

**PAGES
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"Persevere and
Succeed."

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EDITORIAL.

The Awakened East.

We do not mean the Orient. The allusion of the heading is to Canada—eastern Canada, from the Atlantic Provinces to the western bounds of Ontario. Were we asked to say briefly, looking over the chronicles, written, or otherwise, of the old year, what was its distinguishing characteristic in relation to this portion of our great Dominion, we should declare it to be that strong manifestation of the fact that it had come to realize itself and the national potency yet lying half dormant in its magnificent resources of land, forests, mines and water. Ontario and these other Provinces have come to a new consciousness, and already feel the stirrings of a new awakening life. For a generation they have been plodding along, looking betimes to the West or to the United States, all but unconscious that the Land of Promise was right here about us, and all it needed was the touchstone of faith and intelligent effort. In the final analysis, all our people needed was the vision. Just how the manifestation has come about, we need not pause to philosophize. The magnitude and importance of our agricultural and industrial enterprises have been steadily developing, most notably during the past quarter century. In our Christmas issue Mr. Blue told the story of Canada's expansion as graphically as it might be done in words and figures. But still it is hard to become really seized of all that is meant by soil-power, forest-power, water-power and mine-power in the hands of a strong, intelligent, self-reliant people, and what they signify to the people for whom they should be conserved and developed. More than ever before, the people began to discern its meaning and purport in 1906, and in 1907 the vision will become still more vivid. Investigations and Royal Commissions were in the public eye before the footlights, disclosing that we have a sound national conscience, but the other thing, though more subtle, was equally profound and more far-reaching in its psychological effect, and resembling more than anything else the birth of national self-consciousness.

The Ontario Winter Fair for 1907 and After.

Reverting to the remarks made in our report of the late Fat-stock Show at Guelph, regarding needed improvements, we desire to emphasize the necessity and importance of providing a more attractive prize-list for the class of stock this show is principally designed to encourage, namely, steers, wethers and barrows of the type and quality called for by the markets. It may be necessary yet to offer prizes for young females in most of the classes in order to attract a sufficient number to make a respectable show, but the amount of the prizes for those classes need not be large, as most of the animals likely to be shown will probably be only in good breeding condition, or such as have been fitted for the fall fairs, and have, at little additional expense, been carried on for the Winter Fair. But the old-cow class should certainly be cut out, as it has heretofore been composed chiefly of breeding animals or patchy old matrons that have quit breeding and are only fourth-class butchers' stock, and should find no place in such a show. Let there be liberal prizes provided for steers in the several sections, and let the number be increased by providing senior and junior subsections, so that younger animals may not be handicapped by having to compete with others nearly twice as old, which has not infrequently been the case when the list

calls, for instance, for steers over one and under two years, by which requirement an animal thirteen months old may have to compete with another twenty-three months old, with little chance of winning unless it be a prodigy of phenomenal merit. By thus increasing the number of sections, and also the number of cash prizes to five or six in each section for male animals, and giving early notice through the press of the proposed bill of fare for the next show, the probability is that an ample number of entries of the most desirable class will be forthcoming in a year or two and the object of the show more satisfactorily realized. The same principle might be necessary, and is certainly desirable, in the sheep and swine divisions of the show. And since it is probable that a dairy show at some other season will be before long provided for, the room now occupied for that purpose will be available for more stock of the butchers' class, and it will be wise to take such steps as will tend to increase the number of entries of the better class. In order to make such a change most effective and successful, an early meeting of the directorate should be arranged for, and the prize-list published as soon as possible, so that intending exhibitors may know in good time what it is to be, and may commence early to prepare for the next show.

What About the Manure Pile?

Last winter there was a useful discussion in "The Farmer's Advocate" on the care and application of winter manure, but spring work terminated the controversy prematurely. Enough was written to indicate a quite general favor of the plan of hauling the fresh manure direct to the fields and spreading on corn or root land, thus economizing labor and fertilizing virtue. On the other hand are some who are persuaded that the large quantity of colored rainwater or melted snow seen washing from winter-manured fields must contain a good deal of the most soluble plant food, particularly the urine. These incline to the opinion that it is better to keep the manure in a shed, tramped and worked over by hogs, or, if it is taken to the field in winter at all, they would have it dumped in small piles, convenient for spreading in the spring. Others, again, haul to the field and stack in large piles, to be distributed early in the spring with a manure spreader.

It is doubtful whether any system of handling manure can be invented which will not involve a considerable percentage of waste. That material loss of the most soluble constituents results from winter-broadcasting, few will deny, but it is questionable whether, on level land and in an ordinary season, the waste is any greater than would ensue from fermenting and leaching in even a well-protected barnyard. Certainly, the manure on the fields would not suffer nearly so much as if left in the average barnyard several months, and then applied to summer-fallow, where no good could be realized from it for a year or so. Winter application saves second handling, disposing of the manure in a slack season. It facilitates seeding, and puts the manure in condition for early utilization by plants, especially when put on sod to be spring-plowed for corn. Last, but most convincing evidence, is the fact that many farmers who have put cement floors in their stables and adopted the system of winter-manuring have greatly increased the productiveness of their farms in a very few years.

However, for hilly or for very light land, in districts where the precipitation is heavy, and especially where there is much freezing and thawing in spring, the manure spreader may solve the problem of a more economical use of the stable

by-product. The advantages of the spreader are many. It enables us to make a thin but even distribution over a very large area of land each year. For top-dressing meadows, or, perchance, fall wheat or spring grain, it is especially valuable, economizing both time and manure. Three horses and two men, one to drive and the other to help load, choring between times, can make a big hole in a barnyard each day. The one disadvantage of the spreader is that it cannot be used in deep snow.

Much good will flow from a renewed discussion of this whole subject, and "The Farmer's Advocate" will welcome short letters from subscribers detailing their experience with winter application of manure, and also with the use of manure distributors.

A Government Packing Plant?

In the lecture room of the Ontario Winter Fair, last month, Prof. J. H. Gridale, of Ottawa, was down for an address on the much-debated bacon-hog question, his subject being, "Mutual Interests of Hog-raisers and Pork-packers." He started out with the premise that the interests of hog-raisers and packers were identical, as regards class of hogs raised and uniformity of production throughout the year. What makes for the development of our bacon trade, is for the ultimate advantage of both. The main trouble is that each party thinks the other is trying to get the better of him. The speaker indulged in a bit of railery at the packers' expense after crediting them with a sincere effort to export good hog products. He had been unable to find any good bacon on the Ottawa market, from which it might be inferred that they were sending all the good bacon away.

Taking up the specific bones of contention in the heated argument in the lecture-room the year before, he asked what had been gained? Discussing the seasonal fluctuations of prices, he could not see that the packers were to blame for this. The remedy for the grievance lay with the producers, who should make a point of maintaining a more regular supply of hogs, and not dumping a lot in the fall when the packers had more than they could handle to advantage. For one-half to a cent a pound more, as good bacon can be produced in winter as in summer, and more profit realized, as a general thing.

Another point that had been urged with force was that inferior hogs should be discriminated against in buying. Here the producers of bacon hogs had and still have a case. Without claiming that the bacon hog makes more expensive gains than the thick-fat, nevertheless it is somewhat more difficult to produce always a uniformly good lot of bacon hogs than to turn them off as they come. There is seldom a litter in which all are within ideal weights at the same time. It is to our interest, as a general class of producers, to cease marketing thin or overfat hogs; but it is to the packers' interest also, and they should devise some system of buying whereby the man who markets off-type or below-weight or over-weight hogs should be cut a fraction in price, or else put a premium on those that are right. But the packers are always ready with some plausible excuse for not discriminating. Either competition is so keen at the moment that they cannot afford to start it, or they are at the mercy of the local hog-buyer, or something else.

Now, one of the most potent influences tending to the improvement of the business should be paying according to quality, and he ventured a suggestion that perhaps might be adopted—some institution, such as an official referee, to inspect and classify the hogs that come into the packing plants, and send back a report to the

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producer. The inspector could not fix prices, but simply grades. Just how this would work any substantial benefit to the producer, Prof. Grisdale did not attempt to show conclusively, but he thought it might prove a step in the solution of the marketing problem.

The standard of our bacon is advancing; we have ideal conditions for producing it, and much of our goods sells in the British market to-day as Danish. But as we near the top in quality, the struggle for the market becomes harder, and will be keener in the future than it has been in the past.

He believed that in most cases the packer gets a wider margin than necessary, and to that extent strangles his own business. Partly in consequence, bacon production in Canada is almost at a standstill. Could we get the packer to believe in the motto, "Small profits and quick returns," it would redound to the advantage of all parties in the long run.

A novel suggestion was made at this stage by Mr. J. East, a Canadian who has lived for a time in West Australia. In that colony the miners had been at a loss to get their ores smelted, and in the end the Government erected smelters as the only solution of the problem. The smelting was done at the lowest possible cost and to the satisfaction of patrons. Why might not the Canadian Government run pork-packing houses on the same principle? it was asked.

Prof. Grisdale adroitly turned this socialistic idea over to the consideration of the chairman, Prof. C. C. James. Prof. James deemed it too radical to dispose of offhand. There would be certain advantages and certain disadvantages. At a future date some such action might possibly be found necessary, but it would require exhaustive consideration before being entered upon.

A majority of Canadians would doubtless look askance at such a proposal, and yet it is just possible that a single experimental packing plant run by the Government might prove useful in providing the country with data regarding the cost

of packing hogs that would be valuable in future discussions of the hog-marketing question. At present the packer knows our end of the business, and has laudably attempted to help us arrive at the cost of production; but we don't know his end, and there we are. There are those who profess to know that pork-packers are not such chronic losers as they claim, any more than are cattle-buyers. But we cannot prove it very well. If we had data we might. The idea of a Government packing plant is radical, and should be entertained cautiously, but it may be worth more than a passing thought. What say our readers?

Our Maritime Letter.

The official patronage of agriculture suffers under a sort of fatalism. The officials themselves never make mistakes; at least they never acknowledge any. And hence it is that much of the energy which, well disposed, might serve the great farming interest, materially, is frittered away in defending weak systems or upholding the action of those who have fastened them upon the country. "The King can do no harm," was the legitimate expression of the Bourbon creed: "L'Etat cest moi." There have been little Bourbons all through the agricultural dynasties, General and Local; there are, unfortunately, still some of them over the ground. In this matter-of-fact age they are as much out of place as belted knights and caparisoned steeds. They are less to be endured. One could brook what those far-off times countenanced easily—there was little else to be done—but when it comes to deal with the medieval, in the present, it is quite another thing; and infinite as is the patience of the race, long as such things have been suffered, the present-day spirit cannot be gauged as anything but absolutely intolerant of such excrescences. Bureaucracy, long as it has had its sway, in affairs agricultural at least, must now make way for a common-sense business treatment of public affairs.

The government of a country is only efficient, in this progressive age, when it quickly and effectively registers the will of the people that make it. We agitate for reforms, improvements, redresses, and easily carry the country with us; the Legislature passes the measures we demand eagerly enough, for the most part, but down go those ordinances to the bureaux, and there they are held in abeyance for ever so long, if they are not strangled and utterly undone. We talk to the national leaders of the needs of agriculture, for example, from the public point of view; they are all attention; we assemble in National Council, indeed, and decide many things of vital importance, with their concurrence; the resolutions, we are told, will speedily go into effect; but the bureau places its unholy hand upon them, and many come out in an emasculated form, many take a form very different from that intended, and many never see the light of day in any shape or form. The Minister may be even well enough intentioned; the bureaucrat can circumvent any minister when so minded. And ministers come, ministers go, but he goes on forever. He is clearly the evil spirit of departmental administration. It is hard to get at him; the very minister he destroys is bound, it appears, to stand by him to death and after.

When the official machinery of the Department of Agriculture was installed at Ottawa two-score years ago, it was never dreamed that it was perfection, or anything like it; changes would be required, all expected, as with the ordinary farm machinery, which has been improved out of all recognition in that period. What was good enough for 1867 is not good enough for 1907. And, whilst this Department was constituted in name at Confederation, it was not till Sir John Carling's day, twenty years later, that it was organized on its present basis and became of any great use to the country as such. Agriculture has made immense strides since the Experimental Farms were inaugurated and separate divisions opened in the Department for the advancement of the special branches which they specially represent; but everything here below is subject to change, and in the important field resources of Canada, the greatest alertness in our leaders is imperative, not only to keep abreast of the times in the ordinary channels of commerce, but also to point the way effectively

to the new realms of extension ever opening up before us. When barriers block the way we must be ready to bridge them over, and not merely occupy the sottish position of the fool in the classics, who waited at the river's brink till all the water ran by so he might pass over dry-shod.

The evolution of agricultural work in the Provinces, in anything worthy of the name, has, if we except Ontario, been of yesterday; and, with this same exception, it is only fundamentally done to-day. It is important, however, that this rudimentary structure be well poised. Anyone can see how essential, too, it is in the circumstances that the Federal and Provincial programmes do not overlap; so that the large amounts of public money expended be not squandered, but used for the development and fruition of plans essential to the great success of the commonwealth. And in this work the harpy touch of partisanship which has polluted so many good objects should be scrupulously avoided. In the Provinces this curse has constituted a grave impediment to otherwise beneficent endeavor.

We are now to have a Federal Experimental Farm here in Prince Edward Island. We have long had a Provincial Farm which has been no credit to us. It is to be closed forthwith, and there will be no shedding of tears. The Federal authority will now try its hand. There will be a station for experimentation in grains, roots and fruits, anyway; and the management will strive to inculcate the esthetic in farming. Dr. Saunders had an importunate call, in the disagreeable period of navigation we have just experienced, and has conferred with the Provincial Government on the matter. He is quite decided that the new Farm, to be of use to the people generally, must be located so as to permit all travellers by rail to see what is going on, and thus to learn from casual observation, whether they wish to or not. This Station will help us, but it should not relieve the local Government of its primary duty in this agricultural Province—to assist agriculture substantially.

A. B. DURKE.

HORSES.

Attention to Horses' Teeth.

There are many horses of all ages that are not thriving well, although consuming a reasonable amount of food, and their owners are at a loss to account for it, and often spend money in condition powders, stock foods, etc., without result. The animals do not show symptoms of illness, but simply do not thrive, and have not the spirits or energy they should have. The cause, in the majority of cases, will be found in the mouth; either there is faulty dentition or there are irregularities of the teeth. The subjects do not require medicinal treatment; all that is needed is intelligent attention to the teeth. We say "intelligent attention," as in many cases unskillful or ignorant interference does much more harm than good. While it does not necessarily require a veterinarian to make a skillful veterinary dentist, it requires a man who thoroughly understands the anatomy of the mouth, and has the necessary instruments and skill to correct whatever is wrong. Few farmers have either, and the so-called "veterinary dentist" who is not a veterinarian is usually an unscrupulous person who neither understands the proper arrangement and conditions of the teeth nor the proper manner of correcting faults—a man who lives by deceiving the horse owner. Hence, we think that it is better for the owner to get a qualified man to attend to his horse's mouth. There are few horses that have reached the age of six years or over (and often those of younger age) that would not be better if their teeth were dressed once every year. The reputable veterinarian does not tell all his patrons this, and look in the horse's mouth and say that his teeth require attention. This looks too much like looking for a job, and horse owners are very apt to take it that way; and the veterinarian who has much respect either for himself or his profession is above it. He rightly thinks that if his services are worth having, they are worth asking for. All the same, the average horse will thrive better on the same food if his teeth are regularly dressed. There are many cases in which attention is not required, and the professional man who, for the sake of the fee, will dress a mouth that does not require it, is, we trust, rarely found.

The first trouble likely to result from the teeth appears, in many cases, between the ages of two and four years. At from two years and three months to three years of age, the first and second molar teeth in each row (which are temporary teeth) are shed and replaced by permanent ones. At from three years and three months

to four years, the third molar in each row (also a temporary one) is shed and replaced by a permanent one, and the sixth molar in each row appears. It is not at all uncommon to observe a colt between two and a half and three or between three and a half and four years old to become unthrifty and have apparent difficulty in masticating. He does not appear sick, but becomes dull and listless, and does not eat well. During the growth of the permanent molars, which are to occupy the space previously occupied by the temporary ones, the fangs or roots of the latter gradually disappear by absorption as the new teeth grow. In normal cases, by the time the new tooth has reached the level of the gums the fangs of the temporary ones have become so absorbed that the crown drops off, but in many cases, on account of incomplete absorption, this does not occur, and the new tooth, continuing to grow, forces the temporary one above the level of its fellows, and, as a consequence, mastication becomes very difficult or practically impossible, and unless the animal be fed on food that requires little mastication he will fail in flesh and energy. When unthriftiness, without apparent cause, is noticed in colts of these ages, the molars should be carefully examined, and if any of the crowns are not shed they should be removed with a forceps.

In older horses the trouble is usually the presence of sharp points on the outer edge of the upper molars and the inner edge of the lower ones. The lower jaw of the horse is narrower than the upper jaw, hence the rows of molars are closer together, and as the motion during mastication is lateral, it can readily be seen that the molars in the upper rows will be worn from without inwards and upwards, leaving the outside of the teeth the longer, and the lower molars will be worn from within outwards and downwards, leaving the inner side of the teeth the longer. The teeth are irregular in outline on each side, hence on account of the manner in which they are worn there are numerous little sharp points existing on the sides of the teeth mentioned. These, in many cases, irritate the cheeks and tongue, and the degree of inconvenience or inability to masticate properly will depend upon the size and direction of these points, but in most cases they interfere to some extent. Treatment, of course, consists in removing with a rasp these points. In the performance of this operation, a mouth speculum to keep the mouth open and rasps of different shapes are required, and care must be taken to not remove too much tooth. Special care should be observed to not rasp the bearing surfaces of the teeth. These surfaces are normally rough or serrated in order to grind the food, and if made smooth by the rasp the horse will be in a worse condition than before.

In other cases, from various causes, one or more of the molars become longer than their fellows, the opposing tooth or teeth being abnormally soft and wearing more quickly, or their roots decaying, and allowing the tooth to be forced further into the socket, the long tooth or teeth after a while attain such length that they come in contact with the opposite gums and render mastication impossible. In such cases the long teeth must be shorn and rasped down to a level with their fellows. A horse whose molars are in this condition will, of course, never again have a good mouth, but after the teeth are shorn he will be able to masticate fairly well.

Decaying teeth are not uncommon in horses. This condition is usually indicated by a fetid discharge from the nostril or a fetid breath. In some cases difficulty is experienced in locating the diseased tooth, but when the disease has advanced to that stage in which it can be located, it must be extracted.

Wolf teeth (those small, supernumerary teeth which appear in front of the first molars in the upper rows) are generally supposed to have an injurious effect upon the eyes. This is a mistaken idea. They seldom do any harm unless they are large and in such a position that they interfere with mastication; but being supernumerary and having no function, they should be extracted. The somewhat common habit of knocking the crowns off should not be followed. They should be drawn with a pair of forceps. We repeat that sufficient attention is not given to horses' teeth, and that a dollar spent for having them dressed is usually a good investment, while a bungling job does more harm than good.

"WHIP."

Christmas Number Worth Year's Subscription.

Please find enclosed my renewal subscription for "The Farmer's Advocate" for next year. I am well pleased with the paper. It ought to be in the home of every farmer in Canada; it would be money well spent. The Christmas Number alone is well worth \$1.50. With best wishes for a happy Christmas and a prosperous New Year, I remain,

JOHN A. MILLMAN.

East Prince, P. E. I.

Sable Island and Its Ponies.

By Aubrey Fullerton.

"They all have their peculiarities, just like people. Some are intelligent and lovable, others are stupid and slow, and never train out of it."

Thus writes a resident of Sable Island about the somewhat famous Sable Island ponies. Often on the streets of Halifax may be seen a team of these little ponies, drawing a little carriage at an easy trot, and sometimes making a very stylish appearance. They are to be seen most commonly there because Halifax is the nearest port to Sable Island, and shipments of ponies are frequently received by steamer and sold by public auction. They afterward are sometimes sent to other parts of Canada, for the Sable Island ponies are much valued, particularly for young folks' use. The fact, too, that they come from an obscure and very dangerous part of Canada, gives them a special interest.

Sable Island bears the unenviable name of "the graveyard of the Atlantic," with a dismal record of 155 shipwrecks in the past hundred years. Yet it is only a sandbar, thrown up by the junction of two ocean currents. It lies about eighty-five miles from the nearest point on the Nova Scotia coast, or 150 miles south-east of Halifax. Crescent-shaped, and bending to the north, its whole length is twenty-three miles, with a maximum width of only a little more than one mile. Sands blown by Atlantic winds, sometimes reaching a speed of sixty and eighty miles an hour, have brought the Island into being, and in some places the sand-hills are 110 feet above high water. The sand is ever drifting. In a single night the telephone posts are often buried entirely out of sight, and the sand drifts with such a biting force that it kills all but the hardiest trees and sends all

swordgrass. I think it compensates for the rigors of the winter."

But what of the ponies? Quite as much as the sandhills themselves, they are one of the features of the Island. The lineal descendants of animals left there over three hundred years ago—probably by Sebastian Cabot or the early Portuguese explorers—they number to-day about two hundred. They roam the Island, wild, in droves of from five to fifteen, each drove having its own special feeding and drinking places. Says my informant again:

"The ponies are very hardy, and live out all winter without any shelter but the banks. They get thin by spring, but fatten quickly when the grass comes. Those used by the stations are stabled every night in winter, and are fed a little feed besides the hay, and are so kept in good condition for work. The snow rarely lies long, and when the ground is bare the wild ones have plenty of hay, as the wild grass is thick and long, and in fall dries and lies over in bunches. The Island is nearly all covered with grass, and has many fresh-water ponds. The wild ponies are not afraid of a person on foot, as they are never harmed, but when chased to get them into the pound to ship, they are like deer, and never give up until forced right into the wings of the pound. In color they are brown and black, with occasionally a yellow one, black and white, or brown and white, patched."

They are only shipped from the Island when the superintendent considers the supply large enough to spare some, and then he selects a lot of twenty or thirty and sends to Halifax. The difficulties encountered in catching them are frequently repeated when the time comes for landing and selling them. Some of them are particularly unmanageable, as was one high-tempered animal

that refused to be handled until very heroic measures were taken with him; at the end of half an hour he walked away as quietly as a well-trained farm horse—conquered. Usually, however, they are tractable, and soon learn to know what is expected of them. An untrained pony sells at the auction rooms for about twenty dollars, but a pair of well-matched animals, after training, have been valued at \$600. They average about 700 pounds in weight, and are both larger and harder than the Shetland ponies.

Plucky little creatures, toughened by the winds that they have felt all their lives, and well

in keeping with the peculiar character of their Island home, are these ponies of the Atlantic sandbar, and they are withal historic. An unbroken line of descent for three centuries or more—no one knows just when they came there or just where they came from—in the face of adverse Nature, is a good Canadian record, even if it be to the credit of a ragged, shaggy pony.

Horse Notes.

Feed the growing colts enough grain to keep them growing.

Common scratches are simply the result of lack of proper care and cleanliness.

Sluggish horses are too often made so by the way they are handled.

Sulphur and sweet oil, mixed to a thin salve, is an excellent cure for scratches.

One of the first things a growing colt should be broken to is to have his feet handled.

