect a large number of trees. Another plan is to tramp the snow solidly around each tree early in the winter, and another is to poison the mice by placing pieces of poisoned cheese around the fences where they are likely to harbor. It should be placed under boards, where the mice can get it, and a stone placed on top of the boards to prevent dogs and cats from getting at it. These poisoned baits may be placed at intervals along the fence all round the orchard, or wherever the mice are likely to locate themselves.

### Fruit Growers' Educational Campaign.

After a few days of practical work with Professor Macoun, at the Central Experimental Farm, Ottawa, the members of the staff of the Fruit Division are returning to take up active work in their respective Provinces. Messrs. Vroom and Burke are inaugurating a series of meetings in Prince Edward Island similar to those conducted by them last year. A speaker has been secured to conduct a series of orchard meetings in the Annapolis Valley and other parts of Nova Scotia. Messrs. Scriver and Dery returned to continue their orchard meetings in the Eastern townships and on the Island of Montreal, where they will be until the middle of June. In co-operation with Mr. Creelman, of the Provincial Department of Agriculture, it has been arranged that Inspector McNeill will attend a series of annual meetings in the Counties of Haldimand, Grey, Simcoe, Bruce, Brant, York and Wentworth during the first two weeks of June. In the West, Inspector Carey is now engaged in giving a series of demonstrations in systematic spraying, in co-operation with the successful orchardist, Mr. J. C. Harris, of Ingersoll. A valuable and practical educational campaign is being conducted in five Provinces of the Dominion, under W. A. MacKinnon, Chief of the Fruit Division. The New Brunswick meetings just finished, which were held under the auspices of the Provincial Department of Agriculture by Inspectors McNeill and Vroom, have been a pronounced success, and have led to many applications for the extension of the work. There appears to be a general revival of intelligent effort in the direction of improving the fruit industry throughout Canada.

### A Pear Tree Pest.

A report from Simcoe Co. states that, "A little flea-like fly has attacked the pear trees of this district, causing the leaves to curl and turn red." From the meager description given, we would suspect the pear-tree aphid of the depredations. This is an insect that appears about the end of May or beginning of June. The winter is passed in the egg stage, and that is the time to work their destruction, by cleaning off the rough bark and applying caustic washes, as soap suds or weak lye. The same treatment in June is also recommended. I do not deem very destructive to the young and leafless beetles also do away with many of them. It is well to remember that with the changed conditions of this country, many species of insect life have become prevalent, and as we have no means of control, we are obliged to watch the trees and plants upon which they can be found, and also use some checks to

prevent them from becoming uncontrollable. We cannot get around the fact that we must spray and scrape and wash until some other methods are introduced, which, most probably, will only be modifications of those in use at present.

## APIARY.

### Curing Foul Brood.

BY WM. M'EVROY, INSPECTOR.

In the honey season, when the bees are gathering freely, remove the combs in the evening and shake the bees into their own hives; give them frames with comb foundation starters on and let them build comb for four days. The bees will make the starters into comb during the four days and store the diseased honey in them which they took with them from the old comb. Then in the evening of the fourth day take out the new combs and give them comb foundation to work out, and then the cure will be complete. By this method of treatment all the diseased honey is removed from the bees before the full sheets of foundation is worked out.

All the old foul brood combs must be burned or made into wax after they are removed from the hives, and all the new combs made out of the starters during the four days must be burned or made into wax, on account of the diseased honey that would be stored in them.

All the curing or treating of diseased colonies should be done in the evening, so as not to have any robbing done or cause any of the bees from the diseased colonies to mix and go in with the bees of sound colonies. By doing all the work in the evening it gives the bees a chance to settle down nicely before morning and then there is no confusion or trouble.

This same method of curing colonies of foul brood can be carried on at any time from May to October, when the bees are not gathering any honey, by feeding plenty of sugar syrup in the evenings to take the place of a honey flow.

It will set the bees robbing and spread the disease to work with foul-broody colonies in warm days when bees are not gathering honey, and for that reason all work must be done in the evenings when no bees are flying.

Where the diseased colonies are weak in bees, put the bees of two, three or four together, so as to get a good-sized swarm to start the cure with, as it does not pay to spend time fussing with little weak colonies.

When the bees are not gathering honey, any apiary can be cured of foul brood by removing the diseased combs in the evenings and giving the bees frames with comb foundation starters on. Then, also, in the evenings, feed the bees plenty of sugar syrup, and they will draw out the foundation and store the diseased honey which they took with them from the old combs; in the fourth evening remove the new combs made out of the starters and give the bees full sheets of comb foundation and feed plenty of sugar syrup each evening until every colony is in first-class order every way.

Make the syrup out of granulated sugar and put one pound of water to every two pounds of sugar, and then bring it to a boil. As previously stated, all the old combs must be burned or made into wax when removed from the hives, and so must all the new combs made during the four days.

The empty hives that had foul brood in do not need any disinfecting in any way. I have handled many hundreds of colonies in the Province of Ontario, and cured them of foul brood without getting a single hive scalded or disinfected in any way, and these colonies are cured right in the same old hives. In my judgment, resulting from experience, it is the greatest of folly to waste any time over the empty hives, as there is no more reason for scalding empty hives that foul brood had been in than there would be to scald the feet of all the bees that travelled over the diseased combs. No colony can be cured of foul brood by the use of any drugs. All the old combs must be removed from every diseased colony, and the honey got away from the bees before brood rearing is commenced in the new clean combs. Foul brood apiaries are cured by wholesale every year in the Province of Ontario by my methods of treatment, which I have given here.

### Preventing Robbing During Extracting.

At the meeting of the Northern Michigan Beekeepers' Association, held last March, the question of how to prevent robbing during extracting time was pretty fully discussed. The conclusion arrived at was to put the empty combs back in the hives at night if the bees begin robbing. By putting empty combs dripping with honey back into the hives in the daytime, all the bees in the yard must be attracted to the care of these combs, and during the operation the robbers "get in" and get out, and after learning the trick will not be so general wherever extracting is going on. The advantage of putting the empty combs back in the hives at night does not interfere with the normal activities, and in the morning things can be put as usual.

### Hives for Farmers.

As this subject is always a debatable one, even among beekeepers who have been in the business for some time, and as it is largely a question of individual opinion, would say at the start that it is not my object in writing these notes to try and persuade any beekeepers to change from the size of hive they are now using. However, as at this time of the year some prospective apiarists may be thinking of making up some hives for the coming season, a few hints from one who has had some experience with different sizes and styles of hives and frames may be of interest to such. Certain it is that had the writer been a little better informed along this line when he first started to keep a few bees, a great deal of bother and worry might have been avoided.

Broadly speaking, hives can be classified as large and small. Each kind has, of course, its champions, and there is no doubt that in the hands of the specialist, with suitable management, each can be used with satisfaction.

Presuming that the majority of the beekeeping readers of the "Advocate" are engaged in the pursuit as a side issue and not as a specialty, I will state what I consider the most profitable size of hive for such to use, and at the same time briefly give my reasons for such preference.

First, and paramount, bees in large hives (especially if run for extracted honey) can be managed with far less work, a very important item to the farmer who always has plenty to do.

In the spring they will not need attention so early in the season, as there is almost sure to be more stores than in a small hive, consequently less danger of starvation. There is more room for brood-rearing, and as the queen is not cramped for room to deposit eggs, swarming will not likely occur too early in the season, say in fruit bloom, a time of the year when the colony should be kept intact if possible. With large hives, swarming will be greatly reduced. If abundant storage room is given in time, the great majority will not swarm at all. These that do swarm will throw out "whoppers," for in my experience large hives invariably mean very populous colonies. In the fall there will be more likelihood of the bees having more honey in the brood chamber for winter stores than would be the case if a hive as small as the 8-frame Langstroth were being used. Thus feeding is avoided, not a very pleasant job at best, especially in the hands of the farmer, who is always busy with the fall work at the time bees need this attention.

In our locality bees in 8-frame L. hives when run for extracted honey, very seldom have more than from five to ten pounds of honey in the brood chamber at the close of the honey season. Bees in larger hives in this locality at least always winter the best. Farmers around us, who the past fifteen or twenty years have been keeping bees off and on, are nearly all "out of business," with the exception of a few who have been using very large hives. To be sure, in the hands of specialists, not likely there would be this difference. However, we are not considering the question from that standpoint. Last, but not least, in my experience the bees in the large hives always give us much greater returns for labor expended. I admit that with proper attention at the right time, including such manipulations as hoisting brood up into the upper stories, etc., my yields from the smaller hives might be greater. But experience proves that in the height of the honey flow, when we are so busy we don't know what to do first, much of the work that should be done is not done, by reason of circumstances over which we have no control.

Let me illustrate: By reason of buying bees from different parties, unfortunately, I have hives of different sizes, varying from the 8-frame L. to the 10 and 12 frame Quinby. As all will recollect, last season was an exceptional one for excessive swarming. Not being able to get the necessary help at the proper time, could not give the bees in the smaller hives the extra attention required. As a result, they swarmed excessively quite early in the season. Those in the large hives were given plenty of surplus room and let alone; in fact, the brood chambers were not looked into from the time the queens were clipped until winter preparation. Only about twenty-five per cent. swarmed. Instead of being demoralized with the swarming fever, the whole forces of the colonies were concentrated in storing honey.

While the smaller hives did not average over 75 pounds per colony, those in the large hives (that did not swarm) doubled that yield. One colony in particular stored 350 pounds of clover honey, besides some fifteen or twenty pounds gathered in fruit bloom and fed to more needy colonies later on.

In the production of comb honey, I suppose there is no doubt but that in the hands of the large producer a small hive is preferable. However, for the farmer who wishes to produce some comb honey for his own use, would still advise the use of the large hive, but instead of using the comb honey supers commonly in vogue, would use the old style wide frames, i.e., have the sections fitted in ordinary extracting frames (with wide

end and top bars) and then use them in an ordinary extracting super. Have seen some very choice honey produced in this way, and for the busy man who wishes a little comb honey, I think the plan par excellence. If asked for a definite statement as to what I consider a large hive, would say, nothing smaller than a 12-frame Langstroth or 10-frame Quinby. The latter frame, which is two inches deeper than the L., is my preference, and if I were starting in the business, it is the size I would use exclusively.

Much more might be said pro and con as to the merits of different sizes of hives, including as well single walled or packed hives, but as space will not permit, these matters must be laid aside for the present at least. J. L. BYER, York Co., Ont.

**Introducing New Queen.**

T. K. Massey, of Tophit, W. Va., tells of a plan of introducing a new queen, which he says is sure to work. He says to take two frames of hatching brood and put them on an upper story, which is set on top of the hive that is to get the new queen, but separated from it with a thin board. The queen is let loose upon the hatching bees, and the upper story closed up. A day or two later the old queen can be destroyed and the bees shaken off the frames, and these placed in the upper story. A single sheet of paper in which are made small pin-holes is then slipped in place of the thin board. When the bees below find themselves queenless they will at once become restless, and will work their way through the paper to the upper story, where they will find a queen with their brood and laying normally, and having the same scent as the combs.

**POULTRY.**

**Helpful Hints on Poultry Raising.**

Will all who read my letters kindly remember always that in attending to my poultry I have to economize my time and labor, but I still aim at obtaining good results.

To succeed, we must have plenty of room. My henhouse is 48x18 feet; half of it was originally a pig house. My henhouse proper is divided by wire netting into three divisions, which I find most convenient. One division answers for a hospital, another for sitting hens, or if you want to set eggs from a few special hens, it is easy to separate them. In the addition (the pig house) I have had a cement floor put down and six windows put in, and double ones at that; they are placed low to the floor, and face the east and south. I also have wire windows and wire doors for summer use. This house I use for my hens in winter, but I give them the run of the whole building in daytime; but I turn it into a hatching house in spring, and put all my young birds into it at night, as it is rat proof. The hens soon get accustomed to laying in their old quarters. On account of using an incubator, I set very few hens. I set duck, goose and turkey eggs under them. I find it a capital plan to scatter a quart or two of wheat among the straw in the chicken-house at dusk, and also put in fresh water, so that the chickens can commence to scratch for their breakfast as early as they like in the morning. We can't let the chickens out too early. As soon as I start the men at their breakfast I take the "johnnycake" and water to the chickens, and toss all the sitting hens off and out of doors, and give them some grain and leave them to their own devices for half an hour or so, when they generally go in alone, and my son sees they are in their right nests and partially covers them, and then lets out the laying hens.

A few words about mites. I wrote to the "Advocate" praising Mr. Gilbert's method of getting rid of them, "corrosive sublimate," but I am afraid I will have to take it back. I am not free yet. I noticed them again this spring. I intend following my neighbor's advice this time. Save your washing water; put it in the pig boiler; bring it to the boil, and add salt and a pail of ashes and apply freely. I did it ten days ago, and as yet have not noticed their return. The "corrosive" does not kill the eggs; the "lye" water does. TRIX.

**Want Cheap Eggs.**

About twenty Canadian egg-exporting firms met in Toronto, Ont., recently, in an endeavor to reach some agreement among themselves to regulate the prices to be paid for eggs for export purposes. A year ago an effort in this direction was made, but with no satisfactory result. Competition between the dealers has been so keen that the prices are said to have got too high to make money. While a maximum price of 10½ cents a dozen for pickling eggs and of 9 cents to 10 cents for cold-storage stock was agreed upon, the gathering broke up without having attained the object hoped for, and every dealer will continue to look out for himself.

**In the Poultry Yards.**

About the most important feature in connection with poultry-raising just now is the constant care required by the sitters and the chicks. There has never yet been invented an alternative for patient devotion to the flock, and no good poultryman wants one, for it is in the exercise of this care that one gets the most of the enjoyment out of the business. At present the chicks need to be kept free from lice, supplied with pure water and proper food, including green feeds and cracked grains. Plenty of sunshine now is enjoyed, but later on shade will be desirable, one means of providing which is the growing of sunflowers in the yards, which answer the double purpose of supplying shade and feed when the seeds ripen. This is the growing period for the chicks, and the working time for their owners. It is the time when experience is acquired, and the man who profits by his and his neighbor's is the one who is getting nearer success.

**Growing Birds.**

From now on the object is not to keep the young stock fat, but to keep them growing. For this purpose some grains are more suitable than others, barley, wheat and oats making up the list. At no time should all the grain be fed that the birds will eat, and plenty of grit and exercise is necessary to insure the digestion and assimilation of the food. Green food and meat scraps are also essential to the best growth, with clean water always plentiful. When at about maturity a change in treatment can be made, when less exercise and more fattening foods will be in order, but it is only a waste and poor policy to keep any class of young stock on fattening foods while they are getting their growth. Of course it is not advisable to run to the opposite extreme, but just keep the stock growing and their bones well covered and then finish off before going to market.

**QUESTIONS AND ANSWERS.**

- 1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.
- 2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.
- 3rd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.
- 4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

**Veterinary.**

[Answered by our Veterinary Editor.]

Subscribers are kindly requested to read the conditions at the head of this department before writing or mailing their enquiries.

**SORE SHOULDERS.**

Horse in good condition, and feeds well, but is troubled with sore shoulders; small lumps or boils appear, and become raw. G. F. Algoma, Ont.

Ans.—Your horse is predisposed to skin eruptions. See that the collar fits well and is kept perfectly clean. Bathe the shoulders well and often with cold water and salt. Remove the collar at noon, and bathe the shoulders; set the collar in the sun to dry, and before putting it on again clean it thoroughly. Apply to the raw surface a lotion composed of one ounce each, sulphate of zinc and acetate of lead, and one dram carbolic acid to a pint of soft water. It is hard to heal a shoulder without giving rest.

**MORE SORE SHOULDERS.**

We have a mare with sore shoulders, and cannot cure her. J. J. McC. Cardwell Co., Ont.

Ans.—See article, "Cure for sore shoulders," in this issue, and also answer to "G. F."

**JOINT ILL.**

Colt, two days old, got lame and swelled in ankle and hock. The umbilicus was swollen and began to discharge a muddy fluid. Our local veterinarian said it was joint ill. He gave the colt 15 gr. doses soda hyposulphite, applied iodine and camphorated oil to the joints, and cauterized the umbilicus and stitched it up. He told us to keep colt away from other foals, as the disease is infectious. What is the nature of the disease, and did the veterinarian give proper treatment? Addington Co., Ont. A. A. J.

Ans.—Joint or navel ill has received special mention in this journal on several occasions within a year, and means of preventing its appearance have been discussed very recently. The disease is due to a germ that enters the umbilicus, gains the circulation and locates in the joints, causing soreness, swelling, the formation of pus, sloughing of the articular cartilage, and usually death. If by nursing and treatment the life of an affected colt be saved, it is probable it will be a cripple and worthless. Your veterinarian evidently understands the disease, and while there are many methods of treatment, the one he adopted is as good as any.

**CHRONIC LAMENESS.**

About a year and a half ago my horse ran a nail into his foot, and has been lame ever since. The hoof is growing out of shape. I have blistered his coronet without benefit. My veterinarian talks of firing him, but will not guarantee a cure. I will pay the price if cured. No cure, no pay, as I have before paid without benefit. W. S. Peterboro Co., Ont.

Ans.—Veterinarians of any standing will not undertake to treat a case on the system of "no cure, no pay." A reputable practitioner will honestly tell you the probable results of treatment, and after being informed on that point, if you desire to have the case treated he will treat it, and make a reasonable charge, whether you derive benefit or not. Only quacks or practitioners of very low standing and with little respect for themselves will guarantee a cure in any case. An honest practitioner will honestly tell his patron the probable results of treatment, and if he (the owner) decide to have the case treated will proceed to treat and collect a reasonable fee, whether or not treatment has been successful. Quacks only treat on the principle of "no cure, no pay." From the symptoms given it is doubtful whether treatment would result in benefit, but your veterinarian, having seen the case, is in a much better position to judge than I, and I would advise you to follow his advice. If he treats he will doubtless do his best, and if this fails it will be your misfortune and not his fault. If practitioners received large fees for successful treatment they might afford to cancel fees when treatment is unsuccessful.

**SUPPURATIVE ARTHRITIS.**

My horse acquired the habit of kicking the stone wall of his stall. I could not stop the kicking. The hock swelled and became very sore. I employed a veterinarian; he placed the horse in slings, and had the joint bathed with warm water and a liniment applied. It broke and ran a little matter for a few days and then healed, but the leg remained very large and painful. I wanted the veterinarian to blister or open and allow the pus to escape, but he said the liniment was better. In six weeks he died. I opened the joint and found about a quart of dark matter, and the bone had commenced to decay. I found that the liniment had not gone through the hide. Do not you think it should have been blistered or lanced? Brant Co., Ont. H. B.

Ans.—The bruising of the joint by kicking caused arthritis (inflammation of the joint), which resulted in decay of the bone and formation of pus. The veterinarian treated it properly. The pus was so deep seated if the part had been opened it would have caused open joint and hastened death, and then you would probably have blamed the practitioner. Liniments are not supposed to penetrate the skin, but the effects of the application are deep seated. When we want a liquid introduced beneath the skin we inject it hypodermically. No treatment would have saved your horse. This is one of the many cases in which the veterinarian is blamed when he has done all that possibly could have been done.

**SANDY MATTER IN THE BLADDER.**

1. I bought a mare last fall whose urine was yellow and sandy. I gave her repeated doses of saltpetre, then purged her, and followed up with repeated doses of saltpetre and resin, but she remains the same.

2. What are the symptoms and treatment for corns? Bruce Co., Ont. W. K.

Ans.—As the diuretics given have not effected a clearing of the urine, and there appears to be a sandy matter passed, we must conclude that the trouble exists in the bladder and not the kidneys. The bladder needs to be flushed out with a warm, two per cent. solution of Zenoleum or creolin. This operation can be performed only by a veterinarian, and will probably need to be repeated several times.

2. Lameness, tenderness upon pressure upon the quarters, more frequently the inner quarter; that is, the triangular space between the bar and wall on the inside. Upon paring away the sole, red streaks and sometimes pus will be seen. Treatment consists in removing the shoe, paring the corn well down; give rest and apply warm poultices. When soreness and lameness disappears, shoe with bar shoe, so that no weight will be on the wall of the affected quarter.

**ECZEMA.**

Last August mange broke out on the neck and shoulders of my two-year-old colt. It got better in November. I want to drive him now. What is the treatment for mange, and can I prevent its reappearance? Haldimand Co., Ont. T. B.

Ans.—Your colt did not have mange. This is due to a parasite and is very contagious and hard to treat. He had a skin disease (non-parasitic) called eczema. This is usually due to high feeding and want of exercise and grooming. If it should appear again, purge him, wash the parts thoroughly with strong soapsuds, and apply twice daily a five per cent. solution of carbolic acid, Zenoleum or creolin, three times daily.

## MISCELLANEOUS AILMENTS.

1. Sow became stiff in back. In about three days completely lost power of hind legs, and five days later she died. She ran out in winter, and had access to large straw stack.
2. Sow has five pigs, ten days old. Two are doing well, but the others have swollen and stiff knees, and are not growing well. Sow fed on chopped wheat and bran.
3. A year ago a yearling filly was hobbled with a rope and turned on the prairie; when found her leg was cut to the bone with the rope. It is now healed, but is greatly enlarged, and the hair has not grown where the rope was around the leg.
4. A two-year-old filly, born and raised on the prairie, when standing favors right hind ankle; she knuckles forward. H. McF. Alta.

Ans.—1. The sow died from paralysis, caused either from an injury or from exposure. Little could have been done in the way of treatment; more comfortable quarters might have prevented it. Treatment would have consisted in purging with Epsom salts, applying heat to the spine, and giving one dram nux vomica three times daily.

2. The pigs have inflammation of the joints. This may have been caused by cold or damp. Bathe long and often with warm water, and apply camphorated liniment.

3. The hair roots are destroyed, and cannot be reproduced. The enlargement can be reduced some by applying once daily with smart friction, compound iodine ointment, which you can get from any druggist.

4. Repeatedly blistering all around the joint will strengthen it.

## BOG SPAVIN AND THOROUGHPIN.

My nine-months-old colt developed bog spavin and thoroughpin two months ago. I applied liniment daily for a month without result. Ontario Co., Ont. G. M.

Ans.—Keep him as quiet as possible in a box stall, and blister once every month as long as necessary with the following: 1½ drs. biniodide of mercury and 1½ drs. cantharides, mixed with 2 ozs. vaseline. Tie him so that he cannot bite the parts; clip the hair off, and rub the blister well in. In 24 hours rub well again, and in 24 hours longer wash off and apply sweet oil. Let him loose now, and apply sweet oil every day. It sometimes requires several blisters to effect a cure, and the condition is liable to recur in an animal that is predisposed. Sometimes good results are obtained by using a truss especially constructed for the purpose, instead of blistering. Trusses can be obtained from any large dealer in veterinary instruments, for instance, Stevens & Sons, 145 Wellington St. West, Toronto.

## TONGUE LOLLING.

Five-year-old mare lolls her tongue all the time, and her mate has commenced the habit. Peel Co., Ont. R. McE.

Ans.—This is a habit, not a disease. Bits with a plate riveted on the upper surface and extending about 1½ inches backwards, so far backwards that the tongue cannot be retracted sufficiently to allow it to slip forward over the bit, will prevent tongue lolling. In some cases the shortening of the cheek pieces of the bridle will be effectual. Bits for the purpose can be purchased at any well-regulated harness shop, and if not in stock can be procured by your harnessmaker.

## FATALITY IN SHEEP.

Sheep die suddenly. They appear healthy, and are generally found dead in a furrow, with a discharge from the nose and blood coming from the corner of the eyes. Their bowels seem very loose. York Co., Ont. R. L. B.

Ans.—This is an outbreak that requires investigation. The symptoms given indicate anthrax, and if it be this disease all carcasses must be burned, else you will have trouble in future years. Employ your veterinarian to hold a post mortem and determine the cause of death. We are very suspicious of anthrax, especially if the sheep have been grazing on low-lying land. You cannot afford to take any chances, therefore I would advise you to employ a competent veterinarian without delay.

## CHRONIC COUGH.

Horse has had dry cough for four weeks, noticed especially while eating. Wetting the hay made no improvement. When working he breathes a little harder than his mate. Middlesex Co., Ont. A. P.

Ans.—It is possible your horse will become heavy. Dampen all food, both hay and grain, with lime water. Get the following prescription: Powdered opium, 4 ozs.; powdered digitalis, 1½ ozs.; powdered camphor, 6 ozs.; mix and make into 24 powders. Give a powder every night and morning, either as a drench mixed with half pint water, or as a ball rolled in a little tissue paper. See that all food given be of first-class quality. Feed in reasonable quantities, and do not put him to work shortly after eating. Allow at least half hour after eating before putting to work.

## URETHRAL DISCHARGE.

Stallion frequently refuses to serve. There is a whitish discharge after urination and at different times during the day. SUBSCRIBER. Ontario.

Ans.—This stallion must be taken out of the stud, and should be put under the care of a competent veterinarian. From the symptoms given, I presume he has a chronic venereal disease, and there is danger of any mares that are bred to him becoming diseased. In such a case you would be liable for damages, as you are aware the horse is diseased. If you have no veterinarian within reasonable distance, take the horse off the route and refuse all mares. Give him a purgative, and follow up with one dram iodide of potassium night and morning for two weeks, then discontinue for a week and repeat treatment. If at any time he should lose his desire for food or water, or slaver or run water from the eyes, it will indicate that the dose is too large, and you will need to reduce it. In the meantime, the urethral should be flushed out with five grains sulphate of zinc to the ounce of water; this should be heated to 100 degrees. Continue treatment until all discharge ceases. I would advise you to consult a veterinarian at once, and have him examine the horse, as the disease may not be as serious as I suspect, and it is possible you may be able to continue the season.

## POKES HIS NOSE OUT.

Horse pokes his nose out and champs the bit while being driven, especially while going up hill. Northumberland Co., Ont. W. H.

Ans.—This is sometimes done to gain ease from ill-fitting harness. In other cases it is caused by irregular teeth, and in others is merely a habit. See that the harness is clean, pliable and fits well. Have his teeth dressed by a veterinarian; drive with an easy bit, and it is probable he will discontinue the habit.

## RACHITIS.

Calf in good health and doing well lost the use of fore legs. The bones were so decayed that they could be pressed into a pulp with the hand. The calf was killed. T. W. Ontario Co., Ont.

Ans.—This is called rachitis, or rickets, and is due to the nondeposition of earthy salts in the bone. Treatment is not usually successful. Careful nursing, nutritious diet, cod-liver oil, lime water and tonics given in milk, and splints applied to the limbs, has occasionally been successful.

## Miscellaneous.

Subscribers are kindly requested to read the conditions at the head of this department before writing or mailing their enquiries.

## A BREEDING STALL.

Could you, or any of your readers, give me a plan in your valuable paper of a stall fitted in a stable in which to place cows for service? Grey Co., Ont. R. A. P.

Ans.—A stall about four feet wide, with strong sides about four feet high, at one side of the stable may be used for this purpose. The ceiling must be sufficiently high, floor of clay or wood, with cleats across to prevent slipping, and sufficient room behind the stall. The cow must be tied to both sides of stall, and a smooth 3x6 inch plank placed across in front of her breast, or what would be safer, a broad leather belt. If a very heavy bull is used, a belt or slings may be passed beneath the cow in front of her udder, and hooked to sides of stall, or side rails may be built in the stall on which the bull's fore feet may rest, thus relieving the weight. We may say we question the advantage of such arrangement, except in using a very heavy bull, or for safety to the herdsman in handling a vicious bull.

## FIRST-CLASS SEED.

I enclose a sample of timothy seed. Would you kindly inform me if you consider it a first-class seed, and if the quality is recognized in your market as best re-cleaned timothy seed. Here, in New Brunswick, it is appalling the amount of foul clover and timothy seed that is sold to farmers. I simply desire the information in regard to the sample—that if it is considered by you to be the best, I will have a guide to go by when buying in the future. W. H. MILLER. Victoria Co., N. B.

Ans.—The sample is entitled to rank as first-class seed; in fact, seedmen would probably describe it as "extra" good.

## KICKING HEIFER.

A subscriber writes us his method of handling a kicking heifer: "I tie her in stable, and put what is called a hush-bag in her nose with a rope to it, and pull her head up and hold her there, and use her gently and in a day or two she will stand quiet to be milked."

Anything that will take the attention of the animal from the milking operation will be effectual. The tying of a rope around the body just in front of the udder answers this purpose.

## HOME CHEESEMAKING.

We are thinking of trying to make cheese on a small scale. Would you kindly, through your valuable paper, give full directions as to making? What coloring is generally used? How long cheese is left in press? NELLIS. B. C.

Ans.—An article in May 15th issue describes cheesemaking in general in a well-regulated factory. It should be remembered that utensils consistent with the milk supply will be required. A vat, with a tin pan to fit it, leaving space between for hot water or steam, is absolutely necessary. A mill may also be required, as will a press. These may probably be got from some factory that is being enlarged, if advertised for. In addition to the article referred to, we submit a few of the most important points to be remembered, with, perhaps, more details:

The milk should be ripened—which means the development of acid—before the rennet is added. Heat the milk to 84 degrees to 86 degrees F., then use "the rennet test." An eight-ounce glass graduate and a one-dram glass graduate are needed. To make the rennet test, fill the large graduate to the eight-ounce mark (accurately) with milk from the vat at 86 degrees F., add one dram of rennet of known strength, and stir rapidly for ten seconds. Note the number of seconds it takes to coagulate the milk. When coagulation takes place in from 20 to 22 seconds add the rennet at once. Ripen the milk sufficiently before adding the rennet so that the curd may be dipped in about three hours after setting. Add enough rennet so that the milk will coagulate fit for cutting in from 15 to 20 minutes. This latter direction is for spring cheese, which will likely be the first you will be making. As the season advances, the time allowed for coagulation should be gradually lengthened to say 35 to 40 minutes in the fall. Do not depend on the nose or the palate in this part of the work.

The curd is colored by adding annetto (cheese-coloring) to the milk, say one and a half ounces to the 1,000 pounds of milk, depending on the milk and the season, and adding it before the rennet, stirring it well in. As to coloring or not coloring, be guided by the market where the cheese is to be sold. After cutting, the whey is drawn off and curds are placed in curd sink or rack on a linen strainer-cloth, where they drain and mat. In 15 or 20 minutes it can be cut into blocks 8 or 10 inches square, and turned several times. In factories, these are run through the curd-mill, which breaks them into small bits. These are stirred occasionally, and in about an hour and a half it is cooled to about 80 degrees and the salt is added. For a fast-curing cheese, about 2 pounds to the 100 pounds of curd is used; medium, 2½ pounds, and slow, 3 pounds. Use good dairy salt, spread evenly and stir frequently. Put to press when the harsh feeling has left the curd. For a small herd an upright press with a screw to do the pressing is best.

## CLOSING DITCH—DISTURBING LINE FENCE.

A owns a farm next to B. A has an open ditch running through his land, which empties through on B's land. B stopped up the place where the water came through. Can A compel B to open it again, when A can run his water off to the road ditch by digging about 20 rods more along the line fence?

2. B has a lot of big stones near the line-fence between him and A. Can A stop B from taking down the fence, so as to draw them in out of the way? SUBSCRIBER. Wellington Co., Ont.

Ans.—1. No.  
2. No, provided such course on B's part is really necessary. B must, of course, put the fence up again promptly, and avoid damage to A.

## REGISTERING COLT.

Can a colt be registered after it is one year old? If not, can her foals be registered? What is the address, if there is any, of the Thoroughbred Horse Breeders' Association? H. W. Simcoe Co., Ont.

Ans.—There is, we believe, no age limit. If the sire and dam are registered, the foals will be eligible. There is no Thoroughbred Horse Breeders' Association in Canada, nor any register for Thoroughbreds. For information as to registering Thoroughbreds, address the Registrar of Stud-book, care of the Jockey Club, Windsor Arcade, 46th St. and 5th Ave., New York City, N.Y.

## FALSE TEAT.

I have a valuable heifer, two years old, with her first calf, and she has a false teat, or growth, about in the middle of one of her back teats, from which milk comes just as freely as from the end of teat. Can anything be done to grow up the hole in false teat? If so, would it be better to let calf run with her and operate when cow is dry? New York State. E. L. W.

Ans.—It would be unwise to attempt a cure while the heifer is in milk; better operate when she is dry, when the false teat may be clipped off, and the wound stitched so that the opening may close in the healing process.

**BEST BREED AND CHEAPEST FEED.**

1. What is the best breed of cows for the dairy farmer to keep?
2. What is the cheapest food raised and will give best results for milk?
3. What is the cheapest hog-food raised for best results?

**Ans.**—There is no best breed of cows or any other class of stock. They all have their peculiar breed excellencies, which are adapted to the different requirements and tastes of men in different lines of farming. To specify that the cows are wanted for dairy farming helps to a decision, as it eliminates most of the beef breeds, as the Galloway, Angus and Hereford, which make no claim to dairy excellence, although among these breeds some very excellent milkers are found. Among the most common breeds of dairy cattle in this country are the Jerseys, Guernseys, Ayrshires, Holsteins, French Canadian and certain strains of Shorthorns, and all of these breeds have certain characteristics which commend them as dairy cows. It must be remembered, however, that it is not a guarantee that a cow is a good individual because she belongs to any one of these breeds, as there is often greater variation in individuals of the same breed than in some of those of different breeds. First determine exactly what is wanted, whether it is a cow to produce a large amount of milk of ordinary richness for cheese-factory trade, or a cow that produces less milk with more butter-fat for the butter trade, or a cow that produces a medium amount of milk of fair quality and raises a fair calf for the butcher. Then by close observation decide which breed best fills your bill, but in buying be sure to get good individuals.

2. Corn ensilage.  
3. A mixture of foods is always best for hogs. They might be arranged something like this, in order of their cheapness of production: Roots, clover, rape, grains and dairy by-products, depending upon their cost in a given locality.

**LICE AND PINWORMS.**

1. My house flowers are troubled by small green lice, which cause both leaves and flowers to fall off.
2. The flowerpots have small white grubs, the thickness of a pin, in them. I have been using lime dissolved in water as recommended, but they still remain.
3. Little black ants, the size of a small fly, come in the house and get in the flowerpots. I cannot see what harm they do, if they do any, but they are troublesome about the windows. The earth is bush soil and clay.