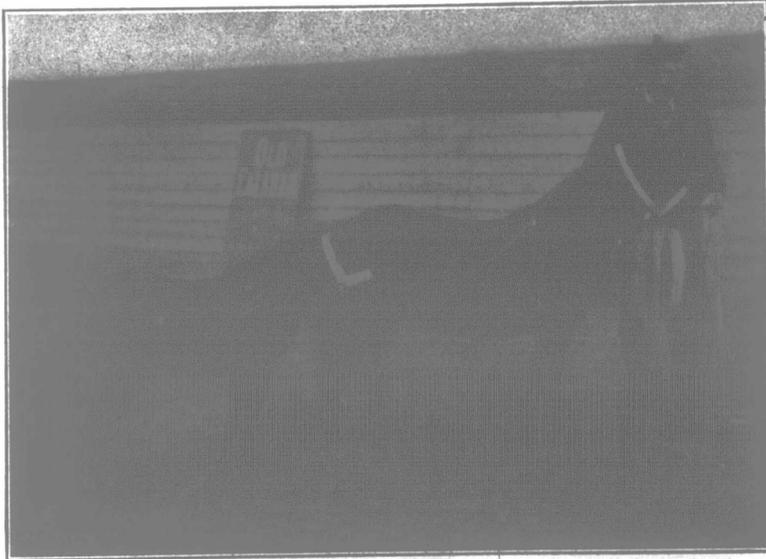
A large and strong body and frame cannot, in fact, be developed except by a bulky quantity of coarse food being consumed.

It is by exercise and hard-work that horses are prepared for severe exercise, and not by high feeding, as some think.

Different horses require different methods of training, different appliances and different handling; consequently the trainer must study each individual case on its merits.

No matter what the condition of any horse on the farm, there is no excuse for abusing it by stinting it in its rations.

There is no such thing as making horses with-



Shetland Mare and Foal.

animalkind hurrying to shelter. Yet the Island is not by any means bare and desolate, as will presently be shown.

Here, on their little sandbar, live forty of our fellow Canadians, who are commissioned by the Dominion Government as a life-saving service. By their efforts, Sable Island has lost much of its dread to Atlantic sailors. There are two light-houses, fog alarms, and a series of life-saving stations, and a wireless-telegraph equipment has recently been installed. Every day, and in thick weather twice a day, a circuit of the Island is made, with a keen look-out for wrecks along the coast. It is the duty of the force to give every possible assistance in case of a wreck, and when a ship has been driven on the sands, which extend miles out to sea, to man the lifeboats and bring the crew ashore.

Twice a year a Government steamer goes to the Island from Halifax with supplies, and during the summer there are occasional visitors; except for these, the forty souls are a little world by themselves. Yet it is not so dreary a home as it might seem. The present superintendent has been stationed there for seventeen years, and his daughter, with a spirit of true loyalty to her home, writes of it thus, in a recent letter which I have already quoted:

"In summer a lovelier spot could not be found. Garden flowers and all kinds of vegetables grow most beautifully and luxuriantly. Strawberries and blueberries grow wild everywhere, and very large. Our visitors admit that they have a superior flavor, too. Last season there was a crop of seventy barrels of cranberries, and some years blackberries are quite plentiful. In the fall the Island is a poem of color, golden-rod and blue asters gleaming everywhere in the green, shiny

out grain, and without care and vigilance, if you expect to get any that are worth raising.

A colt wants to be kept eating and growing and exercising, and anything except fattening, as long as he has a time assigned him by nature to grow.

You can better afford to starve your horses any other time than during the first year of their existence. A stunted colt seldom makes a well-developed horse.—[Live-stock Journal.]

Widen Sleigh-tracks Instead of Taxing Stallions.

Editor "The Farmer's Advocate":

I have watched for some time, with a great deal of interest, the various letters about a stallion license act. Being a farmer, and in a small way a horse-raiser, I feel like expressing my views. One writer says he would favor such an act, as there are far too many scrubs on the road. In our part of the country there are quite a number of stallions on the road, and I don't think there are many, if any, scrubs. The farmers here have awakened to the fact that it pays to breed a better class of horses, and are doing so. There are from one to three mares bred on the most of the farms here, and they are, I think, all bred to pedigreed horses, some imported and some Canadian-bred, and all considered pretty good. One writer says that in his part of the country there are men just as capable of judging the good ones as the experts; so there are here, and, if we are to go by the spring-show rings, with their expert judges, far more able to judge them. I think we farmers are better able to judge what suits our several needs in the way of horseflesh than the Government at Toronto, of which far too small a number are farmers. If a farmer feels it is to his best interest to breed to the so-called scrubs, it is his loss if he raises a horse that will only bring a small price, although I prefer the imported stallion myself. We are in the business for ourselves, and if we don't make money out of it we are the losers, not the Government. A writer from Grey County says a good horse costs from \$1,500 to \$2,500, and that a \$10 fee is too small. I think he is right in that, but I think he has figured the expense of travelling and keeping the horse too high. In this section it would be done at an outside cost of \$500; but even so, under the license act the stallion owner would be running a heavy risk—too heavy—to have a fee of even \$15, and if it was \$20 it would still be the farmer who would have to pay it.

Suppose that after a permit had been granted to cover two years, when it was to be renewed the horse that cost from \$1,500 to \$2,000 was declared unsound, he would not be worth more than \$150 to \$200; his owner would be a heavy loser, unless he had charged a very high service fee and had a goodly number of foals left. So, how such an act would benefit the horse-raising farmer, I fail to see.

To suit the home manufacturers, duties are increased or decreased, as the case may be, and perhaps justly so; but how a stallion license would help the horse-raiser, I cannot see. It would be a great deal more in favor of a few men who import stallions.

I have seen home-raised geldings which, had they been kept for stallions, would have been better individuals than a great many imported ones. I don't mean the horse with no particular breeding, but horses which have a lot of imported blood in their veins, and perhaps only lack one cross of being able to get a pedigree. A number of the so-called scrubs are horses of that stamp, and likely to throw as good stock as some of the imported.

As to old and inferior mares being bred, stallion owners do not need to take them if they do not suit. And if there are a lot of poor colts raised, the man who raises the good ones will find a more ready sale for them and a better price. Let that teach the other fellow to breed better ones.

As has been mentioned in one letter to your valuable paper, if the Government would give us an act to have the sleighs four feet wide, so that the fellow who raises the big horses could drive them two abreast, it would do them a greater favor, and benefit a lot of fellows who prefer the lighter horses, as well. The autos take possession of the front roads in summer time, so I think we should have the roadways of sufficient width in winter so we can drive our teams out to show them, if we must give way to the auto fiends in summer.

WILL M. TURNBULL,
North Perth, Ont.

Proud of the Christmas Number

Mr. W. E. Leeson, Aylmer, Ont., in sending in the names of two new subscribers, says: "If it would not be asking too much, I would like to have you send the two new subscribers the present Christmas number, as it is a very handsome edition, and we are all proud of it."

The Draft Horse and Pure-bred Mares.

W. J. Kennedy, of the Iowa Agricultural College, discussing the above question before Iowa State Farmer's Institute, said, in part:

For several years the demand for good draft horses has been unusually good. Each succeeding year has been a trifle better than its predecessor, until at the present time high-class drafters are selling for higher prices than ever before realized for this class of animals. Are these high prices to continue? Someone will say that such a thing would be impossible, because of the large number of horses now being produced each year, but horse-buyers will tell you that it is next to impossible to find a carload of good draft horses of a salable age in any one locality in Iowa. In Iowa there were 154,414 fewer horses in 1905 than in 1900. The time is not near at hand when good draft horses will have to go begging on the market.

In the production of draft horses, as with all other classes of live stock, the man who first makes a study of the market demands and then sets out to produce exactly what the market wants, will reap the greatest degree of success.

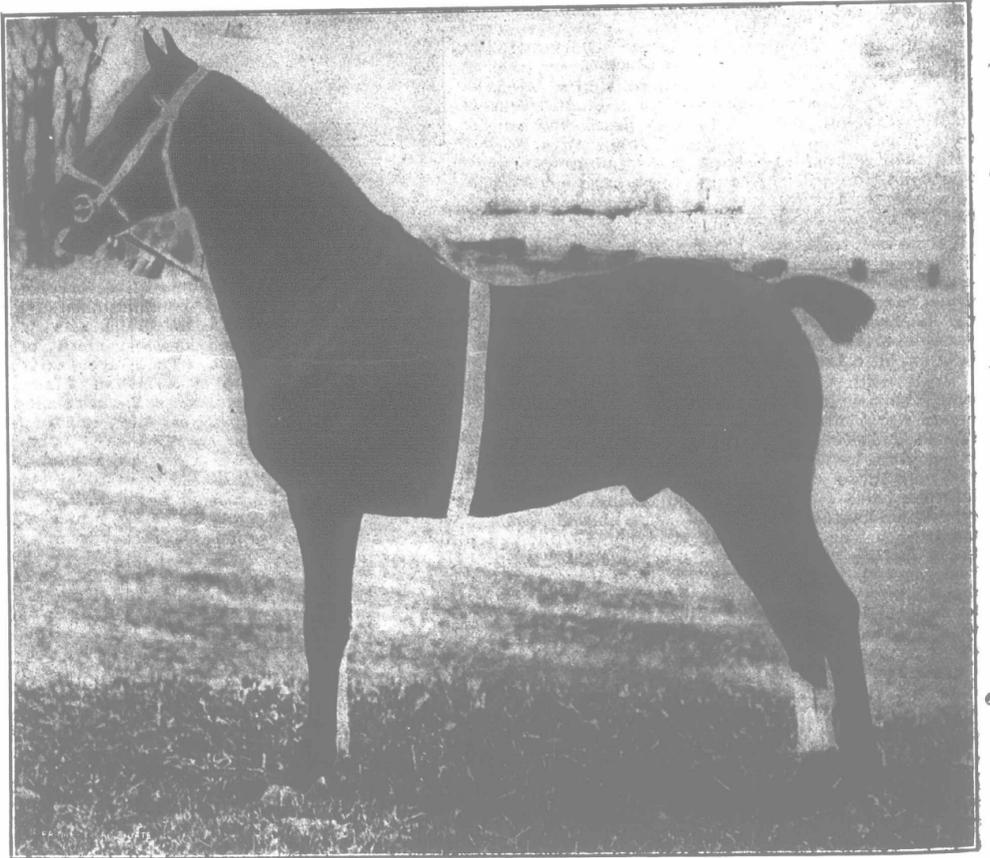
A study of the market demands, as they pertain to the draft horse, reveals the fact that weight is still as desirable as in past years; so that a draft horse, to sell well, must weigh from 1,600 pounds upwards, and be of the desired draft type. That is, he should be massively built, deep-bodied, short-coupled, heavily-muscled, short-legged, a good actor, and possess feet which are properly constructed and out of durable material. Such a horse can be economically raised on any Iowa farm, and, owing to the strong demand for him, he finds a ready sale at a price much nearer his real market value than any other class of horse that can be produced.

Time will not permit of a detailed description of a typical, present-day draft horse. There are some points which are very essential, and these will be treated in detail. The conformation of the fore and hind limbs of a horse have a very marked influence on his value in the market, because his utility is very largely determined by the construction of these. The first point to which I wish to draw your attention is the difference that exist in the nature of the material that enters into the structure of these parts. We are accustomed to the use of the terms, flat bone and clean-limbed, and these are quite expressive in themselves, if we understand what they mean. A horse that is flat-limbed and also clean in limb is much more durable in those parts than one that is round, coarse and "gummy." The advantage of having this conformation is due to the better attachment it gives to the tendons, and also to

the freer play which they have as a result of this conformation.

In breeding draft horses, too much attention cannot be given to the question of weight. At all of the leading draft-horse markets horseflesh sells at the rate of 25 cents per pound for each additional pound from 1,600 to 1,800 pounds; for 50 cents per pound from 1,800 to 2,000 pounds; for \$1.00 a pound from 2,000 to 2,200 pounds; and from \$2.50 per pound from 2,200 pounds upwards, providing, of course, that the horse is sound, well made, and desirable in every other respect. Thus, the heavy ones are the kind we should all aim to produce, because, at best, we will get plenty of the lighter weights to meet the demands for the same.

In discussing the advisability of the average farmer keeping pure-bred draft mares, a somewhat new but very timely topic is opened up for consideration. Just why the average farmer has not been keeping pure-bred draft mares for a decade or more, is one of the questions which amazes almost any man who has had any experience in the production of pure-bred draft horses in this country, or has any acquaintance with the methods pursued in the production of horses in practically all of the European countries. Is there any more reason why the average farmer should keep pure-bred cows, pure-bred ewes, or pure-bred sows, than in the case of pure-bred draft mares? Draft horses are needed on the farm to perform the necessary farming operations. Is there any good reason why a considerable amount of this work should not be done with good pure-bred brood mares? If the English farmer, the Scotch farmer, the French farmer and the Belgian farmer, on their small farms, find it profitable to keep a pair or two pair of pure-bred draft brood mares to do their farm work, why should not the same policy be a wise one to pursue in this country? When this policy becomes more general on the rich farm lands of the Central West, two things, both of which are very much in evidence at the present time, will gradually disappear: First, the importation of such a large number of stallions, many of which are a detriment to the industry; and, second, the presence of the glib-tongued chap whose business it is to organize companies of farmers to purchase these stallions at about five times what they cost on the other side of the Atlantic. In practically every one of the European countries in which draft horses are produced, more than 75 per cent. of the same are produced on the small farms and by tenant farmers. These farmers not only require their pure-bred draft brood mares to do the major portion of the farm work, but they also require them to rear a colt each year, which, in turn, is sold to pay the rent of the ground used. In this way these people have been able



Dainty Duke of Connaught—353—(8809).

Three-year-old Hackney stallion; sire Garton Duke of Connaught, dam by Denmark (177). Imported August 1906, by B. Rothwell, Hillside Farm, Ottawa, Ont. Winner of first in his class at Ottawa, and many prizes in England.

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to pay their high rents and, in addition, comfortably support their families.

It will pay the average farmer in this country to keep pure-bred draft mares. It does not cost any more to feed a pure-bred draft mare than it does to feed a grade mare of the same size. The pure-bred mare will do just as much work as the grade mare. One good pure-bred stallion colt at one year old will readily command as much money as will a pair of high-class five-year-old grade geldings. The speaker has in mind at the present time a dozen or more farmers in Iowa, Illinois and Kansas who are using pure-bred draft mares to perform their farm work and, in addition, raising good colts from the mares each year. The stallion colts find ready sale when from one to two years, at from four to seven hundred dollars each. These men have settled the question as to whether or not it will pay to keep pure-bred draft mares. One farmer in northern Illinois attended a neighbor's sale in March, 1903, and in order to help matters along, bid on a few things which he thought he did not need. He escaped trouble until a pure-bred five-year-old Percheron mare, in foal, was led into the ring. He bid on her, and she was knocked down to him at \$300. He thought he did not need her, thus offered her to another neighbor for \$290, but did not succeed in making the deal. He kept the mare, and she has raised him a good colt each year. He has had the mare a little more than three and one-half years, and she has done her share of the farm work; he has sold three of her colts for \$1,250, and has one left for which he has refused the small sum of \$500 before it was eight months old. Has this mare paid her way? The owner is a most enthusiastic breeder of pure-bred swine, but he informed me last week that pure-bred mares were even better property than pure-bred sows.

I could cite you many other instances of a similar nature.

Someone will say, but it is very easy to overdo this pure-bred mare business. Has it ever occurred to you that in Iowa, the leading draft-horse State in the Union, we have but one horse registered or eligible to registration for every one hundred and fifty-one that are not registered? It will take some time to overdo this business. There is no good reason why our farmers should not keep pure-bred mares of the very highest rank, and then, by the judicious selection of sires, produce home-bred draft horses the equal, if not the superior, to that produced in any other part of the world. We have made good in cattle, in sheep and in swine, so why not make good in horses?

This is a line of work which should receive more encouragement from our fair associations. While liberal premiums should be awarded for all classes of animals, more attention should be given to the home-bred animals, and more especially those produced on the farm of the man with comparatively small means. It is the so-called average farmer that makes a county, a state, or a nation. Thus his interests are worthy of the most careful consideration of those entrusted with the management of the various county, state and national live-stock shows.

Enough Good Registered Stallions.

Editor "The Farmer's Advocate":

In regard to the discussion that is being carried on in the columns of your valuable paper on the advisability of enacting a lien and stallion license act, I beg leave to make a few remarks. I own three stallions, so am somewhat interested. I think it will tend to improve the class of horses in Ontario to use registered sires only. True it is there are inferior horses among the registered ones, but I hold there are enough good ones to do the service. Undoubtedly there are a number of mares being mated every year that are not fit for brood mares, but we have to do the best we can with what we have in hand. Breed a poor mare to a good horse and we are breeding up, and with every cross we will be getting nearer our ideal, if continuing in the same line. Breed to a poor horse of no particular breed and we are breeding down, losing money fast and sure.

I don't think the license fee should exceed the cost of inspecting the stallions, say \$5.00. I don't think it in the best interests of the horse industry to burden the stallion owners with a heavy tax—those that spend large sums of money to purchase good horses and take long chances on them living and being sure foal-getters.

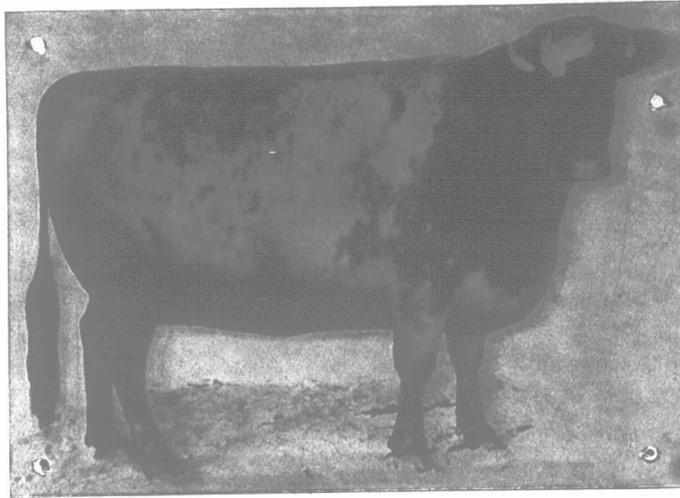
I think the lien act a good measure, for no proprietor will ask for more than his own. If his horse foals a mare, some one is benefited financially, and he should have pay for the service. If A sells his mare to B before foaling time, B will be sure to find out if A has paid the service fee, if such a law was in force, or else keep back that amount until settlement is made and forwarded a receipt from the proprietor of said sire. Why not protect the stallion owners? The manufacturers are protected with a lien act. Yours, for the improvement of the noblest of animals—the horse.
J. C. ANDERSON,
Northumberland Co., Ont.

Against the Horse Monopoly.

Editor "The Farmer's Advocate":

As a farmer, I have been considerably interested in discussions going on in your valuable paper re lien and license act. I would like to know what would be the result if a license law were enacted. As one writer has said, those who want the good horses will get them, and get their pedigrees, too. Those who want cheaper horses, should have a perfect right to do so. I think the day has come when most farmers are able to judge for themselves the kind of sires most profitable to use, and we have in nearly every locality, or, may I say in every locality, horses of both stamps. Who knows better than the breeder what horse suits his individual taste. I do not think it requires a license-tag to a horse to enable people to know his peculiar good qualities. A horse does not go very far before he is picked to pieces as to quality. At the present time I think people are wide awake to the necessity of breeding to the best sires than can be had. I am inclined to think a license act is something a few horsemen are after, not for the benefit of the country at large, but that of their own particular pockets (monopoly). They first begin with a Government license of say from \$10 to \$25; of course, they pay the license. Then, being protected by the same, they are ready to charge an extra fee of—as one has said—\$5; or, \$5 for 60 mares is \$300 into the horseman's pocket. Then he goes to the Agricultural Society show, and there secures a good percentage of prize-money, or gets his license fee back. Who pays the license fee?

Now, at the present time, and will be for some years to come, we have a scarcity of horses.



Winsome Beauty 3rd (imp) = 43480 =.

Shorthorn cow. In dispersion sale of the herd of Mr. W. Doherty, Clinton, Ont., Jan. 15th, 1907.

Enough cannot be had to begin to supply the demand. A license act would, I believe, tend to intensify the shortage of horses, which would be a very serious matter. Many farmers who would feel unable to pay a \$15 fee and run all risks, etc., would be disposed to not breed their mares at all, and the supply would, therefore, be seriously curtailed. I believe a license act would be not only useless, but detrimental to the welfare of the country.

As to the lien act, while I see nothing out of place, there is very little necessity for this, either, as horsemen will tell us very little is lost from causes leading to necessity of a lien act.
Grey Co., Ont. THOS. STEPHENS.

Not Salary, but Perquisites.

Editor "The Farmer's Advocate":

I have read a number of letters in your valuable paper re the licensing of stallions and lien act, which, no doubt, would be a benefit if carried on properly and honestly, but I think this is a question that should be left to breeders and not to the Government, which has enough to look after. Besides, I think that Government officials as license inspectors, and in other positions of the day, are after the job for the money on the side and not the salary, and a man who has a few dollars could get a license for anything. I am an advocate of whatever will better the horse and cattle breeding, but do not approve of lien act, as I think if a mare owner is not worth a colt, the stallion man should not breed his horse to the mare. The tighter you pinch a crook, the bigger rogue you make him, and harder he is to catch. Just use him right and honest, and he will generally pay up first thing. Nothing should be a sire unless it has a pedigree and good quality and soundness.
Emo, Ont. J. A.

The Horse Inspection Commission.

Editor "The Farmer's Advocate":

In discussing the proposed stallion inspection and lien act, let us grant at the outset that our horses really need improvement, and that the Government was intending ultimate good for the average breeder and stock-raiser. This looks right, for adherents of both political parties were appointed on the investigating committees. More fundamental principles are at the root of the trouble than can be righted by legislation, and a general thorough education along the lines of good breeding will be necessary before the Canadian-bred seriously contends for place with the imported in the market or the show-ring. Close study, wide personal experience, and a deductive observing nature is necessary in a successful breeder of live stock. The dignity of a calling is its utility, and surely no grander calling sounds for man than to be the master spirit that controls a breeding establishment. Both common sense and knowledge of both sire and dam must be had and used before definite results can be looked for in horse-raising. One has but to talk to an old trotting-horse man, and hear pedigrees rolling from his tongue back generations, till old Electioneer and his compatriots are reached, and loving memories cluster round these old horses, while anecdote and records clearly show that like does produce like.

The intention of the Government to standardize the available sires by inspection of pedigree and individuals, would no doubt be good, but there are always a few "candid friends" in every neighborhood who would whisper little meannesses, until soon there would be stories around about good horses, not true and not to their credit; but these very wide tales would soon do away with the efficiency of the inspection, and matters would soon revert to the primary conditions.

Our "Candid Friend" makes some assertions it would cause him some trouble to prove if he had to, I am thinking. It is not always wise to publish such scatter-brain assertions as those he makes about average importers bringing in scrubs on manufactured pedigrees. There are readers of your paper who will repeat what Candid Friend believes, and say they saw it in "The Farmer's Advocate." To the man who knows the circumstances, such a piece of foolishness would merely provoke a smile, if it were not that printed matter often carries weight with some. Importers who have been at the business for years will smile when they think of the minute and careful examination to which Arch. McNeillage submits every pedigree. This applies to Clydesdales, as I am not familiar with importing other than Clydes and Shorthorns, and as an instance, I would ask you to turn up the file of "The Farmer's Advocate" of a little over a year ago, and print the exposure Mr. McNeillage, Registrar of Clydesdales in Britain, made of the man Park (since dead) and the man Weir, who attempted faking pedigrees.

The horses the importer brings over are his property, bought by his money, and are either put on the market or kept in the importer's stables until sold. They may be good, bad or otherwise, but every man can be his own judge, and buy what and where he chooses, provided his credit is good. The whole thing is a personal matter, and rests with the individual. If the importer brings poor stuff, let the buyer leave it alone; if he has good, let the buyer expect to pay a good price.

As to why an imported stallion with a good pedigree should be a better stock-getter—a producer of better stock—than an equally good individual minus a pedigree, the answer is not far to seek. Unless an animal has the blood of several generations of good ancestry behind him to intensify his powers of transmission and his character, he cannot be expected to be prepotent; and a horse with a few tops of good blood, from poor mares, can't be expected to breed after himself, even if he is a good individual. Inheritance is an acting law in breeding, not theory; and, unfortunately for the owner of a splendid poorly-bred animal, it usually works in. But even a prizewinning International sensation, bred to a 1,200 pound, short-pasterned, thick-boned chunk, will most likely leave a scrub. Give the stallions a chance, Mr. "Candid Friend." Use good mares, not one redolent with compound horse objectionabilities, and try a few sires with the character that offsets your mare, and see if you

don't come back in a few years with a different tone in your letter.

The good horse is bound to improve our stock, and I would like to see his owner encouraged, but some men are not born with the sporting instincts strong enough in them to risk \$15 to \$20 on the probable foal. There will always be a lot of good horses bred in Ontario, and better ones every year, because some of the old scrub mares die off every year, and better ones, it is hoped, take their place.

If the Government would ask the various commissions to give their personal views of the matter, and give their personal views of the conditions of the horse industry throughout the Province, the Government would have some reliable information to commence operations on. They would find, methinks, that there is a virus getting into the blood of our horses which in after years is going to cause endless trouble. It is getting in in the shape of Percheron blood, and why that is so is this: Our horses for years have been topped by Clydesdale and Shire blood, until the Shire and Clyde characteristics are permanent. Now, however, the horse company—the curse of the States to-day—has struck us, and we will suffer the consequences. Let the commissioners speak out, and if they do not endorse my assertion, I am prepared to withdraw it and let it rest for a few years more, when the results will be more apparent. I am not advocating one draft breed more than another, but the two draft breeds in Canada are Clydesdale and Shire, or Shire and Clydesdale—whichever way one wishes—and the introduction of a third type and blood spells ruin.

Ontario Co., Ont. "ONTARIO."

Care of Brood Mares.

Last year I had a very valuable brood mare, for which, in the beginning of February, I was offered \$225; but I thought she was worth that to me, and so I kept her. I worked her all spring and fed her very liberally, and she was apparently in a very healthy condition, and was hearty and feeling well. But apparently the colt had developed and grown to an abnormal size, so that when foaling time came the foal ruptured the womb, and when I found the mare, a considerable portion of the intestines had come out with the colt. We at once had a veterinary surgeon, but he said nothing could be done, and in a few hours the mare died. The colt was large enough to have been three weeks old. We tried to raise it on cow's milk, but it only lived a few days. Now, I think it is well to be careful in the feeding of a brood mare. It is well to keep her bowels rather laxative than otherwise; but good judgment ought to be used, so that the colt will not develop to too great an extent. A few roots ought to be given, and part bran and part oat chop, and when not working, good wheat or oat straw is perhaps preferable to hay, especially if the hay be timothy. I believe that if care is exercised the mare, especially if she is a heavy draft, is better to be worked, or, if not worked, ought to have plenty of exercise regularly. Some mares will come through foaling time all right themselves, but it is well for some one to be on hand to give assistance, if necessary.

D. L. Oxford Co., Ont.

Tax the Poor Stallions.

Editor "The Farmer's Advocate":

A great deal is being said about licensing stallions. Don't you think the better plan would be to levy a tax on the undesirable horse, thereby compelling the owner of such a horse to raise his service fee to make the business pay, and thereby give the farmers a chance to use a better-bred horse, since the man with a good horse, unlicensed, can offer a better bargain to the farmer than if he had a license to support. We license the bar-room because of its degrading influences, and why not license a poor horse because of his degenerating influence? The question may be asked, Why license at all? Why not let men do as they wish? There is nothing more kindly than doing all we can to get men to do right, even though it means a schoolboy's thrashing.

A SUBSCRIBER

Christmas Number Caught Them.

I am sending the price of three new subscriptions by express order. Two are from my neighbors, and one I am giving as a Christmas present to my two young grandsons. Your Christmas number (the best you have published yet) caught my neighbors when I told them they would get a copy.

THOMAS HISLOP
Oxford Co., Ont.

LIVE STOCK.

Economic Conditions Affecting the Purchase of Feeders

The above is not a new theme, and has been many times discussed, but the importance of the topic and the somewhat involved considerations which enter into the problem render repetition excusable. In the lecture room of the Ontario Winter Fair it was again discussed last month by Prof. G. E. Day, whose points and conclusions we may summarize at this season, reserving the full text for consideration at a more seasonable date. There are, said Prof. Day, at least four important factors to be taken into consideration in the purchase of steers for feeding, viz.:

1. Breeding (including conformation and quality).
2. Age.
3. Weight.
4. Condition.

From experiments conducted at the College, Prof. Day proceeded to show the importance of the factors



Yorkshire Sow Under 15 Months

Winner of second prize at Ontario Winter Fair, Guelph, 1906. Exhibited by H. S. McDiarmid, Fingal, Ont.

of weight and condition, and their relation to the price at which the feeders must be bought to allow the purchaser to get out with a margin of profit. In the address this cardinal fact was brought out plainly, namely, that in fattening steers under College conditions, or, for that matter, under average Ontario conditions, every pound of increase in weight costs substantially more to produce than the selling price of the steer per pound. The feeder makes up this loss, and whatever profit he clears, by increasing the value per pound of the original carcass.

(1) To feed steers cheaply, the meal ration should be kept as low as possible, consistent with securing a reasonable gain in weight.

(2) Heavy, fleshy (short-keep) steers may be fed a heavier meal ration per 100 lbs. live weight than lighter and thinner steers, and give an equal profit, making allowance for their greater first cost per pound.

(3) The lighter and thinner the steers, the greater the need for economizing in regard to the meal ration.

(4) Conditions being equal, heavy steers are worth more per pound to buy as feeders than lighter ones, the selling price per pound being the same.

(5) Weight being equal, a fleshy steer is worth more per pound to buy as a feeder, the selling price per pound being the same.

(6) The lighter and thinner the steer, the greater the "spread" between the buying and selling price per pound necessary to compensate the man who feeds him.

(7) In this experiment, steers which weigh 1053.5 lbs. each when bought, which were increased 348.6 lbs. each in weight, and were sold at 5c. per pound, required a spread of \$1.00 per cwt. between the buying and selling price, to give a profit of \$1.90 per head above value of food; whereas a "spread" of only 45c. per cwt. between the buying and selling price gave an equal profit per head on steers sold at the same price



Broadhooks Golden Fame (Imp) and Broadhooks Victor.

Each a yearling son of the former. Both included in the disposition sale of the herd of Mr. A. H. Jacobs, Blyth, Ont., January 16th, 1907.

per pound, which weighed 1267.7 lbs. each when bought, and required to be increased in weight only 90 lbs. per head in order to finish them.

(8) The results of this experiment must not be regarded as conclusive. They indicate, however, what may happen in feeding steers, and seem to be in accord with the best practice in feeding.

Prof. Gridale's Beef-cattle Ration.

The following paragraphs are from the last annual report of Agriculturist J. H. Gridale, Central Experimental Farm, Ottawa:

Practically every available feed, both rough and concentrated, has been experimented with, but space will not permit of giving results, save in a general way.

For Roughage.—Corn ensilage, mangels and turnips are about equally valuable as the succulent part of the ration; clover hay and alfalfa rank first as dry, coarse feeds.

For Concentrates.—Corn ranks very high, although gluten meal is probably its equal; mixed meals give excellent results. Oats 100, bran 100, oil meal 100, constitutes a very excellent meal mixture.

Much has been done by way of testing the value of various rations for beef production. Not to enter into details, it may be said that for a 1,000-pound steer under full feed, the following ration has never been surpassed here, either as to palatability or fattening qualities:

Corn ensilage	50 pounds.
Roots (turnips)	20 "
Cut straw (oat)	2 "
Clover hay (well cured)	6 "
Bran	2 "
Corn (ground)	4 "
Oil meal	2 "

The ensilage, pulped roots, chopped straw and meal, all mixed together and fed in equal portions night and morning, part of the hay following each feed of chopped produce.

Quality of Sheep Imports.

Editor "The Farmer's Advocate":

Imported Shropshire rams have deluged the country from end to end since last July. The end of the tether was reached at Chicago, International Show week, when scores of them were dumped on a discriminating market. The prices realized could not fail in scoring losses to somebody, and it seems to me some wholesome lessons were taught. One was the impressing of what a serious mistake it is to bring over the sea rams of such a quality that they have to compete in the American markets with the second or third grades, which we can, and, unfortunately, do, produce in too large numbers. Were the careless importers the only sufferers, little sympathy would be spent; but the breeder's reputation suffers. The word "imported" has still a magic influence with some inexperienced breeders, and often in their estimation covers a multitude of faults. The discriminating breeders failed to bid on the low-going offerings at the Chicago sales. There were very ready purchasers of Canadian-bred ram lambs at higher prices than many of the imported shearlings were making, and of Canadian-bred shearlings at twice the price which many of the imported ones were bringing. It is well that so pointed and practical a lesson was given, as it will tend to discourage the bringing over of an inferior type, even in years of keen demand, such as we are now having. The inferior ram is a curse at any time, but when to him is added the prestige of the veil "imported," he is a double injury, as more is usually expected of him, and he is likely to be more largely used than his Canadian scrub brother.

JOHN CAMPBELL,
Victoria Co., Ont.

Daily Gains of Smithfield Exhibits.

The following summarized information of the average daily gains alive at Smithfield show will be of interest to many readers of "The Farmer's Advocate."

The tables given are brief and to the point; each line consists of the highest, the lowest, and the average daily gain shown by each of the different classes of cattle, sheep and pigs named:

DAILY GAINS AND AVERAGES AT SMITHFIELD, 1906.

Breed.	No. present.	Highest Gain.		Lowest Gain.	Average.	Whole class.
		Lbs. Oz.	Lbs. Oz.			
Steers over 1 and not exceeding 2 years old—						
Hereford	3	2 5.36	1 15.88	2 1.72		
Shorthorns	4	2 2.65	1 11.09	2 0.83		
Aberdeen-Angus	8	2 5.94	1 7.21	2 1.50		
Galloways	4	1 15.71	1 11.88	1 13.93		
Cross-breds	9	2 4.14	1 1.28	1 14.89		
Heifers above 1 and not exceeding 2 years—						
Cross-breds	11	2 6.74	1 13.14	2 0.01		
Steers above 2 and not exceeding 3 years—						
Hereford	6	1 15.47	1 10.80	1 13.37		
Shorthorns	7	1 15.66	1 1.00	1 13.10		
Aberdeen-Angus	6	1 15.67	1 10.35	1 12.81		
Galloways	6	1 10.33	1 8.09	1 9.00		
Cross-breds	10	1 15.93	1 1.27	1 13.44		
Heifers above 2 and not exceeding 3 years—						
Hereford	5	2 0.30	1 9.36	1 11.54		
Shorthorns	2	1 10.30	1 9.90	1 9.98		
Aberdeen-Angus	6	1 11.26	1 7.70	1 9.39		
Galloway	4	1 7.41	1 4.18	1 4.90		
Cross-breds	8	1 13.24	1 7.26	1 9.72		
SHEEP.						
Lambs under 12 months—						
Leicester	3	12.45	8.67	10.51		
Lincoln	2	11.64	9.82	10.68		
South Devon	1	12.12		12.12		
Southdown	10	10.38	6.58	7.95		
Hampshire Down	9	11.66	8.77	10.92		
Suffolk	4	11.00	9.55	10.30		
Shropshire	3	9.42	7.93	8.84		
Oxford Down	5	10.81	9.87	10.35		
Dorset Horn	3	9.97	9.97	9.97		
Cross-bred	8	12.21	8.66	10.52		
Wethers above 12 and not exceeding 24 months—						
Leicester	4	7.93	6.93	7.50		
Cotswold	2	7.61	7.59	7.60		
Lincoln	3	8.82	7.73	8.27		
Southdown	8	5.32	4.82	5.04		
Hampshire Down	4	7.39	6.49	6.84		
Suffolk	3	6.72	6.64	6.68		
Shropshire	4	6.65	5.53	6.14		
Oxford Down	4	8.35	6.28	6.97		
Dorset Horn	2	6.36	6.23	6.32		
Cross-bred	5	7.82	6.40	6.94		
SWINE.						
2 pigs above 6 and not exceeding 9 months—						
Middle White	8	1 6.64	1 0.05	1 3.18		
Large White	1	1 4.05		1 4.05		
Large Black	6	1 10.22	1 2.95	1 5.74		
Berkshire	12	1 8.55	1 0.00	1 3.71		
Tamworth	2	1 5.94	1 3.54	1 4.95		
Cross-bred	5	1 5.08	12.73	1 1.42		
2 pigs above 9 and not exceeding 12 months—						
Middle White	3	1 3.26	1 1.43	1 2.28		
Large White	5	1 7.80	1 3.55	1 5.36		
Large Black	6	1 12.15	1 4.30	1 5.27		
Berkshire	12	1 5.77	1 1.07	1 3.38		
Tamworth	1	1 3.07		1 3.07		
Cross-bred	10	1 7.55	1 1.90	1 4.92		
Single pigs under 12 months—						
The White Breeds	6	1 6.37	1 3.40	1 5.10		
The Black Breeds	6	1 6.62	1 3.37	1 5.94		
Berkshires	12	1 6.07	1 0.22	1 2.85		
Tamworths	1	1 2.42		1 2.42		
Cross-bred	9	1 10.44	1 2.05	1 5.30		
2 porkers under 6 months—						
Any Breed	17	1 2.43	9.92	14.22		

The Dual-purpose Cow.

"The Dual-purpose Cow—is She a Reality or a Possibility?" was the title of a popular address by E. C. Drury, of Crown Hill, Ont., in the lecture-room of the Ontario Winter Fair, last month. By syllogistic argument he drove home the conclusion that the breeders of the beef breeds of cattle, especially the Shorthorns, must pay increased attention to milking quality, so as to make their animals truly dual-purpose, if they are to hold their own in the estimation of Ontario farmers. His position may be stated thus:

1. While it is difficult for the dual-purpose cow to rival the special-purpose dairy matron in milk production, there are large sections in Western Ontario, where land is comparatively cheap and labor relatively dear, where the farmers desire to keep and are warranted in keeping some cattle stock other than milking cows. For such farmers the special dairy breeds cannot fill the bill, since there is seldom any profit in raising their calves for beef.

2. The special-purpose beef cow has little place in Ontario, for, under average circumstances, it is a practical impossibility for a steer to pay his mother's board for a year and show a proper balance for himself on the ledger.

3. The only cow which meets the needs of the class of farmers aforementioned is one which will give a good account of herself at the pail and throw a calf that will develop into a fair beef steer. That such a cow is a practical possibility, he reasoned from his own experience and from the experience of the general farmer with the old-time grade Shorthorn stock, but that she is becoming increasingly rare, he unhesitatingly averred, claiming that the breeders of Shorthorns, the accustomed source of dual-purpose cows, were letting their stock run to beef, and making little effort

of milk, and at the same time produce a beef calf that will, during the three years of his life, attain a weight that will make an average annual return of about \$25 for feed consumed. The Canadian farmer has been trying to raise such a cow, but the breeders of Shorthorn cattle, to which he has been looking for his dual-purpose sires, have been aiming chiefly at the beef type and ignoring the dual-purpose ideal, to the disadvantage of their breed and of the country. Under these circumstances, Mr. Drury did not know that the farmer was to be blamed too strongly for comparative indifference about making use of pure-bred sires of the beef breeds. The show-ring was indicated as one influence tending to the fixation of a beef type, to the sacrifice of milking quality. He had seen females of the beef breeds exhibited that were as much fancy stock as pouter pigeons—cows which dropped calves and dried off in eight weeks, leaving their progeny to be nourished by nurse-cows. If such a cow were a hen, and could hatch a dozen chicks and turn them loose to scratch for themselves, she might be worth something. (Laughter).

Beef type and dairy quality are not to any great extent incompatible, and the milking quality can be developed in cows approximating the beef type. The same fundamental qualities of thrift and constitution that make an animal a good producer in the dairy stable will make her progeny good doers in the feed-lot. Mistaken notions of beef and dairy type have led owners of grade beef herds to go to extremes, and assume that heifers which did not show approved beef type must be good milkers; hence farmers, in an effort to preserve a degree of dairy quality in their herds, have selected the scrubby heifers to keep for milkers. Others have gone in for one or other of the special dairy breeds. The only thing that can save the beef business in Ontario is a return on the part

of our breeders of Shorthorns to the dual-purpose standard, so that farmers will not be impelled to select the off-type heifers as milkers. The essential difference between the beef and dairy types is not so great as we have been led to believe. The most important distinguishing characteristic of the beef type is the strong, broad, level back. On the other hand, the sharp chine and peaked back is one of the least important features of the dairy type. In your dual-purpose cow, get the strong back, and combine milking quality therewith.

Whether the dual-purpose cow is deemed a possibility or not, she is here, and it is up to us to

make the best of the situation. We cannot, for the general market, make a profit raising beef without milk. In reply to a question, Mr. Drury stated that the year before last some of his dual-purpose cows made \$48 each at the pail. Their male calves fatten at three years old at a weight of 1,400 to 1,500 pounds, and sell for a price that shows an average return of \$25 per year for their feed.

"What are the characteristics of a dual-purpose sire?" asked some one in the audience. "A dual-purpose mother and a dual-purpose grandmother," was the pithy answer, received with laughter and applause.

The next speaker on the programme for this discussion was H. S. Arkell, assistant to Prof. Day, of the Ontario Agricultural College. The hour being late, he had no chance to expound his views fully, but was constrained to disagree slightly with Mr. Drury in point of emphasis. The former speaker had set up a dual-purpose ideal, and rather emphasized milk. Mr. Arkell doubted the feasibility of a dual-purpose standard, and thought the Shorthorn men should specialize on beef proclivities, paying more attention, however, to milk than has been customary in this country during recent years. He spoke of the splendid carloads of Angus, Hereford and Galloway steers coming repeatedly to Chicago and topping the market, and he mentioned that many an American farmer makes his money out of that class of stock. He cited the case of the Red Polls, a breed which is claimed to be dual-purpose, and dwelt on the difficulty of getting judges in the show-ring to place this breed consistently or with any degree of harmony among experts as to what constituted



Steer, Son of Royal Duke.

Champion Shorthorn. Champion beast and best beast bred by exhibitor at Smithfield Show, 1906. Bred and owned by H. M. the King.

to combine with beef conformation a profitable degree of milking propensity. As a consequence, farmers have been reluctantly forsaking this breed and taking up with the special dairy breeds, in order to get profitable cows.

At the outset Mr. Drury styled himself a "commercial farmer," which is undoubtedly a better term than "ordinary" or "average farmer." He keeps ten or a dozen cows to milk and raise beef calves. He also goes out and buys some calves for feeding. He took pains to explain that he had no quarrel with the special-purpose dairy cow. It is difficult for the dual-purpose cow to equal her in milk production, but he believed that, for her own special circumstances, the two-purpose cow might rival the other in total profit.

There are three conditions under which cattle are kept:

1. Small farms of high-priced land.
2. Ranching conditions.
3. Midway between these extremes are the conditions prevailing in Western Ontario, where land is fairly plentiful and labor "mighty scarce." He might also have added, where many people are disinclined to the milking of very many cows and the exactions of specialized dairying.

Mr. Drury thinks he would hardly find it advantageous to handle forty or fifty dairy cows, and there are many others who can't get the labor to keep all the dairy cows their farms will carry. On the other hand, the ranching system is out of the question, for we cannot count on making a profit from a steer which has to pay his mother's board for a year. What is desired, therefore, is a cow which will give a good yield

Canadian Cattle in Europe.

An unusual phase of Canadian cattle shipments from Montreal developed during the past season. This was the trade with Switzerland and Italy, arising because of scarcity in these countries, it is claimed. The shipments were made by the Allan Line of Steamships, and aggregated 2,471 head. The cattle were taken on the ships, which give the fortnightly service to Havre, France, and London. About 250 were taken on each ship the greater part of the summer, shipments falling off towards the end of the season. The cattle were put ashore at Havre and shipped thence by rail to Switzerland. It is claimed that many were forwarded on to Italy from this point. A dealer states that there seems to be an opening for the shipment of Canadian cattle to different European countries. Belgium is short of meat, and so is Germany. France has a good supply from her own farms. The general opinion is that these shipments to Havre will not be continued next season, unless the unusual scarcity again develops. The cattle gave splendid satisfaction, but, so long as the home supply is sufficient, will not be again wanted.

excellence. He believed the qualities of a real dual-purpose breed were too unstable to insure success in breeding them.

By way of comment, we may add that one factor the American farmer has to his advantage in producing beef is the large quantity of economical feed he grows in the form of corn, which is the beef-producing feed par excellence. Notwithstanding this fact, it is stated by no less an authority than Prof. McKay that dairying is steadily making headway on the valuable lands in the great cattle State of Iowa. Then, too, we have the fact to face that the Red Poll breed aforementioned is gaining favor across the line.

It is probably correct to say that the dual-purpose cow will not be very successfully bred for the show-ring, but will she be much the worse for that? The dual-purpose cow of the future will be selected and bred according to two standards: (1) The eye, to discern beef conformation; (2) the milk scales and Babcock test, to ascertain the degree of dairy usefulness. As a guarantee of the latter quality, the purchaser of the sire must be able to learn the authenticated dairy record of his dam and granddam. This means the adoption by the breed society of the system of official testing and Record of Performance, and it cannot be instituted too soon.

Questions for Pig-raisers.

A friend of "The Farmer's Advocate" out in Southern Alberta, where grain is more plentiful than milk, desires to know what is the best substitute for milk in raising young pigs. Rather than dispose of the query with a brief answer, we submit to our practical readers the following questions, covering the general management of pigs at weaning time. Let us have short answers, and many of them:

1. At what age do you prefer to wean pigs: (a) in case you have skim milk; (b) when you have no skim milk?
2. What provision, if any, for feeding the suckers before being taken from the sow?
3. What combinations of millfeed or meals do you prefer for feeding: (a) with milk, (b) without milk?
4. According to your experience, how much is whey worth per cwt. for weanlings and shoats?
5. How much is separator milk worth per cwt. for weanlings and shoats?
6. Do you feed the skim milk sweet or slightly sour, and why?

THE FARM.

Measuring Stacked Hay.

There is no way of determining the exact number of tons in a stack of prairie hay, unless you know the number of cubic feet required for a ton. This differs with the different kinds of hay, the condition in which it was put up, the length of time it has stood, the height of the stack, and other minor considerations.

A rule which has met with considerable favor, and is in somewhat general use in the prairie-hay sections, is to add the average width of the stack to the average overthrow (measurements to be reckoned in feet); divide by four; square the result; multiply by the length; divide by 512, where the hay has settled for thirty days; or by 420 where the hay has stood over six months.

The philosophy of this will be apparent. The overthrow is the length of a tape required to go over the stack and rest at the bottom on each side. Adding the width of the stack to this is practically putting a tape around the stack. Dividing this by four gives one side of a square, which, when multiplied by itself, gives you the number of square feet; and multiplied by the length gives the number of cubic feet. The longer the stack has stood and the higher it is the fewer the number of cubic feet that will be required to make a ton.