**Ans.**—1. Lice are the great insect pests of flowering plants, as they reproduce very rapidly, the females giving birth to living young without the presence of males. Tobacco is the great specific for plant lice. Make a weak decoction of the leaves, if they can be had conveniently, or of the plug, and spray this upon the plants. Care should be taken until the right strength is obtained. A small pump or tin sprayer used to spray cattle can be used. If more convenient the plants may be treated with tobacco smoke; lay a paper about the foot of the plant, then blow smoke from a pipe or cigar among the leaves; many of the insects will fall into the paper, when they can be destroyed. Hand-brushing with a brush or sponge is generally practiced.

2. Lime water generally kills angleworms, but other small white worms will sometimes survive it. Ashes are distasteful to worms. Good results are obtained by filling the pot with warm water, when the worms will be seen wriggling, and can be killed. Repeat this in three or four days. Also use lime water, it probably dislodges some. Fertilize to produce vigorous growth, and so the plants will resist insects.

3. Try and find the ant hills, and pour in a little carbon bisulphide or boiling water.

**BROME AND RYE GRASS FOR B. C.**

I notice an article on grasses in the columns of the "Farmer's Advocate," where Brome and Western rye grass is spoken of very favorably, and I have often wondered if it would suit my farm. I am mostly in cattle-raising, and some springs my clover kills out so that I have to re-seed. This is quite an expense where we have to import all our seed. Some of my land is gravel soil, other an alkali clay, and some of a deep, mucky, black nature. This latter overflows every spring, and the clover is killed out, and has such an effect on timothy that it dwindles out only a very small yield. I have tried red-top on it, and even that does not do well. Do you think Brome grass would be an improvement on clover and timothy; would it give me as big a yield, and would I need to irrigate it as often as with clover and timothy?

**Ans.**—With your soil and conditions Brome grass is certainly worth a good trial. Sow a few acres this year for a start. If a good stand is secured, it will in all probability stand the unfavorable conditions as to flooding, etc., which are mentioned. As far as the yield in tons is concerned, it should compare favorably with clover and timothy on your land. White the

amount of irrigation required to secure a good crop of the latter might scarcely be necessary with this grass, it responds equally well to a good supply of moisture.

**A TROUBLESOME WEED.**

A specimen of the annual sow thistle was recently sent us for identification and information on its characteristics asked. Annual sow thistle is quite a troublesome weed, as it is a very profuse seeder, but it can be controlled with less effort than the ordinary Canada thistle. It should be distinguished from the perennial variety, which is one of our worst species and holds to the ground most tenaciously. Surface cultivation and frequent seeding to grass and clover keeps the annual sow thistle pretty well in check.

**SECRETARY'S ADDRESS.**

Desiring to get into correspondence with the Secretary of the Royal Agricultural Society of England, I will be greatly obliged if you could furnish me with the address, or advise me to whom I could apply for it.

**Ans.**—Sir Ernest Clarke, 13 Hanover Square, London W., Eng.

**NOTES AND NEWS.**

**P. E. Island.**

No rain for over a month, and weather very cold. Vegetation very backward. No grass for stock yet. Most of the grain is sown and the earlier oats are beginning to come up. The clover has stood the spring weather well, and if the season is favorable there will be plenty of clover in all the new meadows. The old meadows and pasture lands have not been winter-killed like last year, and will give good hay and pasture if the season is moist enough. Beef cattle are plenty and cheap. They sell for about 4 1/2 c. for the best. Hogs are worth 6c. live weight. Horses are exceedingly scarce, and the few that are for sale bring high prices. There are quite a lot of potatoes and oats being shipped to Sydney and other maritime ports. Potatoes are worth 40c. per bushel, and oats 35c. There are only one or two of the cheese factories commenced business yet. Very little cheese will be made till the first of June. There is not so much butter being made in May as usual; in fact, there was not much made at the factories since January. The supply of milk was so small it did not pay to operate a factory. Dairying is not quite so much in favor here as it was a few years ago. The chief reason is that the cows are not of the kind suited to give good returns as milk producers, and the average farmer finds it difficult to build up a good herd for the dairy from the foundation stock in his possession, and is turning his attention more to producing beef.

Horticulture is rather on the boom here this spring as a result of the work of our live Fruit-growers' Association, and especially of its live, energetic president, Rev. A. E. Burke. Large orchards are being planted and old ones are being top-grafted with the best varieties. Mr. Vroom, of the Department of Agriculture, Ottawa, and Mr. Burke, Fruit Inspector, are touring the Island now, giving illustrations in spraying and grafting.

Mr. F. C. Hare, Chief of the Poultry Department, has been here and established a poultry-hatching station at Vernon River. He has three incubators going. The idea is to supply the farmers with pure-bred fowls of the best quality at reasonable prices, and also to give object lessons in the raising of poultry.

May 20th, '03. W. S.

**Annual Meetings of Farmers' Institutes.**

During the first half of June, annual meetings of the Farmers' Institutes will be held over a great part of Ontario. These meetings will be addressed by special delegates provided by the Department of Agriculture. The list includes Mr. Alex. MacNeill, Ottawa, Fruit Inspector; Duncan C. Anderson, Rugby, Ont.; Prof. J. W. Hart, Kingston, Ont.; Prof. J. H. Grisdale, Ottawa, Ont.; and to the Women's Institutes, Miss Laura Rose, Guelph; Miss Blanche Maddock, Guelph, and Miss Agnes Smith, Hamilton, Ont. The speakers will all discuss live questions, and should be favored with large audiences. The day of the annual meeting can be pleasantly and profitably spent by every person interested in the work of farm or home, and we hope to see a keener interest manifested in these subjects, especially by the young people, who have but begun to build their futures.

**New British Minister of Agriculture.**

London, May 13.—The Earl of Onslow, formerly Governor of New Zealand, has been appointed Minister of Agriculture in succession to the late Hon. R. W. Hanbury. He was born in 1853, was educated at Oxford, was Under Secretary for the Colonies 1887-1888, was Parliamentary Secretary to the Board of Trade 1888-1889, was Governor of New Zealand 1888-1892, and Under Secretary for India 1895-1900. He owns about 13,500 acres, and his principal seat at Clandon Park, Guildford, Surrey. Lord Onslow is also a member of the London County Council, and has been a Provincial Grand Master of the Surrey Freemasons since 1895.

**The Isaac Shorthorn Sale.**

The dispersion auction sale at Markham, Ont., on May 13th, of Shorthorn cattle belonging to Messrs. John and George Isaac was largely attended by breeders and farmers and was an unqualified success, the 48 head sold, one of which was Canadian-bred, realizing the handsome total of \$17,580, an average of \$366, while the 47 imported animals made an average of \$369.76. The cattle were for the most part an excellent lot, the heifers especially being of superior type and quality. All the cattle, except two, were purchased by Ontario breeders and farmers, \$700, the highest price of the day, being paid by Mr. John Hill, Wellesley, for the grand imported two-year-old bull, Nonpareil Archer (81778). The red six-year-old cow, Blossom 2nd, No. 4 in the catalogue, of the Cruickshank Orange Blossom family, due to calve this month, was taken by Geo. D. Fletcher, Binkham, at \$650. Golden Duchess and Golden Daisy, of the Marr Goldie family, fell to the bids of J. G. Robbins & Sons, Horace, Indiana, at \$650 and \$550, respectively. W. D. Flatt, Hamilton, took Forest Pride, a red two-year-old heifer, at \$500, and W. G. Pettit & Son, Freeman, secured the two-year-old Merry Maid 10th at the same price. The roan yearling bull, Everlasting, brought \$410, going to S. J. McKnight, Epping. The bidding was brisk and steady, the breeders having full confidence in the future of the breed, having had a steady demand for all they could spare, while a noticeable feature of the sale was the number of purchases by new beginners in the business of breeding pure-breds. Leading breeders report a larger demand for young bulls this year than for many years, and that largely from farmers, a movement which will tell for good on the quality of the beef cattle of the country in the near future. Capt. T. E. Robson and Mr. Geo. Jackson, the auctioneers, did excellent work, sustaining the interest splendidly from start to finish.

**COWS AND HEIFERS.**

Blossom 2nd, 7 years; Geo. D. Fletcher, Binkham	\$650
Golden Duchess, 2 years; J. G. Robbins & Sons, Horace, Ind.	650
Golden Daisy, 2 years; J. G. Robbins & Sons	550
Forest Pride, 2 years; W. D. Flatt, Hamilton	500
Merry Maid, 1 year; W. G. Pettit & Son, Freeman	500
Veronica, 4 years, and c. c.; E. C. Attrill, Goderich	500
Dainty Countess, 3 years; W. D. Flatt	495
Choice Lustre, 3 years, and c. c.; J. A. McGillivray, Uxbridge	485
Flora McDonald, 2 years; W. G. Pettit & Son	485
Charming Gem, 2 years; S. J. Knight, Epping	465
Primrose 8th, 2 years; W. G. Pettit & Son	460
Belle 2nd, 3 years, and c. c.; John Gardhouse, Highfield	440
Lady Ann 14th, 2 years; W. G. Pettit & Son	400
May 3rd, 3 years, and b. c.; H. A. Potter, Caledon	300
Stella, 2 years; S. F. Johnston, Ashburn	370
Rose, 2 years; John Bright, Myrtle	360
Emmeline 9th, 2 years; W. J. Shean, Owen Sound	355
Mina 6th, 8 years, and b. c.; D. Rusnell, Stouffville	350
Eliza 2nd, 8 years, and b. c.; S. J. McKnight	350
Ammonia, 3 years, and b. c.; W. H. Esterbrook, Freeman	350
Lady Laurier, 2 years; J. J. Kitley, Dunkerron	350
Lady Hope, 1 year; E. C. Attrill	340
Celia, 2 years; Guy Bell, Brampton	335
Cloris 4th, 2 years; E. C. Attrill	335
Primrose 2nd, 2 years; A. J. McVigen, Cobourg	320
Maud 14th, 2 years; W. G. Pettit & Son	315
Camelia, 1 year; Peter Stewart, Atha	305
Silver Rose, 2 years; W. G. Pettit & Son	300
Alice, 3 years; James Leask, Greenbank	300
Fair Maid, 2 years; Guy Bell	600
Sally, 2 years; Arthur Johnston, Greenwood	285
Royal Duchess, 1 year; John Hill, Wellesley	275
Rose Lilly, 2 years; A. E. Meadows, Port Hope	270
Twin Countess 6th, 2 years; Ernest Macklin, Cobourg	255
Viola 3rd, 2 years; H. Barr, Douglas	255
Lady Scott, 2 years; W. D. Flatt	250
Lady Lorne, 2 years; T. C. McAvoy, Balsam	250
Tulip, 2 years; T. Hope & Son, Scugog	250
Lady Rose, 2 years; Geo. Johnston, Balsam	225
Twin Countess 5th, 2 years; F. Bonnycastle, Campbellford	225
Rose Flower, 2 years; J. I. Balsdon, Markham	205
Sweet Briar, 2 years; W. J. Shean	205
Lilly 5th, 4 years, and b. c.; William Norton, Brougham	200
Lucky Lass, 3 years; T. Gibney, Holt	200

**BULLS.**

Nonpareil Archer, 2 years; John Hill, Wellesley	700
Everlasting, 1 year; S. J. McKnight, Epping	410
Royal Archer, 2 years; John Bright, Myrtle	350
Lord Kitchener, 2 years; Henry Barr, Douglass	135

44 females averaged	363
4 bulls averaged	398
48 head averaged	366

**C. P. R. Butter Cars.**

Mr. S. P. Howard, General Freight Agent C. P. R., Montreal, has issued circular E. D. No. 32, giving particulars of an iced butter-car service running into Montreal, leaving various points in Quebec Province.

**W. J. Shean's Shorthorn Sale.**

The auction sale of Shorthorn cattle, the property of Mr. W. J. Shean, of Owen Sound, Ontario, came off, as advertised, on the 5th of May, Capt. T. E. Robson officiating as auctioneer, and was considered very successful and satisfactory, figuring out an average of \$163. Most of the animals were purchased by farmers and breeders in the surrounding counties, where increased attention is being given to the improvement of the beef cattle of the district. The highest price, \$575, was made by the imported bull, Marengo's Heydon Duke, a red four-year-old son of the Royal champion bull, Marengo, which fell to the bid of Mr. Thos. Rydall, Colpo's Bay. The imported four-year-old cow, Miss Primrose, due to calve in June to the imported bull, sold for \$400, the highest price for a female, to Alfred Farrow, Warton, and E. C. Attrill, Goderich, secured the good red cow, Augusta 3rd, at \$350. The following is the list:

Marengo's Heydon Duke (imp.), 4 years; Thos. Rydall, Colpo's Bay	\$575
Miss Primrose (imp.), 4 years; Alfred Farrow, Warton	400
Augusta 3rd, 6 years; E. C. Attrill, Goderich	350
Augusta 4th, 1 year; J. A. Bradley, Colpo's Bay	155
Loretta, 8 years; John Farrow, Warton	150
Marengo's Heydon Lassie, 1 year; C. Lemon, Annan	145
Alpina, 4 years; Wm. Sutherland, Walter's Falls	135
Flamora, 3 years; John Farrow	130
Knight of Gold, 1 year; W. D. Flatt, Hamilton	130
Strawberry 9th, 3 years; John Bradley, Colpo's Bay	125
Lady Lisgar, 3 years; Jas. Gardner, Kemble	115
Village Belle, 2 years; Alex. Sutherland, Walter's Falls	110
Polyanthus of Rosevale, 2 years; John Farrow	110
Alexandra Duff, 10 years; Alex. Sutherland	105
Nora Lubin, 9 years; C. E. Lemon	105
Scarlet Crocus, 5 years; John Farrow	100
Vendetta, 7 years; John Farrow	100
Daisy Dean, 11 years; Thos. Rydall	80
Marengo's Highland Lad, 11 months; W. J. Cavell, Brookholm	80

**Farm Schools.**

Our readers have manifested a great deal of interest in the series of articles on improvement in rural education, by Prof. J. W. Robertson, which have appeared during the past six months. The consolidated rural school idea has been very fully presented. It is understood that the Ontario Department of Education now contemplates a small school farm for central schools in each municipality. Travelling teachers of agriculture, preferably graduates of the Ontario Agricultural College, will visit these schools each week and teach the pupils of the districts the principles and practice of the science of agriculture, as illustrated by the varied products of a 2½-acre school farm, worked by the pupils.

Carleton County, Ontario, is taking the initiative in the new departure. School Inspector Crowley has persuaded the Carleton County Council to defray the expenses of two such travelling teachers of agriculture, and Sir William Macdonald will pay the salary of a third teacher. In each municipality, central schools will be selected within easy reach of four or five other surrounding schools. These central schools will be the "farm schools," and in each one the special teachers will hold classes once a week. These classes will be attended by the senior boys from the surrounding schools. The pupils will be taught the elements of horticulture, forestry, entomology, the science of agriculture, etc. The theoretical teaching will be amplified by practical experiment on the school farms. The special teacher will be able to visit five of these central "farm schools" each week, and will hence serve altogether from twenty-five to thirty school sections.

Salterton Municipality, in Wentworth County, in Mr. Harcourt's constituency, is also making arrangements to engage a travelling teacher of agriculture. In this case, however, special attention will be paid to the teaching of fruit culture.

It is Mr. Harcourt's intention to ask the Legislature this session for a special grant to encourage these "farm schools." This grant will be made on similar conditions to the grants now made to schools where manual training is carried on. It may be added that in France, Russia and Austria this system of agricultural education has for some years been carried on with the greatest success and on a large scale. In France there are 24,000 such schools.

**G. T. R. Butter Cars.**

The Grand Trunk has made an arrangement with the Department of Agriculture to run a number of refrigerator cars from different points on the line, to carry butter to Montreal for export to Great Britain. The service will be weekly, commencing May 18th. Cars will leave every Monday from Warton, Goderich, Petrolia, Kincardine, Orillia, Port Perry and Meaford; on Tuesdays from Clam Lake Junction, Bonnet's Landing, Conitcook, Bonnet's Landing, Port Perry; on Thursdays from Galesburg, Port Perry. Numerous stops at intermediate points will be made. The cars will be iced as frequently as is necessary to keep the contents cool throughout to their destination. Shippers by these cars will be charged "the usual less than carload tariff rates," without any charge for icing of the special service.

**Mr. Peer's Sale of Jerseys.**

At the auction sale on May 12th, at Hoboken, N. J., of 83 head of imported Jersey cattle offered by Mr. Frank Sherman Peer, of Ithaca, N. Y., the nine-year-old bull, Golden Fern's Lad, a double grandson of Golden Lad, fell to the bid of T. S. Cooper, Coopersburg, Pa., at \$2,250. The two-year-old bull, Brookhill Fox, owing to a temporary swelling in his throat, brought only \$1,000, which was considered a great sacrifice. He was taken by Dr. C. E. Still, Kirksville, Mo. Owing to Mr. Peer's illness, the cows were not in good selling condition, and the prices realized for them were disappointing. The highest price for a female was \$475 for Mayday's Lilly, four years old, purchased by A. R. Flower, Watertown, N. Y. Pilot's Legacy sold for \$425 to Mr. Flower. Twenty bulls and bull calves brought an average of \$220, sixty-three females an average of \$132, and the eighty-three head, all told, an average of \$153. Messrs. B. H. Bull & Son, Brampton, Ont., were among the list of purchasers, securing seven head, including the imported cows, Pretty Rose Duplex, inbred to Golden Lad, Count Wolseley, Sultanne, and the noted cow, Distinction F.; also Golden Fern's Heritage and yearling heifers, Miss Reality, by Nuriel's Golden Lad, and Crusoe's Belle; also, the two imported bull calves, Haliburton's Prince and Narcissus.

**St. Louis World's Fair Notes.**

On the 37 acres of ground devoted to the live stock department at the World's Fair at St. Louis are being built 2,800 stalls. Two thousand four hundred of these are open stalls, five by ten feet. The remaining 400 are box stalls, ten by ten feet. In addition, four octagonal dairy barns will provide 140 open stalls and 28 box stalls.

The American Jersey Cattle Club is preparing to install a herd of Jersey cows at the Louisiana Purchase Exposition that will eclipse all previous Jersey exhibitions. New England, New York and Eastern States have all already shipped 15 cows to Jerseyville, Ill., where they will be held until the opening of the fair. It is the intention to select the best 40 Jersey cows in the world to take part in the dairy test.

A million roses will bloom at once in the vast rose garden at the World's Fair. Four acres are set to strong and vigorous rose trees. Thirty of the largest exhibitors have sent their choicest stock, and each will strive for first place in the judgment of the jury and people. This vast rose garden with its 50,000 rose trees lies east of the great Palace of Agriculture. The planting was begun early in April. The center of the garden is at the main entrance to the Palace of Agriculture, a grand structure 1,600 feet long and 500 feet deep.

**Trade with Japan.**

Hon. Sydney Fisher, Dominion Minister of Agriculture, has returned from attending the Osaka Exposition in Japan. He was delighted with his trip, and states that there are three commodities for which an exceptional market is now open in the east, namely, flour, pulp and lumber. The market for paper, he says, is excellent. The supply is now being secured from Europe, and there is no reason why Canada should not capture this trade. He was gratified by the Canadian exhibit, which was the center of admiring crowds throughout the Exhibition, and which was selected for special distinction just before he sailed in being awarded the prize for the best assorted display of the entire exhibit. The demonstrations in bread-making from Canadian flour were a great success, the results being far ahead of those with Oregon flour. With the expiration of certain trade treaties now in existence, Hon. Mr. Fisher sees a great opportunity for the development of Canadian trade with Japan.

**Advanced Work in Plant Breeding.**

Experimental work in plant-breeding that promises to be of immense importance to sugar-beet growers is now contemplated by the Department of Agriculture for the United States. The object is to produce what is called single-germ beet balls or beet seed that will produce but one plant for each ball sown, instead of from one to six as is commonly the case. In planting beet seed, the balls are thickly sown in drills. When they have germinated, the plants are usually found in small clusters, and as beets cannot be grown this way, the work of thinning is very tedious and injurious to the plants that are retained for the crop. With the single-germ beet ball it is hoped that plants will be got that will stand alone, and thus make the work of thinning much easier. This, in turn, would lead to larger acreages being sown and a consequent reduction in the cost of production, which would be helpful to all classes of the population.

**Nova Scotia Agricultural College.**

As foreshadowed in a recent issue of the "Farmer's Advocate," the proposed Nova Scotia School of Agriculture will be located at Truro, and a site of five acres adjoining the present Government Farm has been purchased. The building, whose dimensions will be 100 by 55 feet, with an additional ell for greenhouse, etc., is to be completed by October, and is to cost in the neighborhood of \$20,000. Truro is already the headquarters for the Provincial Normal School, the Provincial Manual Training School and the Provincial School of Science.

**Changes in Toronto Prize List.**

The following changes in live-stock classes have been made in the Toronto Industrial Exhibition prize list for 1903:

Roadsters and Standard-breds in harness to be shown in front of grand-stand.

All speed and running races have been cut off, and some extra classes in harness, saddle, hunter and polo pony classes added, all of which will be shown in front of grand-stand.

Two classes in ponies added, one for filly or gelding two years, and same for one year old.

In high-stepping classes, size was divided at 15.2, and one more single class added, making one for 15.2 and under, and another for over 15.2.

The height in pair of high-steppers was struck out, so that any height will do.

A class for ponies under 14.1, to be shown under saddle, was added.

Some extra classes have been provided this year for horses owned and bred by the exhibitor, making them almost entirely a "farmer's class." These are for single roadsters, not less than 15.1; pairs, same conditions; carriage, singles and pairs, not less than 15.1 hands; saddle horse owned and bred by exhibitor, and ridden by owner; single and pair heavy drafts, any breed.

A special prize is given for best collection of ten horses, shown by one exhibitor, any breed or breeds.

Polo pony classes are provided for same as Spring Horse Show, with some extras.

A rule has been adopted that no director or member of a committee shall handle his stock in the judging ring.

It is the intention of the Directorate to select, if possible, for judges the best men procurable in America, and if possible gentlemen who have never officiated at Toronto Exhibition.

In cattle, it was ordered that all fat and grade cattle shall be owned and fed by the exhibitor, at least three months previous to the exhibition.

The ages of junior calves was made to read, calved on or after Jan. 1st, 1903.

In Shorthorn class, the prizes amount to \$3,000, an addition of \$1,000.

A class with same sections and money was added for dairy grade cattle as for beef grades.

The only additions made in sheep were the giving of medals each for best ram, any age, and best ewe, any age. American Cotswold Record, American Leicester Breeders' Association, American Shropshire Registry Association, American Oxford Down Record Association, and American Southdown Association are all offering cash specials this year.

In swine \$600 has been added to the prizes, \$300 by the Industrial Association, and \$300 by the Swine Breeders' Association.

Rules and regulations have been completely changed, many additions made and generally improved.

**Penny Postage Extending.**

On May 20th, Sir Wm. Mulock, Postmaster-General, received a communication from Sir Edmund Barton, Premier of the Australian Commonwealth, consenting to the penny rate per half ounce applying to all letters posted in Canada for Australia; that is, the six Australian States of Queensland, New South Wales, Victoria, South Australia, West Australia and Tasmania. This arrangement will accordingly go into effect on Victoria Day, Monday, the 25th, and that historical day will see the completion, so far as Canada is concerned, of the penny-rate system, one penny per half ounce prepaying letters from Canada to all parts of the British Empire. This event marks the completion of Sir William's efforts, commencing in 1897, to establish a penny letter rate between Canada and every part of the British Empire, New Zealand having previously come into line.

**Prof. Robertson Honored by Queen's.**

Queen's University, Kingston, made no mistake in bestowing the honorary degree of LL. D. on Prof. J. W. Robertson, Commissioner of Agriculture and Dairying. For over fifteen years Prof. Robertson has exerted himself in a public capacity in the interests of the Canadian farmer and dairyman. He has principally devoted himself with very marked success to improving the methods of farmers in producing farm crops, to better the quality of farm products, in finding and developing markets for our surplus products, and in providing suitable means whereby perishable products may quickly reach these markets with the least possible deterioration and at small expense. For the past two years he has devoted considerable attention to the improvement of the methods of education in our rural schools by the introduction of nature study and manual training. Although yet in its infancy, this promises to be as great a success as his other line of work.

**Big Quarantine Threatened.**

Denver, Colo., May 12.—The most extensive quarantine of cattle in the West for many years will be in effect within a few days, as the result of the prevalence of the mange. Six or eight other States and Territories will come under the same rule before the end of the week. Cattle from the Mexican border to Canada will come under these regulations, and practically all of the territory from the Rockies to the Missouri River will be affected.

**Arrange for Ventilation.**

In making the change from the frame or log stables to those in a stone basement, the question of ventilation is almost invariably overlooked. The supply of fresh air in the old stables being generally too liberal, the new ones are built with the object of minimizing the supply, with the result that the inside of the stable in time becomes not only foul, but unhealthy. Germs of disease and of injurious flavors in milk easily accumulate in poorly-ventilated stables, and the spores of rot in roots will also hang about the root-house unless carried out in currents of fresh air. But perhaps the great argument for better ventilation lies in the fact that it discourages the development of tuberculosis, which is everywhere becoming so prevalent under artificial conditions. Fresh air with plenty of exercise to develop a rugged constitution is the most rational and natural way to combat this disease, and nothing is so favorable to its development as a close, ill-ventilated stable.

Plans of stable ventilation have been published from time to time, so that those who have decided to install a thorough system will have made the necessary arrangements, but there are scores who are building this season and who have not made provision for any system. The extra expense in many instances no doubt removes the possibility of anything that is considered elaborate or complete, but at least a fairly satisfactory and inexpensive system might be installed.

A good arrangement for such cases is to use the ordinary drain tile for inlets near the floor on every side of the stable. This is most important, as in windy weather the fresh air will only enter on that side from which the air is blowing. In many instances where the barn is built into a bank, it is impossible to get connection with the outside near the floor on one or more sides. In such cases the tile may be inserted near the top of the wall, where they will be of more service than if none were used. As an outlet for foul air, a few openings in the ceiling with shafts leading to the roof are quite satisfactory, but when put up in the center of the roof these shafts would interfere with the unloading track, so should be located at the ends of the building, running to the ridge of the roof. Some have found four-inch tiles on the top of the basement walls, with provision for closing them in extreme weather, quite satisfactory. Whatever the arrangement, let there be some provision made in the new stable for ventilation.

**The King's Plate.**

There is not a true sport in all Canada who was not glad when two representatives from the Dymont stables finished first in the race for the King's Plate on the 23rd of May. To win the King's Plate means that one must lay plans for a long distance into the future, and if done as Mr. Dymont has done, and other recent winners, by breeding the winning horses, the honor is doubly deserving. Long years ago, Mr. Dymont set his eyes on this event, and has been working persistently, a characteristic of his, toward the accomplishment of his pet hobby. Both the first and second horses were bred on the Dymont farm at Barrie. Thessalon, the winner, was sired by *Cannie Boy*, the sire of *Lady Berkley*, and his dam is *Annie D.*, by *Terror*, a good old Canadian race horse. *Annie D.* is also the dam of *Bellcourt* and *Maratana II.*, well-known race horses from the Barrie stables. *Nesto*, second in the race, is a son of *Courtown (Imp.)*, the horse that made the Dymont string famous, and his dam, *Minnie Lightfoot*, also imported, is sired by *Oddfellow*, thus giving *Nesto* a pure English lineage.

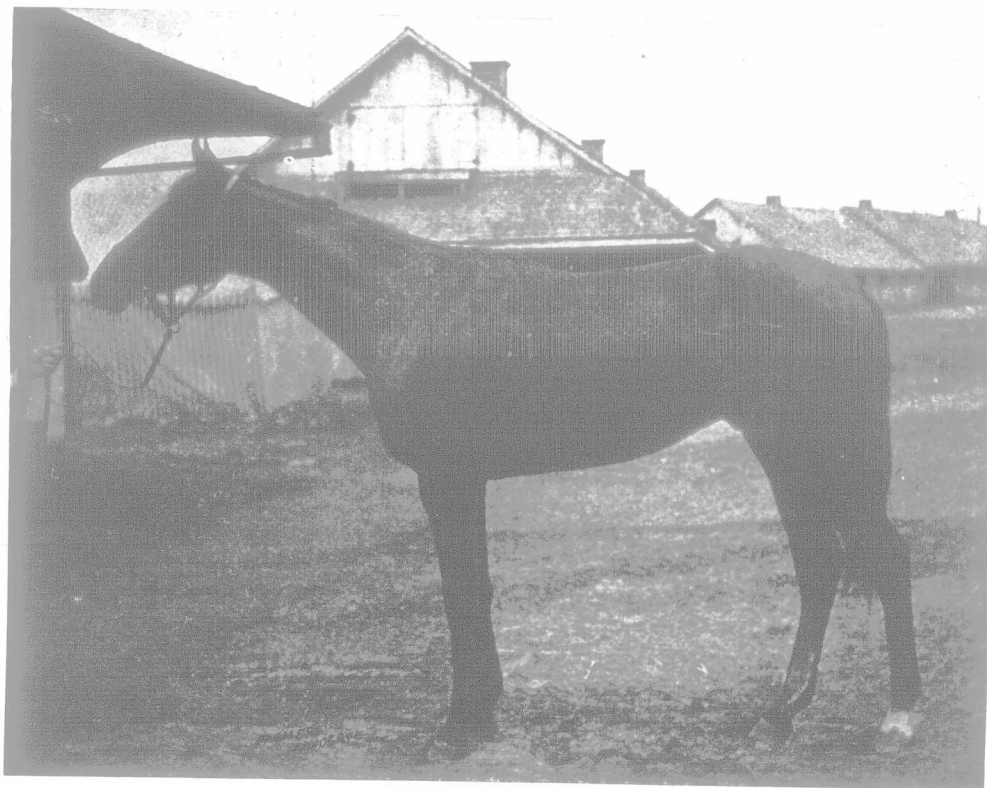
**New Ontario Settlers.**

The annual report of the Commissioner of Crown Lands of Ontario shows that the total area of lands sold during the year was 104,436 acres. The Temiscaming and Rainy River districts attracted most settlers. In the former district, about 224,000 acres were taken up, and about 700 heads of families entered the country. About 6,600 certificates authorizing veterans to take up land were issued during past year.

**Ontario Agricultural College.**

The examinations on the work of the fourth year at the Ontario Agricultural College are conducted by the University of Toronto, and the results will appear in the University class lists in June. The results of the examinations of first, second, and third year students on the work of the past session are as follows (\*to take a supplemental examination in subject numbered):

**FIRST YEAR (in order of General Proficiency).—**  
 1. Bracken, J., Seeley's Bay, Ont.; 2. Hart, F. C., Wallace Bay, N. S.; 3. White, G. G., Perth, Ont.; 4. Colwell, H. H., Toronto, Ont.; 5. Stayner, H. S., Toronto, Ont.; 6. Ballantyne, R., Sebringville, Ont.; 7. McMillan, H. R., Aurora, Ont.; 8. Dickson, J. R., Seaforth, Ont.; 9. Hamilton, C., Dundela, Ont.; 10. Tucker, H. S., Chapman, Ont.; 11. Merkle, G. H., Chesterville, Ont.; 12. Nixon, C. C., St. George, Ont.; 13. Munroe, J. F., South End, Ont.; 14. Hawtin, A., Newmarket, Ont.; 15. Smith, H. B., Wanstead, Ont.; 16. McKenney, A., Corinth, Ont.; 17. Ramsay, R. L., Toronto, Ont.; 18. Fife, K. E., Shelburne, Ont.; 19. Logsdail, A. J., Nagpur, India (\*4); 20. Northcott, S. A., Solina, Ont.; 21. Farmer, P. P., Arnprior, Ont.; 22. Scott, H. W., Lancaster, Ont.; 23. Bailey, C. F., Coldbrook, N. C.; 24. Ketchen, A. F., St. George, Ont.; 25. Marshall, C. A., Westbrook, Ont.; 26. Lund, T. H., Chorley, England (\*12); 27. Jones, D. H., Bedford Park, Ont.; 28. Middleton, M. S., Vernon, B. C.; 29. Murray Wilson, J. G., Montevideo, Uruguay; 30. Robertson, A., Brantford, Ont.; 31. Somerset, H. R., Crickhowel, Wales, England (\*2 and 4); 32. Halliday, C., Pakenham, Ont.; 33. Taylor, H. E., Colchester, Ont.; 34. Duncan, R. S., Huntsville, Ont. (\*13); 35. Bean, W., Haysville, Ont.; 37. Weylie, D. B., Glanford



**THESSALON.**

Winner of the King's Plate, Woodbine race course, Toronto, May 23rd, 1903. PROPERTY OF N. DYMENT, ESQ., BARRIE, ONT.

Station, Ont.; 37. Weir, D., Montreal, Que.; 38. Elderkin, J., Amherst, N. S.; 39. Atkin, J. P., Aldershot, Ont. (\*4); 40. Evans, W. G. E., Ottawa, Ont.; 41. Irving, A. J., Vernon Bridge, P. E. I.; 42. Johnston, D. N., Navan, Ont.; 43. Leavens, H., Chisholm, Ont. (\*14); 44. Woolverton, N. D., Grimsby, Ont.; 45. Birley, R. B., Paris, Ont.; 46. Nancekivell, J. H., Ingersoll, Ont.; 47. Brown, L. A., Port Antonio, Jamaica (\*13); 48. Sumner, A. L., Montreal, Que., and Williams, R. P., Corbetton, Ont.; 49. McVannell, A. P., St. Mary's, Ont. (\*7 and 13); 50. McKenzie, J., Queen Hill, Ont. (\*1); 51. Metcalf, H. M., Grimsby, Ont. (\*4); 52. Gamble, T., Mosgrove, Ont. (\*8 and 14); 53. Baker, M. R., Swarthmore, Pa., U. S. A. (\*14); 54. Manchester, P., Apohaqui, E. B. (\*10 and 12); 55. Macdonald, C. M., Halifax, N. S. (\*7 and 13); 56. del Carril, A., Buenos Aires, Argentine Republic (\*4 and 13); 57. Hutcheson, J. C., Montreal, Que. (\*9 and 10); 58. Fairman, L., Melrose, Ont.; 59. Goodfellow, F. L., Barrie, Ont. (\*6); 60. McBeth, D., Ormsby, Ont. (\*13 and 14); 61. Zubiaur, A., Buenos Aires, Argentine Republic (\*11 and 13); 62. Smith, A., Pinkerton, Ont. (\*6 and 14); 63. Monkman, R. K., Castlederg, Ont. (\*6 and 7); 64. Willey, D., Strathburn, Ont. (\*7 and 14).