For a rule of easy and practicable application, we do not know anything better. Where farmers have scales, it would be a valuable education to measure a rick in this way, then actually weigh it and see how far the computed tonnage differs from the actual. Information of this kind is valuable.—[Wallace's Farmer.]

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Rotation Experiments at Ottawa.

In 1904 an experiment was commenced at the Central Experimental Farm, Ottawa, to test the value of different rotations. The 200-acre farm was, accordingly, divided into 39 different lots of varying size, shape and soil characteristics. These were then grouped as follows: 7 of 3 lots each, 2 of 4 lots each, and 2 of 5 lots each; in addition, a bit of rather broken land used for sheep was divided into 4 lots, so making up another group. It was attempted to so select the lots going to make up each group as to include considerable areas of each grade of soil.

Each group was then put under a certain rotation, as follows:

Rotation A.—Five years—Clover hay, timothy hay, grain, corn, grain.

Rotation B.—Five years—Clover hay, grain, clover hay, corn, grain.

Rotation E.—Three years—Pasture, corn, grain.

Rotation Z.—Three years—Clover hay, corn, grain.

Rotation S.—Four years (shallow plowing)—Clover hay, timothy hay, roots, grain.

Rotation D.—Four years (deep plowing)—Clover hay, timothy hay, roots, grain.

Rotation H.—Three years—Hog pasture, roots, grain or soiling crop.

Rotation T.—Four years—Sheep, pasture, roots and soiling crop, grain, clover hay.

Rotation M.—Six years—Grain, grain, clover hay, timothy hay for three years.

Rotation N.—Six years—Grain, grain, timothy hay for four years.

Rotation O.—Three years—Grain, timothy hay, timothy hay.

Rotation P.—Three years—Grain, clover hay, timothy hay.

Since this experiment has lasted two years only, it is too early to attempt to draw any conclusions or to summarize, but our readers will be interested in the reports when finally published.

Air and Water.

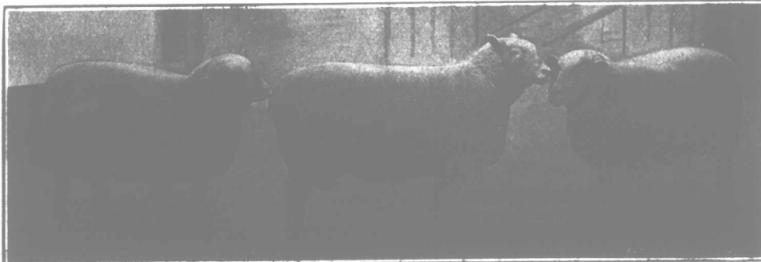
Editor "The Farmer's Advocate":

Air and water are about the only free things in the country, and it will be pretty hard for any combine or trust to "corner" them. The fact that they are so free and without price is likely the reason they are so little valued. Air and water are just as necessary for stock as feed, and if by their proper use we can get larger results, they have to the stockman a "cash value." The proper ventilation of stables is of double importance, as it makes for the health of stock and gives increased returns from feed. As regards temperature, I think the degree of heat is not so important as avoidance of extremes of heat and cold. Fattening animals require less heat than milk stock, but milk cows will do just as well in a stable of about 50 degrees as they will at 60 degrees, if they are accustomed to it. We have made very good records in testing cows when a cold snap came on and the temperature went down to near 40 degrees. With the lower temperature they take a little more feed, perhaps, but in cold and clear weather we all have keener appetites, and it is just the same with stock. If a fairly even temperature with proper ventilation can be maintained at from 50 to 60 degrees, then I would prefer that temperature, but if during cold spells the temperature of the stable cannot be kept at over 40 degrees, I should not like to maintain a much higher temperature than 50 in average weather. Then, again, if maintenance of a temperature in the winter of 50 to 60 degrees means giving improper ventilation, it would be better to have a lower temperature and better ventilation, for several reasons. It is more healthful, and that should be reason enough. It is also better from the feeding standpoint. Lack of ventilation means in the stable a dampness as well as foulness; and a damp air at 60 degrees will feel colder than a dry air at 50 degrees. I am convinced from observation and experience that we can get just as good results, even as regards the economy of feed and returns for feed, at a lower temperature than has been advocated for the dairy stable. This point is important, because it means easier ventilation.

Fresh air means cold air. I do not consider that a sub-earth duct is of any use to warm the air. We have such in the Anandale stable, and the air that comes in that way is very cold. A little consideration will show us why this is so. Although the ground is warmer in the winter six feet down, there is also some

moisture, and the cold air coming in at the intake soon forms this moisture into frost, and keeps following further up the ducts, until soon the ducts underground are covered inside with frost. We do not use the sub-earth ducts at all. The openings in the floor over the ducts are near the water pipes, and would freeze them up. Air coming in cold enough to freeze water has not been much warmed. If we wanted to maintain a low temperature near freezing for apples, onions, etc., these ducts would keep the temperature even, as the frost remains down in them, and when the air is warmer the incoming air would, on warmer spells of weather, be colder than the outside temperature. The trouble with most people is they don't consider ventilation at all. If people would only use the very simplest methods of ventilation there would be a very great improvement. Some of these simple methods: Window or door on the lee side of the stable; as the wind changes have the openings on the side of the building opposite from which the wind is blowing, then the air will not come in with such force. As the warm air inside makes a "suction," it is necessary to have several small openings rather than fewer large ones—that is first principles. Then there should be pipes leading up to the roof of the building; these should not be large, or too much cold air comes down them. There should be a slide at the bottom, as some days it will need less opening than on other days, and this vent should come down three to five feet below the ceiling of the stable, in order not to take off too much hot air. We may laugh at ventilating a stable by straw stuck in the window, but it is not the worst way after all, as the air is then "strained." However, a better and more up-to-date way is to do as the chicken men do, and have no glass in half the sash, but have it covered with white cotton. I believe that simple method is likely to prove of great value. The cotton appears to let in no more cold than glass, but it does let in fresh air, diffuses it, lets it in gradually and all the time so that the warm air of the stable and the cold air from the outside do not meet like two waves and condense moisture.

We have on the Anandale farm a hog-house that cost over \$2,000. It was not very satisfactory. There was too much dampness, as there is in all large hog-pens with 100 head in. Instead of being let to



Southdown Yearling Wethers.

Champion pen of the breed and grand champion pen over all breeds and crosses at the Smithfield Show, 1906. Bred and exhibited by H. M. the King.

Figures on Crop Production.

In 1899 about 200 acres of land was taken at the Central Experimental Farm, Ottawa, to be used for a farm, and a five-year rotation introduced thereon, as well as a system of shallow cultivation. The rotation introduced was as follows:

First Year—Hay or pasture plowed shallow early in August, ridged up into ridges 8 inches high, 2 feet apart, in October, subsoil having previously been stirred by means of a stiff-toothed cultivator.

Second Year—Oats or other cereals, 10 pounds clover sown for fertilizer.

Third Year—Corn or roots, green barnyard manure applied in winter, 15 to 20 tons per acre.

Fourth Year—Cereal crop, 10 lbs. clover, 12 lbs. timothy.

Fifth Year—Hay, mostly clover.

The variety of crops grown and the varying areas under each crop each year render it quite difficult to make a comparison of the returns of the different years, so to simplify matters I would suggest that a fixed valuation be put on the products, and the returns of each year valued accordingly.

Fixing prices as follows: Grain, \$1 per hundred lbs.; roots and ensilage, \$2 per ton; hay, \$7 per ton; summering cattle, \$8 per season, and an area used as pasture for pigs, \$15 per acre. The returns from the "200-acre farm" for the years mentioned may be said to have been worth \$2,776.66 in 1899; \$4,110.21 in 1900; \$4,434.72 in 1901; \$4,787.14 in 1902; \$4,148.19 in 1903; \$4,741.09 in 1904; \$5,714.32 in 1905.

Hardy Variety of Alfalfa.

It is reported from Washington that Prof. N. E. Hansen has found in Northern Siberia a variety of alfalfa which seems promising for the dry country of the Northwest. It is a native of the dry steppes of Siberia, where the temperature frequently falls to 40 degrees below zero during the winter season. Professor Hansen is the horticulturist of the North Dakota Experiment Station, but Secretary Wilson, of the U. S. Department of Agriculture, borrows him occasionally to search for new plants in the cold northern countries.

Live Dairy Topics Discussed.

While the food and water supply are very important factors in producing clean-flavored milk during the winter season, the most objectionable flavors come from stable odors and careless handling of the milk. The principal food flavors come from turnips and spoiled silage, and these should never be fed to milking cows if first-class butter is to be made. Turnip butter usually is docked from two to three cents per pound, which is sufficient argument to prove that turnips give butter an objectionable flavor. A generous supply of good water is very necessary for a milking cow, and no cow can do her best at the pail if she wants for water.

Experiments have proved that an average of two pounds of milk more per day can be got where the cow has water before her to drink at will. "Stable odors" include all the filth which gets into the milk from various sources before leaving the barn, and in a great many cases this is no small amount. Careful experiments have shown that average winter milk contains seven times as many undesirable bacteria as summer milk, and in many cases that could be multiplied by seven.

They come from the dust of the feed, from the filth of the cow, and from dirty hands of the milker. Cream from such milk is greatly benefited by being at once put through the separator, but the same unfavorable conditions are encountered at every step in the hands of a careless patron, and it is altogether likely that the separator and all milk pails and utensils are contaminated from unwholesome dishcloths and a lack of thoroughness in washing. Many women do not realize the effect that a little carelessness has on the keeping qualities of milk and cream, and it is the opinion of the writer that we must bring this more directly to the notice of our patrons in some practical form before we will make much headway in improving the quality of our butter.

Cheesemakers have the curd test, which is being used by some instructors as a very effective method of demonstrating the results between good and bad milk, and buttermakers need a cream test for the same purpose. Prizes given at our fairs for cream a week old ought to prove more interesting than prizes for butter. I say "cream a week old," because it would test a woman's skill in handling milk and cream if she could keep cream good for a week. Such a competition would give the opportunity for a very instructive talk by a competent judge on the care of milk and cream.

One of the very worst forms of bacteria which are encountered in summer comes from the dust of milking yards and from road dust. Milk and cream cannot be too carefully protected from these sources of contamination.

Covers of some sort should be provided for milk and cream wagons to prevent dust and mud from getting into the cans, which it undoubtedly does in unprotected cans, and often in no small amount. The hot sun beating upon an unprotected milk or cream can has a very injurious effect upon the flavor of the contents. It is very necessary that all cream carriers should be protected by wooden jackets, which serve the double purpose of keeping the cream cool and preventing the sun's rays from striking directly on the tin.

In the cream-gathering system it is usually necessary to cool the cream as rapidly as possible as soon as it is received at the creamery. Where the cream can be passed over cooling pipes and cooled in a few minutes a starter may be used to good advantage as an aid to ripening, and also in the development of a desirable flavor, but where the cooling is dependent upon ice water surrounding the vats, the cooling process is usually too slow to allow of a starter being used, as too much acid would usually result.

This is where the factory separator system has the advantage, as the cream is always sweet, and the flavor is very much more under the control of the operator.

After this stage is reached the two systems merge into one, and the product of each system is handled

in a manner exactly similar. The coloring of butter is controlled by the market we are catering to. Our Canadian markets demand a fairly high coloring the year round, but the British markets want it at all times without color, as they seem suspicious of our winter butter if colored to imitate summer conditions. The British people want little or no salt, and a large quantity is now sent yearly across the Atlantic without any salt. Saltless butter is much more difficult to keep in fine condition than salted is, and it is very liable to mold. From $\frac{1}{2}$ of an oz. to 1 oz. of salt to a pound of butter is the rule for our home markets.

The questions of moisture and overrun are live questions at present among buttermakers, and the two are very closely allied.

The question of overrun is, apparently, affected more by the per cent. of moisture contained in the butter than by any other factor, and until recently it was not definitely known that the moisture content could be more or less controlled. Some claim to have achieved definite results, and arrived at definite conclusions, while others think that much more experimenting is still necessary before correct conclusions can be deduced, and that is the opinion of the writer.

It is a well-known fact that butter-fat must have a certain amount of water incorporated into it to make it palatable to the taste, and the law allows 16% of moisture as the limit, but it is only by a chemical analysis that the moisture content of butter can be determined, and this, heretofore, could only be done by a practical chemist.

This difficulty, however, seems to have been overcome by Prof. Gray, chemist for the Dairy Division of the Bureau of Animal Industry, Washington, D. C., who claims to have worked out a method whereby anyone of average intelligence can make an accurate test of the per cent. of moisture contained in butter in 15 minutes or less.

The instrument by which the test is made is now being placed on the market at the very modest price of \$2.00, and if it proves to give the results claimed for it, it will be the most important discovery in the dairy line since the advent of the separator and Babcock test, and will certainly enable the buttermaker to better control his work. J. STONEHOUSE.

Organization of Cow-testing Associations.

A good start was made in 1906 with the organization of cow-testing associations, but we hope to see a great extension of the movement during the coming year, because there is no other line of effort which offers the same possibilities for increasing the profits of milk production. Judging by results obtained elsewhere, and also by the experiences of progressive farmers in this country, it would seem to be possible to increase the average production of Canadian herds by at least 2,000 pounds of milk per cow per year, by applying the same rational methods. Such an increase in production would mean an additional revenue from dairying to the farmers of Canada of at least \$30,000,000 a year, without increasing the number of cows kept.

The plans for the improvement of a dairy herd need not be elaborate or expensive, and should take cognizance of the fact that there are good and poor cows, judged by their milk production, in all breeds, and that it does not follow because a cow may have a lengthy pedigree that her performance at the milk pail is up to the mark. There are "scrub" pure-breeds as well as common "scrubs."

Any scheme which has for its object the improvement of our dairy stock must provide for a study, and record, of the performance of the individual cow, as well as deal with the management of the herd, including its care and feeding, and the breeding of animals to replace those which are discarded in the "weeding"

process. Individuality can only be determined by the weighing and testing of each cow's milk.

It is quite practicable for individual farmers to test their own herds, and many are doing so, but some form of co-operation makes the work easier and cheaper and at the same time more useful, inasmuch as each member of an association has the information relating to other herds as well as his own.

CHEESE FACTORY AND CREAMERY OWNERS SHOULD BE INTERESTED.

Owners or managers of cheese factories and creameries naturally take an interest in this question, and there is no reason why testing of individual cows should not be done by the factory management. Most factories have the necessary appliances (except the sample bottles), and the manager is, or should be, more competent to do the work properly than the average farmer is. It needs no argument to prove that if the patrons of a factory increase the yield of milk from their cows the factory will derive a corresponding benefit. If the efforts which are now made by the owners of most factories, to increase their milk supply at the expense of neighboring establishments, were to be directed towards securing an increased yield of milk from the herds already supplying the factories, a more abiding and better general result would be obtained, even from the individual factory standpoint.

It is probable, however, that the most popular plan for getting the testing done will be through the organization of cow-testing associations. There are some twenty of these associations already in existence in the Provinces of Ontario and Quebec, which have been organized by the members of the Dairy Commissioner's staff, and the number is increasing almost daily. The organization is being effected on the following basis:

RULES AND REGULATIONS.

1. The organization shall be known as.....Cow-testing Association.
2. The officers shall consist of a president, a vice-president and a secretary-treasurer. Three other members shall be appointed to act along with the officers as a committee of management.
3. The officers shall be elected to hold office for one year, or until their successors are elected.
4. The annual meeting shall be held at the call of the president.
5. Meetings of the committee of management shall be held at the call of the secretary-treasurer. Three members shall form a quorum.
6. Any person who will agree to keep a record of individual cows during the whole milking period, to the extent of weighing the morning's and evening's milk on at least three days every month, and also take a sample for testing, will be admitted to membership. The number of members may be limited at the discretion of the committee of management.
7. The milk will be preserved and a composite sample tested once a month with a Babcock milk tester.
8. Members will be expected to provide themselves with scales, sample bottles, one for each cow, and a box for holding the samples.
9. Members shall assume the responsibility of delivering the samples to the place where the testing is to be done, on such days as may be directed by the person in charge of that work.

I am authorized by the Honorable Minister of Agriculture to announce that blank forms will be supplied and that the testing will be done free of charge for the season of 1907 for any regularly-organized association; the members of the association to provide their own outfits, and the association to provide a suitable place in which the testing may be done.

A cheese factory or a creamery is a natural center for an association of this nature. The facilities for testing are available at any properly equipped factory, and the samples can be delivered easily on the regular milk wagons.

I shall be pleased to hear from any person interested in the formation of a Cow-testing Association, and I am authorized to say that whenever it is possible to do so a member of my staff will be sent to attend an organization meeting.

Ottawa. J. A. RUDDICK,
Dairy Commissioner.

Likes It Better Every Issue.

In renewing my subscription, would say "The Farmer's Advocate" pleases me more each number. The information contained in regard to farming and stock-raising is invaluable. The literature is good, and elevating in moral tone; in fact, it is a good all-round journal.
East Lambton, Ont. PETER KINGSTON.

I find yours is a very valuable paper, it shows so many good points for young farmers. I think it is a mistake for farmers to think they can farm successfully without "The Farmer's Advocate."
Perth Co., Ont. L. A. OLIVER.



Belle 17525. Jean Armour 15591. Sarah 2nd 13192.

Dairy test winning Ayrshires. All bred by H. & J. McKee, Norwich, Ont. The last named exhibited by A. E. Hulet; the first two by Messrs. McKee. Sarah 2nd won at Ontario Winter Fair Dairy Test: first in 1902; first and sweepstakes over all breeds, 1903; second in 1905, and first in 1906. Jean Armour, daughter of Sarah, won second in class over 48 months, 1906, and Belle won first and sweepstakes over all breeds under 36 months, 1906.

POULTRY.

Incubating and Brooding Poultry.

[Address by L. H. Baldwin, Deer Park, Ont., in the lecture-room of the Ontario Winter Fair, December, 1906.]

I want to preface my remarks by saying that, in going into a number of precautions, which I may do, I do not wish to appear to frighten anyone with regard to the question of artificial incubation. We have yet to learn a good many things in reference to incubation, and yet it is astonishing the wonderful success that amateurs have in operating incubators.

First, there is the breeding stock from which to secure your eggs, and then there is the care of the eggs from the time they are laid until placed in the incubators, and then the care of the eggs when placed in the incubators. The question of stock may go back a good many generations. If the breeding stock has a tendency to lay eggs that are unfruitful, or with weak germs, it is likely that their progeny will have the same tendency. It is not many years ago when most people kept their henhouses closed up, and were inclined to believe that warm henhouses were best. That was a mistake, and we have found that the open-air henhouse keeps them in the most vigorous condition, and one of the best things for securing real good strong fertility in the eggs. You should throw open the windows of your henhouse every day. Never mind how cold the weather is; as long as the sun is shining keep your hens exercising in the sunshine. It is the man who is working out in the open air who has the strong, vigorous constitution. One thing you must be very careful about is the feeding of your birds. If you feed too heavily they will lay on fat, and that will injure your breeding prospects during the next season. After you have got your eggs, the hatchability is considerably affected by the temperature to which they are exposed. It has been ascertained that the germ in the egg will incubate at the temperature of about seventy degrees. If the egg has been kept at a temperature of above seventy the germ will slowly incubate. Where we have a temperature running up to eighty and ninety, you can easily understand the damage that is done. Considerable damage may be done to eggs shipped long distances by being placed close to the stove in the express car. Then they are taken out of the car and cooled for a day or two before being placed in the incubator. On the other hand, eggs may be too cold. In the winter time you must be careful to gather your eggs two or three times a day, so that they will not be chilled.

Then the question comes of handling the eggs in the incubator, and that is a subject for a whole evening's address. If you have good strong eggs and place them under a hen, you are almost certain to get a good hatch. It is an extraordinary thing, an incubator may do well one month and the next month fail entirely. I do not think I will go so far as to say it is entirely the fault of the machine, but there is something in the conditions under which these incubators are operated that affect the hatch. Then there is the question of the temperature under which we should run these incubators. I would not advise anybody to run an incubator in any other way than under the directions of the manufacturer. He is supposed to know his incubators best. If you do not have the results that you think you are entitled to, then I would begin to experiment on my own account, and one suggestion I would make is to run your temperature a little higher than the ordinary incubator manufacturer directs. I have found that to be an advantage, especially when one comes to deal with the other side of the question, to have the minimum loss in the young poultry. You may have splendid hatches, but if your mortality in the young chicks is considerable after they are hatched, every chick that dies is a loss and takes so much off your profit, and is a great discouragement. I would certainly rather have a comparatively small hatch and a large percentage of the chicks live than to have a large hatch and a high rate of mortality. The Chinese treat their eggs entirely different for the first ten days to the way they do the last, and I believe there is something for us to learn in the manner of starting the germ. I think it is most important during the first twenty-four hours. If you have the germ well started in a vigorous condition, I think that imparts a characteristic to the chick. A very young doctor in France made a close study with regard to the incubation to find out, if he could, the cause for deformities in chicks. He tried artificial incubation at various temperatures, treated the eggs to all sorts of conditions, gave them shocks from end to end and side to side, and sent them away on railway journeys, and he found that, by giving comparatively low temperature at the early part of the hatch, the development being sluggish, they imparted the sluggish character to the chick and it had not a vigorous growth; and I think that is an answer to the question so often asked, Why so many chicks

die in the shell? Some say that it is due to not giving them enough moisture at the end of the hatch. I think the answer is the chicks had not strength enough to kick themselves out, and the reason was because there was not vigorous growth at the start.

Q.—Do you run your incubator with the suspended thermometer?

A.—I think every person should run his incubator with two thermometers. Have one suspended by wire from the top of your machine, with the bulb of the thermometer half an inch from the top of the eggs. I have a veterinary's thermometer, which cost 75c., and it will record much more accurately than the ordinary incubator thermometer. I think it is best to keep the thermometer on the eggs at 102½ to 103. I think 103 is better than the lower temperature. I think it is well to keep the ventilators closed up during the early part of the hatch so that there will be no great draft, and I think the open bottom incubator had better be closed up as much as possible and keep a uniform temperature. The Chinese give their eggs no ventilation whatever until they pick them out of the baskets to cool them. While they are actually in the oven, they have no ventilation during the first ten days, and in the last ten days they are right out on the open shelves.

Q.—If your germs are strong, do you think a few degrees in the incubators makes any difference in the results?

A.—I do not think it does later on in the hatch.

Q.—Why be so particular as to the exact points of temperature? I think there is a great deal of trouble made for the farmer by this kind of work. I think we should get things down as simple as possible, so that the boys and girls can run the incubators. My experience, extending now over nearly one-quarter of a century, is that there is more in the germ than there is in the incubator. I have had incubators that were draughty and they hatched out the chicks. I told the maker his incubator was draughty, that it would hardly hold the heat, and he said: "I made it so as to let wind into it."

A.—I prefaced my remarks by saying that I did not want the audience to be frightened by the cautions I gave, because a great many amateurs who start out are wonderfully successful.

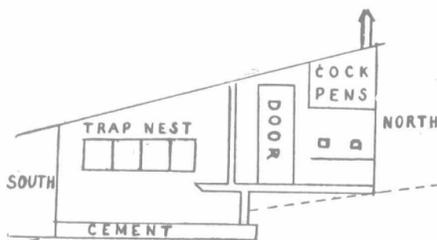
A Subscriber's Poultry House.

Editor "The Farmer's Advocate":

As there have been several inquiries in recent issues of "The Farmer's Advocate" as to the best floors for poultry houses, and also in regard to cement floors for same, I thought I would send you a description of one of my houses which has been giving me great satisfaction.

You will see by the diagram of end elevation sent you that I have adopted a new idea in putting the floor in this house, the use of which gives me considerable more floor space than is obtained by having floor all on one level.