(\*1) English. 8. Horticulture.  
 2. Bookkeeping. 9. Agriculture.  
 3. Physics. 10. Field Experiments.  
 4. Manual Training. 11. Dairying.  
 5. Chemistry. 12. Poultry.  
 6. Geology. 13. Apiculture.  
 7. Zoology. 14. Veterinary Science.

**SECOND YEAR (in order of General Proficiency).—**  
 1. Howitt, J. E., Guelph, Ont.; 2. Esmond, C. W., Blessington, Ont.; 3. McKillican, W. C., Vankleek Hill, Ont.; 4. Deachman, R. J., Gorrie, Ont.; 5.

Albright, W. D., Beausville, Ont.; 6. Eddy, E. D., Scotland, Ont.; 7. Craig, J., Glasgow, Scotland, and Wade, R. W., Smithville, Ont.; 8. Reed, F. H., Georgetown, Ont.; 9. Bell, H. G., Orangeville, Ont., and Bower, J. E., Harrison, Ont.; 10. McDonald, D. J., Crawford, Ont.; 11. Bustamante, D., Jujuy, Arg. Rep.; 12. Leitch, A., Cornwall, Ont.; 13. Hoodless, J. B., Hamilton, Ont.; 14. Westover, C. A., Frelighsburg, Que.; 15. Groh, H., Preston, Ont.; 16. LeDrew, H. H., Toronto, Ont.; 17. Mayberry, H., Ingersoll, Ont.; 18. Scott, P., Waubuno, Ont.; 19. McDiarmid, H. S., Fingal, Ont. (\*2); 20. Evans, J., Randolph, Ont.; 21. Pearce, S. M., Iona, Ont.; 22. Brerton, F. E., Bethany, Ont.; 23. Hand, A. J., Stanton, Ont.; 24. Cohoe, W. J., New Durham, Ont.; 25. Rudolf, N. N., Hampstead, Jamaica; 26. Winter, M. H., Wicklow, Ont.; 27. Hankison, L. D., Grovesend, Ont.; 28. Teeple, H., Jaffa, Ont.; 29. McAulay, J. W., Winnipegosis, Manitoba; 30. Mortimer, R. E., Honeywood, Ont. (\*8); 31. Murray, R. S., Toronto, Ont.; 32. Mason, W. E., Tyrrell, Ont.; 33. Whyte, G. G., Paris, Ont.; 34. Nicholson, C., Mount Forest, Ont. (\*17); 35. Cameron, R. R., Ailsa Craig, Ont.; 36. Lennox, W. J., Newton Robinson, Ont.; 37. Cooper, G. H., Oshawa, Ont.; 38. Barber, E. R., Yorkton, Assa.; 39. Chisholm, J., Briley Brook, N. S.; 40. Robinson, G. H., Walkerton, Ont. (\*8); 41. Logan, F. M., Amherst Point, N. S. (\*10); 42. Thompson, H. H., Heathcote, Ont. (\*7); 43. McDonald, T. D., Olinda, Ont. (\*8 and 17); 44. Davison, J. H., Starrat, Ont.; 45. Barberree, G. L., Corwhin, Ont.; 46. Clark, E. E., Meaford, Ont. (\*7), and Crane, R. N., Montreal, Que. (\*7); 47. Taylor, F., Cumberland Mills, Que.; 48. Prittie, F. H., Toronto, Ont. (\*14); 49. Bartman, R. W., Hamilton, Ont. (\*7 and 8); 50. Martinez, R. C., Same Fe, Arg. Rep.; 51. Warner, G. C., Coulson, Ont. (\*1 and 19); 52. Pabelo, F., Buenos Aires, Arg. Rep.; 53. Stewart, D. F., Hampstead, Ont. (\*7); 54. Granel, J., Buenos Aires, Arg. Rep.; 55. Prittie, R. D., Toronto, Ont. (\*7, 8 and 17); 56. McAuslan, A. T., Heathcote, Ont. (\*1).

(\*1) English. 12. Entomology.  
 2. Thesis. 13. Live Stock (written).  
 3. Public Speaking. 14. Judging Live Stock (except horses).  
 4. Economics. 15. Judging Horses.  
 5. Physics. 16. Dairying.  
 6. Engine. 17. Poultry (written).  
 7. Agricultural Chemistry. 18. Poultry (practical).  
 8. Animal Chemistry. 19. Veterinary Pathology.  
 9. Horticulture. 20. Veterinary Obstetrics.  
 10. Botany.  
 11. Bacteriology.

**THIRD YEAR (in order of General Proficiency).—**  
 1. Fulmer, H. L., Ruthven, Ont.; 2. Thom, C. C., Elma, Ont.; 3. Bray, C. I., Kleinburg, Ont.; 4. Readey, J. C., Rosetta, Ont.; 5. Carpenter, G. H., Fruitland, Ont.; 6. Hamilton, W., Ravenshoe, Ont.; 7. Barber, T. C., Yorkton, Assa.; 8. Henderson, T. B. R., Rockton, Ont.; 9. Rothwell, G. B., Ottawa, Ont.; 10. Johnston, J., Fingal, Ont.; 11. Irvine, A., Habermehl, Ont.; 12. Galbraith, S. M., Ellesmere, Ont.; 13. Guy, J. T., Columbus, Ont.; 14. Mills, P. G., Sussex, N. B. (\*9); 15. Fansher, B. W., Florence, Ont.; 16. Rivett, T. B., Spanishtown, Jamaica; 17. Williams, M. G., Carbetton, Ont. (\*4 and 6); 18. Everest, R. E., Scarborough Junction, Ont. (\*9 and 11); 19. Baker, R. G., Swarthmore, Pa., U. S. A. (\*5 and 11); 20. Buchanan, D., Florence, Ont. (\*5 and 9).

The following third-year students also passed, part of their work being covered by certificates accepted pro tanto: 1. Dewar, W. R., Fruitland, Ont.; 2. Peltzer, J., Buenos Aires, Arg. Rep.; 3. McRae, C. M., Cumberland, Ont.; 4. Avila, C., Cordoba, Arg. Rep.; 5. Bustamante, R. S., Jujuy, Arg. Rep.; 6. Pabelo, J., Buenos Aires, Arg. Rep. (\*2 and 11).

(\*1) English Prose. 8. Inorganic Chemistry.  
 2. English Poetry. 9. Organic and Agricultural Chemistry.  
 3. Mathematics. 10. Geology.  
 4. French. 11. Structural Botany.  
 5. German. 12. Physiological Botany.  
 6. Calorimetry. 13. Entomology.  
 7. Meteorology and Cold Storage.

**HONORS IN DEPARTMENTS—FIRST YEAR.**

English and Mathematics, including English Grammar, English Literature, Bookkeeping and Arithmetic.—Class I.—1. Bracken; 2. McMillan; 3. Colwell. Class II.—1. Stayner; 2. Dickson; 3. Tucker; 4. Hart; 5. Brown; 6. White; 7. Kitchen; 8. Munroe; 9. Scott; 10. Ballantyne; 11. Hawtin and Hutcheson; 12. Nixon and Ramsay; 13. Duncan.

Physical Science, including Manual Training, Physics, Chemistry and Geology.—Class I.—1. Bracken; 2. Hart; 3. Colwell. Class II.—1. Dickson and McMillan; 2. Farmer; 3. Hamilton; 4. Ballantyne and Stayner; 5. Tucker; 6. Whyte; 7. Nixon; 8. Hawtin and Northcott; 9. Fife; 10. Ramsay; 11. Merkle; 12. Logsdail and Weir; 13. Jones; 14. Atkin; 15. Smith, H. B.; 16. Scott; 17. Marshall; 18. Bailey; 19. Lund; 20. Murray-Wilson and Taylor; 21. Duncan.

Biological Science, including Botany, Zoology and Horticulture.—Class I.—1. Bracken; 2. Ballantyne; 3. McMillan; 4. White; 5. Hart; 6. Hamilton, Stayner and Tucker; 7. Munroe. Class II.—1. Fife; 2. Dickson; 3. Logsdail; 4. Colwell; 5. Ramsay; 6. Northcott; 7. Merkle; 8. Smith, H. B.; 9. McKenney; 10. Middleton; 11. Bailey; 12. Nixon;

13, Kitchen; 14, Lund and Murray-Wilson; 15, Halliday.

Agriculture, including Agriculture, Field Experiments, Dairying, Poultry, Apiculture and Veterinary Science.—Class I.—1, Bracken. Class II.—1, Hart; 2, White; 3, Hamilton; 4, Ballantyne; 5, Stagner; 6, McKenney; 7, Colwell and Smith, H. B.; 8, Merkley; 9, Nixon; 10, Tucker; 11, Dickson; 12, Somerset; 13, Hawtin; 14, Munroe; 15, Marshall; 16, Farmer; 17, Bailey; 18, Scott.

**HONORS IN DEPARTMENTS—SECOND YEAR.**

English and Economics, including English, Thesis, Public Speaking and Economics.—Class I.—1, Albright; 2, Deachman; 3, Craig; 4, Esmond; 5, Wade; 6, McKillican; 7, Bower; 8, Howitt. Class II.—1, Reed; 2, Bell and LeDrew; 3, Hand; 4, Eddy; 5, Leitch; 6, McDonald, D.; 7, Pearce; 8, Hoodless; 9, Evens; 10, Groh; 11, Cameron, Westover and Winter; 12, Rudolf; 13, Mayberry; 14, Teeple; 15, Murray.

Physical Science, including Physics, Engine, Agricultural Chemistry and Animal Chemistry.—Class I.—1, Howitt; 2, Esmond. Class II.—1, Craig; 2, Eddy; 3, Bustamante; 4, Albright; 5, Deachman; 6, Bower; 7, Bell and Hoodless; 8, McKillican; 9, Wade; 10, Evens; 11, McDonald, D. J.; 12, Leitch and Westover; 13, McDiarmid; 14, LeDrew; 15, Winter; 16, Cohoe; 17, Scott; 18, Groh; 19, Reed; 20, Mason.

Biological Science, including Botany, Bacteriology, Entomology and Horticulture.—Class I.—1, Howitt; 2, Bustamante, D. Class II.—1, Hoodless and McKillican; 2, Craig; 3, Leitch and Wade; 4, Eddy; 5, Deachman and Groh; 6, Bell; 7, Esmond; 8, Mayberry; 9, Reed; 10, McDonald, D. J.; 11, Evens and Hankinson; 12, Bower and Cohoe; 13, Albright and Westover; 14, Brerton; 15, Pearce; 16, McDiarmid; 17, Scott; 18, LeDrew; 19, McAulay, Nicholson and Whyte; 20, Rudolf; 21, Hand; 22, Murray.

Agriculture, including Live Stock, Dairying, Poultry and Veterinary Science.—Class I.—1, Deachman; 2, McKillican; 3, Reed; 4, Howitt; 5, Eddy; 6, Albright; 7, Esmond; 8, McDonald, D. J.; 9, Wade; 10, Leitch; 11, Scott; 12, Bell; 13, Bower; 14, Mayberry; 15, McDiarmid; 16, Bustamante; 17, Pearce; 18, Westover.

**HONORS IN DEPARTMENTS—THIRD YEAR.**

English and Mathematics, including English, Algebra and Euclid.—Class I.—1, Fulmer; 2, Bray. Class II.—1, Readey; 2, Thom; 3, Henderson; 4, Hamilton; 5, Galbraith; 6, Irving; 7, Johnston and Rothwell.

French.—Class II.—1, Avila; 2, Peltzer; 3, Carpenter; 4, Barber.

German.—Class I.—1, Fulmer. Class II.—1, Bray.

Physical Science, including Physics, Chemistry and Geology.—Class I.—1, Fulmer. Class II.—1, Thom; 2, Dewar; 3, Carpenter; 4, Readey; 5, Bray.

Biological Science, including Botany and Entomology.—Class I.—1, Fulmer; 2, Dewar. Class II.—1, Carpenter; 2, Thom; 3, Readey; 4, Bray; 5, McRae; 6, Rothwell; 7, Fansher; 8, Johnston.

**SCHOLARSHIPS.**

First Year.—1, English and Mathematics—H. K. McMillan, Aurora, York, Ont. 2, Physical Science—F. C. Hart, Wallace Bay, N. S. 3, Biological Science and Horticulture—R. Ballantyne, Sebringville, Perth, Ont. 4, Agriculture—J. Bracken, Seeley's Bay, Grenville, Ont.

**PRIZES.**

Second Year.—First in general proficiency, first and second year work, theory and practice.—W. D. Albright, Beamsville, Lincoln Co., Ont. Essay: "George Elliot as a novelist and a writer of English prose."—J. Craig, Glasgow, Scotland.

**MEDAL.**

Second Year.—Governor-General's Silver Medal, first in general proficiency, 1902-1903.—J. E. Howitt, Guelph, Wellington, Ont.

**Appreciation from the Old Country.**

The William Weld Co., Limited, London, Ontario, Canada:

Gentlemen,—Although I have had your grand paper only since last September, yet I feel that our English agricultural publishers should hurry up and raise their publications to your high standard. Your paper is an educator, a newspaper, and a magazine; the articles and letters take such a broad-minded view of the many subjects treated in your pages. The illustrations are very good, and seem highly typical of the country. Several people in this district, to whom I have shown your Christmas number, say they never saw such a fine number.

There are two men here, M. Cartwright, 12 Sussex St., and J. Goodchild, 4 St. Andrew's Hill, both of Cambridge, who may emigrate soon, and they would much like a copy of your "2nd Annual Immigration Number" sent to them. I have also directed a new subscriber, Mr. Swann, to pay his four shillings and two pence to Mr. Chapman, in London.

I am now taking an agricultural course at the University Agricultural Department.

I hope to be passing through Montreal, Toronto and Winnipeg, to Banff, with a party early in July, and afterwards to Victoria, B.C., and on to the coast. I should like very much to stay a few days at Winnipeg on my way back. Can you let

me know if there will be any cattle and horse fairs in the West at the end of August? Yours very truly,  
FREDK. V. LONGSTAFF,  
10 Peas Hill, Cambridge, England.

**Oxford Co., Ont.**

We have had a continued spell of dry weather for some time, and the grain, especially the oats, has been suffering, and the grass, more especially the old meadows, has not made much progress, and it is not likely we shall have a very heavy crop of hay, even if we should have abundant rains after this. I notice that in a season of drouth the grain that was sown early on well-prepared rich land does not suffer nearly as much as does that on poor land, poorly put in. Fall wheat came out of the winter well, but owing to the dry weather will not likely be a heavy crop of straw, but has the appearance of being a fair, even crop. Barley has suffered less from the drought than any of the cereals, and is, generally, looking well. There have been some local showers lately, but they have not fallen generally over the counties. Grass peas were so unsatisfactory last season that very few have tried them this year, but quite a number of farmers have sown a few bushels of spelt. The dry weather has been very favorable for the cleaning and preparation of the root and corn field. The field we are working on was fall wheat two years ago, when the crop was such a failure, and the ground got very dirty. We have already killed millions of weeds, and there are millions more, so that we need not, Alexander-like, sit down and cry for want of something to conquer. We have been burning the root grass that has been pulled up by the cultivator. The Scotch chain harrow was a good implement for collecting this sort of roots, but it is only very seldom that we have this to contend with. Cheese and hogs are both a little easier in price, the former about 11¢, and the latter \$5.60 this week. There is a good flow of milk coming in to the cheese factories, but several of the skimming stations are closed up, and some that are running must be doing so at a loss, as they do not get enough milk to enable them to make it pay. Stall-fed cattle have been selling at from four to five cents for the best. Some very fine animals were shipped from this place to the British market at the latter price, some of the steers weighing 1,600 lbs. Two-year-old store steers selling at from \$30 to \$40. Potatoes at from \$1 to \$1.25 per bag. There is a great appearance of blossom in some orchards, but it is generally conceded that now, with the increased cost of living and scarcity of help, that the apple business does not pay. I saw Mr. J. C. Harris' spraying outfit at work—a large tank on a wagon, with a gasoline two-horse engine to do the pumping. The charge was three cents per tree each application. I have no doubt it might be the cheapest way of getting the work done. Wages are from \$20 to \$25 per month, and very scarce at that. The farm-help problem is a serious one. We will have to petition the Legislature to impose a very heavy tax on every bachelor farmer.  
D. L.

**Publication Clerk Appointed.**

Mr. W. A. Clemons has been appointed Publication Clerk of the Dominion Department of Agriculture. Since the retirement of Dr. Coard, some two months ago, this position has been vacant, but it has been decided to resume the work, and under the present guidance, it is expected, will be more beneficial than before. For the past three years, Mr. Clemons has been private secretary to the Live Stock Commissioner, and previous to that time had charge of the Canadian Holstein-Friesian records as secretary. He has a thorough knowledge of agricultural and live-stock conditions in Canada, and is conversant with the most urgent needs of Canadian farmers, and should, in his present position, be able to diffuse much valuable information through the press.

**Railway Land Deal.**

A despatch from St. Paul confirms the purchase by Col. A. D. Davidson, of Duluth, Minn., and associates, the majority of whom are old Canadians, of the entire land grant of the Canadian Northern Railway, about three million acres in Manitoba and the N. W. T., the consideration being twelve million dollars. Among the parties interested are: Col. A. B. Davidson, A. D. McRae and Geo. C. Howe, Duluth; A. R. Davidson, Little Falls, Minn.; D. P. McDonald, Fort Qu'Appelle, N.-W. T.; A. J. Adamson, Rosthern, N.-W. T.; F. C. Kenaston, Geo. F. Piper, W. D. Douglass, Minneapolis, Minn. The Manitoba & Saskatchewan Valley Land Co., Limited, with a capital of five million dollars, will be organized at once, with offices in Canada, the United States and England, for the purpose of colonization and settlement.

Mr. D. B. Mann, Vice-President of the Canadian Northern Railway, confirms the report. He expects that fully forty per cent. of the colonists whom the company would locate would also be former Canadians who have resolved to return. The conditions of the land required the bona fide settlement of these lands, and he expected an enormous influx of settlers within the next few years. The lands which have been sold in Manitoba and the Northwest.

**MARKETS.**

**Toronto Markets.**

Over 7,000 cattle passed through the Western Cattle Market during the past week, about 350 loads, all told, the larger number being Chicago cattle that were rested and fed previous to re-shipment. May 26, there were 1,000 cattle, 219 sheep, 200 hogs, 57 calves, and 20 milch cows on hand. The quality of the Chicago cattle is remarkably good, and they are the choice of about 25,000 head. The reason that so many U. S. cattle are passing through this market is due to the fact that it costs but little more to ship from Chicago, the difference being about 10c. per hundred, and a cost price of \$4.85 there figures out less than our best exporters at \$5.10 per cwt.

Export Cattle.—Two shippers purchased supplies on the Chicago Market, which depressed prices here, as many cattle that could have been shipped as exporters were taken back to the country as short-keep feeders. Best selected loads of export cattle sold at from \$5.00 to \$5.15; well-bred 1,130-pound cattle, \$4.85 to \$5.00.

Butchers' Cattle.—Picked loads, suitable for best local trade, 1,125 to 1,200 lbs., \$4.65 to \$4.80; fair to medium, \$4.35 to \$4.60; good, \$4.25 to \$4.45; common, \$3.65 to \$3.75.

Bulls.—Choice export bulls, \$4.00 to \$4.25; good, \$3.50 to \$3.85.

Export cows.—Choice, \$4.00 to \$4.25.

Feeders.—Many farmers were looking for short-keep feeders or the drovers would have lost heavily on the last two weeks' market. The demand for short-keep feeders is still good. Prime steers, 1,100 lbs. to 1,300 lbs., \$4.50 to \$4.80; good, 900 lbs. to 1,000 lbs., \$4.00 to \$4.40.

Stockers.—The demand for stockers is still very good. Drovers and farmers were purchasing young stock to turn on grass, and many were disappointed who could not obtain supplies. Prices firm; two-year-old steers, 400 to 700 lbs., at \$3.60 to \$4.00; poor quality, mixed colors, \$3.00 to \$3.25.

Sheep.—Prices steady; demand not keen; \$1.25 to \$5.00 for ewes, and bucks at from \$3.25 to \$4.00.

Lambs.—Yearling lambs, \$5.00 to \$5.25.

Hogs.—There was a drop of 20c. per cwt, and 2,500 in for the week. Best selected bacon hogs, singers, not more than 200 lbs., or less than 160 lbs., live weight, off cars, not fed nor watered, \$5.90, and culled closely to thick fat and light at \$5.65; sows, \$4.00 to \$4.50; stags, \$2.00 to \$3.00.

**PRODUCE MARKET.**

Wheat.—Red and white are worth 71c., middle freights; Manitoba wheat, No. 1 hard, 87c., and No. 1 northern, 85c. per bushel. Three hundred bushels of white sold in Toronto at 74c. per bushel, and two hundred red at 73c.; one hundred bushels of goose, 67c., for which there is a good export demand.

Barley.—No. 2 extra, for export, 44c. to 45c.; No. 3, 42c. In Toronto, 100 bushels sold at 45¢.

Oats are firmer in price, and with a good demand, quoted at 29¢. north, and 32c. f. o. b. Toronto. In Toronto they sell at 35¢. to 36c., off farmers' wagons.

Corn.—American corn, on track, 50c. per bushel, with Canadian at 48c.

Eggs.—Prices steady at from 13c. to 14c. per dozen; extra choice at 15c.

Butter.—Prices easy at from 16c. to 20c. per lb.

Cheese is quoted on this market at 11¢. per lb.

Hay.—Thirty loads of hay sold at \$12.00 to \$15.00 per ton for timothy, and at from \$6.00 to \$8.00 per ton for clover.

Straw.—Four loads of straw sold at \$8.00 to \$9.00 per ton.

Dressed Hogs.—Prices easier; demand less keen; choice light butchers' hogs easy at from \$7.50 to \$8.25; will go lower.

Potatoes.—Prices steady at from \$1.00 to \$1.10 per bag, on track, at Toronto; farmers' bags, \$1.25.

Apples.—Choice, \$2.50 per barrel.

Poultry.—Scarce and demand good for choice stock.

Chickens at from \$1.00 to \$1.75 per pair; spring chickens, \$1.50 per pair. Turkeys are offered at from 12c. to 15c. per lb.

Dressed Meats.—Beef fore quarters, per cwt., \$5.50; hind quarters, per cwt., \$9.50; mutton, per cwt., \$7.50; yearling lambs, \$12.00; veal carcass, \$9.00.

**Chicago Markets.**

Chicago, May 26.—Cattle—Receipts, 19,000; market steady; good to prime steers, \$4.90 to \$5.40; poor to medium, \$4 to \$4.90; stockers and feeders, \$3 to \$4.85.

Hogs—Receipts, 17,000; market steady to strong; mixed and butchers, \$5.80 to \$6.10; good to choice heavy, \$6.15 to \$6.40; rough heavy, \$5.85 to \$6.10; light, \$5.50 to \$5.80; bulk of sales, \$5.90 to \$6.10.

Sheep—Receipts, 6,000; sheep and lambs steady; good to choice wethers, \$4.75 to \$5.25; fair to choice mixed, \$3.75 to \$4.60; native lambs, \$4 to \$7.

**British Cattle Markets.**

London, May 25.—American cattle, 6d.; Canadian, 5½d. to 6d.; Argentines, 5½d.; Argentine sheep, 6½d.; demand poor.

Liverpool, May 25.—Best Canadian and American cattle, 6d. to 6½d.





"Say well" is good, but "Do well" is better; "Do well" seems spirit and "Say well" but letter; If "Say well" and "Do well" were bound in one frame, Then all were done, all were won, and gotten were gain."

**Travelling Notes.**

My "Travelling Notes" this time are going to be chiefly extracts from the letters of a cousin from Australia, a young lady doctor, who, coming to London in company with her sister, passed on thence to Madrid, to attend the International Medical Congress, which is being held there this year, and at which thousands of doctors from all parts of the world have assembled.

The pleasant foregathering of eight of us, colonial cousins from Australia and Canada, in London at the beginning of April was very jolly. We spent a month together under one roof, where our kind landlady made us most comfortable. Here, as a "by the way," I would venture to advise any of my readers coming to England who may desire a home-like boarding house at most reasonable charges in London, to correspond with Mrs. Pyle, 18 Norfolk Square, Lancaster Gate W. We have laughed and talked and danced and sung in the house, and gone out in two's or half-a-dozen together, to all sorts of places, upon the ever old round of sight-seeing, which is always interesting and always fatiguing, rather too much so for Mollie, or she would have begun this little series long before this. Now, how am I to enumerate the things we have done and seen during these last five weeks? It has all been delightful. The season is just "on," London is very full, and as the King wishes it to be very gay in the social world, so will it surely be from start to finish; the result of which, while it does not affect wayfarers, such as we are, to any appreciable extent, must be for the good of trade generally, a consideration the King never loses sight of. We have taken a furnished flat for six weeks, and my next letter will tell you how we managed it. We are looking forward with pleasure to having a nest of our very own in the heart of this great city, and being able to invite our friends to come and see us. I must not write more now, as I want to give some notes from my companion traveller, whose acquaintance I first made in Canada when she, in company with her dear father, now passed away, and two others, took a trip round the world. I met her again in Australia, when I enjoyed with them that ever memorable holiday of which some of my old notes of travel have already told you. Once more we meet again, this time in the mother country. In the interval my friend has steadily pursued her studies until, as a full-fledged doctor, she is privileged to attend the International Congress at Madrid.

Let me introduce my correspondent to you as "Eleanor," only prefacing my extracts from her letters by saying that they were not written with a view to publication, although I am not at all afraid of condign punishment being meted out to me because I desire to share with the dear readers of the Home Department the very real interest they have afforded myself:

"My dear Mollie,—You will have received my post card from Paris before this reaches you, so you will know at any rate that I was safely on my journey so far. Now we have arrived at Biarritz, but not without several adventures which afterwards, however, only add charm to the tale. My fellow passengers, of whom you saw a number at Charing Cross, have so far all proved to be very nice and very friendly. The old doctor with the long, white beard, whom you called "Grandpa," is exceedingly kind, and always secures a porter at the stations for me, to see after my luggage, etc. We had a delightfully smooth passage across the Channel; several French families on board, and the boys wearing long capes with hoods to them, which made a great contrast to the English boys in short coats. Capes among men and boys in Paris apparently are very fashionable. We had no trouble with the customs at Bordeaux; having declared we had no tea and tobacco we were allowed to pass, but we had very little time to have a lunch. We stood at the counter some time before we were served with ham sandwiches made by cutting long rolls in two lengthwise, and two bottles of the

mild wine of the country. Armed with these we took seats in a carriage with Mrs. H. and Mrs. M., rather a curious couple, but kind hearted; in fact we chummed at once, drank out of their silver mug and helped them with their biscuits and roll. The journey to Paris was picturesque, very much like English country, only less cultivated than that of Kent. Much more water lies about; women are seen working in the fields and teams of oxen at the plow. We arrived at Paris at 6.05, and had dinner at the railway station hotel, a very good dinner, consisting of a greenish colored soup that tasted better than it looked (for spinach color is not appetizing), fried fish, veal, hot roast chicken, with lettuce salad (curious mixture to an English palate), and cherry tart. We were to meet the conductor at 8.30, outside the dining-hall, and all go in cabs to the other station across Paris. We descended to the platform a little before the time, and "Grandpa," not seeing the conductor, said he would go back and look for him. Shortly after he left, the conductor came from the opposite direction, and asked us to accompany him through the "Sortie" "Ansgang." He sent a porter after our missing friend, but after that we saw no more of him that night. We waited outside in the busses till nearly 9 p.m., the conductor returning twice in pursuit, but at last we had to leave without him. Mrs. H. and I felt awfully to blame because we had been with him, and he had left us to find the conductor. All the way she, poor soul, who is evidently of a somewhat pessimistic disposition, was drawing up vivid pictures of the old man robbed and even killed in the heart of Paris. We had a long wait at the beautiful Orleans station. There we kept a lookout for our missing friend, but he not turning up, we took charge of all his luggage for him, with the result that our compartment looked like a luggage van for a short time, until some of it being removed to other carriages, the rest could be arranged in some order. We had six passengers too, but I had a good corner, and the most room. As nobody would allow me to relinquish it, I succeeded in getting at last a few snatches of sleep. Mrs. H. woke up to find she had been sleeping with the carriage window open all night, and then ensued a discourse on the condition of her chest and a history of how the different members of her family died of consumption. The same tale was repeated to any willing listener afterwards, so that she might now be called "The lady with the chest." At Bordeaux, where we got coffee, I caused her considerable consternation by remaining in the carriage fixing up my rugs while the carriages were shunted. Her gesticulations to the French porters were too funny for words. Our carriages were taken off, and while we were having coffee the luggage was taken away, so when we returned there were no carriages and no luggage, and in endeavoring to find the latter a Dr. Irwin and I nearly missed the train. It was moving off, and we called out to the guard, and he said "trop tard, trop tard"; however, I clambered up into the van, followed by the other medico, and we rode in the van among crates of cabbages and bicycles for about an hour, till we stopped at a station long enough to change to a carriage. I forgot to tell you when I sat down to breakfast the lost "Grandpa" was there beside me. He had caught the train after all at another station, and had taken a cab across to it. We were glad to see him safe and sound. Our next excitement was finding our missing luggage. It turned up at last, scattered in various carriages, where we stirred up the occupants at various points along the route. It really is remarkable that so far nothing has been lost, considering the lax ways of these foreigners.

Eleanor writes drolly of the lady in "Tartan green dress not much above her ankles, the skirt having a tendency to part from the bodice"; of the man "in knee breeches and fancy ribbed stockings, patent shoes with buckles," who was perpetually drawing a reference book and pencil out of the leather bag strapped to his shoulders, and of "the crusty old Froggy in the corner, who objected to the window being opened, and who, driven to exasperation finally by the increasing luggage, offered 10 centimes to the porter to take one bag to the vanguard. This failing, he retired altogether; the carriage could not hold both. We reached Biarritz a little before one o'clock, and were allotted rooms almost at once. The afternoon was lovely and warm, so that we could see Biarritz at its best, with its fine beach, its good rocks, its pleasant walks and good seats. Life at the hotel promises to be a very interesting study, for there are plenty of visitors of many sorts and kinds. I have been talking to a doctor, a delegate to the congress, who represents the Asylum Board in London. He is a fine old man, with such a sweet, refined lady as his wife. But it is time my letter should come to a full stop for the present."

MOLLIE.

"Mollie" desires heartily to thank "W. S." Regina, a reader of the "Farmer's Advocate," for his kind contribution of 10s., which has been forwarded by her to the fund raised on purpose to meet the destitution in the east end of London, with the request that it be especially applied ac-

ording to the wishes of the donor. Mollie would like to state that when she made mention in the "Farmer's Advocate" of the suffering in old London, she did so, not with any expectation of obtaining contributions, but rather to emphasize to Canadians the blessedness of their lot in a land where nobody with ordinary industry could ever suffer as those were suffering about whom she wrote.

**THE QUIET HOUR.**

**"He Saw Them Tolling in Rowing."**

"I lean upon no broken reed,  
Nor trust an untried guide.  
I know Him, and He knoweth me.  
He walketh by my side.  
I hold His hand as on we walk,  
And He still holdeth mine.  
It is a human hand I hold,  
It is a hand divine."

A few weeks ago when I began to write about the danger of "forgetting" God, I had not the least intention of beginning a series, but that subject naturally led to the question of "remembering" God in our everyday life, and now I can hardly help speaking about the other side of that mysterious communion—the all-important fact that God never forgets us. If I had intended to write a series, this would, of course, have come first, being first in reality and in importance. Let us consider to-day the solemn and yet joyful truth that God is looking at us always. When conscience accuses us we may sometimes try to hide from Him as Adam did, but we know perfectly well that the attempt is useless, for "The eyes of the Lord are in every place, beholding the evil and the good."

But the thought of God's watchfulness is not intended to fill us with terror, but rather to inspire joyful courage—"The eyes of the Lord are upon the righteous, and His ears are open unto their cry."

Once the disciples of Christ were fighting a desperate battle against wind and sea. They were toiling alone, trying to obey their Master's orders and go to the other side of the lake. He was on a mountain apart, and they were in the midst of the sea, tossed with waves, for the wind was contrary. They seemed to make little or no progress, and must have grown more and more discouraged, for "it was now dark, and Jesus was not come to them. And the sea arose by reason of a great wind that blew." Still they struggled on manfully until, in the fourth watch of the night, when it was nearly morning and they had given up all hope of His help, He suddenly appeared, walking on the sea. As soon as they received Him into the ship their hard fight with winds and waves was over, for "immediately the ship was at the land whither they went." What a beautiful object lesson this was, a lesson for disciples of Christ in every age. What a difference it would have made to their feelings if they had only known that He "saw them" as they toiled on. He had good reasons for keeping out of sight, but was always ready to come to their assistance when there was any real need. Our Lord has again gone "up into a mountain apart to pray," leaving His disciples to fight against a head-wind and a heavy sea of trouble and difficulty. Still we know that they are not forgotten, "seeing He ever liveth to make intercession for them," and we also know that though Himself invisible, He still sees them toiling. Someone has said that when the "Gazette of Honor" is issued after an earthly battle, many who deserve mention there may find themselves overlooked because they have chanced to "fight in the dark"—their gallant service has been overlooked. But no one who fights bravely for the Great Captain will find his name omitted when the last "Gazette of Honor" is issued. Men may think that they are fighting in the dark, that no one notices their sacrifices and efforts, but He who leads the Great Army has eyes "like a flame of fire," and never overlooks the smallest service. When the poor sick woman pushed her way through the crowd, determined to touch at least His garment, she thought herself unnoticed, but St. Mark says, "He looked round about to see her." St. Matthew, in telling the same story, says that Jesus turned Him about and "saw her." St. Luke says that the woman saw that "she was not hid." Is any trembling soul reaching after Christ and doubtful whether it be possible to touch Him? Be very sure that He sees, and is ready to give help just at the best time. Dr. Maclaren has beautifully said, "Can my poor feeble hand find a cranny anywhere through which it may reach the robe? What am I in all this great universe blazing with stars, and crowded with creatures that hang on Him, that I should be able to secure personal contact with Him. The multitude—innumerable companies from every corner of space—press upon Him and throng Him, and I, out here on the verge of the crowd, how can I get at Him? How can my little thin cry

live and be distinguishable amid that mighty storm of praise that thunders round His throne?"

"Among so many, can He care?  
Can special love be everywhere?  
A myriad homes, a myriad ways,  
And God's eye over every place?  
I asked: my soul bethought of this—  
In just that very place of His  
Where He hath put and keepeth you,  
God hath no other thing to do!"

The Great Captain is not only watching the struggle, and giving help wherever it is needed; He also directs the fight and appoints each soldier to his rightful post. Before each day's battle He says, as He did to Joshua, "As Captain of the host of the Lord am I now come." He has "now" come to give each of us our orders for the day. Let us worship as Joshua did, and say, "What saith my Lord unto His servant?" And let our obedience be prompt and soldierly as his was. When the orders were given there was no shirking, "and Joshua did so."

When Judson was once asked how he had been influenced to go to India as a missionary, he said: "I was almost disheartened. Everything looked dark, the way was not open, the field was far distant and in an unhealthy climate. I knew not what to do. All at once Christ's last command seemed to come to my heart directly from heaven. I could doubt no longer, but determined on the spot to obey it at all hazards, for the sake of pleasing the Lord Jesus Christ." And he added, confidently, "If the Lord wants you for missionaries, He will send that word home to your hearts." Then follows the solemn warning, "If He does so, you neglect it at your peril!" There is no doubt about His wanting you to do mission work of some kind, the only question is, "Where and How?" What special work, at home or abroad, has He given you to do? Does He see you "toiling," or are you drifting comfortably and aimlessly with the stream, contented with the name of Christian, but "not working very hard at it?" The Master's eye is certainly on you, and He is ready to make good use of you if you will only obey orders.

"We do not always know it when we have  
The privilege to be God's messengers,  
Nor who shall be His messengers to us."

HOPE.

### The Coming-out Party.

BY PRISCILLA LEONARD.

Dame Nature gave a party—a coming-out affair—  
She sent her invitations by the whispering winds of  
spring:

"Come, one and all; put on your best, and for a  
dance prepare,  
For all the birds have promised their gayest tunes  
to bring!"

O'er field and wood and hillside the joyous message  
flew;

Miss Pussy Willow heard it first, "Of course I'll  
come," she said;  
And, shivering just a little (for cold the north wind  
blew),

She donned her furry, fluffy cloak, and started out  
ahead.

Close after her the Violets, a varied, laughing throng,  
In purple, yellow, lavender and white, came trooping  
on.

"Oh, wait for me!" Miss Bloodroot cried, "I'm com-  
ing right along;  
I hear the robins singing, and all the snow is gone!"

Next Miss Anemone peeped out, between her feathery  
leaves,

And joined the fair Arbutus, whose cheeks of pink  
and white

Blushed rosy 'neath her dingy cloak. "I hope no one  
perceives,"

She cried, "how very shabby I am—a perfect sight!"

"No matter," cried the jolly young Marsh-Marigold,  
"my dear,

You'll be a belle in spite of it!" and, swaggering  
and gay,

His golden-yellow velvet coat he donned in haste.  
"Look here!"

He called out to the Trilliums, "don't make me  
wait all day."

Wake-robin laughed to hear him. "You needn't hurry  
so,

There's time enough, Miss Columbine; don't listen  
to his talk!"

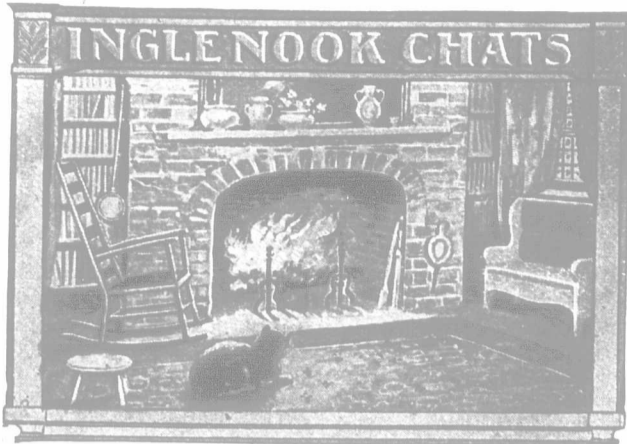
But little Miss Spring-Beauty feared she was late and  
slow,

And hurried till each striped star quite trembled on  
its stalk.

"Come! come!" the spring wind whispered; "Come!"  
saug the robins, too.

Oh, what a merry party beneath the smiling sun!  
They danced within the beehive song, they sipped the  
perfumed dew,

And no one was a wall-flower, nor not a single one!



[The many readers of our Ingle Nook Chats will, we are sure, be sorry to hear that our gracious Hostess, who for many years has welcomed guests, both old and young, to her hospitable Ingle, has decided to say farewell to us all, having made plans which necessitate her removal to a far-away city, though she still remains in Canada. Our loving wishes follow her in her new sphere of useful work, and we wish her every success and happiness. At the same time we introduce to you all the incoming Hostess, Dame Durden, who will be glad to entertain you in her cosy corner, and who, in this her first Chat, invites you, one and all, to join her happy circle.—Editor Home Dept.]

I remember, many years ago, visiting a Sunday school, just at the time of the New Year. A noted artist had been in the schoolroom some time during the preceding week, and had left a very visible memento of his visit. This was a large drawing, placed upon the blackboard with tinted crayons, representing the passing of the old year and the coming of the new. A grate was in the background, a veritable "Ingle Nook," fire-dogs, tongs, and all. Near it stood a Hostess, who had just bid farewell to a parting guest—the old year, passing out at one door—and had turned from him to welcome the "new," entering at another.

The memory of that picture came to me this afternoon, as I sat down to write this little introductory letter to the "Guests" of the Ingle Nook. The "Nook" was there and the Hostess—only to-day it is the Hostess who is leaving, Dame Durden who is entering, and the Guests who must receive. There are regrets in bidding farewell to the Hostess, who has been so long and faithful in the arm-chair of the Ingle Nook, with the smile and the welcome for all. Her old-time Guests will miss her, and will long bear the remembrance of her kindness. She, too, will have pleasant memories of her Guests, and Dame Durden dares to hope that those who have been so kind to the "Hostess" will be kind to her too. From the page of the "Advocate" she reaches forth her hand to one and all, and issues to everyone a hearty invitation to visit still at the Nook.

Now, then, for getting acquainted. Here you are, tall, short, brown-eyed, blue-eyed, black-haired, red-haired, yellow-haired; there are so many of you that Dame Durden can surely make a guess as to what some of you look like. As for her—"aye, there's the rub!" as Shakespeare hath it—now just picture her as you choose. As for what she is like—her real self, not her looks, you know—why, probably, a little bit of her will creep into these chats once in a while. Upon her side, she wants letters from you all. You see, she wants to find out what you are like also, and how can she, if you don't write to her? The one thing to be remembered is that you must write on the topic mentioned at the end of this chat. Put some of your very best ideas upon that topic into your letter, and then Dame Durden will be able to get at a bit of the very best of you.

Now, then, I want to know how many of you are proud of being "farmers," country-born, with a home in the country. If you are, I want to shake hands with you again, for I am proud of it too, and love nowhere so well as the dear country. Why shouldn't we be proud of it? The day has gone by in which "a fellow who wasn't smart enough to be anything else" was considered clever enough to be a farmer. To-day it is recognized all over that it takes brains as well as brawn and muscle to manage a farm. This concession, more than all others, has raised farming into the ranks of the professions.

Of course, there are farmers and farmers. There are those who are unsuccessful, "slipshod," irrational in their methods; but it is a matter for thanksgiving that the number of such is lessening day by day. Just so there are poor lawyers, poor doctors, poor ministers; yet law, medicine, the ministry, lose none of their prestige thereby.

Once for all, then, let every one of us be proud

of the farm and the country. Canada is an agricultural land—dear, glorious old Canada!—and we are Canadians, British subjects and Canadians!

Now, then, Dame Durden mustn't talk too much this time, or you will be thinking she is a dreadfully garrulous "body." In conclusion, she would say that this number opens

#### A COMPETITION.

The subject will be "Why I am proud to be a farmer." Several reasons should be given. Three prizes will be awarded: (1) To those over eighteen; (2) those between fourteen and eighteen; (3) those under fourteen.

Now send along an essay, not too long a one, you know, and stir up all the patriotism to the farm that you can. Address, simply "Box 28, Chatsworth, Ont.," and be sure to write only on one side of the paper. In examination, the greatest attention, of course, will be paid to the strength and "common sense" of the points; but neatness, legibility, careful punctuation and graceful literary style will all count; originality will be a strong factor. All essays must be in by the fifth of July.

With best wishes for your success, then, au revoir, from  
DAME DURDEN.

The contest announced in the March 16th issue was well responded to. The following are the prizewinners: "Leo Carleton," Murray Harbor, P. E. I.; Mrs. J. Wm. Boss, Athol, Cumb. Co., N. S.; Miss Bertha A. Cameron, Parrsboro, N. S. Our Maritime friends have carried off all the honors this time, but were very closely followed by their Ontario cousins. The following deserve special mention: Mary Hunter, Etta M. Kelly, Annie Matheson, "Bettina," Nina Sprung, Bessie E. Wood, Ella K. Campbell, Edna M. Campbell, Mary E. Forsythe, Minnie Luck, Mrs. F. Ransom, Mrs. W. J. King, Flossy A. Butwell. Names not in order of merit. Other contributors were: Ethel L. Travers, Janie Doherty, Gordon Mayhew, "Red, White and Blue," Emily Mason, Wm. J. Cameron, Annie MacHardy, Annie L. McDiarmid, Ethel Jose, and Walter McCulloch.

The answer to the puzzle is:

- |                       |                            |
|-----------------------|----------------------------|
| 1. R A—array.         | 11. E Z—easy.              |
| 2. N M E—enemy.       | 12. R O—arrow.             |
| 3. D K—decay.         | 13. L E G—elegy.           |
| 4. X L—excel.         | 14. N R G—energy.          |
| 5. S A—essay.         | 15. M U—emew or emu.       |
| 6. C D—seedy.         | 16. X S—excess.            |
| 7. X L C R—excelsior. | 17. C V—seavy.             |
| 8. N V S—envious.     | 18. T D M—tedium.          |
| 9. O G—ogee.          | 19. N V—envy.              |
| 10. I C—icy.          | 20. X O D—Exody or Exodus. |

### Domestic Economy.

#### HEALTHFUL COOKING.

Probably no ailment with which the human family is afflicted is more common than indigestion. The prime cause of indigestion is poorly cooked food. Fried foods should be avoided, as a large amount of grease penetrates through every particle of the food, if fried any length of time. Many people will take a piece of steak and fry it until it becomes thoroughly saturated with fat, and all the juices of the steak are entirely destroyed. When it is placed upon the table ready to serve, the steak is about as easy to digest as a piece of leather, and about as nutritious. If steak is fried at all, the skillet should be made very hot, a small piece of butter put in, then the steak placed in the skillet, and allowed to remain long enough to brown through one-fourth of the meat. Then turn it over on the other side, and do likewise. Steak to be nutritious should be red when cut open.

A great deal of the meat that is baked or roasted is cooked too much, which destroys the juices, making the meat indigestible. Meat in roasting loses about twenty-five per cent. of its weight, while if steamed it will not lose any of its weight or nutrition.

All cereals can be cooked by steam with one-fourth the labor that it takes to cook them in any other way, as they need no watching or stirring.

All vegetables cooked by steam are far more palatable, nutritious, and more easily digested than when cooked in any other way.

Puddings, fruit cake, brown bread, and a score of other things have much better flavor if cooked by steam, and are much more easily digested than they are when cooked in a hot oven. Nothing should be boiled, as boiling takes the life out of any kind of food, with the exception of stews, when the liquid part as well as the solid part of the food is intended to be eaten. Potatoes should never be boiled. For most people baked potatoes are more palatable than any others, if eaten just as soon as cooked. They are worthless if allowed to stand any length of time. Steamed potatoes are very delicious, and much better to keep, if left over from one meal to another, than potatoes that are boiled or baked.—[C. M. Robinson, in Christian Advocate.

THE CHILDREN'S CORNER.

Puppies.

Do you see how jealous poor old Tabby is? And she has good reason for her doleful looks, for little Minnie used to love her better than any of the live things about the farm.

A day or two afterwards the children were in the parlor when the door was pushed open and the cat came in, dragging a little blind puppy.

Pussy and the orphan she had adopted were soon tucked away in a comfortable box near the fire, and all the children praised and petted them both.

"Hallo! here's the very thing!" said Harry one day, looking up from an old spelling-book which he had been studying.

Once a big dog started to fight with Waif and his faithful foster-mother rushed bravely to his help. The big dog worried her dreadfully, and the children felt sure she would die.

"Here lies the Best Cat That Ever was Known, And the Faithfullest."

All the children thought that Waif ought to have died too, but he soon recovered his cheerfulness. One day he adopted a cat friend and brought her home with him, and they soon became great chums.

The following poem was sent in some time ago by one of our competitors. It was written by a boy in Foxboro, Ont. He did not mention

his age, so it could not be placed in any class, but it certainly deserves a space in our Corner.

COUSIN DOROTHY.

Canadian Country Life.

BY PERCY M'DAVITT, FOXBORO, ONT.

When I'm a man, I'll a farmer be, It is surely the life that will suit me, Happy and healthy, wealthy and wise.

The farmer's stock, if properly fed, Is surely a cause of joy and not dread. The merchant's stock may grow out of style.

Wealth always comes to farmers who will. Tho' perhaps, at first, work may seem uphill. Take the "Farmer's Advocate" for guide.



PUPPIES.

On Some Trivial Differences.

I am sometimes asked to tell what strikes me most amongst the little things, the incidentals of daily life, as being different in England from Canada. This is a difficult question to answer when there is so little of real difference to note.

When first I came to Teignmouth I used to be somewhat amused watching the large number of apparently young men who, with jaunty air and in faultless knickerbocker attire, walked up and down the sea-front, or were to be met along the roads leading out into the country.

had of them, but the others were just old fogies like myself, and it was only their bestockinged or begaitered legs which gave them that youthful aspect. I never am quite sure whether it is a young man, an old young man or a young old man who is drawing nigh until he is close enough to show, if he has any, the wrinkles upon his face or the white hair peeping out under his close-fitting cloth cap.

I imagine that hardly any Canadian on coming to England fails to notice the softer tones of the English voice, not only amongst the more educated and cultured classes, but amongst those less privileged. Behind the counters of almost any shop, from the dressmaker, the milliner, the saleswoman, of even quite small establishments, one hears a gentler intonation than our ears are accustomed to across the water.

only a certain amount of culture which levels all the differences and softens all the asperities which must remain to rasp the ear where they have been allowed to exist unchecked. In Canada we have representatives of so many nationalities that we can hardly be said to have an accent at all, and, therefore, we are hardly competent judges of what is real and what is burlesque in any language under the sun.

Amongst other pleasant things which strike me, I am always quick to name the bright, fresh complexions of not only the young English girl, but often of the quite elderly woman, a pretty rose-tint softening the eye and toning down the inevitable wrinkles upon the cheek of even three-score years and ten.

H. A. B.

A Song of Gold.

BY BLANCHE ELIZABETH WOODS.

Sing a song of buttercups, and other yellow things; Sing a song of butterflies that sail on golden wings; Sing a song of dandelions, smiling 'neath the skies; Sing a song of daisies white, that open golden eyes.

Sing a song of katkins yellow, dangling from the trees; Sing a song of marigolds that nod to greet the breeze; Sing a song of yellow things, but while you praise each one,

Don't forget to sing a song about the golden sun.

Poor time has its ending



Good time has its beginning

in an  
**ELGIN WATCH**

Every Elgin watch has the word "Elgin" engraved on the works, and is guaranteed against original defect of every character. A booklet about watches will be mailed to you for the asking.

ELGIN NATIONAL WATCH COMPANY, Elgin, Illinois.

## GOSSIP.

## THE HAMILTON SHORTHORN SALE.

The catalogue has been issued of the great combination sale of over 50 imported and home-bred Shorthorns selected from seven prominent Ontario herds to come under the hammer, on June 9th, at Hamilton, Ont. The contributors and their respective quotas in the offering are: Hon. W. C. Edwards & Co., Rockland, 27; Hon. John Dryden, Brooklin, 7; Capt. T. E. Robson, Ilderton, 3; R. Mitchell & Son, Nelson, 4; W. B. Campbell, Campbellcroft, 3; James Gibb, Brooksdale, 5; and A. J. Watson, Castlederg, 2. There are in the offering 44 females, 10 of which are imported and many from imported sire and dam, and 7 young bulls, two of which are imported. The pedigrees of the combined offering show a rich infusion of the blood of the best of the Scotch families which have proved potential in moulding the modern approved type of profitable Shorthorns, and from what is known of the herds and the methods of management of the various contributors, it may be taken for granted that the cattle will be found to be up to a high standard of individual excellence and in the best of breeding condition, while the sires to which the females have been bred or have calves at foot are of high-class character and breeding, making the offering an exceptionally attractive one and one which it may be confidently anticipated will draw a large attendance of farmers and breeders from widely distant districts. The spirit of improvement of Canadian cattle is in the air these days, and it is a hopeful sign that the fruits of these times of prosperity are in part being invested in foundation stock that will raise the standard of our cattle and secure for us a first-class standing in the best markets.

Individual mention of the animals in the catalogue is impossible in the space available for this review, and we can only refer in a general way to the breeding and character of the offerings. Messrs. Edwards & Co., who are the largest contributors, are dealing liberally with the public by including in their list ten imported Scotch-bred females of first-class families, showing a strong string of noted sires in their pedigrees, while the home-bred contingent embraces representatives of such favorite families as the Marr Missies, Cruickshank Nonpareils, Lovelys, Brawith Buds and Secrets, Kinellar Rosebuds, Minas and Jilts, Kiblean Beautys and others similarly bred, while among them are a number of sonsie daughters of the great sire, Imp. Marquis of Zenda, a son of the grand old Brawith Bud bull, Waverder, and of Missie 123rd, the winner of Orange, and full brother of Missie 153rd, for which Mr. Edwards paid \$6,000 and which Mr. W. C. Edwards considered his best Missie cow. Several of the imported heifers in this selection were prizewinners in Scotland, and many of the home-bred ones are good enough to make show animals here. The Rockland list also includes two lusty young bulls, Imp. Highland Chieftain, a red two-year-old son of the Cruickshank Clipper bull, Clifton, and Loyalty, a red

yearling son of Imp. Marquis of Zenda and of Imp. Lilly, by Matadore.

Mr. Dryden's consignment includes the excellent red-roan four-year-old cow, Adelia, with calf at foot by his chief stock bull, Prince Gloster, of the Cruickshank Duchess of Gloster tribe. Adelia is of the Sittyton Anemone family, and was sired by the prize bull, Revenue, some of whose get have sold for very high prices in the United States. Rose of Towie 4th, a red two-year-old daughter of Imp. Red Light, of the Gordon Lustre tribe, and out of Imp. Rose of Towie 3rd, of the favorite Jealousy tribe, is also included, together with the red yearling, Northern Blonde, by Prince Gloster, and in calf to the Cruickshank Clipper bull, Clipper Hero. A red five-months-old daughter of Imp. Collynie Archer, so successfully used as a sire in the Maple Shade herd, and a red four-year-old cow, Bridal Beauty, with calf at foot by Imp. Collynie Archer, and of the good Lady Eden family, from which many prizewinners have been bred, complete this consignment.

Messrs. R. Mitchell & Son, Nelson.

## Crippled and Stunted Hogs.

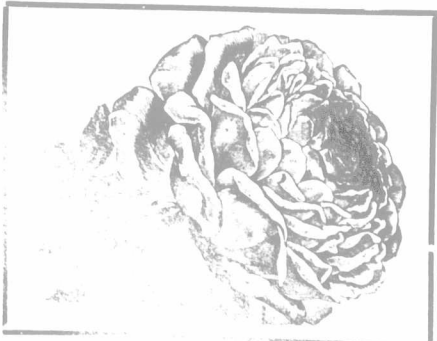
The cause is indigestion brought on by overfeeding or the feeding of foods that are too rich to be readily digested. The sure cure and sure preventive is Herbageum, as witness the following from a practical man who knows whereof he speaks:

"Last spring I bought two pigs that weighed 50 lbs. each. I fed them three months to a day. Their combined weight was then 440 lbs. I did not feed them heavy, but I fed them Herbageum regularly. The buyer guessed their weight at 180 and 190 lbs.

"At present, I have a pair of pigs that I took on an account. They were badly stunted and covered with scabs; in fact, they were in such bad shape generally that I would not have taken them, even to square an account, had I not known from former experience what Herbageum would do for them. I began feeding Herbageum at once, and now they are great long, healthy pigs."

Springford, Ont. H. A. WHITE.

## PLANTS, 5c.



Address: WEBSTER

Ont., consign the big imported cow, Miriam, a Bruce Mayflower, a large, wide cow, one of their very best breeding cows, and safe in calf, sired by Beau Ideal, a noted sire and show bull. Princess Belinda is a red yearling, thick, short-legged, very fleshy, with a nice coat of hair, is sired by Imp. Prince William, a show bull weighing 2,700 lbs., while her dam, Belinda 2nd (imp.), is a very breedy-looking cow with a great back, being sired by Prince Horace, a Princess Royal, by the noted William of Orange. Lovely Gem 3rd, of the Cruickshank Lovely tribe, is big for her age, with only one home-bred cross in her pedigree and that one from imported sire and dam, and due to calve early to service of Imp. Greengill Victor, a Princess Royal, bred by W. S. Marr, and half-brother to Imp. Republican, and is said by competent judges to be one of the best yearling bulls in Ontario. They also contribute the yearling bull, Imp. Greengill Archer, bred by Mr. Geo. Campbell, of Aberdeenshire, and sired by Archer's Heir, winner of numerous prizes and sold to go to South America, being one of the best sons of the famous \$6,000 bull, Brave Archer. Imp. Greengill Archer is a very thick, heavy calf of his age, with a nice back, big hind end and good deep body. He has been fancied by a great many good breeders, and looks like making a grand breeding bull, and will go into the sale in his every-day form. The fact that his owners think enough of him to have bred half a score of good cows and imported heifers to him speaks well of the estimation in which he is held.

Capt. Robson consigns three capital females which stand on their individual merit, of which the owner has reason to be proud. The roan four-year-old cow, by Imp. Blue Ribbon, is the dam of the fine show heifer, Lovely Lorne 2nd, who won first at Toronto as a calf and as a yearling, and is of the same family as Topsman's Queen, first-prize yearling at Toronto last year. The red yearling Morning Glory 6th, is a show heifer and a prizewinner, sired by Duke Lad, a son of the Kinellar bull, Oxford (imp.), by Vermont. The roan three-months-old heifer, Nelle Fidget, has the quality and style to make a successful show calf, and has for sire Ingram Chief, by Grand quality, and for grandsire British Chief, by Imp. Indian Chief.

Mr. Campbell consigns the roan yearling bull, Orange Duke, son of imported sire and dam. His sire, Orange Duke (imp.), was sold at one of Mr. Platt's sales for \$1,510. The dam, Victoria (imp.), was by Matadore, of the Marigold family, and by Prince of Archers, by Scottish Archer. A red three-year-old cow comes from the same herd, sired by Royal James, of the Cruickshank Lovely tribe.

Mr. Gibb contributes five nicely-bred heifers, three roans and two reds, four of which are sired by the prizewinning Crimson Flower bull, Trout Creek Barmpton, and one by Maxon, by British Flag, a son of the grand old Barmpton Hero. These are all of the good Beauty Roan family, and have richly-bred top crosses.

Mr. Watson consigns two bulls, the roan three-year-old Lord Sackville, of the favorite Cruickshank Nonpareil family, with top crosses of the excellent imported Scotch-bred bulls, British Statesman,

## Order Quick.

Here is a chance to fill your flower gardens with healthy, sturdy plants, all well-known varieties. To make sure of having enough, we grow enormous stocks of all kinds of plants, and have usually a good number of plants at the end of the season. We now make a special offer of the varieties mentioned below at a uniform price of 5c. each, to clear out—the very same plants we have been selling all season at from 10c. to 30c. each.

If you have window boxes, hanging baskets or an empty garden to fill, don't fail to send in your order at once; the result will surprise you. Your choice of the following at only 5c. each. We pay the postage. No order accepted for less than 25c.

Phlox, 2 Basket Plants, Giant Musk, Abutilon, Stevia, Double Petunia, Heliotrope, Fuchsia, Coleus (fancy), Cyclamen, Geranium (new), Cordyline, Canna, Chrysanthemum, Pelargonium, Cyperus, Ivy (hardy), Tea Rose, Hardy Rose, Ivy (hardy), Climbing Rose.

We ship plants safely all over Canada. Distance is no drawback in getting our stock.

Leading Canadian Florists, HAMILTON, CANADA.

Conet and Golden Crown; and the red bull calf, Under Sheriff, of the excellent Kinellar Rose of Autumn tribe, which has produced so many prizewinners in the herd of the Messrs. Russell, of Richmond Hill. The date of the sale would seem to be well chosen, farmers, as a rule, not being crowded with work. Hamilton is easy of access from all directions. The arrangements there for conducting a sale are very complete, and the public may depend upon receiving honorable treatment in keeping with the character of the contributors.

## GET AN EMPIRE

The Empire Cream Separator turns more easily, is more easily cleaned and kept clean, is more satisfactory in every way than any other cream separator made, because it is simplest in construction and has fewest parts. It will pay you to investigate. Book free.

Empire Cream Separator Co.

28 Wellington St. W. TORONTO, CANADA.

## THE Empire Way MAKES COWS PAY

## Ordered Corsets by Mail



There's an individuality about your figure. The store corset simply cannot fit you in all respects. Our corsets meet your personal requirements. Write for free catalogue, showing how to order exactly what you want. Our guarantee covers everything.

Durability, Perfect fit, Finish.

Robinson Corset Co., London, Ont.

We Loan Money

BUSINESS STRICTLY PRIVATE.  
TERMS: ANY REASONABLE ONES.  
RATES: THE LOWEST CURRENT.

Write: Hamilton Provident & Loan Society, HAMILTON ONT.

## GOSSIP.

Attention is called to the change Mr. Jas. Bowman, of Guelph, has made in his advertisement. A few good Aberdeen-Angus bull are still left, and orders are now being taken for Suffolk rams and lambs. Customers can depend upon the animals kept by Mr. Bowman being of finest quality, and when ordering by mail will receive the very closest attention. Mr. Bowman has one of the few herds of Aberdeen-Angus cattle kept in Canada, but their reputation is international and their quality unsurpassed.

In answering any advertisement, please mention the FARMER'S ADVOCATE.

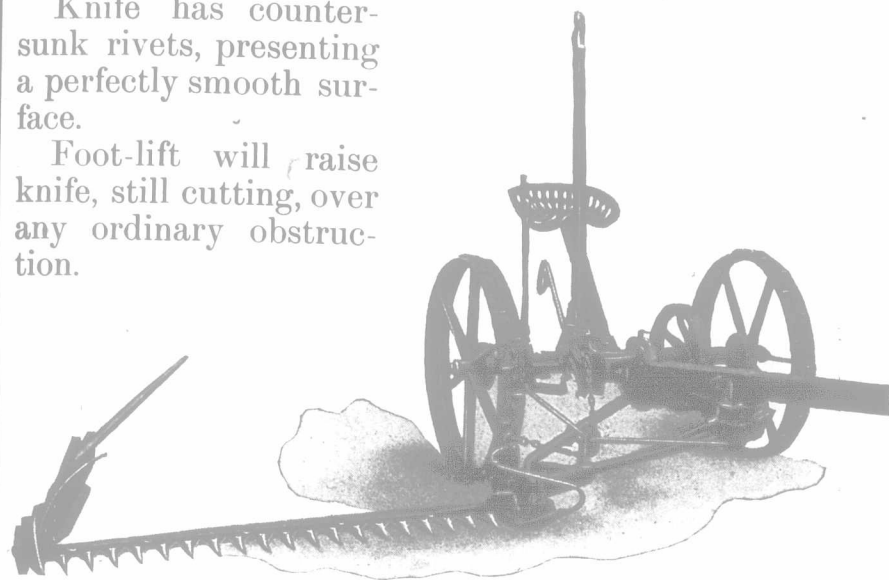
# THE NOXON NO. 3 FRONT-CUT MOWER

## Some Special Features:

Pole can be removed for storage without disturbing lifting appliances.  
 When heavy team is used, pole can be moved over several inches.  
 Pitman is one piece only of steel.  
 Cutter Bar is absolutely rigid, with a wide range of tilt.

Knife has counter-sunk rivets, presenting a perfectly smooth surface.

Foot-lift will raise knife, still cutting, over any ordinary obstruction.



**THE NOXON COMPANY, LIMITED,**  
 INGERSOLL, CANADA.

# TRUMAN'S PIONEER STUD FARM



**BUSHNELL, ILL.,**  
 Has for 24 YEARS been headquarters for the CHOICEST  
**SHIRE, PERCHERON, SUFFOLK AND HACKNEY STALLIONS.**

Last Importation received February 25th, 1903.

## 20 to 30 Good Practical Salesmen Wanted.

Best lot of draft stallions in the United States or Canada. Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. If there is no first-class stallion in your neighborhood, please write us. For our 24th annual catalogue, etc., address—

**J. G. TRUMAN, Manager,**  
 BUSHNELL, ILL.

### TRADE TOPIC.

**GOLD MEDAL SCALES.**—C. Wilson & Son, Limited, Toronto, are doing an extensive business with farmers. They are making a special scale called the "King Edward," which will be sure to please farmers who want high-grade scales. The bearings are made of diamond steel and fully warranted. The Wilson scales have been before the public

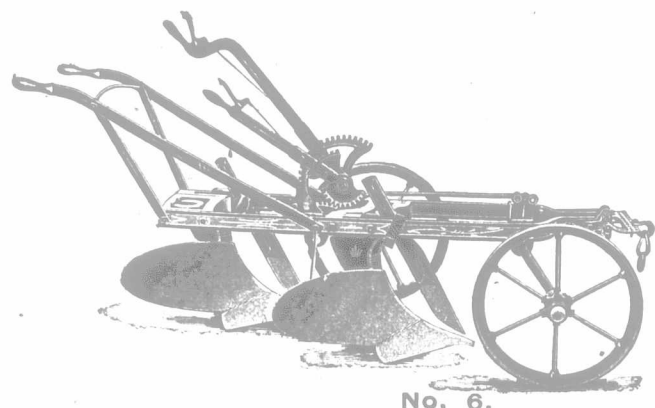
for over 50 years, and have been shipped to foreign countries, and they have recently been shipped to Australia and South Africa. Their scales have been awarded the highest medals at Chicago and Paris, France. Farmers are buying and get the manufacturers' lowest prices and easy terms of payment. These scales are fully warranted, and inspected by the Dominion Government before shipping.

An error, which we regret, was made in our report of the Canadian Horse Show, on page 469 of our May 15th issue, in which the second prize for three-year-old Hackney stallions was credited to Mr. Belth, but which was won by Dr. A. L. Lewin and Mr. T. A. Cox, of Brantford, Ont., with their grandly-bred and excellent young horse, Jubilee Performer, by Imp. Jubilee Chief, dam Imp. Miss Baker.

Parties desiring to purchase a good and well-furnished Western Ontario farm should look up the advertisement of the auction sale on June 19th of the comfortable Spruce Grove Farm, with the excellent stock of horses, cattle and pure-bred Yorkshire hogs, belonging to Mr. Fred C. Smith, of New Hamburg. The farm is supplied with water from an artesian well by a 16-foot windmill on the barn. There is a good young orchard of all kinds of fruit. The buildings are nicely placed and protected by a fine plantation of spruce and pine trees, which beautify the place and make it a very desirable home in one of the finest farming districts in the banner Province of the Dominion.

Imported Thoroughbred Stallion, **Dinna Greet**, by Adieu, out of Effie Deans, and grandson of the famous St. Simon, will stand for the season at Cookshire, Que. Winner of several races. Color bay, standing 15.3 hands; plenty of bone; 5 years old. For terms, apply, **C. N. Montgomerie, Prop., Cookshire, Que.**

## "There are No Plows Like FLEURY'S."



**Walking Plows.**  
 Single and Two-furrow Sulky Plows.  
 Gang Plows—small and large.

**"GOOD LUCK"** Gangs, Nos. 6 and 7, for skimming or for regular heavy plowing, do the work of two walking plows.  
 No. 6—10 or 11 in. furrows, as desired.  
 No. 7—8½ or 9½ in.

"Enclosed find cash for No. 6 'Good Luck' Gang. This is a splendid plow."  
**D. F. YOUNG, Agincourt, Ont.**

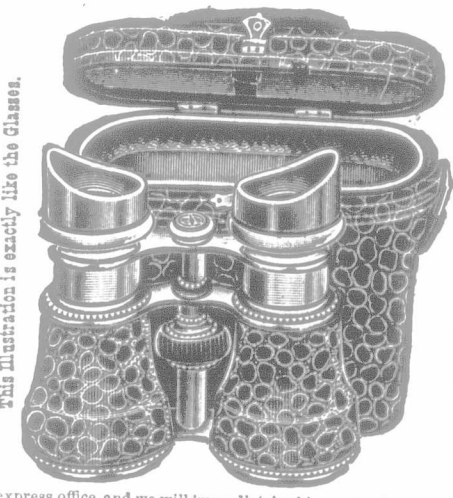
"Find enclosed payment for No. 6 Gang, bought from your agent. The Gang is all right."  
**JOHN SCOTT, Zephyr, Ont.**

"The No. 6 Gangs are giving the best of satisfaction. They do good work and draw light. The last plows I ordered have not reached me yet."  
**A. LIVINGSTONE, Mount Forest, Ont.**

"I cannot recommend your Gang Plow too highly. It is easy on team, and in turning down long weeds, leaves the land in splendid condition."  
**FRANK GRAY, Wardsville, Ont.**

See our nearest Agent, or write us for further information and **LITHOGRAPHIC HANGER** on application.  
**J. FLEURY'S SONS, Aurora, Ontario, Canada.**  
 Medals—World's Fairs, Chicago and Paris.