This house is 18 by 32 feet. The south wall is 6 feet high, and north wall 9 feet. The eave on south side extends well out to protect windows as much as possible. The front half of floor is of cement, and runs 10 feet back. The



upper or back part is board floor, and is 11 feet from front to back. It extends forward over cement floor 3 feet, and is 30 inches above the same. In other words, I have 21 feet of floor space from front to back, instead of 18 feet. In a house 18 by 32 one would get 96 extra feet of floor space, or enough for 16 extra hens, allowing 6 feet for each.

This house is divided into four pens, with a window 3 by 5 ft. in front of each pen. One-half of each window is glass, and other half is wire, over which a curtain drops on cold nights.

The droppings board and roosts are against the north wall, and a row of cockerel pens is constructed above the roosts. A curtain might be hinged to bottom of the cockerel pens to swing down and close front of roosts if house was not built very warm. This curtain, however, should not be used unless absolutely necessary, as the ventilation might be poor if there were 25 to 30 hens on the roosts.

The nests are arranged along the west side of each pen and above the cement floor, the birds approaching nests by means of a board extending along front of them.

There are three ventilators in roof, one above

each partition. A large feed-box for grain, holding 10 bags, is behind the door against the east wall, and extends part way over the cement floor. In this house every square inch of floor is given the hens, except where feed troughs and water fountains sit. The dust box is in one corner by the window, and above the floor.

The diagram shows this house on a slope facing south. If the land were level, the north wall would require to be supported on posts. In that case, if thought desirable, the hens could be allowed to run under the board floor from the outside, especially if there was no shade in the yard. It would be much appreciated by the hens. If the ground had a slant to the north, longer posts would be required, and there would be still more room under the floor. In either case the opening would have to be closed in winter to prevent cold getting under the floor. Rough lumber could be tacked on the posts, and cornstalks or pea straw, with barnyard manure thrown on top, would answer the purpose.

The house described will hold 112 hens, and, with 8 cockerel pens and 2 in each pen, there would be 128. By no other method that I know of can so many birds be kept in a house of this size. There is plenty of room on the floor, and as the windows are always open, one does not have to consider how many cubic feet of air-space each hen has.

The exercise the birds get in jumping up and down from one floor to the other, is one of the best features of this plan. I have eight inches of cut straw and wheat chaff on cement floor, in which all grain is fed. On the board floor I have 2 or 3 inches of clover leaves and chaff all the time. This I gather up off the barn floor where the clover hay is thrown down out of the mow. The hens pick up a great deal of this, and I do not find it necessary to feed out clover in a wet state with mash.

FRANK J. BARBER.
Halton Co., Ont.

Co-operation in the Handling of Poultry Products.

As the poultry industry of this country is improving, and becoming an important factor in connection with other farm products, by increasing the revenue from the farm, in my opinion it could be further improved and the industry increased by introducing the co-operative plan in the feeding and marketing of dressed poultry. Crate feeding is acknowledged by all to be the best and only way that chickens can be put in proper condition so as to bring the best prices, and at the same time increase the consumption or create a demand for first-class goods. Everyone likes a well-fed and a well-dressed fowl, and, to meet this growing demand, a larger quantity of uniform quality must be produced in the district where the co-operative plan is to be carried out. And to this end, a larger number of the breeds that are recognized as good table fowl should be produced. Then, if some enterprising party would undertake to furnish the farmers with crates for fattening the chickens, and perhaps furnish eggs for the right type of fowl for hatching, at a moderate price, with the understanding that he was to have all chickens hatched from eggs supplied when fattened, by this means a large quantity of the right type could be obtained. Have the farmers crate-feed all chickens (for they can feed them at a lower cost than anyone else); at least the chickens would be better, there not being so many together, and a small quantity would be better looked after than in large numbers; feed from three to five weeks, then deliver chickens to a central station or packing-house alive, to be paid for live weight, or dressed, and when sold each farmer receiving a price as per quality. At this central place the killing and dressing can be done under the most improved and up-to-date methods. Here is a cooling house, or, better, a cold-storage plant, could be operated for cooling of the birds before shipment, or held in storage until such time as wanted. Another advantage under this system, the birds could be graded as to size and quality, then packed in cases suitable for the markets. By this system a larger quantity of uniform quality would be obtained. I fully believe if a plan something like this could be introduced in some districts it would put the poultry industry on a par with the dairy and fruit industry.

Bruce Co., Ont.

A. E. S.

Everybody Likes It.

Being well pleased with your paper as a farm journal, we thought we would advertise it a little, and showed it to a couple of neighbors, and they were so pleased with the Christmas number that they decided to take it, and gave me their subscriptions for one year each. They would like to get the Christmas number.

Bruce Co., Ont.

HECTOR MCGILLIVRAY.

Pointers on the Care of Laying Hens.

Editor "The Farmer's Advocate":

It is now the proper time to have fowl producing eggs, as the price is high; and, with the proper strain of fowls and the right feed and care, our fowls should be returning a good profit for time and money expended.

The first step in readiness is proper quarters. These need not be expensive structures, as some farmers think, if they are built properly, so as to afford sufficient heat and a good light. Make it sufficiently large, so that the fowl will have ample space for scratching. Avoid any small cracks or crevices, as these will admit a draft which will often cause great injury to a flock. When the building is finished, then comes the foundation stock. Many people content themselves with the old-time speckled hen, because they imagine the pure-bred fowls will involve too large an output to procure, and that their quarters must be much more elaborate. But allow me to say that all that is necessary is to buy a setting of eggs, or buy a cockerel in the fall to mate with the common stock. In this way the flock will be improving at a cost next to nothing. When you have a large number of fowl, it is a good practice to cull them, as many old fowl or young cockerels will often cause a turn in affairs if kept running with the laying flock during the winter months. These drones should be sold off at the market during the fall months and nothing kept but pullets and hens not over one year old.

Then comes proper feeding. Some poultry owners think that if they throw a scuttle of grain to their fowls and provide them with any kind of shelter, that is all that is necessary; but a farmer does not expect any returns from his other stock when cared for in such a manner. Feed the fowl good wholesome food, but make them work for all they get, and eat it up clean, too. Give your fowls a good variety of grains and green food. Don't fill your fowls up on some sloppy food, as it is injurious. Provide the fowls with a dust-bath, a box of grit, and don't forget to supply them with fresh, cool water. A hen derives great benefit from exercise; therefore, keep her busy scratching by throwing small grains in the litter. Feed regularly, and keep the house in perfect cleanliness, and then you will surely have abundance of eggs if your fowls are of a good strain.

J. W. DORAN.

South Renfrew, Ont.

APIARY.

Michigan Beekeepers' Convention.

[Specially reported for the "Farmer's Advocate."]

The annual meeting of the Michigan State Beekeepers was held in the upper (northern) part of the State, Big Rapids. The State boasts of some of the best beekeepers in the Union, and the industry is carried on very extensively, including a large number, particularly in the northern portion, whose sole business is beekeeping.

Mr. S. D. Chapman, Mancelona, on the evening of December 25th, spoke upon the subject of "Honey Possibilities of Northern Michigan." The representative of "The Farmer's Advocate," during the address, and in a private interview, secured information which not only is of general interest, but which has a valuable bearing upon the more broken portions of Ontario and portions of the country which the Province is seeking to settle. Mr. Chapman states that in his section of country—he resides seven miles north of the 45° latitude—there are more bees kept than in any other portion of the State. He began beekeeping in the locality in 1881. His honey crop has been from the wild raspberry, and since that time he has only had one complete failure, and that was, in 1895, when, on May 16th, the temperature dropped to 11°, killing everything; snow fell, and for three days they hauled logs on sleighs. This year (1906) they had a flood on May 20th which did a great deal of damage, and only a partial crop was secured. He is running about 400 colonies of bees. Raspberry in that climate and soil—sandy loam—gives a honey the equal of clover; in fact, few could tell it from clover. He has averaged about 100 pounds to the colony, spring count, of extracted honey. Three years ago, from 82 colonies, spring count, he secured 13,000 pounds of surplus honey; this is his best record. As a rule, the honey flow begins June 1st, and closes about 18th July. Raspberry will yield honey more freely than basswood; that is, his best record yields on raspberry far exceed the best records on basswood. One day, from 1 o'clock till 4 o'clock, a colony gained, by actual weight, 17 pounds. The bees were not in a large hive, the eight-frame Langstroth being used. Sumach, fall flowers and some buckwheat were now coming in and giving him some more honey, but until recently wild-raspberry patches were his only source of surplus honey. Instances were given where beekeepers went into a section of country which had been lumbered, where the beekeeper cleared ground enough to put down his hives. The surrounding timber acted as a shelter

and wind-break to the hives, and a good crop of honey had been secured.

Mr. L. A. Aspinwall, of Michigan, President of the National Beekeepers' Association, gave an address upon "The Non-swarming Hive." There is every reason to believe that, after twenty-five years' experimenting, he has made a success of producing such a hive. Only a few leading beekeepers, already selected, will be allowed to test these hives during the coming season.

"Outdoor Wintering," by Geo. E. Hilton, Fremont, Mich., brought out the fact that he wintered his bees on their summer stands in packed hives. The temperature in his vicinity dropped as low as 20° below zero. Snow fell to such a depth that often no hive could be seen in the apiary. He did not remove this snow from the entrance until weather came that the bees could fly, when the entrance was cleared. Abundant stores, the hive contracted to the capacity of the cluster, enough top-packing over the bees to retain for the cluster the maximum heat, yet enough air passing through to carry off the moisture expelled by the bees from the hive and through the packing.

Geo. H. Kirkpatrick, Rapid City, in his address, gave his method, and said that more beekeepers should retail, by means of a wagon, in town and country, their honey crop. He sold his entire crop to farmers, and had no package smaller than ten pounds.

"Locating Apiaries," by E. D. Townsend, Remus, gave valuable information to the specialist. He advocated great care in selecting an advantageous locality.

"Ripe Honey," an address by R. F. Holtermann, Brantford, Canada, pointed out the importance of having the honey left with the bees until it has properly matured. Thin, unripe honey never has a honey flavor; if thick, even if from an inferior blossom to the source of the best grades, it was superior to thin honey from clover and the like. A great deal of energy was wasted in creating a market for honey until this policy was carried out.

The President, W. Z. Hutchison, Flint, Mich., who is also inspector of apiaries, brought up the subject of "Foul Brood." It was admitted by all that this disease was on the increase in Michigan, and a resolution was passed favoring an inspector for a smaller district, making thirty-two for the State.

Mr. Elmore M. Hunt, Bell Branch, the hard-working and efficient secretary-treasurer, gave a public exhibition in a tent, demonstrating the method of handling bees.

GARDEN & ORCHARD.

Horticultural Progress.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

THE RELATION OF EARLY MATURITY TO HARDINESS IN TREES.

Excerpt from the Nineteenth Annual Report of the Agricultural Experiment Station, Lincoln, Neb., U. S., by R. A. Emerson.—This is a publication containing definite information obtained at the Nebraska Experiment Station from experiments in determining the relation of early maturity to hardiness in trees. The facts given should be carefully considered and acted upon by Canadian fruit-growers, especially in the peach districts and in the colder parts of the country where all of the tree fruits are grown with difficulty. It is well known that a tree with well-ripened wood will stand the cold better than one having immature wood. What is proved in this bulletin is that hardiness in some trees is due more to the fact that the wood is mature than that some trees are constitutionally harder than others. An example is given of black walnut trees, some from the Southern and some from the Northern States having their new growth killed equally as much by spring frosts, while the same trees were affected quite differently in winter, those which had ripened their wood thoroughly coming through unharmed, while those which grew late in the autumn were injured. It is shown that the hardest varieties of apples and plums are those which ripen their wood early. What is, perhaps, the most valuable experiment in this bulletin is that showing how peach trees which were induced to ripen their wood early by special methods of culture, stood the winter much better than those not so treated. One method of inducing early ripening of the wood was to plant the trees on high land, where growth ceased much earlier than on low land where there was more moisture. An illustration is given of trees on low land which were killed outright and seriously injured, while those on high land came through the winter without injury, except for some discoloration beneath the bark of the twigs. Another experiment with cover crops gave marked results over a period of four years. During that time the trees in the cover-crop plots stopped growing, and ripened the new wood from a few

weeks to two months earlier than similar trees in adjoining plots that received late summer cultivation, the result being that in the case of the cover-crop trees there was very little injury, and that most of the terminal buds had started growth, while with trees given late cultivation the winter injury was severe, none of the terminal buds having started growth, and some of the twigs having been killed back almost their entire length.

Much attention has been given, at the Central Experimental Farm, Ottawa, to the relation of winter apples to hardiness of trees, and the conclusions reached regarding this were given in a paper read before the Society for Horticultural Science last June, and before the Quebec Pomological Society in August. In that paper it is shown that winter apples are, as a rule, more tender than summer varieties, because the wood of the winter kinds does not mature early. Early maturity in wood usually means early maturity of fruit.

The useful information published by the Wisconsin Horticultural Society in bulletin form, suggests the possibility of the Ontario Fruit-growers' Association doing something in the same direction. Much timely information might be furnished to fruit-growers in this way at comparatively little expense, and the publication of bulletins by the Association would be an inducement to new members to join.

In the bulletin before us attention is drawn especially to three hardy apples. The Hanco is a Wisconsin seedling, of which the oldest tree is 44 years of age. The fruit somewhat resembles the Alexander in general appearance, but keeps in an ordinary cellar till March or later. "In quality, it is better than any other apple of Wisconsin origin, and compares favorably with the best Eastern apples." The Dudley is the second variety referred to, and is described as "an apple of merit for northern Wisconsin." This variety, which is a seedling of Duchess, originating in the State of Maine, has been planted to some extent in Ontario under the name of North Star, especially in the Orillia district. At Ottawa the tree has proved very hardy and productive, and the fruit of good size, appearance and quality. It is in season with Wealthy, but does not keep as long, being past its best by November. This variety is also succeeding well in New Brunswick. It is probably harder than Wealthy, and is not unlike that apple in general appearance. The writer considers it a very promising variety for the North, being evidently as hardy as Duchess.

The third variety mentioned is the Windorf apple, which originated on the farm of Albert Windorf, Stettin, Wis., U. S. It is a seedling of Northern Spy. The fruit is medium to large, and usually yellow in color, although it is sometimes red on sunny side. The season is September to October. It is said to be a better keeper and of better quality than the McMahan. In a trial orchard at Wausau, in the northern part of Wisconsin, the Patten (Patten's Greening) has headed the list for productiveness, with Hibernial second. These are undoubtedly two of the hardest apples grown. The Hibernial apple, the writer considers the very hardest. It has produced considerable fruit in Southern Manitoba, and young trees have borne in other parts of the Prairie Provinces.

THE FARM BULLETIN.

King's County, P. E. I.

December was unusually cold and stormy, and winter caught a good many farmers unprepared, but the good sleigh roads of the last two weeks have had a beneficial effect on trade, and no doubt largely increased the Christmas sales of the merchants. The holiday poultry trade suffered, owing to the bungling way in which the winter steamers have been managed. Geese recently slumped several cents a pound. Prices in the local markets have been as follows: Turkeys (drawn), 14c. to 15c. a lb.; geese (drawn), 9c. to 10c.; chickens, 5c. to 7c.; pork, 8c.; beef, 5c. to 6c. in quarters; hides, 10c.; eggs, 20c. dozen; oats, 41c. bush.; wheat, 75c. to 80c.; potatoes, 30c.; baled hay, per ton, \$9 to \$10. Hay and potatoes will likely advance in price before spring. The various dairying companies have had a most successful season, the patrons of one factory receiving, in some instances, as high as \$1.30 per cwt. for their milk. In most of the Island factories we believe they pay by test, hence there is usually a considerable difference in the prices paid the different patrons. While crops during the past season were considerably below the average in many sections, still the prevailing high prices for produce has helped out the shortage in the crops, and times are fairly good as a result. Owing to the growing interest in sheep-raising, an agitation for a dog tax has begun, and some have gone so far as to ask for the total destruction of all dogs in the Province. But this, we think, is the opposite extreme. A good dog is a valuable help on a farm, and we think a moderate tax would send many curs to an early grave. On all sides we hear expressions of admiration for your Christmas number, all pronouncing it "the best yet."

P. E. I.

BEN. BRAMBLE.

Quit Yer Grumblin'.

Editor "The Farmer's Advocate":

Again the time o' year has come when we will a' be turnin' over the new leaf in oor lifebook, an' makin' up oor minds as tae what we will be writin' on it.

The last page has dootless sae mony blots that ye canna' weel mak' oot onything mair, but nevertheless the maist o' us are gaein' tae get anither chance, an' its up tae us tae mak' the maist o' it. An' maybe a few words frae an auld sinher like mysel', wha has had conseederable experience in the makin' an' breakin' o' gude resolutions will no' come amiss at the present time, when we should a' be thinkin' o' makin' a fresh start on this new page we hae bin talkin' about.

It's an easy thing tae give gude advice, but an unco' hard thing tae tak' it, an' sae ma friends ye ken noo why I like tae dae the former. "It's mair blessed tae give than tae receive," the wee laddie said when his mither was gie'in' him a skelpin', an' the same is true as tae advice. So wi' yer permission I'll just be goin' ye a few pointers for the comin' year, which ye may tak' or leave, as suits ye best, an' na harm will be done, especially gin ye tak' them.

An' noo, in the first place, I want tae say something on the subject o' grumblin'. Ye ken that we farmers hae conseederable o' a reputation as grumblers an' some things I hae been listening tae lately maks' me think that we weel deserve the name. We hae been gettin' fancy prices for a gude mony o' the things we hae been sellin' the past year, but if, for instance, ye say to ane o' oor dairymen that thirteen cents a pound for cheese is no' sic a bad price, ye may depend on it he'll say: "O, aye, but ye ken there's na grass the summer ava. an' its no' muckle we'll hae for oor wark onyway." An' it's the same way wi' onything else. Gin there's ane bright side there's twa black sides to everything they hae. They are muckle like the mon frae Boston, wha they say cam' tae the gate o' heaven an' asked for admittance. St. Peter made some inquiries, an' when he ken't he was frae Boston he said, "Weel, ye may come in, but I'm almaist sure ye will na' like it." Sae, my friends, let us gie up this habit o' grumblin' an' fault-findin'. an' let us mak' the best o' what we hae, an' gin we will just but get the habit o' contentment we'll hae' solved the problem of hoo tae become rich.

Of course we may gae to the ither extreme an' get intae the habit o' braggin' about a' we hae an' a' we are daein'. I heard some men the ither day tellin' ane anither about the weight o' their turkeys, an' ane o' them called one o' the ither a liar. "Hoots, mon!" said an auld chap wha was standin' by, "Ye canna' expect a mon tae tell the truth when he's talkin' about the weight o' his turkeys, but ye mauna' ca' him a leear, he's an optimist."

An' noo for the second pointer, an' it is ane that is of no sma' importance either. Hoo mony o' oor farmers are daein' what they can to mak' their eddication continue through life? Maist o' us got a start in the little auld log schoolhouse, which was mair o' a tannery than onything else, but hoo mony o' us are keepin' up the process o' eddication in a way that we might easily dae if we had ony ambition. The trouble is that too mony o' us hae the habit o' workin' an' putterin' around late an' early, an' never a minute do we hae' for onything better than the makin' o' the almighty dollar, so that we may be sure to hae enouch to supply oor bodies wi' food an' claes, while at the same time oor minds are on the verge o' starvation. Noo, the mon wha is daein' this is all the track. Get yer farm wark done in the day time, so that ye will na' need tae be prowlin' around the barn half the night wi' a lantern, an' then ye will hae the time tae spend on some gude book or magazine or paper, or gin ye are an auld bachelor ye may write a letter tae yer lassie, which will be a gude lesson in composition for ye, an' composition is a branch o' muckle importance in eddication. I'm afraid, as a class, we dinna appreciate the importance o' feeding the mind as weel as the body, for if we did we wud spend mair time on its development, an' on the buildin' up o' a weel-balanced character, which is the only w'y to mak' a true success o' life.

An' noo to change the subject we'll pass on tae the next pointer I wad like tae gie ye. It has bin pit intae ma mind by some things I hae seen in the course o' ma life, an', forbye, maybe, by my ain actions. It is just concerning oor treatment o' oor cattle an' horses. Noo, I ken that the majority o' oor farmers are guid stockmen an' dinna need ony advice, an' to such I wad say, if the cap disna' fit, pit yere ain hat on again, but frae personal experience I ken that we hae' still some farmers that dinna treat their stock just quite in the w'y they wad like tae be used themselves. Noo, for instance, I hae seen a mon hammer his horses over their heids wi' a fork handle till the pair brutes didna ken which way they were gaein', much less did they ken what they were being hammered for, an' I hae seen a mon, not satisfied wi' using a handle o' his fork this way, tak' the ither end an' come sae near killin' the horse that he had to gae for a horse-doctor as quick as he kened how, an' I heard a mon say not lang since that the best an' only sure way to cure a coo o' kickin' was wi' a club. It may be, but ye hae to kkep it up in some cases till ye kill the coo.

An' so I might gae on an' tell o' ither things o' the same kin', an' o' seein' cattle shiverin' on the lee side o' an auld barn durin' six months o' Canadian winter, an' so on, but what's the use. Ye hae all

seen these things for yersels. All I want to say is, that if ye are in the habit o' lettin' yer temper lead ye intae abusin' the animals that dae yer wark an' mak' yer money, it's muckle waur for ye than for them. First get control o' yersel', an' ye will hae a muckle better chance to control yer beasts.

An' noo for my last pointer, which is gaein' to be just a word in private tae the farmer wha is marrit, an' is the father maybe o' a family o' bairns. I'm just wantin' tae speak tae ye aboot yer wife. Farmers' wives in this country hae na' been getting a fair shake, if I'm ony judge. They get up early and they gae tae bed late, an' they wark like slaves, an' half o' the time they have a cryin' bairn tae carry around on ane arm, while they do their never-ending wark wi' the ither. Na' wonder that sae mony o' oor farmers' wives are in the asylum, an' sae mony mair wishin' they were there. An' the pity o' it a' is that this state o' things is a' so unnecessary. In the case o' the farmer wha is comparatively weel off the remedy is easy to prescribe, but apparently hard to tak', judgin' by the few that do tak' it, namely, get yer wife a hired girl. Where the farmer canna' weel afford this expense, he can still mak' the wark o' his wife less if he wad be juist half as thoughtful o' her weel-fare as he was before he married her. There is na' a happier existence on this earth than life on the farm gin the wife an' husband are conseederate an' thoughtful o' ane anither, an' dinna' be tryin' to dae all the wark so as to leave naethin' for their children to dae after they're deid. But gin a mon an' his wife will na' use common sense they can mak' farmin' intae a very purgatory. Young man, when ye marry see that ye tak' yer wife intae partnership an' not intae slavery. Let her share yer affection an' yer money as weel as yer troubles, an' ye'll be mair than likely to find her a gude partner an' as necessary to the weel-fare o' the firm as yersel'.

An' noo I'm thinkin' I had better come tae a stop, as there's naething worse than givin' too much guid advice, unless it's not takin' it. But if ony o' ma brither farmers get ony material for guid resolutions for the New Year in what I hae said, my object will be gained. Ye can tak' it for what ye think it's worth onyway, an' ye can pay me when ye hae na ither use for yer money.

An' sae, wishin' ye all success durin' the coming year in the carryin' on o' yer business an' the carryin' out o' yer guid resolves, I am as ever,
Yer friend,
SANDY FRASER.

20th-century Postal Service in Huron!