## REGULAR \$15.00 FIELD GLASSES FOR ONLY \$3.95

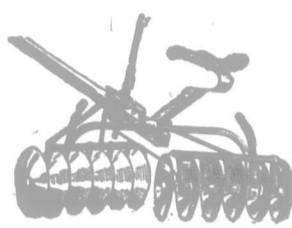


### POWERFUL ACHROMATIC LENSES FULL 50-MILE RANGE

We have just been notified by one of the largest manufacturers of High Class Field Glasses in France, that our special shipment of 42 doz. Glasses will arrive in Toronto June 10th. Included in this shipment is a sample lot of only 3 doz. pairs of extra fine regular \$15.00 Glasses, which we offer you for only \$3.95 (just one quarter their real value), in order to clear them out as soon as they arrive. They are genuine Achromatic, fitted with 6 lenses and are noted for their remarkable power at long range. On a clear day you can see 50 miles with them. They are richly and beautifully finished throughout, the crossbars and draw tubes being heavily nickel-plated, and the trimmings in gold and silver. The tubes are covered with the best grade of green alligator leather. Each pair of Glasses is enclosed in a beautiful satin lined alligator leather case and in the lid protected by a satin pad is a highly polished mirror which can be used for heliograph signals and other purposes. You will notice in our illustration that these Glasses are shaped to fit close to the eyes. This feature adds wonderfully to the clearness of the view and distinguishes the glasses at once as being strictly high grade. We know that you could not buy as fine a pair of Field Glasses as we here offer you, from any wholesaler in Canada, for less than \$6.00, and a dealer would think he was selling them cheap at \$12.00. Because we have such faith in the merits of these glasses and because we know that you could not buy a pair equal to them anywhere for less than \$12.00, we are willing that you should see and examine them before paying us one cent. Simply drop us a Post Card with your name and address and nearest express office, and we will immediately ship a pair of these special High Grade Field Glasses for your free inspection. When they arrive at your express office, call and examine them carefully, and if perfectly satisfied that they are fully worth four times what we ask for the Express Agent our Special Bargain Price \$3.95 and express charges, send us a check for the balance. You will own for all practical purposes one of the finest pair of Field Glasses to be had in Canada. A glass of this kind is worth its weight in gold to farmers, hunters, fishermen, prospectors, tourists or anyone requiring a very powerful instrument. We have here a few of the dozens of letters we are constantly receiving from people who have purchased Field Glasses from us: Herman Fehr, Winkler, Man., said: "I received the Field Glasses and am highly pleased with them. They are far better than I could buy here for three times the price." Jean Gossion, Kingston, Ont., said: "I received the Field Glasses all right and I consider them remarkably good for the low price I paid. I can see objects miles away very distinctly." Please remember there are only 3 doz. of the e. Special Glasses coming and we expect to have orders for every one by the time they arrive, June 10th. We have another lot of 6 doz. Glasses coming in the same shipment. They are similar to our Special Glass all covered with tan alligator leather. This Glass we could sell you for \$3.95, and, if you would prefer it to our Special Glass at \$3.95, please be very careful to mention so when you write. If you do not live near an express office send \$3.95 or \$5.95, according to the Glass you order, and 25¢ to pay postage, and we will forward the Glasses by mail postpaid. We guarantee safe delivery and perfect satisfaction and will refund money if asked for. Do not delay in ordering. You will never get another bargain as good as this. Address very plainly, **JOHNSTON & CO., DEPT. 567, TORONTO, Ontario**

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

**HOLLWELL MANOR FARM.**  
 FOR SALE:  
 7 Scotch Collie Puppies  
 For price apply to  
**D. G. GANTON, ELMVALE, ONT.**  
**BISSELL'S**



**Disk Harrow**  
 For fitting up root and corn ground, for summer-fallow work, or fall wheat land, gives by far best results of any cultivator. Write for full particulars. This Disk has several imitations but no equal.

T. E. BISSELL, Dept. W., Elora, Ont.

**ALEX. GALBRAITH & SON,**  
 JANESVILLE, WIS. BRANDON, MAN.  
**STALLIONS** left that they offer at a special bargain.  
 Have a few choice  
 New importation of prizewinners of the various breeds will arrive in August.  
 Buying orders executed on commission.

**Joseph Rodgers & Sons**  
 Limited,  
 SHEFFIELD, ENGLAND.

Please see that this EXACT MARK is on each blade.

**JAMES HUTTON & CO., MONTREAL, SOLE AGENTS IN CANADA.**



**ELM PARK STOCK FARM**  
 Fresh importations of High-class  
**ABERDEEN-ANGUS CATTLE**  
 AND  
**SUFFOLK SHEEP.**

We have for sale the 1st, 2nd and 3rd prize bull calves at Toronto and London, and 1st prize bull calf at Guelph, all fitted by their own dams.

We have a good crop of strong Suffolk lambs. This breed produces the highest proportion of lean to fat of any of the improved mutton breeds.

**JAS. BOWMAN, - GUELPH, ONT.**

**AGENTS WANTED** for the best milk cooler on the market. Sells at sight for \$2. Live agents can easily earn from \$30 to \$50 weekly. Write for full particulars. The Collins Mfg. Co., 34 Adelaide St. West, Toronto.

**HOUSEKEEPER WANTED**

at once by widower with children; a person of 30 preferred. Apply, P. O. Box 55, Hawkestone, Ont.

**EMPLOYMENT ON A DAIRY FARM**

is desired by a young man wishing to acquaint himself with the Agricultural conditions of Ontario. Apply to Box 459, Truro, N.S.

Every Farmer Should Have a

**King Edward SCALE**



Manufactured by

Get our special prices this month

**C. Wilson & Son, Ltd., Toronto, Canada.**

**80 RODS A DAY**  
 This handy little machine will weave 60 to 80 rods of wire fence in a day. Works so easy a boy can run it. Weaves up rights on any size of smooth or barb wire. Best new fence machine made. Can make meshes any size you want to turn little chicks, horses, cattle, etc.  
**THE McCLOSKEY WIRE FENCE CO. LTD.,**  
 BOX A WINDSOR ONT.

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

**WALKERVILLE WAGONS ARE THE BEST**  
**Walkerville Wagon Co. LIMITED**  
 WALKERVILLE, ONT.  
 WRITE FOR CATALOGS.

**THE NORDHEIMER PIANO**  
 THE REPRESENTATIVE PIANO OF CANADA  
 INSPECTION SOLICITED  
**THE NORDHEIMER PIANO and MUSIC CO., LIMITED**  
 15 KING ST. EAST  
 TORONTO, ONT.

"A DAIRYMAN'S DOLLARS" AND "EMPIRE PUSH" are the titles of two striking booklets issued by the Empire Cream Separator Co., Bloomfield, N. J., which will interest every one desirous of making money by getting the cream out of milk. Copies may be secured by dropping a post card to H. C. Sparling, Canadian representative, Lock Box 493, Toronto, Ont.

# Have You Read It?

**Dr. McLaughlin's Book**  
**IT IS FREE—Send for it To-Day.**

I have a book which tells all about the signs of decay in men, how they are caused, how they first appear, the way the vital power is wasted, and how all these troubles are cured by electricity. It inspires a man with a desire to be "a man all over." It is full of things a man likes to read.



If you are weak I want to help you. I want to show you the way to future happiness, and I offer you, free, my beautiful book, illustrated with photo-

graphs of fully developed men, showing how men begin to break down as the result of overwork and dissipation, and how they recover in a few weeks' application of electricity. This book contains a lot of information for men which explains many points they want to know. It is written in plain language, and the illustrations are of the highest type of art, showing the best developed specimens of manly strength. No man who feels any doubt as to his physical powers should be without this book. I send it, closely sealed, without marks, free, upon application.

## Dr. McLaughlin's Electric Belt

has restored health and strength to thousands of weak men. If used as I direct, it is a positive cure and cannot fail. It gives the vitalizing power of electricity, without burning or blistering, to every weakened part, developing manhood. It removes all the effects of indiscretions or excesses forever. I want every weak man who is not the man he should be to use one of my Belts, and, when he is cured, tell his friends of its wonderful effects.

### \$1,000 IN GOLD IS MY OFFER.

I have perfected a new Belt, and I want a test case of Rheumatism, Pains in the Back, Weak Kidneys, Sciatica, Lumbago, Varicocele, Prostate Trouble, Torpid Liver, Indigestion or Dyspepsia, and I will pay \$1,000 for any case that my Belt will not relieve in one month's use according to my directions. This is especially directed to those who have doctored without benefits.

### DR. McLAUGHLIN'S OFFER.

The proposition I make is a fair one, and should remove all doubts as to its ability to cure all forms of weakness in **MEN AND WOMEN**. I take all the chances myself. If I fail, all you lose is the time you took in putting the Belt on, that is, about five minutes each night. I don't ask you to try it one month, or two months, but long enough to cure you. After I have cured you then you can pay me. Give me reasonable security and you

## PAY WHEN CURED.

**READ WITH CARE!** Every patient wearing Dr. McLaughlin's Electric Belt receives FREE, until cured, the advice of a physician who understands his case. Agents or drug stores are not allowed to sell these goods.

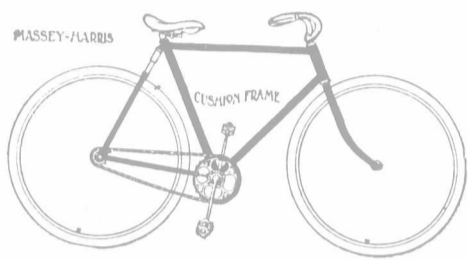
**FREE BOOK** If you cannot call write at once for this descriptive book showing how my Belts are used. It explains my method thoroughly of curing weakness in men and women, also gives you prices. Do not delay but send for it at once.

I HAVE A BOOK ESPECIALLY FOR WOMEN.

**DR. M. S. McLAUGHLIN, 130 Yonge Street, TORONTO, ONT.**  
 OFFICE HOURS 9 a.m. to 8:30 p.m.

# THE WHEEL — ON — THE FARM

We know of no more useful thing on the farm than a good reliable bicycle—one that is made to wear well on rough roads, that is solid in build and easy to handle. Such a wheel is the



## "Massey-Harris"

It is built of good material, by experts of acknowledged ability. It has all the big improvements, and one that is responsible entirely for the regingering of wheeling—the hygienic

### CUSHION FRAME

that makes all roads smooth, that is to wheeling what the "Pull-man" is to railroading. In the country it turns the ordinary road into a city pavement and saves the tires because it does away with a lot of friction. A bicycle so equipped puts your neighbor and the post office at the turn of a pleasant spin.

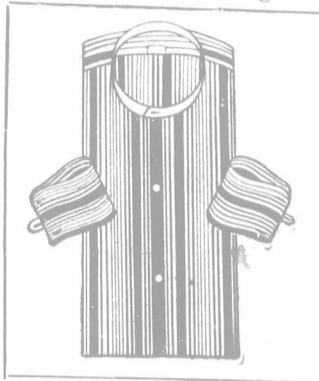
Write for our pretty new "In Bicycledom."

## Canada Cycle & Motor Co.

Head Office and Works: TORONTO JUNCTION, L<sup>M</sup>ITED.

## Three Exceptionally Good Values IN MEN'S UP-TO-DATE FURNISHINGS

GARMENTS that are correct in Material, Pattern, Workmanship, Fit and Finish. As for values, we invite comparison with Furnishings costing half as much again.



**Men's Fine Neglige Shirts**, made from imported Scotch Zephyr; laundered neck and wrist bands; detached link cuffs; full size bodies; medium and dark stripes—a manufacturer's overmakes of high class goods, secured at a heavy discount, shared with our Mail Order friends—sizes 14 to 17 inch neck measure. Price 69c or

Prepaid to any address in Canada for..... **.79**

**Men's Fine Double Thread Balbriggan Underwear**, shirts and drawers, pearl buttons and overlapped seams, close ribbed cuffs, French neck. These come in light fancy stripes, sizes 34 to 42 inches chest measure, per garment 38c or

Prepaid to any address in Canada for **.46**

**Men's Silk Neckties**, four-in-hand, knot and large flowing end shapes; satin lined; best finish throughout; medium and dark fancy patterns; superior goods and the top notch of style, each 19c or—

Prepaid to your address, for..... **.21**



All Mail Orders filled promptly. Money will be refunded if you are not satisfied these furnishings are worth at least half as much again as we are asking you to pay. Write at once, addressing your orders to

**THE T. EATON CO.** F.A. L<sup>M</sup>ITED  
190 YONGE STREET TORONTO, CANADA

## Churn, Churn!

Windsor salt lightens the task of churning butter. Every flake of it dissolves quickly—you'll find no gritty particles in the butter, because Windsor Salt is all Salt.

### Windsor Salt.

Best grocers sell it.

### BRITISH COLUMBIA.

"Fruitland," Kamloops, B. C.

Newly-developed irrigated lands in the beautiful fertile valley of the Thompson River, on the main line of the C. P. R., within half a mile of the City of Kamloops, the inland capital of British Columbia, and a well-known health resort. Magnificent soil for fruit of all kinds: Apples, pears, cherries, plums, peaches, grapes, strawberries, and all kinds of vegetables grown in abundance. Perfect climate; air dry and bracing. Good schools, churches, boating, shooting, fishing, etc. For full information apply to:

Manager, Canadian Real Properties, Ltd.,  
Box 185, Kamloops, B. C.

**Eggs for Hatching**—Barred Rocks exclusively—Two pens of Selected females, headed by an imported bird of Hawkins' Royal Blue strain and one of Bradley Bros.' show birds. \$1 per setting of 13.  
A. E. SHERRINGTON  
Box 400, Walkerton, Ont.

### HILLHURST DISPERSION SALE.

HAMILTON, ONT., AUGUST 11th and 12th.

## 80 STRAIGHT SCOTCH AND SCOTCH-TOPPED SHORTHORNS.

Including the whole of last year's importation of yearling heifers. Catalogues ready July 1st. Six choice young bulls by Scottish Beau, Joy of Morning and Scottish Hero, for private sale at attractive prices. Send for catalogue.

M. H. COCHRANE, HILLHURST STATION, P. Q.

### PUBLIC AUCTION SALE

ON Friday, June 19th, 1903,

Six Miles from New Hamburg and Tavistock, G. T. R.

### AN EXTRA CHOICE FARM

of 110 acres; deep, rich soil, thoroughly tile drained; good buildings and water; 12 acres good timber; all kinds of fruit trees; convenient to church, school and post office. Title indisputable. Also pure-bred YORKSHIRE HOGS, HORSES, GRADE CATTLE, and IMPLEMENTS. Proprietor retiring from farming on account of failing health. For particulars, write

FRED. C. SMITH, PROP., Spruce Grove Farm, New Hamburg P. O. or D. RUDY (Tavistock, Ont.), T. INGRAM (Guelph, Ont.), Auctioneers.

## Poultry and Eggs Wanted

Empty crates forwarded upon application.  
Highest prices paid.  
Payments weekly by express order.  
Correspondence solicited.

### TORONTO POULTRY & PRODUCE CO.,

470 YONGE ST., TORONTO.

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

## READER

ALWAYS insist on your dealer supplying you with

## E. B. EDDY'S WARES.

Matches, Washboards,  
Woodenware, Indurated Ware,  
Etc.

There are none so reliable.

FOR SALE EVERYWHERE.

### Eggs for Hatching

**BARRED ROCKS** a specialty. From a grand pen of 30 hens, famous for their large size, marvellous laying qualities and splendid color, mated to a large, robust, National-strain cockerel. \$1 per set of 13. Order early.

**CLAUDE BLAKE,**  
Poplar Vale Poultry Yards,  
Egln County, O. LYONS, ONT.

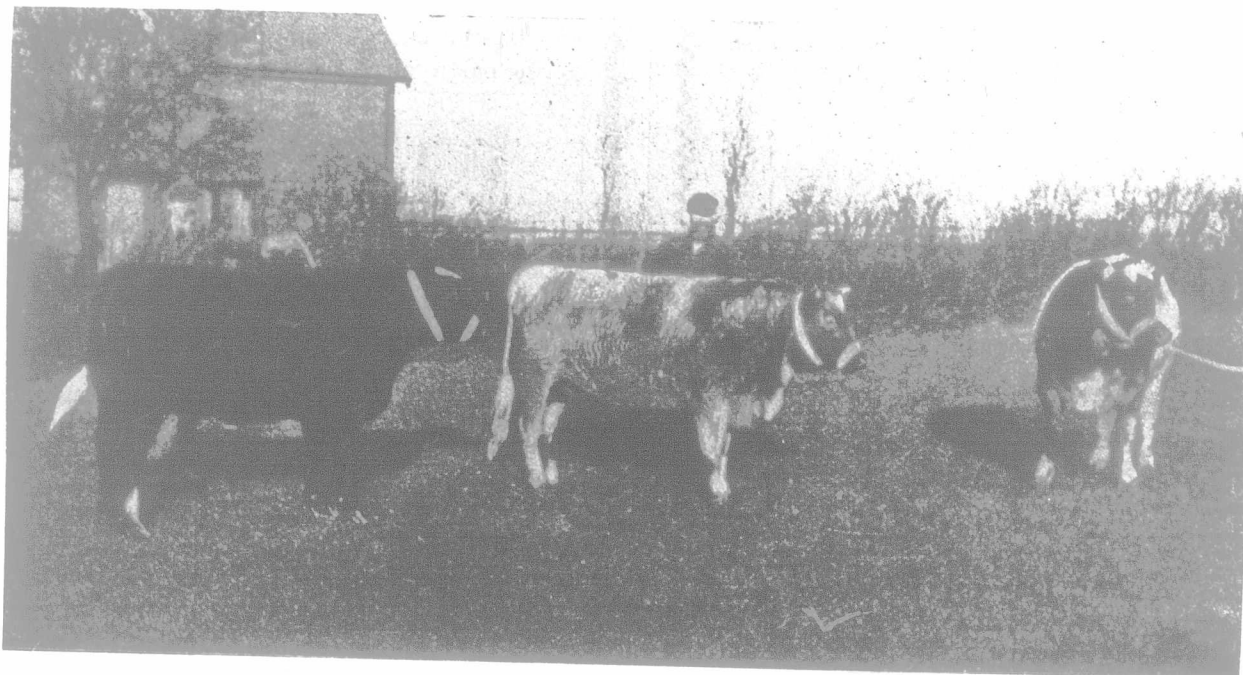
**\$3 a Day Sure** Send us your address and we will show you how to make \$3 a day absolutely sure; we furnish the work and teach you free; you work in the locality where you live. Send us your address and we will explain the business fully; remember we guarantee a clear profit of \$3 for every day's work, absolutely sure, write at once.  
IMPERIAL SILVERWARE CO., Box 508, WILSON, ONT.

IMPORTANT PUBLIC SALE OF  
**Scotch = bred Shorthorns**  
 at Hamilton Stock-yards Sale Pavilion, Hamilton, Ont.,

ON  
 Tuesday,  
**JUNE 9th,**  
 1903,

**56 HEAD**

High-class  
 Shorthorns



CONTRIBUTED BY

HON. W. C. EDWARDS  
 Rockland;

HON. JOHN DRYDEN,  
 Brooklin;

CAPT. T. E. ROBSON,  
 Ilderton,

AND OTHER PROM-  
 INENT BREEDERS.

This offer affords an opportunity to secure animals of the choicest breeding, many of them being imported from Scotland at great expense. The cattle will be found in good condition, and will be sold without reserve.

Catalogues on application to HON. JOHN DRYDEN, Parliament Buildings, Toronto.

AUCTIONEERS:  
 GEO. JACKSON, Port Perry.

CAPT. ROBSON, Ilderton.

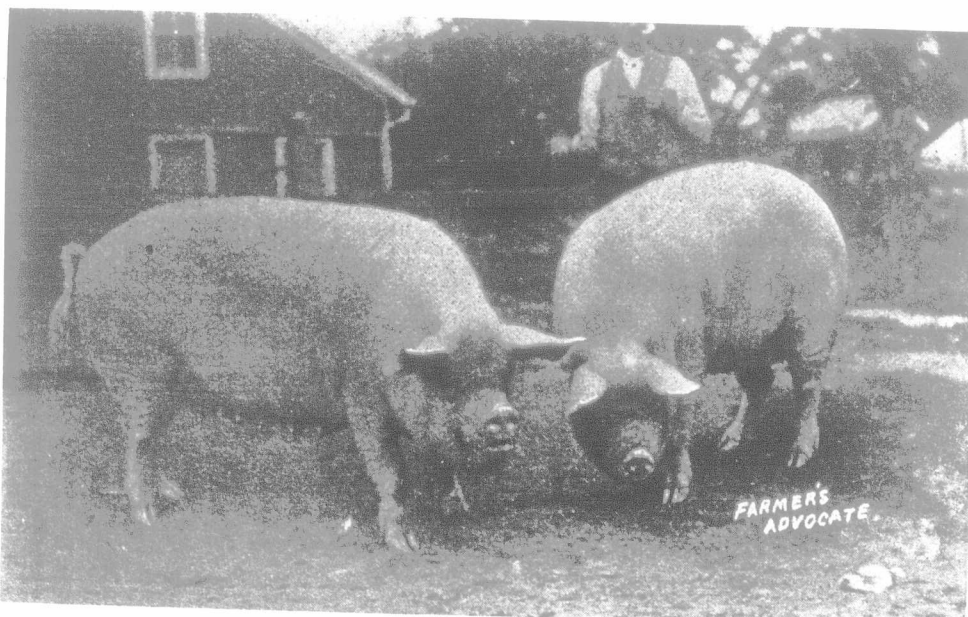
IMPORTANT AUCTION SALE  
 OF IMPORTED  
**LARGE ENGLISH YORKSHIRES**

AT THE STOCK-YARDS SALE PAVILION, AT HAMILTON, ONT., ON

**THURSDAY,**

**70 Head 70**

20 BOARS, ranging from 6 to 15 months. 50 SOWS, mostly in pig to choice English sires. All selected from leading British herds. The most valuable consignment ever imported to America, including many first-class show animals.



**JUNE 25, '03**

**Britain's Best**

Never was so good an opportunity offered to procure first-class show and breeding stock at the purchaser's own price, as sale will be absolutely unreserved. First-class hotel accommodation at Stock-yards Hotel. Catalogues ready May 5th; will be mailed on application.

S. FRANK SMITH,  
 CLAPPISON'S CORNERS,  
 THOS. INGRAM,  
 GUELPH, ONTARIO.

AUCTIONEERS.

**D. C. FLATT & SON,**  
 MILLGROVE, ONT.

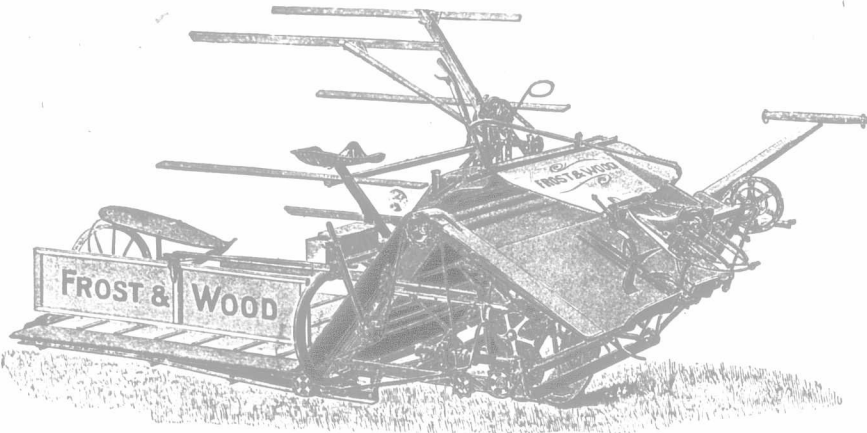
In any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



YOU CAN HAVE THE SAME CONFIDENCE IN THE  
**FROST & WOOD**

# NO. 3 BINDER

THAT YOU HAVE IN YOUR WATCH.



You can **TRUST** the No. 3 to cut the most tangled crop,  
You can **DEPEND** on the No. 3 to work right through the harvest.

You can **RECOMMEND** the No. 3 to your neighbors.

### WHY? -- BECAUSE:

It is strongly and carefully made. It works easily and efficiently.  
It is correctly designed and handsomely finished.

*The Frost & Wood Company*  
LIMITED.

Head Office & Works:  
**SMITH'S FALLS, ONTARIO.**

BRANCH OFFICES:  
Toronto, Ont.    Winnipeg, Man.    Montreal, Que.    Quebec, Que.  
London, Ont.    St. John, N. B.    Truro, N. S.

## OUR FREE TRIAL COSTS YOU NOTHING WE PAY THE FREIGHT.

The following letter, dated May 14th, from Mr. H. A. Baldwin, Canfield, Ont., shows why we are willing to send our Windsor Separators out on trial before we receive any pay. It reads:

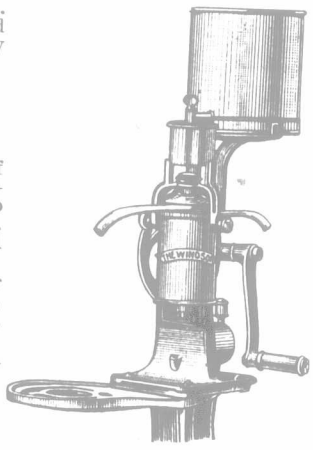
*"Enclosed find two express orders, in full payment of the two No. 2 Windsor Separators sent on trial to Mr. G. Hedley and myself. We are very well pleased with them."*

This is only a sample letter, such as we receive daily. If our separator is only given a trial, its work and ease of operation will do the rest. To make it an additional inducement to try our separator, we will prepay the freight to your town. Give it a week's trial, and if not satisfied, it may be returned to us and you are not a single cent out.

Our price for our No. 1 separator, capacity 210 lbs. milk per hour, \$48.75; for the No. 2, capacity 340 lbs. milk per hour, \$57.60; and for the No. 3, capacity 560 lbs. milk per hour, \$85.00.

Send for catalogue explaining all. We send our separators out for a week on free trial.

**WINDSOR SUPPLY CO., - Windsor, Ont.**



# SUPERIOR

MATERIAL, DESIGN, WORKMANSHIP  
IN ALL

# WAGONS

MADE BY

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

### GOSSIP.

THE HAMILTON SALE OF IMPORTED YORKSHIRES.

Mr. D. C. Flatt writes from the quarantine station at Quebec that the important importation of 75 head of selected Yorkshire hogs advertised to be sold by his firm at Hamilton, Ontario, on June 25th, were safely landed in good condition, and are by far the best bunch of Yorkshires he ever saw or ever expects to see together; at least one-half of them good enough to make show animals. They have been carefully selected from seven of the leading herds of Great Britain by Mr. Geo. Sinclair, factor for the Earl of Rosebery, whose Dalmeny Park herd of Yorkshires ranks high among the best in Britain, the majority of the consignment being selected from this herd, in which quality and breed character are prominent features. This importation makes up over 200 Yorkshires which the Messrs. Flatt have received from Mr. Sinclair in the last year, and they have been delighted with his selections, which have been invariably of the type and quality suitable for the requirements of the trade and markets of this country, having good length, strong fleshy backs, deep and well-sprung ribs, a good quality of bone and hair, and withal thrifty, good feeders and early-maturing. The introduction of fresh blood through this class cannot fail, as it has not failed to improve the quality and vigor of the herds in this country into which it has found its way.

The popularity of the Yorkshires in Canada has grown rapidly in the last ten years, and they have taken a leading place in the principal competitions for ideal export bacon hogs, while their prolificacy in breeding large litters and mothering them well has made the Yorkshire sow the closest competitor of the dairy cow as a profitable factor in the economy of farming. Indeed, if judiciously managed, the sow will make such a showing of profit that the cow is not in the race with her, though they work so well together that they should never be divorced, for the sow and the cow are the sheet anchor of farming and the financial salvation of the average farmer.

That the popularity of the Yorkshire on this side of the sea is not confined to Canada is evidenced by the rapidly-increasing demand for them in the United States, where, owing to close interbreeding and exclusive corn feeding, the fecundity of their swine has diminished to such an extent that twins are the best that many of the sows produce, and that breeders are looking anxiously for a change of breed to lead them out of the wilderness of barrenness and bone degeneracy into which they have fallen, and are finding in the Yorkshires the Moses they need, a breed having the required qualities of vigor of constitution, strength of bone, length of body, and withal, exceedingly prolific. The fact that the firm of Flatt & Son alone have, in the last thirteen months, shipped from their Summerhill herd over 200 head to the States on mail orders shows which way the wind is blowing, and as Canada is the natural breeding ground for the supply of seed stock for that greatest of hog-producing countries, the prospect is pregnant with prosperity for the breeders of this country who will place themselves in a position to profit by the immense demand which is springing up for this class of hogs. The nearness of our country to theirs, the readiness with which they can visit us and the complete facilities for shipping with dispatch and safety is entirely in our favor, and these circumstances have only to be taken advantage of to insure a very profitable and satisfactory source of trade, as Americans are liberal buyers and haggle not about prices when they find what suits them, and in these prosperous times they can well afford to be liberal. What is needed is that Canadian breeders wake up to the importance of the opportunities presenting themselves for profitable trade, and prepare to profit by strengthening their herds by the introduction of the best blood available, and by a judicious system of handling their hogs to keep up the character

(Continued on page 534.)

**The Books are Free**

## Spavin Lump Jaw

You can cure Bone Spavin, Rog or Blood Spavin, Ringbone, Curb, Splint or any blemish hard or soft, Fistula, Poll Evil, Sweeny or Knee-Sprung, also Lump Jaw in cattle, with very little trouble or cost. Our two booklets tell you how and prove that you can do it, and we will guarantee you success in every case. Over 140,000 farmers and stockmen are doing it our way. If you have a case to cure write us and we will send you the books free.

**FLEMING BROS., Chemists,**  
46 Front St., West, Toronto, Ont.

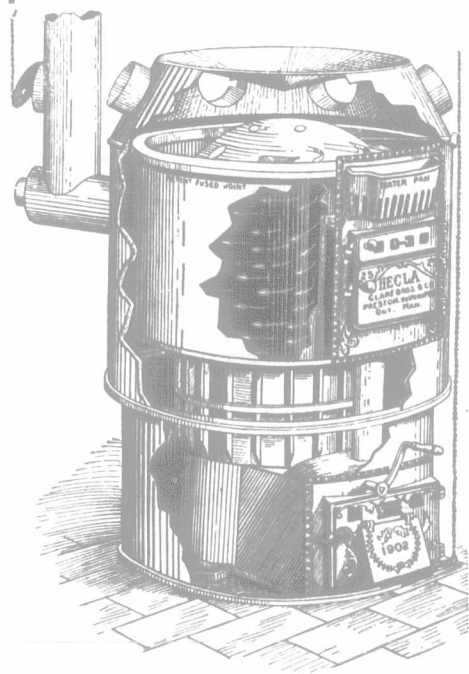
### SALESMEN WANTED

This is the time of year to secure a position on our staff of salesmen.

Our goods are a staple line, and the demand is constantly increasing. We reserve good ground, fit you out free of expense, and pay you weekly. We can arrange with you either on whole or part time.

It will be worth your while to write us.

**STONE & WELLINGTON,**  
"Canada's Greatest Nurseries," Toronto.



## HEALTHFUL HEAT

Is the daily experience of those who heat their homes with

# HECLA FURNACES

**NO SMOKE  
NO DUST  
NO GAS**

The Hecla is the only furnace fitted with

## PATENT FUSED JOINT

This feature renders it absolutely tight.  
Write for our illustrated booklet, which we send free upon request.

**Clare Bros. & Co., Ltd.**

PRESTON, ONT.    WINNIPEG, MAN.



**New Book** on how to prevent and cure diseases of horses and cattle, to know sound horses, age, constitution, valuable recipes, etc., prepared especially for farmers, from facts gathered in 20 years' practice, by S. S. Dickinson. (Out shortly.) Advice by mail, \$1.

Address **S. S. Dickinson, Port Hope, Ont.**

**KENDALL'S SPAVIN CURE**

the old reliable remedy for Spavins, Ringbones, Splints, Curbs, etc., and all forms of Lameness. It works them out of cures annually. Cures without a blister, as it does not blister.



Complete Cure for Bone Spavin.

Russell, Manitoba, Jan. 20, 1903.  
Dr. B. J. Kendall Co., Gentlemen: I had to treat a young horse of nine four years ago which had a Bone Spavin and got kicked on the same leg and was very badly swollen; so bad that I had to bathe it in warm water, then applied Kendall's Spavin Cure. I had Typhoid Fever the same winter and only gave the Kendall's Spavin Cure half a chance, and it only took one and a half bottles to cure his leg with very little treatment, and it did so completely that you would never know that he had a spavin; he never has gone lame since.

Very truly yours,  
GEO. S. HARRIS.  
Such endorsements as the above are a guarantee of merit. Price \$1; six for \$5. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address

DR. B. J. KENDALL Co., ENOSBURG FALLS, VT.

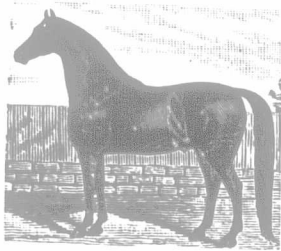
**Thorncliffe Stock Farm**

ROBERT DAVIES usually has on hand some fine specimens of Clydesdales, Hackneys, Jersey and Ayrshire Cattle, Yorkshire Pigs.

Correspondence solicited. Visitors always welcome at

THORNCLIFFE, TORONTO.

**DR. PAGE'S ENGLISH SPAVIN CURE**



For the cure of Spavins, Ringbones, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering.

This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 AND 9 YORKSHIRE ROAD, LONDON, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., DRUGGISTS, 171 KING STREET, EAST, TORONTO, ONT.

**BAWDEN & McDONELL Exeter, Ont.**



IMPORTERS OF Clydesdale, Shire and Hackney Horses

are now offering several imp. Clydesdale, Shire and two Hackney stallions, prizewinners in England, Scotland, and Canada, and representing the best blood alive; also several choice Canadian-bred ones. These animals are all true to type, and possess substance, quality, style and action.

**CLYDESDALE MARES**

Registered mares, from three years old and upwards, for sale.

NELSON WAGG.

Claremont station, C. P. R., 2 miles. Stouffville station, G. T. R., 4 miles.



DEATH TO HEAVES Guaranteed NEWTON'S Heave, Cough, Distemper and Intestinal Cure. A certain cure for all such throat and stomach troubles. Strongly recommended. 25¢ per can. Dealers: Simpson & Co., Toronto, Ont. Newton Horse Remedies Co., Toledo, Ohio, U.S.A.

Imported by Lyman Bros. & Co., Toronto, and Montreal.

**GOSSIP.**

(Continued from page 533.)

of Canadian stock to a high standard. The best will always find a market at paying prices, and the motto of every Canadian farmer should be "the best is none too good."

Since writing the above, the sale catalogue has been received. It presents a splendid showing of judicious combinations of the best prizewinning blood in Great Britain. The almost endless list of winnings, both on side of sires and dams, recorded is, at first sight, somewhat bewildering, but on analysis it speaks volumes for the character of the stock from which these hogs have been bred, and stamps the importation with the signet seal of the aristocracy of the breed.

At the sale of Shorthorns from the herd of Mr. J. T. Hobbs, Maiseyhampton, England, on April 30th, forty females made an average of £50, and ten bulls an average of £41 10s. The fifty head sold averaged £48 7s. The highest price was 91 guineas, for the cow, Fanny 94th.

Mr. Jno. Racey, Jr., Lennoxville, Que., writes: "Our Shorthorns and Berkshires are looking well. We have an extra nice lot of calves by Strathroy =9305= and Nonpareil Victor 2nd =34534=. Our sows have all large litters, the smallest number of pigs in any litter being eleven. Some of the young pigs are by Lee Duke -8733-, a lengthy boar by King Lee 14th of Hood Farm, the rest are by Marsden -10177-, a big, growthy, strong-boned hog, large enough to please anybody. I do not think we have ever offered a better lot of young pigs. We have had very little rain for over a month. The grass in pastures is very short, and crops will suffer if a change of weather does not take place shortly."

**TRADE TOPIC.**

ROBINSON CORSETS.—The mail-order system of buying has reached that stage of perfection where individual tastes and ideas can be complied with as closely as if the customer made a personal purchase. No matter what your likes or dislikes may be, The Robinson Corset Co., of London, will satisfy you with their ordered corsets. The firm's free catalogue shows how to state your needs exactly, and their guarantee vouchers for the durability, perfect fit and finish of the goods. Besides plain and fancy ordered corsets, undershirts and children's waists, the company manufacture a complete range of articles appropriate to these lines. Do not fail to write for a catalogue.

**Society of Christian Endeavor Denver, 1903.**

The Passenger Department of the Chicago & North-Western Railway has issued a very interesting folder on the subject of the Christian Endeavor meeting to be held at Denver, July 9th to 13th, together with information as to reduced rates and sleeping car service, as well as a short description of the various points of interest in Colorado usually visited by tourists. Send two-cent stamp to W. B. Kniskern, Passenger Traffic Manager, Chicago, for copy.

**GEO. STEWART, Howick, Quebec,**



IMPORTER OF

**Clydesdale Horses,**

has now on hand for sale 2 three-year-olds, 3 two-year-olds and 1 yearling stallion (all imported), carrying the blood of Baron's Pride, Mac a of Airies, Dairley and Prince of Wales, combining size, style, quality and action. Also 1 five-year-old mare, with filly foal. The best lot I ever imported. Write quick.

GEO. STEWART, Howick, Quebec.

**CLYDESDALES**

A Specialty.

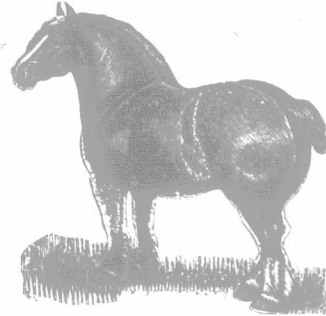
Another important importation of stallions and mares may be looked for in August. Intending purchasers will do well to see our horses, as we import the best. Quality, with sufficient size, is our motto.

**WM. COLQUHOUN,** Mitchell P. O. and Station (G.T.R.), Ont.

**JOHN BRIGHT, MYRTLE, ONTARIO,**

BREEDER OF

**Clydesdales and Shorthorns,**



Is now offering for sale 8 stallions, sired by such horses as Prince Patrick (imp.), Erskine's Pride (imp.), Sir Erskine (imp.), Royal Laurence (imp.). Also a number of mares and fillies. Shorthorns of all ages, of such families as Miss Ramsden, Clementina, Strawberry, Crimson Flower, Village Girl, Stamford, Rachel, etc.

Myrtle Station, G. T. R. and C. P. R. Farm connected by long-distance telephone.

**BELGIAN STALLIONS and MARES**

IMPORTED LAST SEPTEMBER. THOROUGHLY ACCLIMATED.

The up-to-date drafter, big and medium weight, dark colors, short, straight back, no hair on legs, immense rumps, pony-built body. Not a shaggy lump of fat. A Klondyke in your stable. Honest value for honest money. Write, or, better, come to

**BARON DE CHAMPLouis, Importer,** DANVILLE, QUEBEC.



**ROSEDALE STOCK FARM.**

IMPORTED SHIRE and CLYDESDALE HORSES. SHORTHORN CATTLE and LEICESTER SHEEP.

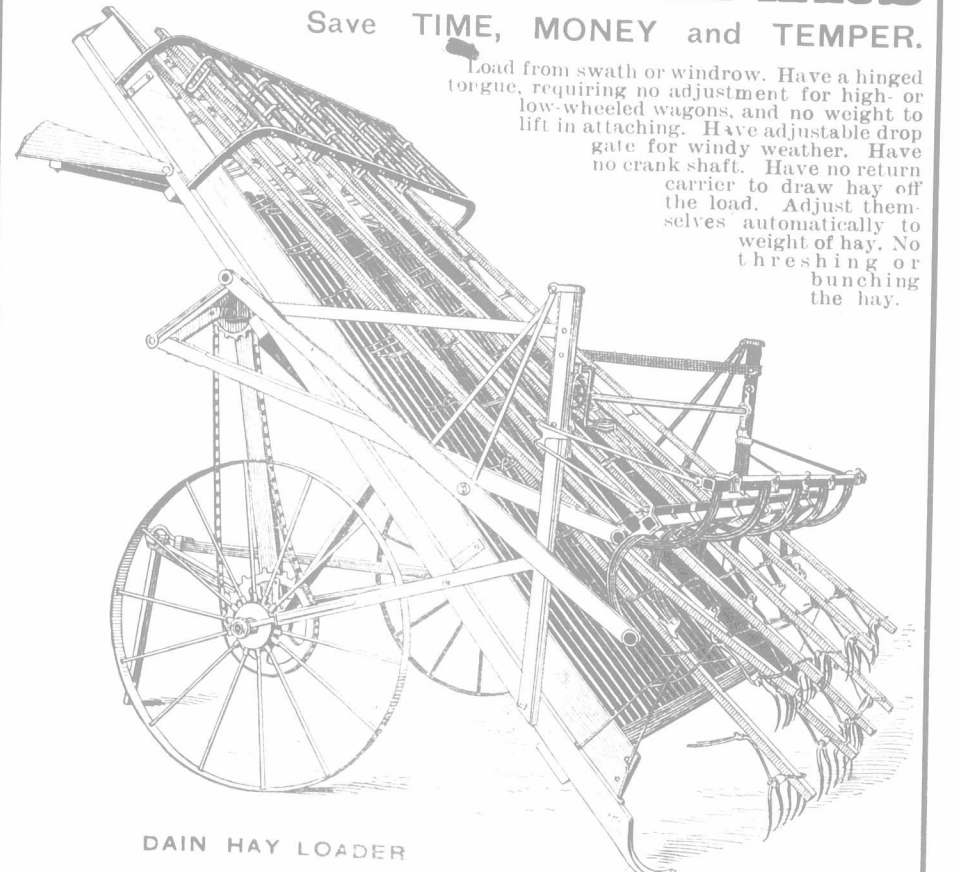
Newnham Duke, the gold and silver medal four-year-old Shire stallion, and the imported Clydesdale stallion, Royal Kerr, in service; also Clyde and Shire stud colts for sale.

Imp. Chief Ruler, bred by W. S. Marr, heads the Shorthorn herd. Of the females, 15 are imported, from such families as Marr Missies, Strathallans, Jealous Girls, Crimson Flowers, Orange Blossoms, Wimples, Lovelys, Jilts, Secrets, Verbenas, etc. Farm 15 miles from Toronto, on G. T. R. and C. P. R. Post office, telephone and telegraph.

J. M. GARDHOUSE, Weston, Ont.

**DAIN HAY LOADERS**

Save TIME, MONEY and TEMPER.



Load from swath or windrow. Have a hinged tongue, requiring no adjustment for high- or low-wheeled wagons, and no weight to lift in attaching. Have adjustable drop gate for windy weather. Have no crank shaft. Have no return carrier to draw hay off the load. Adjust themselves automatically to weight of hay. No threshing or bunching the hay.

DAIN HAY LOADER

Has a continuous push. Weight of machine carried entirely on the wheels. Those who have seen them say they are the best yet. Send for circulars and prices to

**DAIN MFG. CO.,**

Guelph, Canada. Ottumwa, Iowa. FRED. R. SHANTZ, CANADIAN MANAGER.

### "A FREE SAMPLE PACKET"

of Delicious "SALADA" Ceylon Tea (Black, Mixed or Natural Green) will be sent to any person filling in this coupon and sending it to us with a two-cent stamp for postage. (Write plainly and mention Black, Mixed or Natural Green.)

Name.....

Address.....

"Farmer's Advocate."

Address "SALADA" TEA CO., TORONTO.

## Imp. Clydesdales and Shorthorns

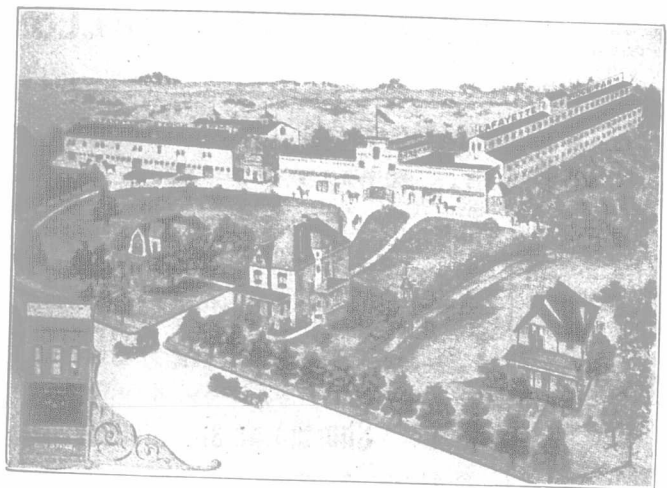


Messrs. Smith & Richardson, COLUMBUS, ONT.,

Importers and breeders of Clydesdale horses and Shorthorn cattle, are now offering 14 stallions, 9 of them imported, including brothers of the world-renowned Baron's Pride, Hiawatha, and Royal Cairnton; also 13 mares bred from imported stock. Shorthorns, imported and home-bred, all ages. Stations:

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

Long-distance Telephone, Columbus. Telegraph, Brooklin



### LA FAYETTE STOCK FARM, J. Crouch & Son, Props. Importers of all breeds of STALLIONS.

We are the largest Importers and Breeders of Oldenburg German Coach horses in America. We also import Draft horses of all kind, including Belgians, Clydesdale, English Shires, and Normans. 359 head of Coach and Draft stallions imported in last 15 months.

La Fayette, Ind., U.S.A.

Terms easy. All stock guaranteed.

### International Importing Barn, Sarnia, Ontario.

J. B. HOGATE, PROPRIETOR.

IMPORTER OF

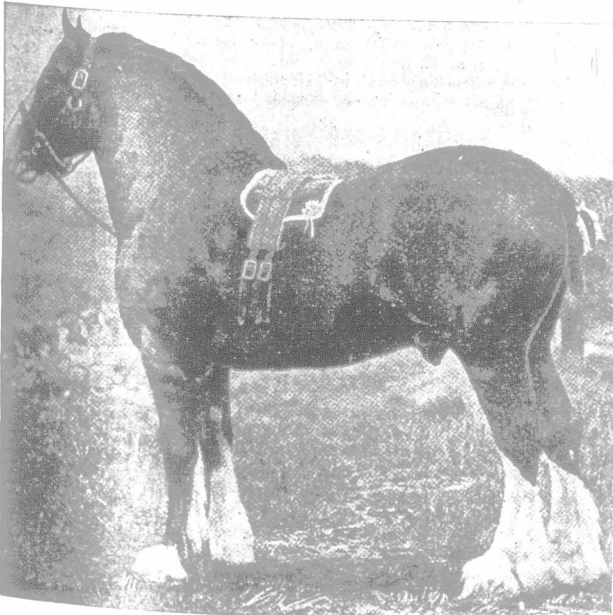
Clydesdale and Shire Stallions, and Spanish Jacks.

My third importation within the last fourteen months arrived Sept. 4th.

I select every one myself, and it is conceded both in Europe and America that I do get the best ones that cross the Atlantic to America. My stallions are sired by the leading sires of Scotland; ages from two to four years. The Jacks are direct from Spain, and registered, two to four years old, 11 1/2 to 15 1/2 hands high. I pay cash for my stock. I buy where I can get the best. Write for particulars. Will save you money.

Mention this paper when you write.

H. H. COLISTER, Manager and Salesman.



ROBERT BEITH, BOWMANVILLE, ONT.,

IMPORTER AND BREEDER OF

### Clydesdale AND Hackney Horses

Is offering for sale a number of choice bred Clydesdales and Hackney stallions; also a number of Hackney mares. The Clydesdales are sired by the noted horses, Prince of Albion, King of the Roses, Lord Stewart and The Prior.

### GOSSIP.

Mr. W. D. Platt, Hamilton, Ont., reports the following recent sales from the Trout Creek herd of Shorthorns: To J. G. Robbins & Son, Horace, Ind., the two show bulls, Lord Chestersfield, first and champion in junior class at Toronto last year, and Hillcrest Hero, which was awarded second at Toronto last year, standing next to our stock bull, Spicy Marquis. These bulls are well known here and require no comment. They will undoubtedly make a further reputation in U. S., as they are in good hands. To Samuel Haining, Highgate, Ont., a young bull and heifer of outstanding merit. No breeder, either in U. S. or Canada, has purchased two better Shorthorns from Trout Creek, and I predict a good future for Mr. Haining in the breeding of Shorthorns. The young bull's name is Jilt Victor (imp. in dam), bred by John Young, Scotland. He is a beautiful red-roan, with almost faultless conformation, showing great style and finish, with wonderful substance. On the dam's side, he is of the Jilt family. This family did exceedingly well in the hands of Messrs. Pearsons, and produced many good ones, among them being the show bull, Justice, exhibited throughout U. S. with great success by Mr. N. P. Clark. His sire, Lord Methuen (79281), was got by the well-known bull, Nonpareil (75140), of the Cruickshank Nonpareil family, and got by the prize bull, Emancipator (65447), he being the sire of many animals of note, including Golden Fame, used for two years at Trout Creek with success, and then sold for \$1,400. Grandsire of Jilt Victor, Scottish Prince (73593), bred by that famous breeder, Wm. Duthie, Esq.; got by Captain Ripley (68324); dam Scottish Princess, by the renowned Scottish Archer, sire of the \$6,000 Brave Archer, and scores of other good ones; grandam Princess Royal 31st, by the great William of Orange, then follow such bulls as John Bull (65701), bred by Geo. Bruce; Doctor (60616), bred by A. Cruickshank, and Albert, also bred by A. Cruickshank. The heifer Mr. Haining purchased was a red two-year-old, bred by Jas. Durno, Scotland, the gentleman who bred the famous Choice Goods. She was the highest-priced Shorthorn sold at the auction sales in Scotland last year, and is of the popular Miss Ramsden family. Her sire, Lovat's Champion, was first at Perth, and was awarded a special prize at Inverness. He is a typical Cruickshank, and belongs to Lord Lovat's famous Broadhooks family. His sire, Royal Star, is also the sire of one of our stock bulls now at the farm, namely, Baron Beaufort. Lovat's Champion was recently sold at a very long price to Mr. A. Chrystal, of Marshall, Mich. To G. H. Gallagher, Everett, Ont., a great, suppy two-year-old bull named Royal Statesman, belonging to the well-known Princess Royal family; grandam Imp. Princess Royal 118th, bred by the world's renowned breeder, Wm. Duthie, Esq. It was a Princess Royal bull which sired the champion Cicely, sold at one of my Chicago sales for \$5,000, and the champion, Royal Duke, \$8,000 was offered and refused for him when he was two years old. The sire, Diamond Statesman, was equally well bred, got by British Statesman (imp.), same family as the great Lord Banff which won round the circuit, both in U. S. and Canada, and was sold at our November sale in Chicago for \$5,100, while the dam of Diamond Statesman is of the favorite Jilt family. Some of the highest-priced females I have sold are closely related to Royal Statesman, and Mr. Gallagher has shown commendable enterprise and sound judgment in making this selection. To L. A. Wright, Salisbury, N. B., a choice red yearling bull out of an imported Claret cow. This family have proven to be very deep milkers. The bull, Consul, sold from Trout Creek for export to the Argentine for \$2,700, was of this family; also Daisy 3rd, sold for \$1,900 at one of our Chicago sales. Mr. Wright has only a few Shorthorns, but believes that the best are none too good. Will report a number of other sales we have made later on. We can offer a few choice home-bred bulls, two of the Stamford family and three very choice ones of the favorite Missie family; also, a few young females.

### HORSEMEN! THE ONLY GENUINE IS

## GOMBAULT'S CAUSTIC BALSAM.

The genuine without the signature of The Lawrence-Williams Co. Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O.

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTERY or FIRING. Impossible to produce scurf or blains. Every bottle is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for use. Send for free descriptive circulars. THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

### CLYDESDALES FOR SALE



New importation just arrived.

### 25 STALLIONS

Choice Breeding, Excellent Quality and Extra Large Size.

Stock has been personally selected. Inspection is solicited and prices will be found right.

O. SORBY, GUELPH, ONT.

John Gardhouse, Highfield P. O., Ont.

Breeder of SHIRES, SHORTHORNS and LEICESTERS. Young stock for sale, both sexes. Scotch and Scotch-topped Shorthorns of such noted families as Imp. Rollas, Clarets, Lovelys, Rosebuds, Blossoms, Circes, Roses, and other noted families. The Imp. Lancaster bull, Prince Louis = 32082 = (77486), heads the herd. Farm 3 1/2 miles from Weston station, G.T.R. and C.P.R., and 14 miles north-west of Toronto.

### CLYDESDALE STALLIONS.

I am now offering the quality stallion, Highland Harry 2545, by MacInnis (imp.), a perfect model; and the stallion, MacInnis 2nd, by same sire. Also Ayrshire bull, Glenair's Prince 13566. Write at once to DONALD CUMMING, Lancaster P. O., and Station

THE KINDERGARTEN STUD FARM, GUELPH. JAMES HURLEY, Proprietor.

Breeder of Thoroughbred horses from noted sires and dams. All classes of horses for sale.

### RED RIBBON STUD

Largest Importers and Breeders of

## Shire Horses

in the Dominion,

including first-prize winner at Royal Agricultural Show in England, and winning more prizes at Industrial and other large shows than all others combined.

Stallions and mares all ages, home-bred and imported, always for sale. Over 50 to choose from.

MORRIS & WELLINGTON, Fonthill P. O., Welland County, Ont.

### CLYDESDALES

AYRSHIRES and POULTRY.

R. Ness & Sons, Howick, Que.

Importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, 1 Percheron, and 1 Hackney, winners. Ayrshires of both sexes and poultry.

### After a Brush you will find ABSORBINE

quick to remove the inflammation from any bruise or strain. No blister, no hair gone, and you can use the Horse. ABSORBINE removes any soft bunch in a pleasing manner. \$2.00 per bottle, of regular dealers or delivered.

W. F. YOUNG, P. D. F., Springfield, Mass. LYMAN, SONS & CO., Montreal, Agents for Canada.



**GOSSIP.**

Manager Orr, of the Toronto Industrial Exhibition, has received notification from Secretary H. J. P. Good, of the Harness, Hunter and Saddle Horse Society, that the Society will give a gold medal for the best harness horse at the forthcoming Dominion Exhibition; that First Vice-President O. B. Sheppard will give a solid silver cup for a class yet to be designated, and that Second Vice-President T. A. Crowe will give a gold medal for the best saddle horse.

O'Neil Bros., Southgate, Ont., have recently sold to Mr. Wm. Squires, Jr., Amherstburg, Ont., pioneer breeder of Herefords in Essex Co., the bull, Sunny Slope Tom, bred by the late Mr. C. S. Cross, and formerly at the head of the herd of O'Neil Bros., having left an impress for good on their herd such as they did not fully realize until after he was sold. Mr. Squires is certainly to be congratulated on securing a bull of such superior character, individually and as a sire, and we wish him abundant success in his career as a breeder.

**DAIRY TEST AT ST. LOUIS.**

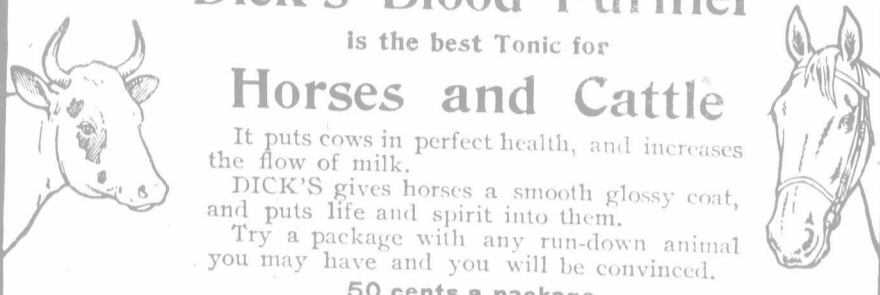
There will be three classes provided for the cows entered for the dairy test at the St. Louis Exposition next year, viz., Class A., consisting of twenty-five cows; Class B., fifteen cows, and Class C., ten cows. For the latter class, only cows of the Devon, Brown Swiss, Red Polled and Dutch Belted breeds will be eligible. The cows and their milking will be in the Live Stock Department, and the milk when drawn will go to Chief Taylor, of the Agricultural Department, under whose supervision it will be made into butter and cheese, and exact records kept of each cow's performance and product.

**A MODEL DAIRY HERD.**

Such is the Ayrshire herd of W. W. Ballantyne, of Stratford, Ont., being of true up-to-date dairy type and good performers at the pail. Daisy 1st of Auchenbrain, one of the first imported cows in the herd, now in her 14th year, gave, last year, over 12,000 lbs. of milk in less than ten months; a matronly-looking cow with enormous, well-shaped udder and prominent milk veins, milking as high as 65 lbs. per diem. Kirsty of Auchenbrain, imported at same time as Daisy, and equally as good a cow, is of the same breeding as the Kirsty cow which did so well in the Pan-American test. The stock bull, Royal Peter of St. Ann's (imported in dam), is of correct dairy type, has fine silky hair, soft mellow skin, smooth shoulders, large barrel, ribs well placed, and while trim and smooth is free from all appearance of beefiness. A bunch of young heifers, the offspring of Royal Peter and out of imported cows, show unusual udder development, and should make great milch cows. A heifer calf and a yearling out of Daisy 1st, by the same sire, show their descent from Ayrshire aristocracy. Spotty, a recently-purchased cow, gave over 11,000 lbs. of milk in 368 days, making 550 lbs. of butter. Her calf by Royal Peter is one of the best we have seen, and would make a capital show animal. Bessy 3rd of Neidpath milked continuously until within a month of her fourth calf, and was then with difficulty dried off. Although milking since last October, is still giving 30 lbs. per diem. A young daughter of hers, milking since July last, and due to calve in August, gives her daily 24 lbs. yet, which is a very good showing for so young an animal. A row of yearling and two-year-old heifers, in calf or to be bred soon, are coming on well and show unusual udder development, well-placed, clean, waxy teats, in good breeding condition. Just suitable for B. C. dairy farms, or would make ideal family cows. A couple of young yearling bulls by Laird of Thorncliffe, one out of the Kirsty cow, are now ready for service, and would prove invaluable to anyone desiring to improve their dairy herd; also bull calves, all from good milking strains and of true dairy type and breeding. A visit of inspection to this up-to-date herd will satisfy the wishes of the most fastidious dairyman. Just watch the price of cheese, and appreciate the value of a good dairy animal.

**Dick's Blood Purifier**  
is the best Tonic for  
**Horses and Cattle**

It puts cows in perfect health, and increases the flow of milk.  
DICK'S gives horses a smooth glossy coat, and puts life and spirit into them.  
Try a package with any run-down animal you may have and you will be convinced.  
**50 cents a package.**  
LEEMING, MILES & CO., AGENTS, MONTREAL



**HEY, THERE! JUNK MAN!**

I want to know how much you will give me for one of those separators that claim to be "just as good" as the

**DE LAVAL CREAM SEPARATORS**

I put in one of them last year because the agent claimed it was "just as good" as a DE LAVAL machine and was \$10.- cheaper. I have looked about and gotten some separator experience since then and I find now that I could have bought a DE LAVAL machine of greater actual capacity for less money in the first place, while I have lost money every day through the imperfect skimming of this machine, aside from hard running and trouble of all kinds from infernally poor construction.

I am going to have a DE LAVAL machine now if I have to "junk" this old one for scrap-iron. I know it will save its cost the first year of use and should be good for twenty years. I find all well-informed dairy farmers are using DE LAVAL machines and that there are over 400,000 of them.

*A De Laval catalogue may save this experience.*

**THE DE LAVAL SEPARATOR CO.**  
77 YORK STREET,  
TORONTO.



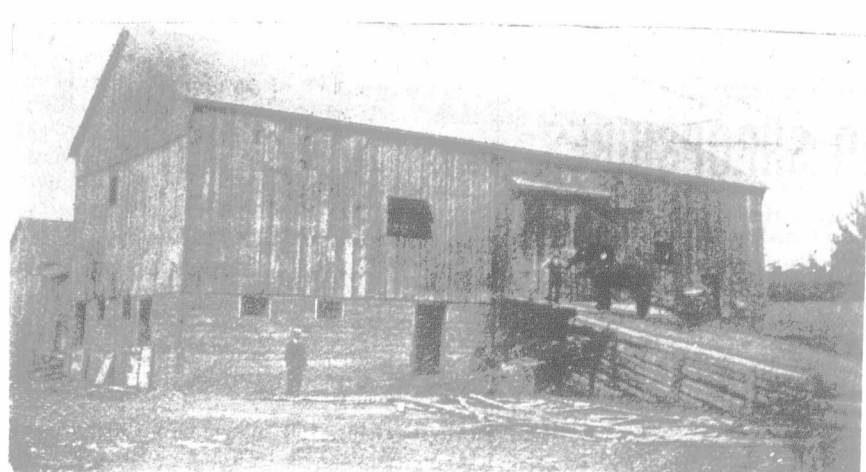
**Beware!**

Of a Fence Lock which needs a kink or crimp to make it hold. It weakens the wire and will eventually cause it to break. The

**Frost Wedge Lock**

is the only Fence Lock on the market today which will bind two hard wires without injury to either.

**The Frost Wire Fence Co., Ltd.,**  
Winnipeg, Man. Welland, Ont.

**BASEMENT BARN OF ELIJAH ARMSTRONG, LAMBTON CO.**  
Size of wall, 15 x 16 feet, and 11 feet high in places.  
Wall of barn and floor of stables were made with Battle's Thorold Cement.

**TROUT CREEK SHORTHORNS**



**IMP SPICY MARQUIS**  
1st LONDON 1901  
1st & 2nd CHAMPION TORONTO 1902

JAS. SMITH, Manager, Millgrove, Ont.  
W. D. FLATT, 378 Hess St. South, Hamilton, Ont.  
W. R. Bowman, Mt. Forest, Ont.

IS OFFERING  
**YEARLING DURHAM BULL**

of an excellent dairy strain (weight 1,200 lbs.) for \$75.00. Two Aberdeen-Angus bull calves 13 and 9 mos., at \$75 and \$90. Yorkshire boars and sows, Suffolk Down sheep, shearing ewes and ewes in lamb.

**GREEN GROVE SHORTHORNS**  
This herd comprises such noted families as Nonpareils, Crimson Flowers, Mysias, Langulshes, Butterflies, Jessamines, etc., and is headed by the noted Watt-bred bull, Spicy Robin = 28250 =, winner of second prize at Toronto and London, 1902. A few choice young bulls and heifers from Spicy Robin, also cows in calf to him, on offer; also prizewinning 8 C White Leghorn fowl. Eggs, \$1 per setting.

**GEORGE D. FLETCHER,**  
ERIN SHIPPING STA., C.P.R. BINKHAM P. O., ONT.

**S. DYMENT,**  
BARRIE, ONT.  
Breeder of Scotch Shorthorns  
Imported Morning Star at head of herd.

**HIGH-CLASS Shorthorns**

Now offering 12 bulls, reds and roans, from 6 to 24 months old—the thick, fleshy kind—and a few heifers. Also Clydesdale horses.

**JAS. McARTHUR,\*** - Goble's, Ontario.

**SHORTHORNS, COTSWOLDS,**  
Berkshires and Barred Rock Eggs.

Six bull calves for sale, from 2 weeks to 8 mos. old. A few young cows in calf. Choice ewe lambs. Barred Rock eggs, from Hawkin's Royal Blue strain, at 75c. for 13, \$2 for 50, \$3.50 a hundred.

**F. BONNYCASTLE & SON,**  
Campbellford P. O., Ont.

**SHORTHORNS:**  
JILTS and MARAS: 6 heifers from 1 to 3 years old; 5 with calves at foot and in calf again to Imp. British Statesman. Also two young bulls (roan).

**LOUIS ELLARD, Loreta P. O., Beeton Sta.**

**SHORTHORNS FOR SALE.**  
Three young bulls of choicest breeding and quality; also cows and heifers.

**ALEX. FLEMING, Jr.,**  
Owen Sound Station. Kilsyth, P. O., Ont.

**MERCER'S SHORTHORNS**

Comprise Missies, Stamfords, Floras, Clarets, Princesses, Red Roses, Young Sterlings, Fashions and Matchlesses. They number 60 head for sale. There are several choice heifers, 17 heifer calves, 3 bulls fit for service and 4 bull calves. A few older females.

**Thos. Mercer, Markdale P. O. and Station.**

**STILL THEY COME!**

ANOTHER PLEASSED USER TESTIFIES TO THE STERLING QUALITIES OF

**Thorold Cement**

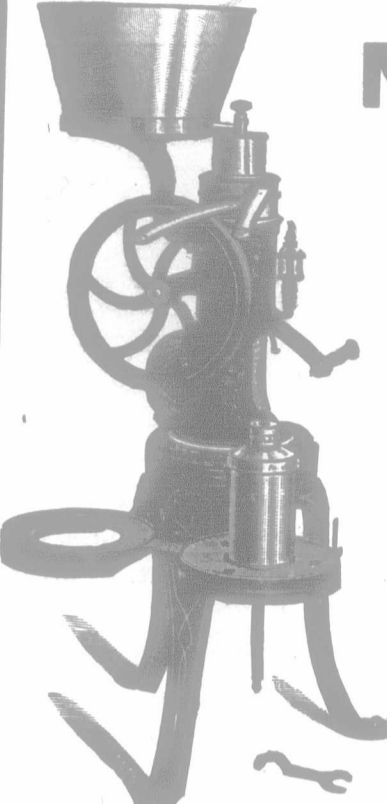
READ WHAT MR. ARMSTRONG SAYS  
and ask your dealer for Fattle's Cement:

*Abertoby, Ont., Oct. 27, 1900.*  
Estate of John Battle, Thorold, Ont.  
Gentlemen: It is with much pleasure that I testify to the good qualities of your Thorold Cement. I erected this summer under my barn a wall which in places is 11 feet high (size of building, 25 x 25). I have also floored stables with it, and erected concrete roof-house, using nearly 200 barrels of your cement.

I remain, Yours truly,  
**ELIJAH ARMSTRONG,**  
Breeder of Shorthorn cattle,  
Euphemia township, Lambton Co.

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

**WHAT THE NATIONAL WILL DO.**



**NATIONAL**

It will increase the yield of butter about 1 lb. per week, and about 30 to 60 lbs. per year, and will pay 8% on its cost price annually with one cow, and pay for itself in one year with 12 to 15 cows.

It will be placed on trial beside any other Cream Separator and prove to be superior in construction for convenience, easy operating, cleaning, close skimming, quality of cream and butter, style, fine finish and lasting service.

The only Cream Separator having its bowl and all parts made and finished in one shop in Canada under the supervision of the best Cream Separator experts obtainable.

The bowl is not filled with innumerable complicated parts to adjust and wash every time it is used. It has no stable-tainted, enamelled casing into which the milk and cream is discharged, that requires hot water at the barn to wash it every time it is used.

The National is designed for convenience and to overcome every objectionable feature found in other Cream Separators. A sample machine sent for a free trial to prove all that is claimed for the National.

NATIONAL No. 1A.  
Capacity, 450 to 500 lbs. per hour.

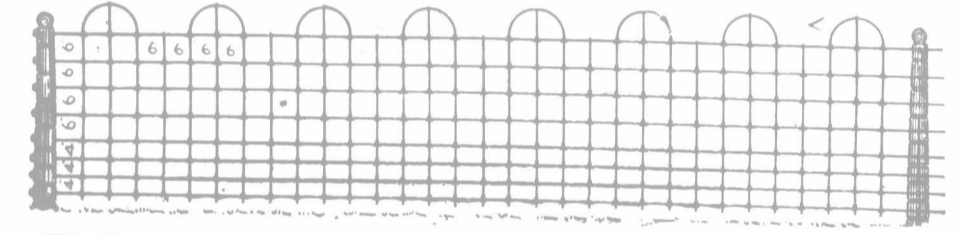
NATIONAL No. 1.  
Capacity, 330 to 350 lbs. per hour.