Editor "The Farmer's Advocate":

For forty-five years we have had a regular and well-conducted mail service to Marnock from Belgrave; distance, 3½ miles. The mail leaves Marnock about two o'clock, and returns usually about five or half-past five in the evening, losing the greater portion of the afternoon, and for which the mail carrier has received the sum of 38 cents and a fraction per trip. During all those years the mail carrier and postmaster has been the same person. Now, owing to old age and infirmities he cannot carry this mail any longer. He cannot engage anyone to carry it for any such remuneration, and, as a consequence, has sent in his resignation, which has been accepted by the Post-office Department, and in accepting it, asking him to send in the office equipment after the 31st of December, 1906. In other words, the office is closed. The Post-office Department did not ask for tenders for carrying the mail or keeping the office open. The patrons of the office are from 2½ to 6 miles from any other office. It is going to be a serious inconvenience to us to get our mail matter, and compelling us to reduce our newspapers and correspondence to a minimum. A magazine will be at a premium, and a daily paper an unheard-of luxury. A return to some of the hardships of pioneer life.

A promise was given some time ago, in answer to the agitation for a rural mail delivery, that the Post-office Department could not afford the cost, but would increase the number of outlying offices to facilitate the delivery of mail matter, and this, I suppose, is the fulfilment of that promise.

I do not know what the intentions of the post-office authorities are in regard to this matter, but a large number of the patrons of this office consider it an outrage the way we have been treated.

Huron Co., Ont. J. W. BONE.
P. S.—Any communication addressed to Belgrave may reach us in the course of a few weeks.

J. W. B.

Ontario Veterinary College.

The Christmas examinations of the Ontario Veterinary College, Toronto, were held in December by the usual board of examiners. The following gentlemen were awarded diplomas: Graduates—Homer R. Clemmer, Staunton, Va.; Ralph Waldo Clere, Syracuse, N. Y.; David W. Cox, Chicago Junction, Ohio; Francis J. Flanagan, Boston, Mass.; Harry W. Graham, St. Catharines, Ont.; Charles E. Hershey, Erie, Pa.; Daniel James Holton, Winsted, Conn.; Joseph H. Jefferson, Albion, N.Y.; Oscar W. Leach, Hartford, Wis.; Nathaniel McCarthy, Cobourg, Ont.; Bennett Porter, Albert Lea, Minn.; B. F. Ricebarger, Gilead, Ind.; Fred H. Seward, Wallaceburg, Ont.; George S. Smiley, Rawdon, P.Q.; G. Earl Spencer, Craik, Sask.; W. Stanley Thompson, Deloraine, Man.

Township School Boards.

Editor "The Farmer's Advocate":

According to the Public School Act of the Province of Ontario at present, each school section in each township has to be supplied from the total assessment of the township the sum of \$300 for each school section, called a general rate. This is done for the purpose of equalizing the rate; wealthy sections to help the weaker or poorer ones, as the case may be. Note how this scheme equalizes:

In Osgoode Township, County of Carleton, there are 24 public schools, consequently twenty-four times \$300 is levied and collected to pay the general rate, which amounts to 1 5-10 mills on the dollar. School sections requiring more than \$300 to pay their expenses have the extra amount collected by a levy, called a section rate. I have chosen the two lowest assessed and the three highest assessed sections to show how the equalization works:

No.	Assessment.	Section.	Expenses.
1	\$ 54,000		\$300
14	28,150		800
12	162,800	1 3-10 M.	500
20	55,575	3 6-10 M.	500
15	78,020	4 4-10 M.	640

The 1 5-10 mills on the dollar is not included in the section rate. The board of trustees for each school section is composed of three members. Said board asks the township council to provide the amount they require for the current year to pay all expenses, which has to be done. School sections Nos. 1 and 14 did not require any more than the general rate provided, consequently they have no section rate to pay.

During the past ten years or more various amounts have been tried under the school act as a general bulk rate in order to equalize, and, in practice, the result is those amounts have not had the desired effect.

First was no general rate at all; next, the sum of \$100 for each school section, then \$150, and this year \$300 for the first time, and they are all far from equalizing.

Would it not be better to manage the schools as all other municipal business is done, viz., by a township board, composed of a limited number of trustees, elected as the sections elect their trustees now—one member retiring each year—except a greater number, say nine trustees, or fifteen in each township? Then either three or five would require to be elected each year, on the same day as for municipal councillors, by the same officials and by ballot, all expenses, except the ballots, to be paid by the township council. The township would require to be divided into either three or five wards to carry this into practice.

We have all due respect for those who framed the present school act, dividing the townships into subsections. No doubt it was the best way at that time, because the clearings were very scarce, and each settlement required a school for the youth of the settlement. But to-day we have a changed condition of affairs; the woods are more scarce than the clearings were then, consequently it is advisable to conduct our schools in accordance with modern conditions, financially and otherwise.

There are many reasons why a township board would be the best. Fuel could be bought (en bloc) for all the schools; teachers could apply to the board at any time, thereby saving a lot of expense for advertising. We would have a better selection of teachers to choose from. Schools could be built according to modern methods—more especially heating and ventilation. We have not the old log school to-day to keep the children warm, nor the woods to break off the cold winds. The township secretary could act as secretary for the board, and one treasurer would serve for the entire township.

During my experience with teachers, and I have attended them all, viz., the private school teacher, the separate school teacher, and the public school teacher, the teachers of the Holy Orders are the best, because they instruct for both mind and soul. Education ennobled and consecrated by religion will give a better class of citizen. Not only the intellect (as at present) but the will should be cultivated. It will profit a man nothing to gain dollars and lose his soul in the act of obtaining them. Next to Holy Orders an aged married man is best, because he can exercise a parental supervision over the youth. He is more steady in his habits, more plain in attire, and looked up to by the child or youth as their superior. As separate schools cannot be maintained in a mixed community of sparse population without weakening each other, then the next best is a public school, and lay teachers for all.

School sections Nos. 1 and 14 have no section rate to pay, only 1 5-10 mills on the dollar to meet the general rate, but they receive the \$300 the same as all the rest. School section No. 12 has a marked career, having had a first-rate teacher for a good many years, paying him the sum of \$500 per annum, and it costs them only 1 3-10 mills on the dollar this year. They pay only \$450, and yet have a teacher of first rank. Other sections, which I might name, pay as much or more, but do not secure corresponding service. This is far from being equal rates for all. Section No. 12 was the home school in their youth for such noted men as the late lamented Doctor Stewart, of McGill

University, Montreal; His Honor Judge McTavish, senior judge of Carleton County, and Hon. Mr. Rutherford, Premier of Alberta Province; and there are many others to follow. This school has a teacher of the first rank, and it costs them by far less than the average rate of all the schools.

What surprises me most is that those of the learned professions who have the ability do not take a more active part in advancing the educational interests of the home of their school days, and also that of agriculture. This does not apply to farmers' sons who are resident in the City of Ottawa, with its high-toned society to keep pace with. They have to attend the grand opera, the club, and society "functions," such as Government House dinners, balls, etc.; but the rest of the ungrateful farmers' sons, please take a hint, and show an active interest in helping the old folks at home.

A township board for the future, and an equal rate for all, I believe will be the only way to equalize. All other townships in the Province, I feel, are in the same position, and many worse.

T. J. GUNN.
Carleton Co., Ont.

[Note.—Another inequality, apparently not contemplated by the framers of the School Act, arises out of the different rates of assessment prevailing in different townships.—Editor.]

Meat and Canned-goods Inspection.

Hon. Sydney Fisher, Dominion Minister of Agriculture, has introduced two important bills at the present session of Parliament. One is for a system of bonuses to cold-storage warehouses. This was outlined in our Christmas number. The other bill is one providing for a system of meat and canned-goods inspection.

The proposed act provides that the Minister may order the inspection of all animals intended for slaughter in any establishment. No animal is to be allowed to enter a slaughter-house unless it has undergone inspection and been found healthy and fit for food. Every animal affected or suspected of being affected with contagious or other disease is to be slaughtered under supervision and disposed of as provided by the regulations. Provision is made for the inspection of carcasses of all animals intended for export wherever slaughtered. Slaughtering by farmers and retail butchers on their own premises is not subject to inspection unless otherwise directed by the Minister. Healthy carcasses are to be marked by the inspector, but their disposal is subject to further supervision. The following clauses are of special interest: "All articles prepared for food in any establishment and packed in cans or similar receptacles, or in any package whatever, shall be subject to inspection during the whole course of preparation and packing, and all such packages shall be marked or labelled in such manner as the Minister directs; provided that no such packages, except packages of meat products, shall be marked by the inspector, and that no package of meat products shall be so marked unless the inspector is satisfied that all the requirements of this act in reference thereto have been complied with.

"The inspector may at any time reinspect a carcass or any portion or product thereof in order to ascertain whether, subsequently to the first inspection thereof, it has undergone decomposition, or has otherwise deteriorated, or has been tampered with or adulterated by the use of preservatives or otherwise.

"Every carcass or portion or product thereof sent out of an establishment and returned thereto for any purpose shall not be again sent out therefrom without reinspection.

"Every carcass or portion or product thereof found upon inspection or reinspection to be unhealthy or unfit for food, or which contains such ingredients or preservatives as may render it unfit for food, shall be marked by the inspector in such manner as the Minister directs, and shall thereupon be deemed to be condemned as unfit for food, and shall be disposed of as provided by the regulations. Any person slaughtering animals and selling or offering for sale or transportation or for export a carcass or any portion or product thereof which he knows to be unhealthy or unfit for food is guilty of an indictable offence and liable to one year's imprisonment. Every one who is convicted of this offence after a previous conviction for the same crime shall be liable to two years' imprisonment. All fish, fruit or vegetables used by any establishment where these articles are prepared for export shall be sound, wholesome and fit for food, and any such articles or products thereof found in the said establishment unsound or unwholesome shall be confiscated and destroyed as provided by the regulations."

An inspection and close supervision of the sanitary conditions of any establishment may be ordered, and where such conditions are not up to requirements the inspection or marking of articles shall be refused. Non-compliance with the provisions of the act or with any regulations, or with the lawful instruction of an inspector, may lead to the closing of an establishment. The acceptance for export or export of articles subject to inspection is prohibited unless the requirements of the act have been complied with, and clearances to a vessel carrying carcasses will depend upon the production of an inspector's certificate. Notwithstanding these provisions, the Minister, whenever necessary or advisable to do so, may authorize export of articles without inspection. No article subject to inspection is to be offered or sold for export or exported under a

deceptive title. Tampering with the marks on any article is made punishable by fine. An inspector appointed under the act is empowered to enter any place or premises, or any steamship, vessel or boat, or any carriage, car, truck, horsebox or other vehicle used for the carriage of articles subject to the provisions of the act, but if required is to state in writing his grounds for so doing.

Canadian Jersey Cattle Club Annual Meeting.

The seventh annual meeting of the Canadian Jersey Cattle Club was held in the Temple Building, Toronto, Saturday, December 31st. There was a good attendance of breeders.

The President, Mr. R. J. Fleming, in his opening remarks spoke enthusiastically of the high stand taken by the breed among the dairymen of the country, and the increasing demand for bulls, especially from creamery sections. He also claimed that as a family cow the Jersey is par excellence, being docile, easily kept, and giving more than the average amount of the richest milk 335 days in the year; many cows have been known to milk continuously for three and four years, and drop a calf each year. It is also encouraging to note that many of our wealthy men are establishing Jersey herds. Mr. McKenzie, of McKenzie & Mann, has lately imported some nineteen head from the Island; another enterprising farmer is about to leave for England to purchase some 30 or 40 females as a foundation. The introduction of this new blood should make an interesting contest at the coming exhibitions.

The Secretary reported that comparatively few breeders had as yet registered their cattle in the Canadian Herdbook, being loath to break away from the wealthy and influential American Jersey Cattle Club. He urged the breeders present to at once register their cattle at Ottawa, and by so doing place the club on a strong financial standing, and then there would be some money to devote to furthering the best interests of the breed in Canada. Some of the members present thought the Club should ask the American Jersey Cattle Club for a grant for prizes at the Toronto Exhibition, especially as the American Club has received thousands of dollars since 1872 in fees, etc., from Canadian breeders; but the majority opposed the suggestion, feeling that it would be better to encourage our own herdbook. It was explained by the Secretary that cattle registered in the A. J. C. C. could be registered in the C. J. C. C. at a reduced fee.

F. W. Hodson spoke strongly in favor of the Advanced Register, and urged breeders to enter their cows for registration therein, as bulls from cows in the Advanced Register would be eagerly sought after by the dairymen of the country. He also stated that too much attention in the past had been paid to showing type and not enough to performance. This statement was refuted by the President, who mentioned a number of first-prize cows that had phenomenal records at the pail and churn, showing that it is quite possible to combine beauty and utility in the one animal.

A committee, consisting of R. Reid, T. Porter and H. C. Clarridge, was appointed, to take charge of the placing of representatives of the breed in the dairy tests held in various parts of the country.

The Club again condemned the short-term tests as misleading, and of little value to the dairy interests of the country.

Mr. H. B. Cowan addressed the meeting in the interests of a National Dairy Show, and asked that the Club appoint a committee to confer with representatives from the other dairy breed associations, to formulate a plan for the establishment of a dairy exhibition. The Club endorsed the scheme, and appointed a committee to represent the Club.

It was decided to ask the board of the Toronto Exhibition to give a prize for a herd, consisting of aged bull and four females in milk.

OFFICERS FOR 1907.

President—R. J. Fleming. Vice-Presidents for Provinces—Ontario, D. Duncan, D. O. Bull; Quebec, W. H. Martin, Warden; Maritime Provinces, W. McMoagie, Sussex, N. B.; Manitoba, Alberta and Saskatchewan, W. V. Edwards, Souris; B. C., to be appointed by the President and Secretary. Sec.-Treas.—R. Reid, Berlin. Board of Directors—R. W. Hodson, F. L. Green, T. Porter, R. Tufts, S. J. Lyons. Representatives to Fair Boards—Toronto, D. O. Bull; Ottawa, P. Clark; London, R. Edmunds; Winnipeg, W. W. Wright. Judges—Toronto, C. T. Graves, reserve W. R. Spann; Ottawa, J. L. Clark; London, H. C. Clarridge; Winnipeg, R. Reid; Sherbrooke, H. G. Clark.

The Stratford & St. Joseph's Radial Railway Company is applying to Parliament for a charter to build passenger and freight lines from Stratford (Ont.) to Avonton, thence to Downie, Fullarton, Russelldale, Farquhar, Exeter, Hensall, Zurich and St. Joseph, thence southerly to Grand Bend, in the Township of Stephen, or from Exeter, westerly through the most convenient places to St. Joseph, and from St. Joseph to Grand Bend, thence to Parkhill.

A Northumberland postmaster writes: "Your Christmas Number is simply immense, splendid, far surpassing all previous efforts. Hope to send you in a few names soon. I wish you increased success in your work."

Ontario Veterinary Association Annual Meeting.

The annual meeting of this association was held in the Ontario Veterinary College, Toronto, last month. There were members in attendance from all parts of the Province, and some from the United States. The President, Dr. L. A. Willson, V.S., of Aurora, opened the meeting with a short address, that was received with applause.

The Secretary, Treasurer and Auditors' reports were received and adopted, showing that there was then in the Treasurer's hands the sum of \$34.31. Nine new members were proposed and accepted.

Dr. Rutherford, Veterinary Director-General for the Dominion, reported that he has now in his hands, as Treasurer of the Veterinary Organization Committee, the sum of \$656.63.

Dr. C. Elliott gave a verbal report of the proceedings of the Veterinary Organization Committee; also Dr. Rutherford and Dr. Andrew Smith spoke relating to the action of the committee and its results, and a motion was subsequently adopted, tendering thanks to Dr. Rutherford for the stand he has taken in endeavoring to elevate the profession in the Dominion.

After luncheon a case of paralysis of retractor muscles of the penis, with excessive swelling of that organ, was exhibited in the college infirmary, and the operation of excision of the penis was very skillfully performed by Dr. W. J. R. Fowler, Demonstrator of Anatomy of the Ontario Veterinary College, assisted by Mr. C. G. Saunders, veterinary student, who administered chloroform, and who has had considerable experience in producing anaesthesia with chloroform. This operation was viewed with much interest by the members. The animal is now doing well.

Dr. A. A. Grange, V.S., of New York, who graduated from the Ontario Veterinary College more than thirty years ago, read a very interesting paper on motor stimulants, which was sometimes given to race horses, with the object of improving their racing powers (called by racing men "Doping"). He described the action of the drugs commonly used, and the conditions and symptoms they produce. He also gave various modes for detecting their administration.

Dr. Rutherford gave an interesting and instructive address, mentioning the similarities of the diseases "Surra" and "Dourine" (or mal du coit) in the eastern and western hemispheres, but the marked bacteriological differences that are found in Manitoba and the adjacent Provinces from those in tropical climates and in the eastern hemisphere. He also mentioned that Dr. A. E. Watson, of Lethbridge, Alta., Quarantine Station, had reported to him, in a letter dated December 3rd, 1906, the finding of Trypanosomata in the blood of the cotton-tail rabbit (*Lepus Sylvesticus*) of that district. This is the first record of the finding of Trypanosomata in mammalian blood in Canada.

Dr. Duncombe, V.S., read a good paper on castration. He gave an excellent description of his method of operating in the standing position, and advocated the application of carbolic acid or creolin in oil to the scrotum afterwards.

The subject of the so-called "Veterinary Correspondence School" was then brought forward, and institutions of that character were very strongly reprobated by many members of the profession.

A motion was passed that the sum of \$25 be appropriated for a medal, to be presented for competition to the graduating class of the Ontario Veterinary College at the approaching spring examinations.

The following is the results of the election of officers for the ensuing year: President, J. W. Orr, V. S., Stratford; 1st Vice-President, O. H. Duncombe, V. S., Waterford; 2nd Vice-President, F. G. Hutton, V. S., Welland; Secretary, Treasurer and Registrar, G. Heath Sweetapple, V.S., Toronto; Assistant Secretary, R. Barnes, V.S., London. Directors—Drs. C. Reid, G. T. Bowlby, J. W. Gortin, C. Elliott, W. Steele, J. A. Tancock, T. Bates, Jas. Stewart.

C. N. R. Extension in Ontario.

The Canadian Northern Railway has filed plans with the Dominion Government for the following new railways in Ontario, besides the proposed lines from Toronto to Ottawa and Montreal:

Toronto to Hamilton, Brantford, Woodstock, London, Chatham, Windsor and Detroit.

Brantford to Port Dover.

Ancaster to Galt, Waterloo, Berlin and Goderich.

Brantford to Waterloo, Berlin, Mount Forest and Owen Sound.

Owen Sound to Collingwood, and a junction in the Township of Pickering with the main line east of Toronto.

Kincardine to Barrie, Orillia and Washago, from which latter place there will be an extension to the Georgian Bay.

Pembroke to Peterboro and Cobourg.

Arrprior to a point on the St. Lawrence in Leeds Township, east of Howe Island.

Hawkesbury to a point of junction with the main line in Bastard Township, south of Rideau Lake.

Story of Victoria Cross.

"For Valor," are the words inscribed under the royal crown and the lion which occupy the center of the bronze Maltese cross forming the noble decoration instituted by the late queen in 1856. A reader of history realizes keenly that this "valor" means not only reckless courage, but often a heroic devotion to others that stirs all his pride in humanity. For, over and over again, these simple records present a man who on a field of disaster turns back from safety to rescue, in the face of fearful odds, a wounded comrade. Caste does not count in these deeds, officer or private, each risks life for the other with equal obliviousness of self.

Charles Davis Lucas, mate, on board her Majesty's steamer Hecla, in the Crimean War period, received the first Victoria Cross. It was during the bombardment of Bomarsund that a live shell was thrown by the enemy on to the deck.

Mate Lucas picked it up and threw it overboard as if it were a football—showing a spirit which afterwards carried him through the service to the rank of rear admiral.

A similar deed is reported of Captain William Peel, who lifted a shell with its burning fuse from among several powder cases outside the magazine at Sebastopol and threw it over the parapet, saving the magazine itself and the lives of many men. The shell, it is said, burst as it left his hands.

The Crimean furnished a long list of Victoria Cross men—English, Scotch, Irish—who more than met the necessary qualification of "conspicuous bravery or devotion to the country in the presence of the enemy."

A fine thing is remembered of Lieut. (afterward Major-General) Teesdale, who, after gallantly leading the final charge at Kars, "at a terrible risk to himself," flung himself among several infuriated Turkish soldiers, and prevented them from killing wounded Russians lying outside the works. Mr. Wilkins notes that this act of courage and humanity was witnessed and gratefully acknowledged by General Mouravieff, the Russian commander.

The Indian Mutiny added largely to the number of wearers of the decoration. One of them, William McBean, of the Ninety-third Highlanders, was the man who, unsupported, attacked and killed eleven of the enemy in the main breach of the Begum Bagh, at Lucknow, thereby winning the Victoria Cross.

McBean was an Inverness plowman before he enlisted, and rose from the ranks to command the regiment, and died a major-general. It is said of him that when he first joined the regiment he walked with a rolling gait, and the drill corporal was rather abusive with him when learning his drill. At last he became so offensive that another recruit proposed to McBean, who was a very powerful man, that they should call the corporal behind the canteen in the barracks yard and give him a good thrashing, to which proposal McBean replied: "Toots, toots, man! That would never do. I am going to command this regiment before I leave it, and it would be an ill beginning to be brought before the colonel for thrashing the drill corporal." McBean kept his purpose, and did live to command the regiment, going through every rank from private to major and general.

Another winner of the Victoria Cross at that place and period was "Lucknow" Kavanagh, a civilian who, stealing in disguise through the Sepoy lines, carried to the relieving force Outram's plans for concerted action, and who guided its columns to the residency by a safer route than they would have otherwise taken. A more thrilling story even than this is told of another civilian who won this decoration in a night of dauntless heroism. This was Ross Louis Mangles, a magistrate at Patna, who volunteered to serve with a little force sent to relieve the garrison at Arrah—a garrison of 65 men, holding out against 4,000 mutineers. The relieving party fell into an ambush, and was obliged to retreat under a merciless fire from the Sepoys. Mangles was wounded at the first attack, but disregarded his own hurt to help the surgeon in caring for the others who were injured.

He was a magnificent shot, and kept a hot fire from his post upon the enemy; a little knot of men he kept together handing him loaded muskets. During the retreat a soldier of the Thirty-seventh had been shot, and as he laid on the ground implored Mangles not to leave him, well knowing that death, not in too fast or painless a manner, would be his on the arrival of the mutineers.

Under a hail of lead Mangles turned to the man, bound up his wounds, and though no food had passed his lips for twenty-four hours, and no sleep had he had for forty-eight, yet he lifted him upon his back and marched away with him.

The man he carried was as big as himself; the ground over which he marched was swampy, rough and dangerous, yet for six long hours did he tramp, only putting down his heavy burden to stand over him firing at the harassing enemy

to keep them in check and enable him to accomplish his act of mercy and of love. At last he reached the river, into which he plunged, holding up his comrade until he could get him into a boat, when, under medical care, his life was eventually saved. This story of as fine an act of English heroism as has ever been recorded, was only brought to light by the surgeon, to whom the man recorded his marvellous deliverance.

It was not until a year had elapsed that the Governor-General heard of the deed, about which no word had been breathed by the young magistrate. It was then at Lord Canning's emphatic request that the V. C. warrant was ordered to include not only military and naval men, but "soldier-civilians" like Mr. Mangles. He and "Lucknow" Cavanagh were the first of these to receive the decoration.