NATIONAL B.  
Capacity, 250 lbs. per hour.

Give the National a trial. Send for particulars to any of the following general agencies:

The CREAMERY SUPPLY CO., Guelph, for South-western Ontario.  
The T. C. ROGERS CO., Guelph, for Ontario North and East.  
JOS. A. MERRICK, Winnipeg, Man., for Manitoba and N.-W. T.  
JOHN A. ROBERTSON, 108 Union Avenue, Montreal, Quebec.

**The Raymond Mfg. Co. of Guelph, GUELPH, ONT. LIMITED.**



This Fence is particularly suited for cemetery, orchard and garden. Made of wickets 12 inches wide, and any length required. The price is less than that of the other ornamental fences, and in a long stretch this is a consideration.

The ANCHOR FENCE is made of all No. 9 wire, either plain or coiled.

**ESPLEN FRAME & CO.,**  
EST AGENTS WANTED. Stratford, Ont.

# SHORTHORNS

WE ARE OFFERING FOR SALE a grand lot of young imported Scotch cows and heifers with calves at foot or safely in calf to the best imported bull obtainable.

**Herd Numbers 150 Head.**  
Send for New Catalogue.

VISITORS WELCOME, AND CORRESPONDENCE PROMPTLY ATTENDED TO.  
TELEGRAPH OR TELEPHONE.

**H. CARGILL & SON,**  
Also have a choice lot of Oxford Down Sheep, either sex, at reasonable prices. om Cargill, Ontario, Canada.

## PINE GROVE SHORTHORNS AND SHROPSHIRE.

Our herd comprises over 150 females, including our last importation of 30 head, all of the most esteemed strains. Of Shropshires, we offer a few choice rams, also high-class ewes bred to first-class rams. Address

**W. C. EDWARDS & CO.,**  
Rockland, Ontario.

**THREE YOUNG SHORTHORN BULLS,**  
First-class Scotch breeding, good suckers and sure-getters; choice quality; low prices. Also cows and heifers of the same and choice Scotch home-bred.  
Station, Telegraph and Telephone office adjoin the farm. David Milne & Son, Ethel, Ont.

### TRADE TOPICS.

**THE HAMPSHIRE DOWN FLOCK BOOK**, Volume 14, containing pedigrees of rams numbered from 4634 to 5100, has, through the kindness of the secretary, Mr. J. E. Lawrence, The Canal, Salisbury, England, been received at this office, for which thanks is returned. The volume, which is well compiled, printed and bound, comprises 250 pages, and, in addition to the record of rams mentioned, gives a list of the officers of the Association, and of its members, with their addresses, a list of recorded flocks, the by-laws of the Association, and the Shepherds' Prize Competition.

**FOR STOCKMEN**—Every stock-raiser and dairyman should write T. Hamilton, Hamilton, Ont., for folder giving description of the Common-sense Calf-feeder, an article which is of the greatest value to those raising calves. It is an article that has been tried and tested, and is being used by many of the largest dairymen and stock-raisers of America. This folder also gives a description of the celebrated remedies, "Cow Ease," for curing caked bag, cow-pox or spider in the teat, and "Arabian Gall Cure," a scientific remedy for galls, sores, scratches and grease heels.

**A GROWING INDUSTRY**—Mr. M. W. Savage, manufacturer of International Stock Food, recently purchased the Minneapolis Exposition property for the purpose of housing his immense factory and office equipment and staff. Forty thousand dollars will be expended in fitting the building up, and when finished there will be 600,000 square feet of floor space. The auditorium will be retained to provide a large hall for conventions and other big gatherings.

The first floor will be retained for the accommodation of large horse, stock, poultry and automobile shows. With the exception of the printing establishment, this floor will be free from wall to wall. The manufacturing business will be confined to the two floors of the present art gallery building attached to the exposition.

On the second floor will be the largest office in the Northwest. In dimensions it will be 50 by 300 feet. The large force of stenographers, clerks and bookkeepers will be housed in a room which for light and air will not be surpassed in the country. It will be built on the river side of the building, with the entire west wall formed of glass windows.

Mr. Savage will seize this opportunity to develop social or industrial betterment plans, which he has had in mind for some time. The factory now has a force of 300 employees. Of this number, at least 200 are girls, 110 of whom are in the office. It is expected that with the natural growth of the business, the women employees will number eventually about 500. To provide entertainment for this large number along the lines advocated by the Institute for Social Service of New York, Mr. Savage will devote considerable space in his new building. During the summer or outdoor months, the park on the river front of the building, with its grass and flower plots and with its magnificent view of the river and falls, will be a place of recreation. In addition, there will be provided artistically arranged reading, rest, gymnastic rooms and lunch rooms. The lunch rooms will be made thoroughly up-to-date, with the latest accessories for the comfort of employees who bring their meals or secure them at the factory. Another plan in mind is to arrange entertainments for the employees, perhaps during the noon hour or in the evenings. These will take the form of concerts, popular lectures and the like.

### GOSSIP.

At an auction sale of Hackneys and harness horses at Stow, England, last month, five geldings sold at prices ranging from 100 guineas to 135 guineas each, and the 54 lots sold averaged £57 13s. Of the Hackneys, the top price was £55 guineas, for Santa Cruz, a good 16 hands 1 inch, five-year-old brown stallion, bought to go to the Hebrides.

**Shorthorns, Leicesters and Berkshires.** FOR SALE—1 yearling bull, bull and heifer calves; Berkshire boars and sows, ready for service, and suckers ready to wean. Write for wants, or come and see E. Jeffs & Son, Bond Head P. O., Bradford and Beeton Stns, G.T.R.

**Greengrove Shorthorns** Number 35 head families. For sale: Several young bulls, by Wanderer's Last, Imp. Fitz Stephen and Freebooter. Females of all ages. W. G. MILLSON, Goring P. O., Markdale Station.

**SHORTHORNS.** Imp. Christopher = 28859 = heads herd. A few choice young cows, heifers and bulls for sale, of milking strain. A. M. Shaver, HAMILTON Sta., Ancaster P. O., Ont.

**HAWTHORN HERD** Of Deep Milking Shorthorns. FOR SALE: Four young bulls, from 8 to 24 months old, from A1 dairy cows. Good ones. WM. GRAINGER & SON, Londesboro, Ont.

**Lakeview Shorthorns.** Herd represented by such noted families as Stamfords, Minas, Marr Floras, Crimson Flowers, Village Girls, Bucan Lassies, and Lavinias. Some yearling and two-year-old heifers for sale. om James Stowes, Strathairn P. O., Meaford Sta.

### OAK LANE STOCK FARM.

**Shorthorns, Cotswolds, Yorkshires and Barred Rock Fowls.**

FOR SALE: Three bulls (2 imp.) cows and heifers, both imported and Canadian-bred. Still open to take orders for N.W. trade. Write for prices. Satisfaction guaranteed.

**GOODFELLOW BROS.,** MACVILLE, ONT.

**W. G. PETTIT & SONS**  
FREEMAN, ONT., CAN.  
Importers and breeder of

## Scotch Shorthorns

and SHROPSHIRE SHEEP,

make special offering for January and February.

2 imported bulls coming 2 years old.  
4 bull calves, from 8 to 13 months old, from imported sire and dam.  
6 bulis, 10 mos. to 2 yrs., by Imp. sire.  
Imp. and home-bred cows and heifers of all ages.  
Our entire flock of Shropshire sheep, 75 head.

**JAS. GIBB, SUNNYSIDE STOCK FARM,** BROOKSDALE, ONT. om BREEDER OF SHORTHORN CATTLE. Stock for sale.

**JOHN DRYDEN & SON,**  
BROOKLIN, ONTARIO,  
BREEDERS OF CRUICKSHANK SHORTHORNS AND CHOICE SHROPSHIRE SHEEP.

Five choice young CRUICKSHANK bulls, straight, smooth, low-down and of show-yard type. Visitors welcome. om

### MAPLE LODGE STOCK FARM

ESTABLISHED 1851.

**SHORTHORNS.**—First-prize milking strains, best Scotch breeding. Young bulls and heifers for sale.  
**LEICESTERS.**—A grand lot of ewes, bred to our imported rams, and a few choice rams now for sale.

A. W. SMITH,  
ALISA CRAIG STA., G.T.R., MAPLE LODGE P.O., ONT.  
3 1/2 miles.

**Orchard Hill Shorthorns.** I am now offering 13 heifers from six months to two years, 4 bulls from 10 to 13 months old, and 7 very heavy milking cows. Here is a rare chance to get stocked with pure-bred cattle at reasonable terms. A. Johnston, Vandebeur P. O., Markdale Sta. om

**J. & W. B. WATT**  
BREEDERS AND IMPORTERS OF

## Shorthorns, Clydesdales and Berkshires

We breed our show cattle and show our breeding cattle.  
The imported bulls, Scottish Beau, Viceroy and Scottish Peer, head the herd.  
Imported and home-bred cows and heifers for sale.  
A few choice young bulls on hand.  
Our herd at Toronto won three firsts, a second and third out of five herd classes.  
Salem P. O. and Telegraph Office. Elora Sta., C.P.R., G.T.E.

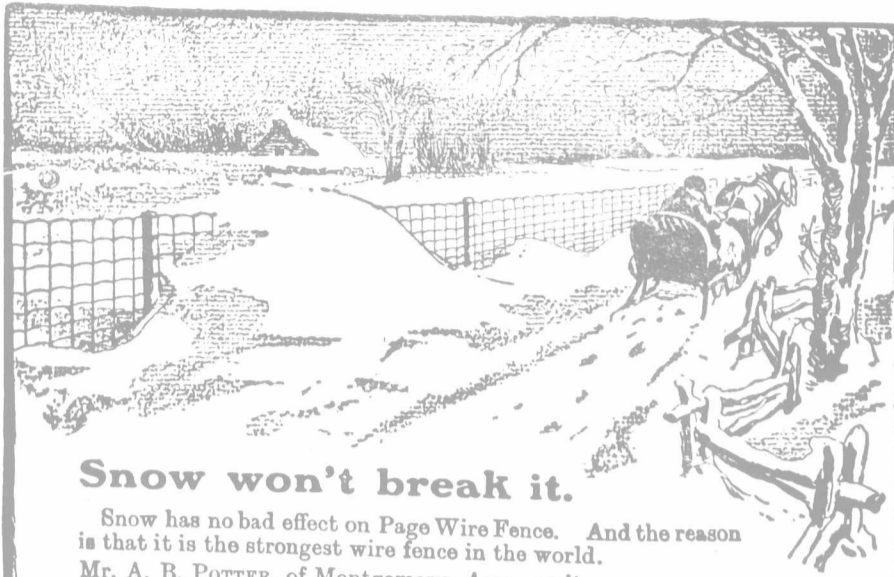
**SHORTHORNS.**  
Importer and breeder of choice Shorthorns. Scottish Hero 156726 at the head of herd. om JAS. A. CRERAR, Shakespeare, Ont.

GOSSIP.

June 23rd to 27th are the dates this year of the annual exhibition of the Royal Agricultural Society of England, which is now permanently located near London, England, and which will be held for the first time on the new grounds at Park Royal, situated between Willesden and Ealing. The Highland and Agricultural Society's Show will this year be held at Dumfries, July 21st to 24th.

SHORTHORNS AND YORKSHIRES.

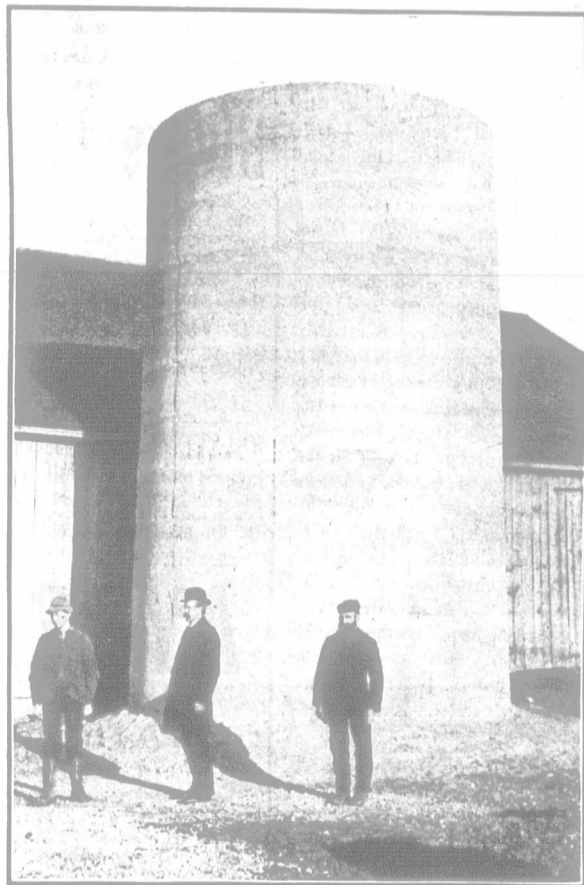
Evidently, Mr. H. J. Davis does not believe in having his eggs all in one basket, as he is an extensive breeder of both Shorthorns and Yorkshire pigs at his farm, about five miles from Woodstock, Ont. His imported roan two-year-old bull, Bapton Chancellor, bred by Mr. J. Deane Willis and used in the herd of W. S. Marr, is one to be proud of. Sired by Silver Plate and out of Crocus, by Captain of the Guard. He is a very thick, symmetrical bull, with good top and underline, great depth of chest, and of good size. He was bought from Mr. W. S. Marr at a long figure, but is proving himself a good investment, as his progeny are of the right kind and show him to be a bull of strong individuality. Of recent additions, Imp. Village Maid, bred by late Wm. Black, purchased from Mr. Wm. Duthie, her dam being now in his herd, is a model of general utility cow, being a large, well-bull cow with well-developed udder and a deep milker. Her last year's calf, Village Maid 29th, is a sweet heifer and would be difficult to duplicate. She is also suckling a red bull calf (imp. in dam), by Cornelius, a Royal winner. Graceful Rose (from the herd of Lord Rosebery; sire Graceful Chief) and her calf by Villager (imp. in dam) are doing very well. She is a very elegant roan, of very good size and shape. Jessie 4th, bred by Mr. Watson, Aberdeenshire, of the Julia family, is a very deep milker, and has a nice calf at foot by Cornelius. Golden Rose 3rd, by Bell the Cat, full brother to Cock of the North, champion of Great Britain, is of the Cruickshank Julia family. Red Lady, by Watchman, a very large red cow, bred to Chancellor, is another good one, and Eastern Duchess 4th, bred by J. & W. Law. Sanquahar, by Diamond Jubilee, is a three-year-old heifer, suckling a roan bull calf by Motto, of the herd of Cameron, of Balnakyle. A pair of red heifers, Merry Lass 7th and 8th, by Lord Lovat, from same herd, are just what breeders are looking for and yet hard to find—a well-developed, smooth, even pair, in the pink of condition and health. Twin Princess 12th, another Cameron heifer, has for sire the sire of the highest-priced bull in Canada, of the Broadhooks family of high-selling fame. Pansy Blossom, two years old, red, by British Hero, and Marchioness 22nd, a red two-year-old by Lord Lovat, complete the list of imported cattle, a bunch of cattle which for individual merit, good breeding and size would be hard to beat. Of the home-bred stock, Strathallan Maid, a Bracelet cow, five years old, is a fine specimen of what can be done by careful selection and use of good sires. She is a credit to her owner and breeder. Barbara, out of Rosedale St. Marys (nursing a heifer calf by Chancellor), is of the heavy-boned type, suitable for N.-W. trade. Sales have been frequent during the winter, Mr. Davis having sold twenty-three head during that time. There are a number of calves by the imported bull, out of imported cows, of which space forbids particular mention. Going on to the pigpens, we find Bloomfontein (imp.), bred by Philo Mills, Ruddington, a long, even sow, has a nice lively litter of nine by Ruddington Ensign, who has been the stock boar, but is now for sale, as he has been long enough in the herd. He is a sire of true bacon type, with smooth shoulders and full hams. Several other sows have litters doing well. Nine young sows are being bred to Dalmeny Long Sam, bred by Lord Rosebery. There are about 75 head of Yorkshires of all ages and sizes, giving a big class for purchasers to choose from. For further particulars, see advertisements.



Snow won't break it.

Snow has no bad effect on Page Wire Fence. And the reason is that it is the strongest wire fence in the world. Mr. A. B. POTTER, of Montgomery, Assa., writes: "Dear Sirs,—Having purchased some 'Page' 11 strand wire fence from you in 1900 for pig yards, this fence was put along some trees that caused the snow to pile up two feet over the top wire, and the fence came out in the spring O. K., only a few staples drawn. Another fence under the same conditions on a neighbor's farm was badly broken and bent. I consider the Page a good fence." When you buy fence, why not have the best?—The Page. Used on all Canadian Railways. 60,000 miles in use. Page Gates and Poultry Netting are as good as Page Fence. The Page Wire Fence Co., Limited, Walkerville, Ontario. St. John, N.B. Montreal, P.Q. 103

PORTLAND CEMENT Concrete Silo



BUILT FOR P. CRERAR, MOLESWORTH, HURON CO., ONT. 14 feet in diameter and 30 feet high, with "RATHBUN'S STAR" BRAND MANUFACTURED BY The Canadian Portland Cement Co., LIMITED SOLE SALES AGENTS: THE RATHBUN COMPANY 310 and 312 FRONT STREET WEST, TORONTO, ONTARIO

What J. H. & E. Patrick Say About Zenoleum Dip:

"After having used your dip for the last three years on our flock of Lincolns, among which are the best that money could buy in England, including the winner of the International Stock Food Co. prize of \$400.00 for the largest sheep in the world, we take pleasure in offering you our testimonial as to the merits of Zenoleum." J. H. & E. PATRICK, Ilderton, Ont. Send for copies of "Zenoleum Veterinary Advisor" and "Piggie's Troubles" and see what others say about it. Books mailed free. Sample gallon of Zenoleum \$1.50, express prepaid. Five gallons \$6.25, freight prepaid. "The Great Coal Tar Carbolic Dip." ZENNER DISINFECTANT CO., 113 BATES STREET, DETROIT, MICH.

PENNABANK STOCK FARM

Three choice Shorthorn bulls from 12 to 14 months old, solid reds. Prices reasonable. Also a few Shropshires left, of choice quality and breeding. om Hugh Pugh, Whitevale, Ont.

SHORTHORNS and CLYDESDALES.

We have for sale five bull calves, from 8 to 24 months, from imp. sire and dams; also six extra good stallions, from two to six years old.

JOHN MILLER & SONS, BROUGHAM, ONT.

CLAREMONT STATION, C. P. R. om

SHORTHORNS (IMP.)

Cows and heifers, imp. and home-bred. Bulls, imp. and home-bred—all ages. Representing the fashionable blood of Scotland. om EDWARD ROBINSON, MARKHAM P. O. & STN.

Scotch Shorthorns

Have for sale, at moderate prices, imported heifers and cows, with calves at foot or in calf to Bapton Chancellor, imp. (recently imported from Uppermill). Also Canadian-bred heifers and young cows. om H. J. DAVIS, WOODSTOCK, ONT.

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

ARTHUR JOHNSTON, GREENWOOD, ONTARIO,

Offers for sale at times' prices, 6 young SHORTHORN BULLS, from imp. dams and by imp. sires. 6 YOUNG BULLS, of purest Scotch breeding. 10 YEARLING and 8 TWO-YEAR-OLD HEIFERS.

Pickering Station, G. T. R. Clarendon Station, C. P. R. om

SHORTHORNS.

THORNHILL HERD, ESTABLISHED 27 YEARS. Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls. om REDMOND BROS., Millbrook Sta. and P. O. BONNIE BURN STOCK FARM, 40 rods north of Stouffville station, offers Scotch Shorthorns; choice Shropshires and Berkshires from imported and Canadian-bred sows. All at farmers' prices. Inspection invited. om D. H. RUSSELL, STOUFFVILLE, ONT.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep. HERD prize and sweepstake at Toronto Industrial Exhibition, three years in succession. Herd headed by the Bruce Mayflower bull, Prince Sunbeam, imp. Present crop of calves sired by Imp. Wanderer's Last, sold for \$2,005. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply om

T. E. ROBSON, ILDERTON, ONT.

SCOTCH SHORTHORNS AND SHROPSHIRE.


Present offering:—Have still on hand one bull and four heifers, and a few cows. Shropshires of both sexes and all ages. om BELL BROS., Bradford P.O. and Station.

SHORTHORNS.

Lady Fannys and Beautys for sale 5 bulls, from 6 to 14 months old; 7 heifers, from 1 to 3 years old, some of them in calf to Prince Eclipse 33049. om James Caskey, Tiverton P.O., Kincardine Sta.







**BABY'S OWN SOAP**

prevents roughness of the skin and chapping.

Best for toilet and nursery use. 035  
ALBERT TOILET SOAP CO., Mfrs. MONTREAL.

**Springhill Farm Ayrshires.**

**FOR SALE**  
One bull 16 months old, three bulls 7 months old, all from imported sire and deep-milking dams. Females, all ages.

Robt. Hunter & Sons, Maxville, Ont.

**DAVID A. MCFARLANE,**  
Breeder of high-class **KELSO, P. Q. AYRSHIRES.**

Young stock for sale from imported and home-bred foundation. Prices reasonable.

**STOCKWOOD AYRSHIRES.**  
Our herd now numbers 40 head of all ages, with milk records from 40 lbs. a day up. Stock of both sexes for sale. Bulls a specialty.  
**WATT BROS., Allan's Corners P. O. St. Louis Sta., near Howick, Que.**

**HIGH-CLASS AYRSHIRE CATTLE**  
For Sale: Both sexes; bulls and heifer calves from 2 to 9 months old; cows and heifers all ages. Famous prizewinners bred from this herd, including Tom Brown and White Floss, sweepstakes prizewinners at Chicago. **DAVID BENNING & SON, "Glenhurst," Williamstown, Ont.**

**AYRSHIRES AND YORKSHIRES.**  
My Ayrshires are all bred from imported stock; Yorkshire from Mr. D. C. Platt's imported stock. Choice young animals for sale.  
**James McCormick, Sr., Roekton, Ontario.**

**Menie Stock Farm**  
Choice young **AYRSHIRE** bulls and heifer calves, from 2 to 9 months old. Also cows and heifers all ages. Write **WM. STEWART & SON, Menie, Ont.**

**Maple Cliff Dairy and Stock Farm**  
Breeders of **AYRSHIRE CATTLE, BERKSHIRE and TAMWORTH PIGS.**  
Special offer this month in young bears of both breeds, fit for service. One young bull, 2nd at Toronto last year as yearling.  
Farm adjoins Central **R. REID & CO., Experimental Farm. Hintonburg, Ont.**

**Tredinnock Ayrshires.**  
Imported bulls at head of herd: Glencairn 3rd, Napoleon of Auchinbrain, and Lord Dudley. Forty imported females, selected from leading Scotch herds, and their produce from above-named bulls. Size combined with quality and style, well-formed udders, good-sized teats, and capacity for large milk production. Bull calves for sale; also a few young cows and heifers. For prices and particulars address **JAMES BODEN, Mgr., St. Anne de Bellevue, Quebec.**  
Farm close to St. Anne Station, Quebec.  
**G.T.R. & C.P.R., 20 miles west of Montreal.**

**NETHERLEA AYRSHIRES.**  
Present offering: 3 bulls fit for service, prize-winners; also a few young females, sired by Napoleon of Auchinbrain (imp.), whose dam's record was 72 lbs. a day, and all of them out of record cows. **T. D. McCALLUM, Danville P. O. and Station, Quebec.**

**AYRSHIRE CATTLE**  
**SHROPSHIRE SHEEP,**  
**B. P. ROCK FOWL and 20 YOUNG LARGE ENGLISH BERKSHIRES FOR SALE.**  
**J. YUILL & SONS, Carleton Place, Ont.**

**Homecroft Farm** for dairying and pure-bred stock. Ayrshires, Cheater Whites, and Furred Rocks. We have some fine bulls fit for service. Also hogs of all ages. Prices reasonable. Try us. **J. F. PARSONS & SONS, Barnston, Que.**

**Spring Burn Ayrshires and Oxford Downs**  
Our special offer at present: 10 bulls from 1 to 9 months old, 4 two-year-olds, 2 shearlings, and 7 ram lambs; a choice lot. Prices reasonable.  
**H. J. Whitteker & Sons, North Williamstown, Ont.**

**GOSSIP.**

Mr. Wm. Colquhoun, Mitchell, Ont., the well-known importer and breeder of high-class Clydesdales, writes that he has had excellent results from his advertisement in the "Advocate," having sold all his imported stallions, and, as stated in his advertisement, he purposes making another important importation in August, due notice of the arrival of which will be given in this paper.

Mr. Robert Hunter, farm manager for Mr. W. Watson Ogilvie, Lachine Rapids, Quebec, who has been in Scotland purchasing Ayrshires for the Rapids Farm, has secured among others from Mr. R. Wm. Grieve, Kirklands, Kirkconnel, a splendid three-year-old cow for importation to Canada. This cow, which is got by a Tower bull, out of one of the best cows in Kirkland herd, has only been once shown, and this was at the open show at Cummock last month, where she easily carried off the first prize. In Mr. Hunter's opinion, this is one of the best in-calf queys which he has taken across the water, and he expects she will give a good account of herself in Canada. And it was only by paying a long price that he could induce Mr. Grieve to part with her.

H. J. Whitteker & Sons, North Williamstown, Ont., breeders of Ayrshire cattle and Oxford Down sheep, write: "We are well pleased with our ad. in the 'Advocate,' as we have sold all the bulls we advertised, and still the enquiries are coming in. Our stock has come through the winter in fine shape, and we think we have the best crop of calves and lambs that we ever had. We have made some good sales this season. Sold one bull to each of the following: Rolin Whitteker, Dundalk; David Johnson, Bouck's Hill; C. A. Cass, L'Orignal; N. Ralph, Oak Leaf; Eldon District Farmers' Institute, P. E. I.; and a two-year-old heifer to John Whitteker, Dundalk; one cow to James Baker, Elma; one cow and two heifers two years old to William Berkley, North Williamstown; and one cow to W. C. Prunner, Winchester Springs.

"Hobson's choice" is a proverb which is frequently used by many unacquainted with its origin. But Mr. C. E. Harper, in his new book on the Cambridge Road, throws considerable light on the subject. "Thomas Hobson," says Mr. Harper, "was the famous carrier between London and Cambridge, and died in 1631. It was from him that the phrase originated, meaning a choice that is no choice. 'Mr. Harper adds: 'The saying arose from the lively stable business carried on by Hobson at Cambridge, in addition to his carrying trade. He is, indeed, said to have been the first who made a business of letting out saddle horses. His practice, invariably followed, was to refuse to allow any horse in his stables to be taken out of its proper turn. 'That or none' was his unflinching formula when the Cambridge students, eager to pick and choose, would have selected their own fancy in horseflesh. Every customer was thus served alike, without favor."

E. Jeffs & Son, Bondhead, Ont., breeders of Shorthorns, Leicesters and Berkshire, in ordering a change of ad., write: "We have sold a lot of stock these last three months, and the rest are doing nicely, especially the calves, young bulls and pigs. The yearling bull, Pickwick, at 22 months old, in working condition, weighs 1,600 lbs. Of Berkshires, we have a nice lot, some fit for winners at the Industrial next fall, and sales also have been exceptionally good. The Leicesters are doing nicely in the shade of the trees and fences. We have plenty of good grass. The following are the recent sales: one yearling bull to W. J. Hughes, Cookstown, Ont.; one yearling bull to Wm. Harris, Jr., West Shefford, P. Q.; five heifers, three yearlings and two two-year-olds, to S. Dymont, Barrie, Ont.; one bull to J. H. Westwick, Doe Lake, Ont.; one cow and one heifer to H. L. Bayeroff, Bondhead, Ont.; one boar and one sow to R. McCormick, Midland, Ont.; one boar to W. Harris, Jr., West Shefford, P. Q.; one sow to G. S. Brooks, Bondhead, Ont.; one sow to F. A. Schooley, Sparta, Ont.

**EUROPEAN ADVERTISEMENTS.**

**THE RIBY HERD and FLOCK**

OF SHORTHORN CATTLE AND LINCOLN LONG-WOOL SHEEP  
**HENRY DUDDING,**

Riby Grove, Great Grimsby, Lincolnshire.

To get Champions by the produce of Champions. These can always be secured from the Riby Grove Herd and Flock, the largest in England, comprising the choicest lines of blood extant. Theirs is a world-wide reputation, and suffice to say that at no period of its history, dating back 150 years, were they stronger in merit or quality. 85 awards were won in 1901, and equally good results secured in 1902, culminating in those great victories at Smithfield Show, where its pen of wethers won the 100-guinea Challenge Cup for the best pen of sheep of any age or breed; and at Chicago Live Stock Show, in December last, where a ram from this flock won the \$400 prize offered for the heaviest sheep in the world. **CABLE—Dudding, Keelby, England.**

**HAMPSHIRE DOWN SHEEP**  
**GREAT ENGLISH PEDIGREE SALES,**

July, August & Sept., 1903

Waters & Rawlence, Salisbury, Eng., will sell by public auction, during the season, upwards of

**50,000 PURE-BRED EWES, LAMBS, RAMS.**  
including both rams and ewes from the best registered prizewinning flocks in the country. Commissions carefully executed. Address—

**Waters & Rawlence,**  
SALISBURY, ENGLAND.

**W. W. CHAPMAN,**  
Secretary of the National Sheep Breeders' Association,  
Secretary of the Kent or Romney Marsh Sheep Breeders' Association,  
and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: **MOWBAY HOUSE, NORFOLK ST., LONDON, W. C., ENGLAND.**

Cables—Sheepote. London.

**English Shorthorns.**

Booth and Bates Shorthorns, topped with Cruickshank bulls. Young cows, bulls and heifers always on hand for sale. Eligible for the American herd-book. Royal and Highland prizewinners included for the last two years. Close on \$400 won in prize last year and this.  
**WM. BELL,**  
Batchesugh Farm, Alnwick, Northumberland, Eng.

**HAMPSHIRE DOWN SHEEP.**

"RESERVE" FOR CHAMPION IN THE SHORT-WOOL CLASSES, SMITHFIELD, LONDON, 1901.

**Splendid Mutton, Good Wool, Great Weight.**

This highly valuable **ENGLISH BREED OF SHEEP** is unrivalled in its wonderfully early maturity and hardness of constitution, adapted to all climates, whilst in the quality of mutton and large proportion of lean meat it is unsurpassed; and for crossing purposes with any other breed, unequalled. Full information of

**JAMES E. RAWLENCE,**  
SECRETARY HAMPSHIRE DOWN SHEEP BREEDERS' ASSOCIATION,  
SALISBURY, ENGLAND.

**English Berkshires**

About the end of June the well-known prize-winning herd, the property of the **EARL OF CARNARVON**, will be sold without reserve, at **HIGHCLERE CASTLE, NEWBURY.** This herd contains more prize-winning blood than any other English herd. At the record sale at Billmore on Feb. 3rd last (221 '90 for 61 head of English Berkshires), several of the pigs sold were bred at Highclere, and many others descended from Highclere sows, thus showing how highly-valued this blood is, and intending purchasers should not miss this opportunity of obtaining it. Full particulars from

**W. T. HALL, HIGHCLERE FARM, NEWBURY, ENGLAND.**

**NOTE!**

The annual sale of Shorthorn cattle and Lincoln sheep, property of Henry Dudding, Riby Grove, Stallingboro, Great Grimsby, England, has been fixed to take place on **Friday, July 3rd, 1903,** when some fifty or sixty Shorthorn cows, in-calf heifers and young bulls of the highest merit and most fashionable lines of blood, together with fifty yearling rams and some ewes from the world-wide-known flock of Lincoln sheep, will be sold without reserve. Catalogues and information of the owner or of Messrs. J. Thornton & Co., 7 Princes St., Hanover Square, London.

**NO HUMBAG.** Three in One. Swine V. Stock Marker and Calf Beholder. Stays awide from rooting. Makes 46 different ear marks. Extracts Horns. Price \$1.50. Send \$1 for trial. If it suits, send balance. Pat'd May 6, 1902. Hog and Calf Holder only 75c. **FARMER BRIGHTON, FAIRFIELD, IOWA.**



**TORONTO ENGRAVING CO.**  
**92 BAY ST**  
CUTS BY ALL PROCESSES  
LIVE STOCK A SPECIALTY

**THE ONTARIO VETERINARY COLLEGE**  
(LIMITED),  
TEMPERANCE ST., TORONTO, CANADA.

Affiliated with the University of Toronto.  
Patrons: Governor-General of Canada, and Lieut.-Governor of Ontario. Fee \$65.00 per session. Apply to **ANDREW SMITH, F.R.C.V.S., Principal. 18-2-y-om**


**Dorset Horn Sheep**

The largest flock in America. The most celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand.

John A. McGillivray, Uxbridge, Ontario.

**SHEEP BREEDERS' ASSOCIATIONS**

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



**LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH.**  
NON-POISONOUS

**Non-Poisonous Fluid Dip**

Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large breeders.  
**For sheep.** Kills ticks, maggots; cures scab; heals old sores, wounds, etc., and greatly increases and improves growth of wool.  
**Cattle, horses, pigs, etc.** Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.  
Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.

**No danger, safe, cheap, and effective**  
Beware of imitations.

Sold in large tins at 75 cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to breeders, ranchmen, and others requiring large quantities.

**SOLD BY ALL DRUGGISTS. SEND FOR PAMPHLET.**  
**Robert Wightman, Druggist, Owen Sound.**  
Sole agent for the Dominion.

**FAIRVIEW SHROPSHIRE**  
A great lot of good young lambs. Home-bred and imported shearing rams. A beautiful lot of home-bred ewes. Whoever wants such, let him write. All 1902 customers fully satisfied, and I am determined to please each and every 1903 customer by furnishing good stock and dealing fair.  
**JOHN CAMPBELL, Fairview Farm, Woodville, Ontario.**

**Broadlea Oxfords** NUMBER 110 HEAD, all imported and from imported stock. We have for sale a number of choice flock-heads, about twenty-five ewe lambs, and a number of shearlings, on **W. H. ARKELL, Teeswater P.O. and Sta.**

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

COOPER SHEEP DIP

STANDARD OF THE WORLD for 60 years. Used on 250 millions annually. If local druggist cannot supply, send \$1.75 for 50 gal.

Evans & Sons, Montreal and Toronto.



GILLETT'S PURE POWDERED LYE

BEST, PUREST, STRONGEST.

E. W. GILLETT COMPANY LIMITED TORONTO, ONT.

BEST and CHEAPEST IN THE MARKET.

Kemp's Instantaneous Sheep-Dipping Fluid.

1-gal. Imperial tin for 75c.

STRENGTH EQUAL TO ANY.

Instantly kills ticks and parasites on sheep and lambs. Improves and waterproofs the wool. A sure remedy for vermin, mange, etc., on horses, cattle, sheep, and dogs.

Ask your druggist for Kemp's Dip. I will express it, prepaid to any part of the Dominion, for \$1.

W. W. STEPHEN, Agent, MEAFORD, ONT.



LIVE STOCK are free from insects and skin diseases when West's Disinfecting Fluid is used. THE WEST CHEMICAL CO., TORONTO.

FOR SALE, AT MAPLE AVENUE STOCK FARM, CHOICE

Lincoln Sheep and Shorthorn Cattle

Bred from best English stock. Bred from Scotch bulls of fashionable families.

CAN SUPPLY EITHER IN CARLOAD LOTS. Write us before buying elsewhere. Address: F. H. NEIL, Proprietor, LUCAN, ONT. Box 35. Telegraph and Railway Station.

American Leicester Breeders' ASSOCIATION.

A. W. Smith, Pres., Maple Lodge, Ont.

Pedigrees now being received for Vol. 4. For information, blanks, etc., address:

A. J. TEMPLE, Sec., CAMERON, ILL. om U. S. A.

PRIZEWINNING COTSWOLDS.

Imported and home-bred stock, prizewinners at all the leading fairs. ELGIN F. PARK, om Box 21, Burgessville, Ontario, Canada.

IMP. COTSWOLD SHEEP

Five rams (year-olds), both sires and dams imp.; 10 ewes (year-olds), sire imp. Also this year's lambs, both sexes; Yorkshire and Tamworth hogs. om BROOKS & LANGMAID, COURTICE, ONT.

GOSSIP.

VOLUME XX. OF HOLSTEIN HERD-BOOK.

Through the courtesy of Mr. Frederick L. Houghton, Secretary and Editor of the Holstein-Friesian Association of America, we have received Volume XX. of the Association's herdbook. This volume includes bulls numbering between 28415 and 30152, inclusive, and cows numbering between 55921 and 60172, inclusive. It also includes a report of the annual meeting of the Association, held at the Yates Hotel, Syracuse, N. Y., June 4th, 1902.

AYRSHIRES AT AYR.

"Ayrshire milk stock," says the Scottish Farmer, "at the late Ayr Show, taken all over, was quite as good an exhibition as any seen at Ayr hitherto, and competition in all the classes was, without exception, very keen. The first class of the show was the Derby for three-year-old cows, and contained no fewer than fifty-four entries. The standard of quality in the exhibits was quite up to the usual Ayr Derby, and perhaps the principal feature of the winning animals was the general excellence of vessel and teats. The judges appeared to be going strong for the latter point all along the line, and the winners were all animals possessed of teats more of the commercial order than has been the case in recent years. Mr. Alex. Cross, of Knockdon, Maybole, had no difficulty in taking the leading position, with Lady Jane, a daughter of Prince III. of Knockdon, by far the tightest-vessel cow in the class. She has extra good teats, and carries her vessel well, her only fault being a little wideness in the fore teats. Otherwise, however, she was a popular winner, and ultimately was awarded the female championship and the herdbook awards. Mr. James Howie, Hillhouse, won in aged bulls with Not Likely, for the third year in succession at this show. Mr. Jas. Robb, Old Cunnock, was second with Full Bloom. Mr. Wm. Murray, Borrowmoss, was third with Still Another, looking better than he did on his appearance at Castle-Douglas. He owes his position on this occasion to the excellence of his opponents, and to no fault of his own. A round dozen two-year-old bulls were entered, and here Mr. Jas. Howie, Hillhouse, Kilmarnock, won easily with the level, stylish, well-balanced Fizzaway, by Prince Imperial, which stood second to Gentleman John at Kilmarnock. The judges seemed to have some difficulty in awarding the second ticket. Ultimately, Mr. John N. Drummond, Bargower, Hurlford, secured the ticket, with General M'Kinlay, the third-prize taker at Kilmarnock, bred by Mr. M'Kinlay, Hillhouse. He is a good, level type of the wedge shape, so much fancied by breeders, and if a fault could be found it would be in his shortness of leg. Mr. James Kennedy, Glnshamrook, Auchinleck, was a close third with Safe Guard, a Wynholm-bred bull, which is likely to make a capital aged bull. As at present, however, outside opinion was quite in favor of the judges' decision. Bull strikes would be a record entry for Ayr, and the judges had considerable difficulty in placing the tickets. First place was, however, conceded with little difficulty to Mr. James Howie's Erin Go Bragh, from Hillhouse, which was winner at Kilmarnock. He was looking even better than on his first appearance, and gives every promise of growing into a splendid aged bull. Mr. John N. Drummond, Bargower, Hurlford, was second and third with Royal Imperial and Blooming King, respectively. "In the competition for the male championship, Not Likely, Full Bloom and Erin Go Bragh entered the ring. Not Likely won the £50 challenge cup and the herdbook prize of £5. This being the third occasion on which Mr. Howie has won the cup, it now becomes his own. Erin Go Bragh was reserve in both cases. The female championship and herdbook money prize went to Mr. Cross's Derby winner, while Mr. Howatson's second prize cup, value £15, in the milking class, was awarded to Mr. Wm. Murray's Daisy, owned by Mr. Sully L."

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

Farnham Oxfords and Shorthorns

My present offering—125 one and two year old rams, sired by Bryan's 125, Hampton Hero 4th, Royal Windsor 4th, and Kempford Hero 8th (all imported), 35 of which are flock headers, the balance strong, vigorous ranch rams. Also 50 choice yearling ewes, and the rare, nice ten-months-old bull, Royal Arcanum 45133, by Imp. Sittyton Conqueror, and four heifers, from 10 to 20 months old, by 20th Crown Jewel. Guelph four miles. om BENEY ARKELL, Arkell P. O. and Station.



HILLCREST HERD OF Large English Berkshires

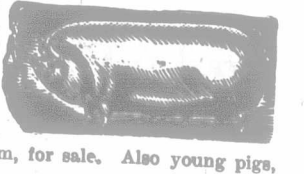
My brood sows are imported or show animals, and the sires are big, long fellows of the bacon type. For sale: An excellent lot of young pigs, and a few young sows recently bred. Can supply pairs not akin. Enquiries promptly answered. Vine station, G.T.R.—near Barrie. Jno. Lahmer, Vine, Ont.

W. S. CARPENTER, "MODEL FARM," SIMCOE, ONT.

Importer and breeder of Shropshire sheep. My flock was represented at Toronto, and won first on shearing ram, first and second on aged ewes, and second on the pen. First time exhibiting. If in need of a first-class yearling ram, imported or home-bred, write! Your wants can be supplied, and at prices consistent with quality. Have a choice lot to choose from, and can guarantee satisfaction. Come and see them, or a card will bring them. om Station One-half Mile from Farm, Wabash and G. T. R.

Large English Yorkshires

Imported and Canadian-bred Yorkshires, from stock of the best British herds. A choice lot of boars, ready for service, and a number of sows being bred to Imported Dalmeny Long Sam, for sale. Also young pigs, all ages. om H. J. DAVIS, Woodstock, Ont. Box 518.



Dorsets & Chesters Young stock in Dorset Sheep and Chester White Hogs of good quality for sale, reasonable. R. H. HARDING, THORNDALE, ONT. om "MAPLEVIEW FARM."

SHROPSHIRE FOR SALE.—Shearing rams, ram lambs, ewe lambs, also shearing and older ewes, about 50 head all told. All registered or eligible. Low-set, well covered, in fine condition and form. Sires from Campbell and Dryden flocks. MALCOLM McDOUGALL, om Tiverton, Ont.

This season I am offering for sale SHROPSHIRE lambs of both sexes. Also shearing ewes and 2 shearing rams. Prices right and quality guaranteed. om GEO. HINDMARSH, Ailsa Craig, Ont.

LINDEN OXFORDS at Toronto, 1902, won 1st open pen; 1st and 2nd Canadian pen; 1st and 2nd aged, yearling and ram lambs; 1st, 2nd and 3rd yearling ewes and ewe lambs. All these ewes retained in flock and the best rams. E. J. HINE, Dutton, Ont. om

TAMWORTHS.—Young pigs for sale, from medal-winning sow, O. A. C. 110, and other good ones, sired by Imp. Starlight, Pan-American First, and Bold Boy, Toronto winner. JOHN HORD & SON, om Parkhill P. O. and Station.

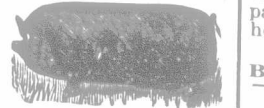
TAMWORTHS. FOR SALE: Two young sows, bred to Dandy =254—, a good typical sire; also several young boars and sows of very best breeding.

BRONZE TURKEY EGGS—\$3 per setting. HAZEL DELL om D. J. GIBSON, STOCK FARM. Bowmanville, Ont.

Newcastle Herd of Tamworth Swine Have for a number of years taken a share of the best prizes offered at Toronto Exhibition, but this year has excelled all past records, having taken the sweepstakes for the best herd; also both silver medals for many other prizes in the various classes. Our present offerings are: A few choice young sows, 4 to 5 months old; 2 yearling sows, in pig; and we are now booking orders for spring pigs, both sexes. Enquiries promptly answered. om COLWILL BROS., NEWCASTLE, ONT.

WILLOW LODGE BERKSHIRES

Herd headed by Long-fellow 10th of H. F., assisted by the noted prize-winner, Highclere Crown 3rd. Sows, the best money will buy, and are winners. Young stock of both sexes and all ages for sale, not akin. om W. WILSON, Snelgrove, Ont.



IMPROVED CHESTER WHITES

Boars fit for service. Sows ready to breed. Young pigs in pairs, not akin. om LARG ENGLISH BERKSHIRES.—Sows ready to breed, and young pigs in pairs, not akin. Pedigrees registered. For prices write or apply to om TILMAN E. BOWMAN, Berlin, Ont.

Yorkshires, Poultry and Collies

Choice Yorkshires, 2 to 3 months old, bacon types. Eggs from prizewinning W. Wyandottes and B. P. Rocks, mated for exhibition stock. A litter of fine collie pups, pedigree. Address: om J. A. & A. B. Armstrong, Warkworth, Ont.

Maple Grove Herd of Large ENGLISH YORKSHIRES

From imported and home-bred sires. Choice lot of young sows bred to imported boar, Summer Hill Dalmeny Cavalier, 10955—, and a number of young stock from prizewinners. Pairs not akin supplied. om T. J. COLE, Box 188, Bowmanville, Ont.

GLENBURN STOCK FARM

Berkshire Pigs from March and April litters. Can supply pairs. A few good young boars ready for use, at reasonable prices. Large Shorthorn calves of both sexes. om John Rees, Jr., Lennoxville, Ont.

One hundred Tamworth and Improved Chester White Spring Pigs of a true bacon type, our herd having won the best prizes offered at the leading exhibitions throughout Ontario and Quebec for the past ten years. Stock for exhibition purposes a specialty. We pay express charges between stations, and guarantee safe arrival of all stock shipped. Pairs furnished not akin. Write for prices. H. GEORGE & SONS, Crampton P. O., Ont.

PINE GROVE FARM HERD OF LARGE ENGLISH YORKSHIRES.

The oldest-established registered herd in America. We have 12 imported boars and sows and 20 home-bred animals breeding, and have a limited number of young boars and sows for sale, suitable for this fall's breeding. Satisfaction guaranteed in all mail orders. om Joseph Featherston & Son, Streetville Station, O. P. R., and P. O. and Telegraph, Clarkson Station, G. T. R.

GLENBURN YORKSHIRES won Gold Medal at averages 100, headed by the choice boars, Oak Lodge Prior and Pine Grove Squire. Twenty brood sows, 12 six-months sows, due to farrow March and April; 42 sows and boars, four weeks to three months old; pairs not akin. om DAVID BARE, Jr., Renfrew, Ont.

Large English Yorkshires

Sows safe in pig, boars fit for service, sows ready to breed, boars and sows 2 and 4 months old. Satisfaction guaranteed in orders received by mail. om JAS. A. RUSSELL, Precious Corners, Ont.

YORKSHIRES FOR SALE

Boars fit for service, sows in farrow, ready to breed, and young stock on hand. Can supply pairs, not akin, of spring farrow; also a Shorthorn bull 21 months old. om WILLIAM HOWE, Bruce Co., North Bruce, Ont.

FOR SALE. Chester White swine of good bacon type, and Shropshire sheep. Write for prices. om W. E. WRIGHT, Sunnyside Stock Farm, Glanworth P. O., Ont.

LANGELIER'S YORKSHIRES.

My importation of Yorkshires has arrived, and is rather better than I expected. Imported boars and sows now for sale at prices consistent with quality. Correspondence cheerfully answered. om GUS. LANGELIER, QUEBEC CITY.

YORKSHIRES and BERKSHIRES.

FOR SALE: Some choice young sows and boars, ready to breed; also Banded Rock eggs, \$1 per setting. om C. & J. CARRUTHERS, Cobourg, Ont.

FOR SALE: Yorkshires and Holsteins

Best type and quality. Young stock constantly on hand. Prices right. om R. HONEY, Brinkley P. O., Instead of Honeyworth.

Weston Herd Large Yorkshires

Choice young stock for sale, from imported and home-bred stock of highest breeding and quality. Prices low. Satisfaction guaranteed. My motto: Not too cheap, but how good. Telephone, Telegraph and Stations: C. P. R. and G. T. R., Weston, Ont. Electric cars from Toronto. Address: om L. ROGERS, EMERY, ONT.

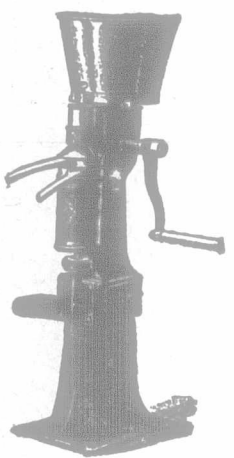


No cheap paint is as good as Ramsay's Paints, nor is there a good paint so cheap. Every can and every color has the same high quality.

Send us a post card, mentioning this paper and we'll send you a booklet showing how some beautiful homes are painted with our paints.

**A. RAMSAY & SON, Paint makers, MONTREAL.**  
Estd. 1842.

### Most People Want The Best of Everything. Why?



Take Cream Separators, for instance! Why are Magnet Separators used in preference to others? That they are is easily proven. Our factories are now making from 25 to 30 Magnets per day to supply a steadily-increasing demand. There must be some good reason for their universal adoption. There is: Every farmer wants a Cream Separator that is made very strong and simple. Magnet Separators also turn easy and are made with spur gearing, not worm.

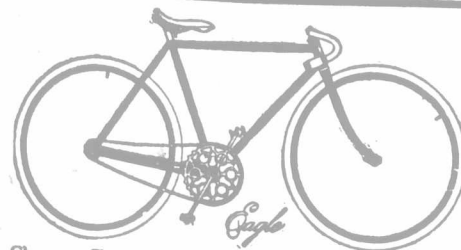
Jas. W. Robertson, Commissioner of Agriculture and Dairying.  
F. W. Hodson, Live Stock Commissioner.

Dominion of Canada Department of Agriculture, Commissioner's Branch.  
Ottawa, April 6th, 1903.

THE PATRIE MFG. CO., LTD., Guelph, Ont.:  
Gentlemen,—I am pleased to inform you that the Magnet Cream Separator which I bought from you several months ago has been in continuous use in my dairy of forty cows. It has been very carefully and severely tested, and I am glad to inform you that it has given perfect satisfaction. It runs very lightly, skims well, and separates beyond the capacity guaranteed by you. I have no hesitation in saying that Canadian farmers would find it to their interests to buy machines made in Canada, rather than those imported from foreign countries and assembled in Canada. The reasons are obvious and need no explanation.

Magnet Cream Separators are money-makers. Made in Canada and sold on a positive guarantee. Write for a catalogue.

**PETRIE MFG. CO., GUELPH, ONT.**



**\$30.00** Cut this ad. out and send to us with **\$1.00**  
State whether you wish Men's or Ladies' Bicycle, height of frame and gear wanted, and we will send you this High Grade 1903 Model Eagle Bicycle by express C.O.D. subject to examination. You can examine it thoroughly at your Express Office and if found perfectly satisfactory, exactly as represented a GENUINE EAGLE BICYCLE, HIGH GRADE, 1903 MODEL—pay to the Express Agent the balance due—\$29.00—and Express Charges. The express charges are only 50 to 75 cents for each 500 miles. No extra charge for Ladies' Bicycles. EVERYONE KNOWS THE EAGLE BICYCLE. They are the Highest Grade wheels made; big joints, finest hanger, hubs and bearings, highest grade equipment. Built on honor, flush tires. Heights of frame—Men's 20, 22 and 24 in.—Ladies' 20 and 22 in.—enamelled Black. WE OFFER splendid chance to a good agent in each town. Send for catalogue and ask for Agents' Discounts. Wheels slightly used, \$8.00 to \$25.00. Secure Agency at once.

**T. W. BOYD & SON, 1683 Notre Dame St., MONTREAL**

There are many Reasons why the Improved U.S. Cream Separator is the One to Buy

Below are a few of them:

**THE U.S.**

- Costs no more than inferior machines
- Gets more Cream out of the Milk
- Is less expensive to operate
- Increases the quantity
- Improves the quality
- Will wear longer
- Soon pays for itself
- Has its gears enclosed
- Bowl has few parts to wash
- Has simple self-emptying Bowl
- Has many other points of superiority more fully described in our catalogues which are free for the asking, all making

**The U. S. Separator the Standard Separator of the World.**

For Manitoba and the West we transfer our separators from Chicago and Minneapolis, and for the Eastern Provinces from Quebec, Sherbrooke, Montreal, and Hamilton. Address all letters to Bellows Falls, Vt.

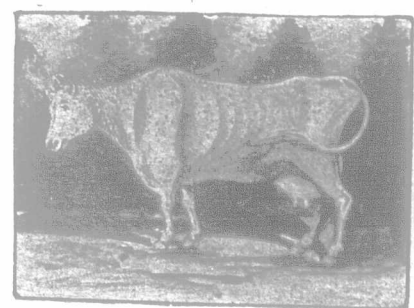
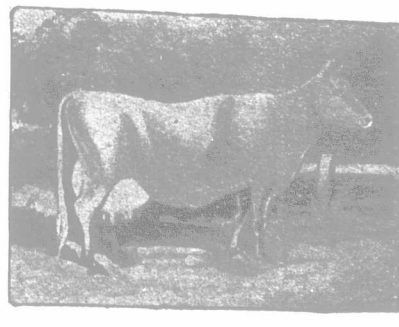
**Vermont Farm Machine Co., Bellows Falls Vt.**



## "EUREKA" FLY KILLER.

"EUREKA" is death to flies, a comfort to stock, and a profit to the farmer who uses it.

It kills Texan horn flies, cattle lice, hog lice, and vermin.



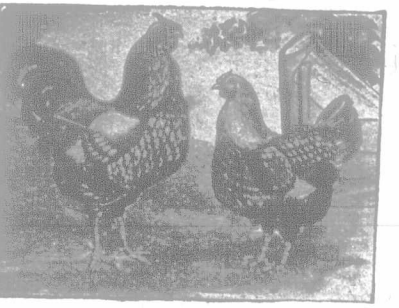
AGENTS IN EVERY TOWN IN ONTARIO. SEND FOR TESTIMONIALS.

The Superintendent of the Provincial Government Farm at Truro, Nova Scotia, tested it beside all other known remedies, and EUREKA was proven superior. Read what this well-known English authority says:

THE J. H. AMES CO., BOWDOINHAM, MAINE: GENTLEMEN,—This is to certify that I have used all the known remedies for prevention of flies, and consider EUREKA FLY KILLER superior to all others.  
Truro, N. S., Feb. 4, 1901.  
F. L. FULLER, Supt. Gov't Farm.

ELMHURST, K. Co., N. B., March 2, 1901. GENTLEMEN,—I found your Fly Killer and Sprayer to be all it was recommended to be. After I began using it my cows came out much in their milk. I have much pleasure in recommending it to those who have not yet used it.  
Yours truly,  
H. E. GANONG.

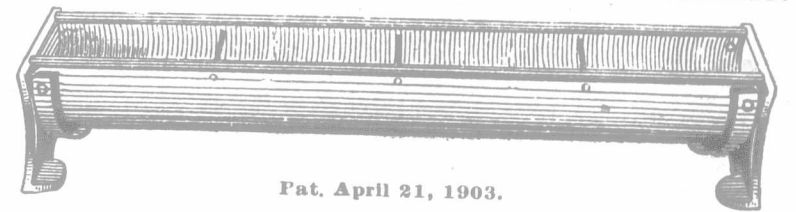
Can you question which is best after reading the above? We sell all kinds of Sprayers. The best in Canada for Fly Killer is the "ELECTRIC."



**The LAWTON SAW COMPANY, Ltd.,**  
MANUFACTURERS,  
ST. JOHN, NEW BRUNSWICK.

## Patent Steel Hog Troughs

SOMETHING NEW. SOMETHING LONG WANTED.



Pat. April 21, 1903.

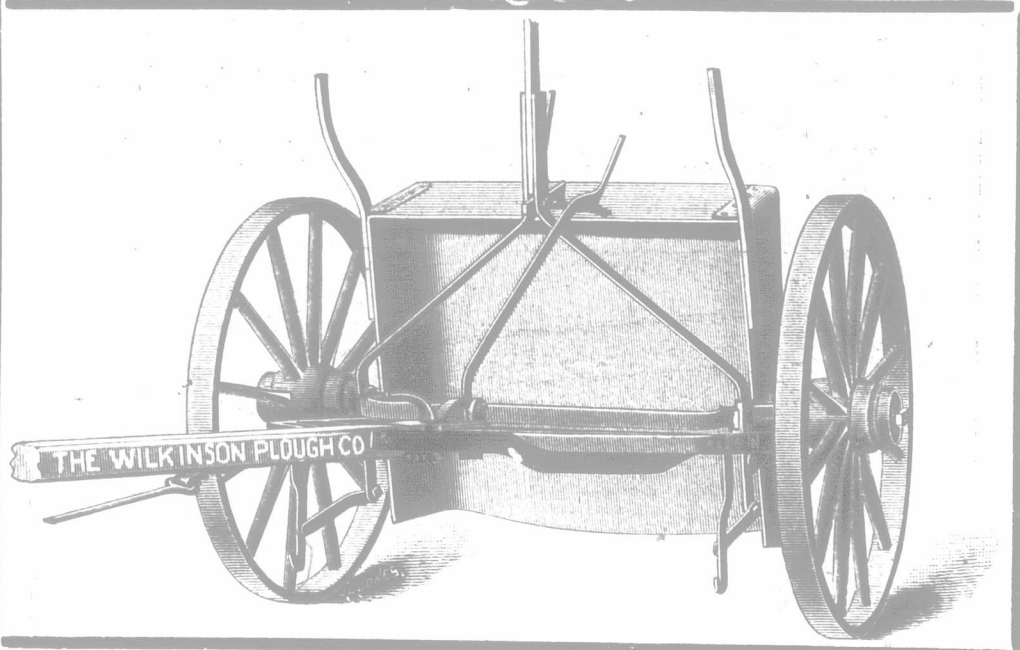
WE are placing the above first-class troughs on the market, with absolute confidence that they will fill a long felt want in the feeding of hogs. After five years' experimenting, they have been perfected in every detail, and made to excel all others. The bodies of our troughs are made in a half circle, out of 14-gauge cold rolled steel boiler plate, especially imported from the Old Country for the purpose. This steel is so hard and close grained, the wry has practically no effect on it and will not eat it. The ends are of heavy cast iron, with flanges, to which the steel body is riveted. Cross bars of steel are placed every twelve inches and riveted through the sides. This is to strengthen the troughs, and especially to prevent the hogs from crowding each other when feeding, and to keep them from lying in the troughs. The top edges have a nice round finish, 3-8 wrought-iron pipe, being slotted with a special machine, driven on the edge and riveted there. These troughs are hog-proof, whey-proof, frost-proof, and practically indestructible. Their circular shape allows for expansion of ice, so they will not burst. Should they freeze up, they can be easily thawed out. Fire will not hurt them; you can boil water in them. There is an unlimited demand for these troughs, as every hog-raiser wants them, and will have them when he understands what they are. Farmers are making money out of them, one man selling 600 feet of these troughs to his neighbors in three months. Standard sizes kept in stock—3 ft., 4 ft., 5 ft., 6 ft., 7 ft., 8 ft., 9 ft., 10 ft., 12 ft. Special orders of any length from 3 to 20 feet made to suit customers. These troughs are fully warranted.

Westake our reputation on them. If your dealer does not keep them, write us direct. Write for fuller particulars, and prices.

**Agents Wanted Everywhere.**  
**WILBER GORDON, TWEED, ONT.**

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

**DON'T WASTE TIME AND ENERGY WITH HILLS AND HOLLOW**  
**A WILKINSON WHEEL SCRAPER WILL LEVEL 'EM UP.**



ON A SMOOTH FARM, cultivating and hauling are easy. Grade off the high spots and fill in the low ones. You'll save time, trouble and toil for men and horses, not only this year, but every succeeding season. And remember, the scraper is an ideal excavator for houses and bank barns.

OUR IMPROVED Pneumatic Ensilage Cutter makes heavy work light. Seven years' experience have taught the thrasher and farmer that the Climax is the only machine in its class for capacity and economy.

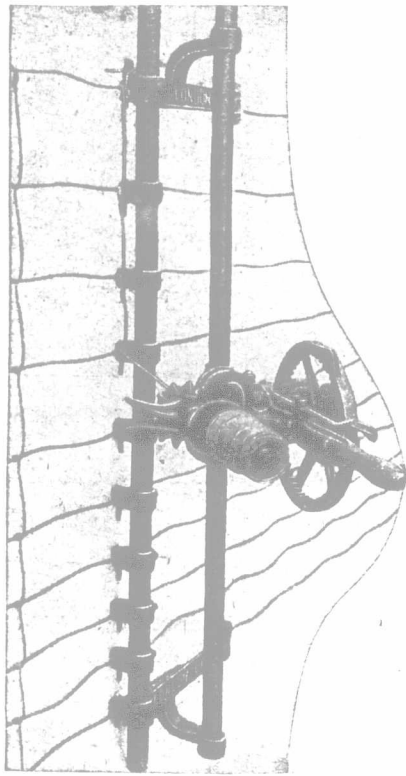
A LITTLE LIST OF LINES:  
 Walking Ploughs, Gang Ploughs, Riding Ploughs, Ditching Ploughs, Sidehill Ploughs, Pick Ploughs, Railway Ploughs, Scrapers (Wheel and Drag), Road Planers, Land Rollers, Golf Rollers, Drag Harrows, Disc Harrows, Disc Plows, Turnip Drills, Beet Pullers, Scufflers, Wheelbarrows, Rooter Ploughs, and Trucks of all kinds.

WRITE NOW.

**The WILKINSON PLOUGH COMPANY, Limited, TORONTO, CANADA.**

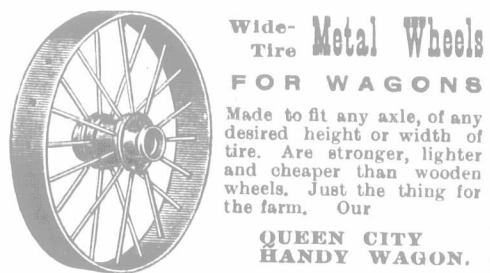
It will cost about \$300.00 more to fence a 100-acre farm with a ready-woven fence than to do it with the

**LONDON FENCE MACHINE**



Fences erected with the London are stretched and woven better than any factory fence ever made, and therefore give satisfaction and last longer. Write for our catalogue and prices. Coiled spring, and all kinds of wire. See ad. in April 15th issue.

The LONDON FENCE MACHINE CO., Ltd., London, Canada, and Cleveland, Ohio.



**Wide-Tire Metal Wheels FOR WAGONS**

Made to fit any axle, of any desired height or width of tire. Are stronger, lighter and cheaper than wooden wheels. Just the thing for the farm. Our

QUEEN CITY HANDY WAGON.

With metal wheels is low and convenient for farm and general work. Made by skilled workmen, and of the best material. Guaranteed to carry four to five thousand pounds. Write for catalogue with full description of both Wheels and Wagons.

Dominion Wrought Iron Wheel Co., LTD., ORILLIA, ONT.

PATRONIZE HOME INDUSTRY.

**CARNEFAC STOCK FOOD**

PATRONIZE HOME INDUSTRY.

MADE IN CANADA

By Canadians and for Canadians.

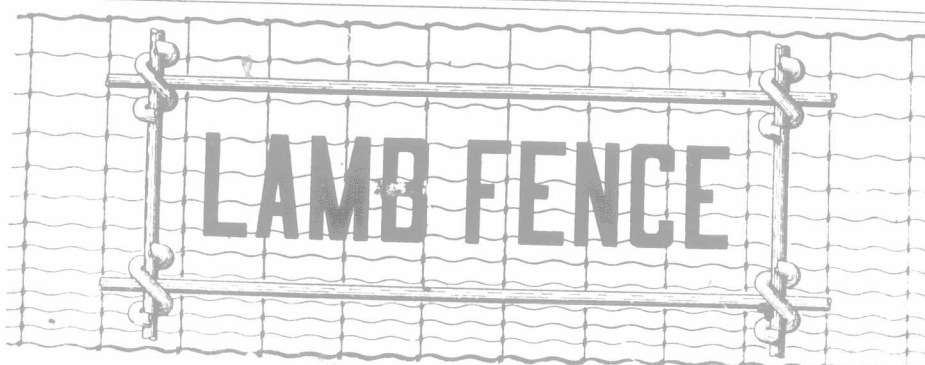
NOT A CENT. OF CUSTOM DUTY TO PAY ON IT.

CARNEFAC has no known equal as a food for calves and young pigs, a tonic for weak or sickly animals, and a never-failing preparation in the proper titting-out of exhibition stock. It enables animals to get full benefit from the food they consume, thus guaranteeing increased flesh and a glossy coat.

EMINENT VETERINARIANS, shrewd stockmen and experienced farmers have no hesitancy in recommending Carnefac for its uniform and superior excellence. Read what Dr. S. J. Thompson, the prominent breeder and exhibitor of Yorkshire hogs and Ayrshire cattle, says in praise of this great stock food:

Winnipeg, Man., March 5th, 1902.  
 W. G. Douglas, Esq.:  
 Dear Sir,—This is to certify that I have examined the ingredients used in making Douglas' Carnefac, and have no hesitation in recommending it to all stock-owners as a first-class food, and is good for fattening and keeping all kinds of stock in good condition.  
 Yours truly,  
 S. J. THOMPSON, Prov. Veterinarian,  
 Inspector of Contagious Diseases.

The CARNEFAC STOCK FOOD CO.,  
 Try our Carnefac Poultry Food for drooping fowls and birds for early market. 63 Front St. East, TORONTO.



RIGID BECAUSE IT HAS A HARD WIRE UPRIGHT.

The H. R. LAMB FENCE CO., Ltd., LONDON, ONT.

**The Livingston Linseed Oil Co., Ltd., BADEN, ONTARIO,**

Manufacturers of strictly pure

Old Process Linseed Oil Cake and Meal, also Ground Flax Seed.

Write for prices.

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

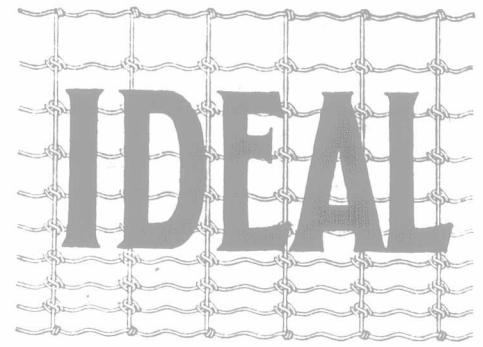
**MELOTTE ...CREAM SEPARATORS**

Are the popular farm cream separators for several reasons. One of them is illustrated here. The Bowl hangs on a hardened steel spindle which revolves



in a socket fitted with ball bearings. Friction is thus reduced to a minimum, and the machine runs so smoothly as to necessitate the use of a brake, which is a feature of all the "1903" Melottes. An equally important feature of this beautiful arrangement is that the bowl is self-balancing, and thus all the annoyance and expense involved in a bowl getting out of balance is avoided. These invaluable features are possessed by no other Cream Separator. Ask our agents to let you have a machine for eight days' free trial, or write us for illustrated Booklet.

**R.A. LISTER & CO. LTD.**  
 579 & 581 ST. PAUL STREET, MONTREAL.



**IDEAL WOVEN WIRE FENCING.**

Heavy uprights and bars of No. 9 hard spring wire, united by a perfect galvanized lock, make the IDEAL FENCE

**Strong, Serviceable, Durable.**

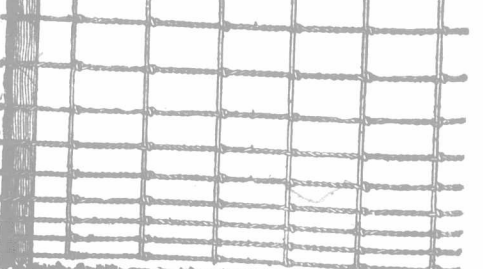
Contraction and expansion amply provided for. Write to-day for catalogue.

THE **McGregor, Banwell Fence Co., LIMITED.**

WINDSOR, - - ONT.

IMPROVED POULTRY FENCE LATEST UPON THE MARKET

**Fencing and Gates**



Buy your fencing and gates direct from the manufacturer. The Oshawa Wire Fence Co., Limited, are the largest manufacturers of different styles of fencing and gates in Canada.

Send for Catalogue and Prices. **OSHAWA WIRE FENCE CO., Ltd., OSHAWA, ONT.**