He is to be pitied whose pulses do not hasten over the story of the famous defence of Rorke's Drift, when four private soldiers—Henry Hook, John Williams, and Robert and William Jones—held the burning hospital against the furious Zulus, and saved most of the wounded. Hook and Williams were the only unhurt men in their part of the building, and were forced to escape from room to room, carrying the wounded one by one in their arms. The rooms had no intercommunication, and so one man cut holes in the partition with a pickaxe while the other held the outer door, rifle in hand. The last room nearest the laager had for its only exit a window so small that Williams was obliged to enlarge it with his pickaxe to get the wounded through it.

Hook, meanwhile, defended the hole in the wall through which they had come, the Zulus stabbing at him through blinding and almost suffocating smoke. When the window was enlarged Williams lifted the patients through into the laager. Then he himself followed, pulling Hook after him, just in time to evade a final rush of the Zulus. Hook's heroism won him not only the Victoria Cross, but a substantial promotion, and later a post on the staff of the British Museum. He died in London a short time ago.

To Our Subscribers.

Have you sent us your renewal subscription for 1907? If not, don't delay.

We also ask you to take notice and see if the address label of your paper is changed within three weeks from date of remitting; if not, write us, giving full particulars.

In writing us, please deal with only one subject—subscription, advertising or editorial—on each sheet of paper, and also sign your name and address on each sheet.

Our special offer to old subscribers to get their own subscription free for 1907 is still good. If you have not yet secured the two new names, start out for them to-day. The magnificent Christmas number will be sent to all new subscribers while the supply lasts.

We have received hundreds of flattering testimonials about the Christmas number, many saying that it is the best published in America for 1906. The cost of the illustrations and artists' work alone in the Christmas number amounted to over eighteen hundred and fifty dollars.

Mr. Jas. S. Black, of Bexley, says: "We should surely rejoice to get the best farmer's adviser and instructor printed in Canada once a week for only \$1.50 per year, with such a beautiful Christmas number."

To Develop an Irish Draft Breed.

According to a report of the United States Consul at Cork, an effort is being made to perpetuate the old Irish type of draft horse, the distinctive type and character of which have been threatened by infusion of draft blood from across the channel. The horse sought is one standing at least 15 hands high, and displaying evidence of capacity for farm and harness work. Owners of suitable mares are invited to present them for inspection, looking to enrollment in a new studbook. It is stipulated that the mares must show no evidence of Clydesdale or Shire blood, presumably to avoid the element of variation or departure from desired type which such breeding would probably introduce. Owners of selected mares must undertake to breed them to Irish draft stallions selected under the scheme, to offer the produce for future inspection, and to keep approved foals for breeding purposes. The Department of Agriculture will provide free service for approved mares and purchase approved foals.

When Grandma Went to School.

Still in memory's cluttered garret hangs a painting, rich and rare,
Of a rearing lad and lassie, and an old gray, gentle mare,
That recalls the scenes of childhood—summer mornings, soft and cool—
And the unforgotten pleasure when your grandma went to school.

Life another song was singing, both our hearts were blithe and gray;
And whenever, bright and early, I would call for her, she'd say,
With a smile of satisfaction, "Bill, I'm sure you're very kind"—
Then away we'd canter, slowly—she in front and I behind—

Over meadows, clover-clustered, down the long leaf-laden lane,
On the ancient country turnpike, on the hot and dusty plain,
Through the midway pool, where, somehow, she'd seem overcome with fright,
And I'd tell her not to worry, but to "grab and hold me tight!"

How our voices rang with gladness, how our laughter mocked the birds,
How the love that lit our fancies seemed too deep for empty words!
How the other boys, in envy, lured me on to break each rule,
Just to know the trancing joy I felt when grandma went to school!

Father Time, turn back your pages! change these silver locks to gold!
Let me live once more the love-life of those dear, dead days of old!
Not these dim, delusive day-dreams—dreams too beautiful to last,
When the heart is painting pictures of the pleasures that have passed—

Just to see her, trim and dainty, in her little gingham gown,
Just to hold her hand in mine, as then, and read her eyes of brown,
Just to hear her say she loved me, and to answer her caress
With a something less than heaven, perhaps, but something more than "yes."

How that old emotion haunts me! How I thrill at thought of it!
How I feel a youthful flutter, as her fairy features fit
Through the softly swaying shadows, where the locust blossoms wave,
Through the moonlight of my memory—just a shadow from the grave!

Ah! the old gray mare is waiting, and the morning sun is high,
And the schoolhouse bell is ringing, from the belfry in the sky,
And I see the same old turnpike, meadow, plain and midway pool—
As my fancy calls her back from heaven to ride with me to school.

—Robert Mackay, in Success.

On the Hills of Long Ago.

Your cheeks were winter roses,
Your eyes were like the stars
That shone above the meadows
Beyond the pasture-bars;
Your laugh was sweeter music
Than any bird had sung,
And, oh, your heart was wild and free
And innocent and young.

We sought the berried holly,
The beaded mistletoe,
With feet that never wearied
Across the Christmas snow,
And climbing, climbing skyward,
Just at the end of day,
How many a league below us
We left the world away!

Firelight to-night—and ashes,
Yet still, as the Yule-log dies,
I wait for your girlish laughter,
I see but your frank brown eyes,
Somewhere beyond the darkness,
Somewhere you wait, I know,
The step of your missing playmate
Over the Christmas snow.

—Reginald Wright Kauffman, in Saturday Evening Post.

Fairs and Exhibitions Meeting.

The annual meeting of the Ontario Association of Fairs and Exhibitions will be held in the City Hall, Toronto, on Wednesday and Thursday, February 20th and 21st. Arrangements have been made with the Eastern Canadian Passenger Association for single-fare rates on the Standard Certificate plan.

THE Savings of Years

Should never be risked in uncertain investments. Much better to be SURE of your money and reasonable interest, than to risk loss of both through the unsafe depository or any get-rich-quick scheme.

THE BANK OF TORONTO

in its Savings Department offers a perfectly safe depository for money. Its large resources, its conservative management, and experience of over fifty years, ensure all depositors and other customers an unexcelled banking service.

Interest Paid on all Savings Balances Twice a Year.

THE BANK OF TORONTO

Capital - - - \$ 4,000,000
Reserve - - - 4,500,000
Assets - - - 37,000,000

HEAD OFFICE, TORONTO, CAN.

MARKETS.

Toronto.
LIVE STOCK.

Receipts have been light at the City and Junction live-stock markets during the past week, not more than 100 carloads being offered, all told. The bulk of the cattle were of the export class. Trade was good in all classes of live stock, with prices firmer for shippers.

Exporters.—Prices ranged from \$4.50 to \$5.15 per cwt., the bulk selling at \$4.60 to \$4.85; export bulls, \$3.50 to \$4.25 per cwt.

Butchers.—Quality generally not good. Picked lots sold \$4.25 to \$4.37½; best loads, \$4 to \$4.20; medium lots, \$3.60 to \$3.90; common, \$3.25 to \$3.50; cows, \$3.25 to \$3.75; canners, \$1.50 to \$2 per cwt.

Feeders and Stockers.—Trade dull. Few offering, and seemingly few wanted. Steers, 1,050 to 1,150 lbs. each, are worth \$3.50 to \$3.90 for fair to good quality. Stockers are worth from \$2.50 for common to \$3 and \$3.25 for good.

Milkers and Springers.—Only a limited number were offered, which were of medium quality generally. Prices ranged from \$35 to \$50 each.

Veal Calves.—Few offering; market strong at \$3 to \$6.50, with an odd one now and again at \$7 per cwt.

Sheep and Lambs.—Light deliveries met a strong market. Export ewes, \$4.75 to \$5 per cwt.; rams and culls, \$3 to \$3.75 per cwt.; lambs, \$5.50 to \$6.50, the latter price being paid for choice lots of ewes and wethers for export purposes.

Hogs.—As predicted in our last letter, prices have again advanced 25c. per cwt. Selects are firm at \$6.40; lights and fats, \$6.15 per cwt., with market firm. Drivers are paying the farmers all over the country \$6 per cwt., at their nearest point of delivery.

Horses.—At the Canadian Horse Exchange, on Monday, Mr. Carroll conducted a very successful sale, it being the last of the year. The horses offered, generally speaking, were of good quality, and sold at about the same quotations as for last week. Dealers report farmers as asking too high prices.

BREADSTUFFS.

Grain.—Wheat—No. 2 white, 70½c.; No. 2, mixed, 70c.; No. 2 red, 68c. Manitoba, No. 1 Hard, 82c.; No. 1 Northern, 80c.; No. 3, 78c.

Corn.—No. 3 yellow, sellers, 49c., at Toronto.

Oats.—No. 2 white, 35½c.; No. 2, mixed, 35c.

Rye.—71c.

Barley.—No. 2, 50c.; No. 3X, 49c.; No. 3, sellers at about 47c.

Peas.—No. 2, 79c. bid; sellers, 81c.

Buckwheat.—53c. offered.

Bran.—\$18 to \$19.

Shorts.—\$20 to \$21.

Flour.—Manitoba patent, \$3.75, track, at Toronto; Ontario, 90 per cent. patents, \$2.70 bid for export; Manitoba patent, special brands, \$4.50; strong bakers', \$4.

COUNTRY PRODUCE.

Butter.—Common grades more plentiful, with prices slightly easier. Creamery, pound rolls, 27c. to 28c.; creamery boxes, 25c. to 26c.; dairy pound rolls, 24c. to 25c.; tubs, 22c. to 23c.; bakers' tub, 17c. to 18c.

Eggs.—New-laid, 30c.; cold-storage, 22c. to 23c.

Cheese.—Market unchanged. Large, 14c.; twins, 14c. to 14½c.

Honey.—Strained, 12c.; dozen sections of comb, \$1.75 to \$2.60.

Evaporated Apples.—9c. per lb.

Potatoes.—Prices easier at 75c. to 80c. per bag for New Brunswick Delawares, for car lots, on track, at Toronto.

Poultry.—Receipts moderate; prices firm as follows: Turkeys, 14c. to 15c. per lb.; geese, 10c. to 11c.; ducks, 10c. to 11c.; chickens, 8c. to 9c.; old fowl, 6c. to 8c.

Hay.—Prices easier. Baled hay, on track, \$11.50 to \$12.50 for No. 1, timothy.

Straw.—Baled, on track, \$6 to \$7.

Beans.—Hand-picked, \$1.60; prime, \$1.45 to \$1.50 per bushel.

SEEDS.

Market steady. Prices unchanged, as follows: Alsike, fancy, \$6.30 to \$6.60; alsike, No. 1, \$6 to \$6.20; alsike, No. 2, \$5.25 to \$5.40; alsike, No. 3, \$4.50 to \$4.80; red clover, No. 1, \$7.20 to \$7.50; red, No. 2, \$6.50 to \$6.90; timothy, No. 1, \$1.50 to \$1.80; timothy, No. 2, \$1.20 to \$1.40.

HIDES.

E. T. Carter & Co., 85 Front St., have been paying the following prices: Inspected hides. No. 1 steers and cows, 11½c.; No. 2 steers and cows, 10½c.; country hides, cured, 10½c. to 10½c.; country hides, green, 9½c. to 9½c.; calf skins, No. 1, city, 12c.; calf skins, No. 1, country, 11c.; lamb skins, each, \$1.10 to \$1.20; horse hides, \$3.50 to \$3.75; horse hair, No. 1, per lb., 36c.; tallow, per lb., 5½c.

Montreal.

Live Stock.—The British cattle markets were in good shape last week. Glasgow reported a keen demand for good stock, over two hundred Canadians being offered. Prices ranged from 13c. to 13½c. per lb. Prices were 8½c. to 9c. per lb. Liverpool cabled Canadian steers at 11½c., and ranchers at 10½c. In Montreal offerings were fairly heavy; prices firm. Choicest cattle, 4½c. and 4½c. per lb.; good bringing 4c. to 4½c.; fair, 3½c. to 3½c., and common, 2½c. to 3c. per lb. Very few sheep and lambs; 3½c. per lb. to 4c.; choicest stock, 6c. and over; good stock ranging down to 5½c. For some time past the receipts of hogs has been very light, and the market has shown a stronger tendency; demand keen, at 6½c. to 6½c. per lb., for selects, weighed off cars.

Horses.—There is a good active demand for horses. The recent weather has been very hard on all classes of animals, and this, with the big holiday delivery trade, has stimulated a buying movement. Besides the city trade, there is also a fair demand from the lumber camps, as well as from other out-of-town sources. Apparently, there are very few horses left in dealers' stables here, and these are bringing firm prices. Throughout the country, farmers are demanding high prices. It is probable that there would have been an advance in price ere this, were it not for the extremely high prices at which hay is held. Prices are as follows: Heavy-draft horses, weighing from 1,500 to 1,700 lbs. each, \$250 to \$300 each; light-draft, weighing 1,400 to 1,500 lbs. each, \$200 to \$250 each; express horses, 1,100 to 1,300 lbs., \$150 to \$200; common drivers, \$100 to \$150; old broken-down horses, \$50 to \$100 each, and choice driving or saddle horses, \$350 to \$500.

Dressed Hogs, Provisions, etc.—Owing to the firmness of the market for live hogs, dressed have shown a slight advance. The offerings have been light, and market is in good shape. Fresh, abattoir-killed stock is 9½c. to 9½c. per lb., country-dressed being from 8½c. to 8½c. Smoked meats moderately active at 12c. to 13½c. per lb. for large hams, and 11c. to 14½c. for small. Bacon is steady at 10½c. to 11½c. for green and long clove, and 12½c.

to 13½c. for spiced roll, boneless, and 15c. for finest smoked. Barrel pork is rather dull at \$20.50 to \$23 per bbl. Lard is 12½c. to 13c. per lb. for pure.

Poultry.—The market for poultry is now dull. Quite a lot of holiday stock was carried over by merchants. Good stock might now be had for 10c., while good turkeys would not bring more than 12c. to 13c. Finest chickens are offered at 10c. to 10½c., and fowl at 8c. to 8½c. Ducks are considered to be worth about 11½c. per lb. With an improvement in the weather, a better market is looked for. In a few days, the holiday surfeit will have passed, and the market will then get into good shape again.

Hides, Tallow and Wool.—Hides show a decline in sympathy with the American markets to which the exports from Canada are sent. Prices: 9½c., 10½c. and 11½c. per lb., for Nos. 3, 2 and 1, respectively, to farmers, and re-selling to tanners at ½c. advance on these figures. Calf skins steady at 10c. for No. 2, and 12c. for No. 1, and lamb skins firm at the recent advance, being 95c. each. Rendered tallow shows no change, being 3c. to 5c. per lb., and 1½c. to 3c. for rough. Wool holds steady at 26c. to 28c. for Canada fleeces, tub-washed, and 18c. to 20c. in the grease; Canada pulled, brushed, 30c., and unbrushed, 27c. to 29c.; pulled lambs, brushed, 30c. to 32c., and unbrushed, 30c. per lb.

Cheese.—Market quiet. Dealers are asking firmer prices. A few tail-ends appear to be left, and for these 12½c. would be paid, while holders are asking ½c. For early October makes, 12½c. to 12½c. is asked.

Butter.—Market not so brisk as it was. Prices are by no means lower, but they can hardly be called strong. There appears to be a feeling in the trade that the anticipated arrivals of Canadian butter from England will be fairly heavy. The make in Canada is almost sure to be small. Butter selling in moderate lots. Choicest, 26c., and good to fine, 25c. to 25½c. Dairies very scarce, at 21c. to 23c. per lb.

Eggs.—Active demand for the season of the year. Large quantities of eggs were reported to have been turned over. Prices of limed and cold-store eggs held steady to firm, at 20c. to 21c. for limed, and 21c. to 23c. for cold-store, selects being rather firmer, at 25c. to 30c., according to selection.

Potatoes.—Market shows practically no change. Offerings fairly liberal. Prices are about 70c. to 75c. per 90 lbs., carloads, on track, according to quality, and 85c. to 90c. per bag of 90 lbs., delivered into store, in a jobbing way.

Grain.—Oats are in slight demand, at 42½c. for No. 2, 41½c. to 42c. for No. 3, and 40½c. to 41c. for No. 4, store. No. 2 peas are 91c. per bush., and No. 1 Northern Manitoba wheat, 86½c. per bush., store, and No. 2 white winter, 78c. There is a slight demand for oats.

Hayseed.—Alsike nearly all in, and dealers are offering 25c. per bushel more to secure the last of it, or \$5 to \$6.50 per bushel of 60 lbs., country points. Timothy and red clover seem to be waiting on the cold weather. Dealers are offering 25c. more for red clover, or \$7 to \$8 per bushel, while \$1.25 to \$2 is being offered for timothy, per bushel of 48 lbs. The latter has not begun moving as yet, but is expected to become active this month.

Flour and Feed.—Manitoba strong bakers' is slightly easy in price, and millers are quoting it at \$4 to \$4.10 per bbl., in bags, patent being steady at \$4.60. Mill feed is fairly active, and prices show no change. Manitoba bran, in bags, is steady at \$21, and shorts at \$22, bagged. Farmers are not feeding so much as a short time since.

Hay.—More hay and more cars are offering, but the Grand Trunk still maintains its embargo against bringing hay into the city. One dealer is ready to sell No. 1 timothy at \$14.50 to \$15 on spot; No. 2, \$1 less. The situation is considered to be rather easier, but stocks continue very light indeed, and it is hardly likely that prices will go much lower.

Puffalo.

Veals.—\$4.25 to \$9.75.

Hogs.—Heavy, mixed and Yorkers, \$6.75; pigs, \$6.80; roughs, \$5.75 to \$6.

Sheep and Lambs.—Lambs, \$5 to \$8; yearlings, \$6.50 to \$6.85.

Chicago.

Cattle.—Common to prime steers, \$4 to \$7.20; cows, \$2.75 to \$4.75; heifers, \$2.60 to \$5; bulls, \$2.40 to \$4.50; calves, \$2.75 to \$8.50; stockers and feeders, \$2.40 to \$4.50.

Hogs.—Good to choice, heavy, \$6.45 to \$6.50; strong-weight butchers', \$6.40 to \$6.50; packing, \$6.30 to \$6.45; mixed light, \$6.30 to \$6.40; bulk of sales, \$6.35 to \$6.45.

Sheep and Lambs.—Sheep, \$3.75 to \$6; yearlings, \$4.60 to \$6.75; lambs, \$6 to \$7.85.

British Cattle Market.

London.—Canadian cattle in the British markets are quoted at 11c. to 12½c. per lb.; refrigerator beef, 8½c. per lb.

GOSSIP.

A note from Messrs. Hamilton & Hawthorne, of Simcoe, Ont., the well-known importers of Clydesdales and Percherons, informs us that Mr. Hawthorne sailed, on December 29th, for France and Scotland for a new importation of stallions of these breeds, which will be of the usual high-class quality, and the arrival of which will in due time be announced in these columns.

SALE DATES CLAIMED.

Jan. 15th.—W. Doherty, Clinton, Ont., dispersion sale of Shorthorns.

Jan. 16th.—A. H. Jacobs, Blyth, Ont., dispersion sale of Shorthorns.

Jan. 23rd.—Valentine Ficht, Oriel, Ont., Cotswolds.

Jan. 31st.—M. J. McGillicuddy, Kenilworth, Ont., Shorthorns.

For pumping or running cream separators, churns, etc., etc., a gasoline engine of suitable size and not too expensive would be a most desirable help. Just such an engine is advertised in this issue by the Gilson Mfg. Co., York St., Guelph, Ontario. If interested, look up the advertisement, and write for catalogue.

Messrs. S. J. Pearson, Son & Co., of Meadowvale, Peel County, Ont., near Streetsville Junction, on C. P. R., breeders of high-class Scotch and Scotch-topped Shorthorns and Large English Berkshires, report numerous enquiries and satisfactory sales during the past year. In ordering a change in their advertisement in this paper, they write: "We would like to show you some of the letters received from customers who have purchased from us by mail order, expressing their satisfaction with the stock sent them. We have a number of good young bulls and heifers for sale, also young sows, bred; boars, ready for service, and pigs, eight to twelve weeks old, singly, or pairs not akin."

TRADE TOPIC.

HOW TO GET FARM HELP.—In this issue, readers will find an exact copy of the Salvation Army form of application for farm help. We have frequently called the attention of those needing help to the admirable system in operation by the Army, and advised them to apply at once. Again we throw out a timely warning, and urge farmers and others needing help to cut out this form, fill in carefully, and send to Brigadier Thos. Howell, Albert St., Toronto, at once. The opening of British Columbia for Army immigration and the recent liberal offer of the Rhodesia Syndicate in South Africa, of 400 miles of excellent land there for colonization, will draw a great many who otherwise would come to Ontario. Canada has done nobly in the cause of immigration, and we trust will continue to extend a welcome to those who will come to this fair land. Last year the Army brought out about 12,000 persons, and we believe more are expected in 1907. Staff Capt. McGillivray, the immigration officer at London, for Western Ontario, is very anxious that sufficient applications will be in Toronto by Jan. 30th, 1907, to take the first ship's crowd, which will arrive about March 1st. Then will follow other ships every fortnight. As the first shipload is promised for Ontario, the Army Immigration office is anxious to have the applications in at once. Forms will be sent on application.

steers, \$1 to 4.75; heifers, \$1.40 to \$4.50; calves, \$1.00 to \$3.00; hogs, \$3.75 to \$6; lambs, \$6 to \$10.



Life, Literature and Education.

Our Literary Society.

STUDY V.

It is now time, we think, to give our Literary Society members something harder to do, something which may put them on their mettle, as it were, and bring out more fully their powers of thought.

Whether we are setting you too hard a task or not, will eventually appear, yet we trust that we shall not be disappointed, and that the study of this poem will bring out the very best thought of which rural Canada is capable.

Elegiac Stanzas.

[Suggested by a picture of Peele Castle in a storm, painted by Sir George Beaumont, and written soon after the death, by shipwreck, of Wordsworth's brother John.]

I was thy neighbor once, thou rugged Pile! Four summer weeks I dwelt in sight of thee: I saw thee every day; and all the while thy Form was sleeping on a glassy sea.

How perfect was the calm! it seemed no sleep; No mood, which season takes away, or brings: I could have fancied that the mighty Deep Was even the gentlest of all gentle things.

Ah! THEN, if mine had been the Painter's hand, To express what then I saw; and add the gleam, The light that never was, on sea or land, The consecration, and the Poet's dream; I would have painted thee, thou hoary Pile, Amid a world how different from this! Beside a sea that could not cease to smile; On tranquil land, beneath a sky of bliss.

A Picture had it been of lasting ease, Elysian quiet, without toil or strife; No motion but the moving tide, a breeze, Or merely silent Nature's breathing life.

Such, in the fond illusion of my heart, Such Picture would I at that time have made: And seen the soul of truth in every part, A steadfast peace that might not be betrayed.

So once it would have been,—'tis no more; I have submitted to a new control: A power is gone, which nothing can restore; A deep distress hath humanized my Soul.

Not for a moment could I now behold A smiling sea, and be what I have been: The feeling of my loss will ne'er be old; This, which I know, I speak with mind serene.

Then, Beaumont, Friend! who would have been the Friend, If he had lived, of Him whom I deplore, This work of thine I blame not, but commend; This sea in anger, and that dismal shore.

O 'tis a passionate Work—yet wise and well, Well chosen is the spirit that is here; That Hulk which labors in the deadly swell, That rueful sky, this pageantry of fear!

And this huge Castle, standing here sublime, I love to see the look with which it braves, Cased in the unfeeling armor of old time, The lightning, the fierce wind, and trampling waves.

Farewell, farewell the heart that lives alone, Housed, in a dream, at distance from the Kind! Such happiness, wherever it be known, Is to be pitied; for 'tis surely blind.

But welcome fortitude, and patient cheer, And frequent sights of what is to be borne! Such sights, or worse, as are before me here,— Not without hope we suffer and we mourn.

QUESTIONS.

- 1. (a) Describe the picture of Peele Castle as the poet saw it. (b) Describe the picture of the castle as the painter saw it and painted it. 2. (a) What two views of human life correspond with these two pictures? (b) Why did the poet change his opinion about life? Quote the passage which shows that he did so. 3. Which do you consider the most poetical stanza in the poem? Give reasons for your answer. 4. (a) Explain as fully as you can the meaning of "the light that never was on sea or land." (b) What words are in apposition in lines 2, 3, 4, stanza 4? Why does the poet use so many terms in trying to bring out his idea? 5. What do you understand by "silent Nature's breathing life"? 6. (a) Why does Wordsworth make the assertion in line 4, stanza 9? (b) Who is meant by "Him whom I deplore"? (c) Explain "Passionate work," "Hulk which labors in the deadly swell," "Pageantry of fear," "Cased in the unfeeling armour of old time," "the Kind." 7. Explain fully the meaning of the last two stanzas. 8. Quote from any other poet who has given expression to thoughts similar to any expressed or suggested in Peele Castle. 9. Show that the tone and diction of the poem are characteristic of Wordsworth. 10. What impression has the study of the poem left on you, (1) as to mood; (2) as to beauty? 11. Comment on the rhyme and meter of this poem. 12. Write a short, critical essay on the poem, embodying thoughts which you may not have found opportunity to express in answering the above questions. [Note.—Questions 2, 9 and 10 have been taken directly from a paper set for departmental examinations by Mr. S. J. Radcliffe, London Collegiate Institute.]

Kindly send in your papers that they may reach this office on or before January 31st.

Marks will be given for each question, and books or L. S. pins, as preferred, sent to those who succeed in obtaining the greatest total number.

How to Keep Young.

Have you ever stopped to marvel at that most inexplicable thing in the universe, the human brain?—that convoluted mass of soft, spongy gray and white matter, so sensitive that even one tiny blood-clot on it may be enough to transform its owner to a raving maniac, yet apparently the seat of thought, of the will, of all that makes man really powerful.

Moreover, have you ever stopped to consider that the brain is a part of the body, to be treated with discretion as other parts of the body are? You know very well that if you were to tie up an arm and carry it so for a number of years it would become powerless. Exercise is the condition of its usefulness. Similarly, exercise is the condition of a useful brain.

You cannot exercise your brain

without gaining in brain-power. The study of a poem, the following out from cause to effect of an occurrence in nature, or a political situation, the wrestling over a problem in mathematics, may seem to you but trifling things; yet it is undeniably true that in each case power to think in all other directions has been acquired, and with it an impetus, however small, to success in things far remote from the poem or the political situation, or the occurrence in nature. When, however, such effort becomes habit, when that one small impetus becomes multiplied indefinitely, the influence on the whole life may be imagined. One water-drop coming over Niagara Falls does not count for much, and yet just water-drops multiplied indefinitely produce the roar of the great cataract, and are sufficient to furnish power to a whole countryside. Whatever the career in life one may have chosen, intelligent thought, as well as industry, is essential to success. The successful business man must be able to think out all the pros and cons of the subjects which touch his business; similarly the successful physician, lawyer, farmer, etc. Should any of these, then, neglect that continual brain drill, in some way, which will give him power to think, to succeed? Of course, it is possible to overwork a brain, as well as a body; cases of mental collapse are not unknown. Yet it may be asserted as a general truth that the man who thinks, with proper care of his health otherwise, lives longer and carries his youth and mental alertness with him longer than the man who does not so develop himself. For one Sir Walter Scott or Southey, a hundred Herbert Spencers, and Victor Hugos, and Thomas Carlyles, and Goldwin Smiths, may be pointed out. Think of Goldwin Smith writing last year at far over eighty years of age, a book which has challenged the attention of the world. On the contrary, among people who cannot read or write, and who, consequently, have much less incentive to thought, instances are quite common of "childishness" setting in comparatively early in life. With childishness and uselessness comes practically the end of life. Why, then, should any man die before his time? To the wise the moral needs no pointing out: Mental exercise, physical exercise, a proper regard for the rules of health; a vigorous and useful life, extending into a vigorous and useful old age; a death in the fulness of time, with a creditable life-work accomplished.

Forgotten Knowledge.

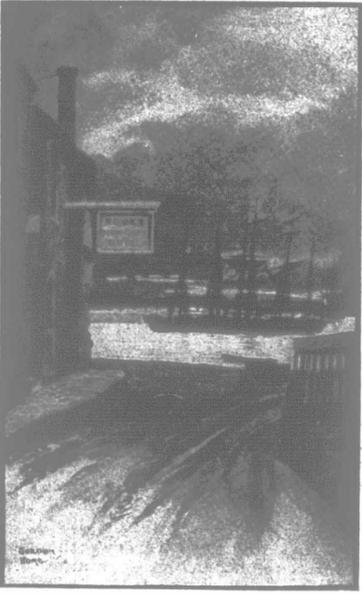
To many people, forgetfulness in regard to things read or even studied is a source of real annoyance. "What is the use?" say some of these, disconsolately, "I can't remember anything." And yet there is a great "use." The benefit from reading or study is not all confined to the concrete thing read or studied. Ideas then acquired or stimulated beget other ideas: these, in turn, still others; and so on, in ever-widening circles, the whole mind becoming broader, more capable because of that original, apparently wasted effort. Closely speaking, there is no such thing as forgotten knowledge.

Our Letter from the Home Land.

I am sending one or two little pictures to show you the outlook from my window, although I am sorely afraid that in the crowded columns of our "Farmer's Advocate" room can hardly be found for them. Teignmouth is surrounded by hills, not of any very great height, but high enough to add to the picturesqueness of the place and to be a pretty heavy tax upon any but young legs to climb. To-day, for instance, I was intent upon getting up to the moor immediately behind us—Haldon Moor—which is part of the continuous chain of moorlands which connects it with Dartmoor itself. To do this, I chartered a funny little pony-chair, with the boy driver perched up in front, and a lively little "Bessie" between the shafts. By sundry chirrups, g'langs, and whip-crackings, which latter seldom imposed upon the small animal in front of us, we mounted the hilly road, which finally brought us to the highest level we could hope to attain in the limited time allotted to us, and, resting at the cross-roads, gazed upon the fine view spread out before us, taking into our lungs deep breaths of the fine moorland air which blew almost as a gale, but which, whilst treating us without the slightest ceremony and threatening to convey one's bonnet over to Chudleigh, or across a gap to the tower of Bishopsteignton Church, brought with it a bracing invigoration which repaid one for the struggle. There were in the hedgerows, as we passed them, a goodly sprinkling of golden gorse, big fronds of ferns, holly bushes, ivy, and some rows of closely-grown pines, which seemed to be in great commotion as the breeze stirred them. I noted, too, some really fine residences, built by those who prefer to live within reach of the moorland breezes rather than in the more confined air of sheltered, sea-girt Teignmouth; and here and there a Devonshire lane, with its promise of sweet violets and lovely primroses in the early spring. Dismissing my miniature chariot, a stroll upon the beach to the right of the lighthouse, passing the quaint little inn facing the harbor—a picture of which I will also send—and then a rest upon a bench in a corner of one of the shelters provided by the town council for the convenience of visitors, finished my pleasant morning. My eyes were constantly attracted by the color amongst the greenery of the well-kept grounds—not much, but enough to make it difficult to realize that King Winter reigns, with a sway so mild, however, that he does not meddle with the yellow marigolds, the plain or striped members of the snapdragon family, the fragrant wall-flowers, and even tolerates here and there a plucky geranium, which seems determined to hold its own to the last, in competition with banks of white—well, I do not know what to call them, but they form pretty fringes to the sterner vegetation which mounts sentinel behind the rocky bordering of the extensive promenade fronting the sea-wall. Not, I venture to assert, a poor show of flowers for the first day of December.

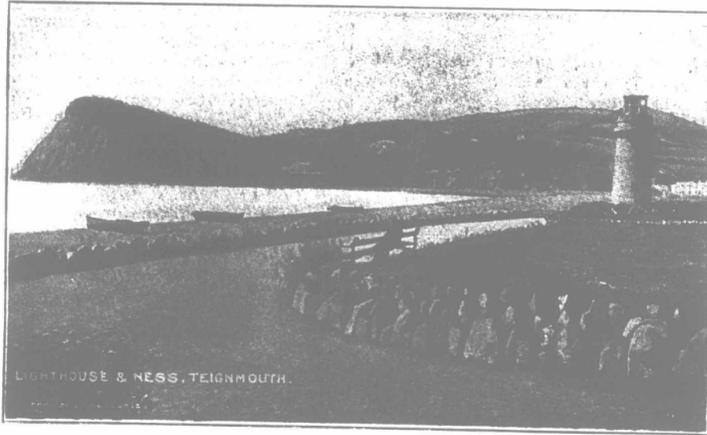
Seeing a kindly-faced old couple in part possession of a sheltered seat I desired to share, I asked, by way of introduction, "Can you tell me why those flags are flying to-day?" for there were flags of all kinds aloft from the coast-guard stand and other places. "Why, it is the Queen's birthday," was the reply, with a look of reproach at my ignorance. Then followed a reminiscent and most interesting talk. I was told how both husband and wife remembered well the coronation of Queen Victoria, how they had been married sixty-five years ago, and could I guess their ages? Of course I hazarded a guess, and was told that I was nearly ten years out in my reckoning, "for," said the husband, "I am in my ninetieth year, and she," patting her hand, "is not far behind me." So you like Devonshire?

he queried. "Well, so do we; it's our native county." And then, as in a duet, we sounded the praises of this lovely southern coast of England. "When I found myself getting old," confided my old gentleman, "I just left my business to my sons, and they are doing well at it, all prospering, and I have the comfort of seeing their success with my own eyes, without having any care or responsibility myself. Now, I can't help thinking," he continued, "that Queen Victoria lost a good deal of pleasure by not giving herself a chance to see what a splendid



A stormy sunset over Dartmoor. Looking up the Teign.

king her son is making, God bless him. Why, she might have been alive now, as we are." Of course, I did not part with my friends without offering the information that I had just come from Canada, a fact which I am proud to find gives even to the most insignificant of her sons or daughters a special claim to consideration in the mother country. Indeed, one cannot take up one's daily paper without finding throughout its columns or in broad headlines the familiar name. Let me quote some of them. Under the caption, "Garden Notes," I find the following: "It is very noticeable that most of the trees and shrubs which distinguish



Lighthouse and Ness, Teignmouth, Eng.

themselves by remarkable beauty of hue in autumn foliage come to us from North America. The enthusiasm of our kindred of the States and Canada for the splendor of their autumn time is easily understandable. The Maple Leaf Forever of Canada's national song well deserves its popular appreciation, judging from the resplendent crimson-scarlet with which Acer circinatum adorns our shrubberies where it finds a place.

Under the heading, "The King's Forces, Reservist Emigrants": "The War Office is giving some attention

to emigration as a possible opening for Reservists and ex-soldiers, and has received much useful information on the subject from the Commissioner for Canadian Emigration, who is of opinion that ex-soldiers and ex-sailors are very suitable emigrants. The experience of the Commissioner is that the sailor and soldier emigrants have been very satisfactory. It has been ascertained that £10 is sufficient to meet the expenses of an intending emigrant to Canada, a sum which could without difficulty be saved by a soldier or sailor whilst serving. General officers commanding have been informed from the War Office that they may now give permission for Army Reservists to reside in Canada."

It goes without saying that these and similar mentions must have a very special interest for a Canadian, and perhaps more especially for anyone associated, even in a very humble degree, with a paper so widely read and of such marked influence as "The Farmer's Advocate" in the Dominion. It will, therefore, be a duty, as well as a pleasure, to pass on, through my own corner in the "Home Magazine," all and sundry of such references to Canada as may appear to me as likely to be of interest to our readers, whether in accord with a Canadian point of view or otherwise, or, even as is more than probable, if I do not quite understand myself the full force of the argument used or the fact stated; for, in the matter of my daily paper, to quote President Lincoln, with reference, however, to his meals in the absence of his wife, "I kind of 'browse' round."

Wishing you all a very happy and prosperous New Year, I subscribe myself your old friend and comrade.
H. A. B.

Work as a Medicine.

One of the most noticeable things among the unemployed is the rapidity with which they age. The more delicately adjusted a piece of machinery is, the quicker it rusts out and goes to ruin when not running.

When the mind is not healthfully employed and constantly exercised, it ruins itself very quickly. There are many instances in history where great men, when deprived of liberty, when their employment was taken away from them, very quickly went to pieces. They were unable to sustain the shock.

Statistics show that great mental workers are, as a rule, long-lived.

Activity is conducive to longevity. There is nothing like having plenty of work—something to look forward to constantly, something to plan for, live for. There is nothing more fatal to growth and normal living than the monotony which comes from mental inaction, nothing more fatal to growth than stagnation. There are a great many semi-invalids in this country to-day who could probably be cured by the right kind of work, mental or physical, because they are invalids mentally before they are physically.—[Success.

Current Events.

Lieut.-Col. Clarke has resigned as Clerk of the Legislature of Ontario.

A revolutionary movement, looking to independence, is under way in Poland.

A new steam yacht, costing \$60,000, is being built for Dr. Oronhyatekha at Picton, Ont.

Mr. Charlemagne Laurier, M. P., half-brother of the Premier, was buried at St. Lin, Que., on Jan. 2.

A coal seam 80 miles up the Saskatchewan River from Edmonton is on fire, and is burning for miles, giving off intense heat.

The Provincial Government of Ontario is reported to be considering the advisability of establishing two new agricultural schools.

The first contingent of some 10,000 British immigrants which are to be sent to Ontario this year, arrived in Toronto recently, and have been distributed among the farmers.

Fourteen people were killed at Lodz, Russia, on New Year's Day in fights between the Nationalists and Socialists. The Prefect of Police at St. Petersburg was assassinated on January 3.

Four million people in China are starving by reason of famine, and the Government has decided to appeal to Europe and America for aid. In Russia, which has also suffered by reason of famine, 30,000,000 peasants are in need of assistance.

The Nobel gold medal, recently conferred on President Roosevelt by the Norwegian Government in recognition of his services in the interests of peace, has arrived at the White House. The prize-money, which approximates \$37,000, will follow.

Baroness Burdett-Coutts, an account of whose life recently appeared in "The Farmer's Advocate," is dead. The greater part of her immense fortune will go to her husband, Ashmead Bartlett, known since his marriage with the Baroness as Mr. Burdett-Coutts.

By the acceptance of the revised constitution, submitted to the National Assembly of Persia on Jan. 3, constitutional government is practically assured to that country. The Assembly can only be dissolved with the consent of the Ministers and two-thirds of the Senate, which is composed of thirty elected and thirty appointed members.

Fortunes in Picture Frames.

Some splendid picture frames may be seen every year at the Royal Academy exhibition, but the finest and costliest frame ever made for a picture was that which encloses the "Virgin and Child," in Milan Cathedral. It is made of hammered gold, with an inner moulding of lapis lazuli. The corners of this valuable frame have hearts designed in large pearls and precious stones. Some idea of its value may be gained when it is stated that the frame is eight feet long and six feet wide. Its estimated worth is £25,000. One of the pictures in the Vatican at Rome is in a frame studded with jewels. The picture is a valuable one, but the frame nearly equals the value of the painting.

Children's Corner.

Original Story Competition.

The boys carry off the honors this time. I suppose the girls were busy making Christmas presents, or the boys would not have found it so easy. The second prize is awarded more for the composition than for the story, which I do not think exactly illustrates the proverb. G. C. Duff won the boys' prize in the book competition last winter, and we must all congratulate him on his second success.

First prize.—G. Clarke Duff (age 12), Cookstown, Ont.

Second prize.—Wilmot Wilson (age 16), Georgetown, Ont.

Hon. mention.—Margaret Kelly, Edna Robinson, Ada Edwards, Loretto Kennedy.

The Honest Boy.

Jimmie Lee was a little boy whom everybody knew. His father and mother were both dead, and he was left an orphan; so his uncle and aunt took him to raise him. They had two children of their own, whose names were Walter and Albert Johnson. When his aunt and uncle took him, Jimmie was five years old. He now was seven, and, after Easter holidays, they said they would send him to school, where Walter and Albert went, which was about a mile away. The Monday morning after Easter, Jimmie started to school. At first, he hung back a bit, and did not play with the rest of the boys. However, by dinner time he was all right, and the boys all thought he was great fun.

He learned from the rest of the boys that in the evening the teacher always took down how many times the boys had spoken during the day. When the teacher called out, "Jimmie," he did not answer because he did not understand very well. "Jimmie, how many times did you speak to-day," said the teacher. "I don't know, sir."

"Did you speak ten times?" "Yes, sir."

"Any more?" "Yes, sir."

"That is very bad, Jimmie," said the teacher. "I shall have to mark you zero."

That evening, after they got home from school, Walter and Albert asked Jimmie to whom had he spoken so often.

"Oh," said Jimmie, "I asked that boy that sits in front of me for the loan of his knife, and I asked the boy that sits behind for the loan of his rubber, and a lot of other things."

"But," said Walter, in astonishment, "we don't call borrowing things talking, do we, Albert? If we did that, we should all speak more than ten times."

"I don't care," said Jimmie, "it's talking, and you are supposed not to talk. I won't tell a lie at all."

The teacher will, perhaps, say something about your being away behind in your class at the end of the month, if you keep on like this," said Albert.

Jimmie still stuck to what he had resolved to do, and always had a low mark. The teacher always looked very grim when Jimmie gave in his report, but never said anything. At the end of the month, Jimmie's standing was the lowest in the whole school, and the big boys laughed him quite a bit about his honesty," as they called it.

However, as this went on, month after month, the bigger boys began to grow ashamed of being taught so much by so small a boy, and began to respect him a lot more on account of his truthfulness.

That year, just a day or two before school closed for Christmas, the teacher called his pupils to order, and said:

"Now, children, I want to find out who is really the most honest boy in this school, and to the boy or girl whom all the children think to be the most honest, I will give a medal. Now, children, who is it?"

"Jimmie Lee!" they all cried, with one accord.

Jimmie was now called up to the front and presented with the medal amidst great applause.

So this is how a little boy showed a whole school how to act right, and proves the proverb that "Honesty is the best policy."

G. C. DUFF.

"Procrastination is the Thief of Time"

There once was a bright and handsome lad. He was his mother's only son, and he loved her, and tried to please her in everything and every way. However, he had one bad fault, and that was, he never was in a hurry to do as she asked him, but wanted to take his own time about it. If asked to rise in the morning, he would say, "Yes, in ten minutes." If his teacher told him it was time to study, he would say, "Yes, in ten minutes." It became a fixed habit of his that grew with him day after day,



An Interesting "Tale."

and his young playmates soon began to call him, "Little Mr. Ten Minutes." Alas, he never realized the danger of the habit which had grown up with him, or what harm would come to him by it in the future. When he became a man, he went into the army, and, after some time, became commanding officer over a company of men. While at this post of duty, his company were ordered to a fort which at the time seemed deserted. An officer tried to persuade him to return, as the enemy might come upon them at any time; but all in vain, for the habit of his early life was still with him, and he said, "There is no danger; let us have some refreshments, and start in ten minutes." In less than that time a band



"The Intruder"

(From a painting by F. Harnes, Meadowdale, Ont. Exhibited at Toronto Exhibition, 1906.)

of men rushed upon them, and the young man of whom I have told you was the first to fall by the sword.

Hence, we cannot but see the danger caused by procrastination, or the habit of delaying, if only for ten minutes. It may become even as dangerous and unfortunate to us as it did to that young man.

WILMOT WILSON.

Keep in mind the people who have courage, pluck, faith, resolution, and who never give up, rather than the pessimists who deny and whine.

The Letter Box.

Dear Cousin Dorothy,—I am a little country girl. I have about a quarter of a mile to go to school. We have two farms; the one we live on contains 89 acres, and the other 54 acres. We have nine milking cows and 21 young cattle. We have five horses; their names are: Bill, George, Prince and Maud; and for a driver we have a black named Fan. For pets, I have a dog named Collie, and a cat. We have 20 turkeys, 200 chickens, and 7 ducks.

IRENE BURCHIEL (age 10), Muirkirk, Ont.

Dear Cousin Dorothy,—I have four brothers and three sisters. We have five horses; their names are Charlie, Nettie, Prince, Frank and Victor. We have two kittens and one old cat. I live on a farm. I am sending some riddles:

Why does a sailor know there is a man in the moon? Ans.—Because he has been to sea.

Why does a hen know no night? Ans.—Because her son never sets.

When I wasn't looking for it I found it, and when I found it I sat down to look for it, and when I looked for it I couldn't find it, and because I couldn't find it I carried it home with me. Ans.—A thistle in the foot.

Greenock, Ont. MAY CONDY.

Dear Cousin Dorothy,—This is the first time I have written to you. I am nine years old. I am in the Second Reader. I learn grammar, geography and arithmetic. We have a large orchard and lots of fruit. I have a big dog. His name is Carlo. He watches for me to come home from school. We have six cows and one calf. We have two horses and two pigs and a lot of hens. I will close, wishing "The Farmer's Advocate" every success.

ROBERT KENT (age 9), Rollo Bay, East, P. E. I.

Dear Cousin Dorothy,—I live in the country with my father, mother, four brothers and five sisters, about seven miles from town. We milk twenty cows. Father makes butter and ships it to London. We keep six horses. Our driver's name is Darky. He is a faithful old beast, and is known by everybody for miles around. My sister, Joy, has two dogs and three cats. I and my sisters have good times gathering butternuts, walnuts and beechnuts in the fall. We live two miles from school. It

call Babe, and our man, George, has a horse named Peanuts.

VERA BONGARD (age 7), Crampton.

Dear Cousin Dorothy,—In reading "The Farmer's Advocate," I notice that you are receiving lots of nice letters from little boys and girls almost everywhere, and I read every one each week. We like "The Farmer's Advocate" very much. My father has taken it for a long time. My mother keeps all the copies for future reference. Sometimes we give some away to friends to read. I have two pet kittens, as white as snow; a dog named Bell, and a calf named Blossom. I have more than a mile and a half to go to school. I am almost through the Second Book. I have three brothers. We have five horses; their names are Charlie, Lucy, Dan, Duke and Prince. We have sixteen cattle and seventy-five sheep. Our farm is one hundred acres. It is five miles from the town of Uxbridge, on the G. T. R. I will close for this time, wishing you a Merry Christmas and a Happy New Year.

Uxbridge. MYRTLE PUGH (age 9).

Dear Cousin Dorothy,—I have never written to "The Farmer's Advocate" before. I go to school every day, and like my teacher very much. We are going to have a concert soon. I am in the Part II. I have a pet cat; its name is Tiddlewink. We have about 30 cattle and about 35 sheep and 2 horses; their names are: Kate and Doll. I have two sisters and one brother; their names are: Ivy, Grace and Bertie.

HAROLD J. McLEMON (age 7), Walter's Falls, Ont.

Dear Cousin Dorothy,—I like your paper very much. My father does not take the paper, but we keep a post office, and I always get my uncle's paper. I have two sisters and one brother; whose names are: Florence, Stella, and Willie. For pets, I have a cat. I call her Topsy. She stays out in the store nearly all the time. I live half a mile from school. I like my teacher very much. I am in the Senior Second Class. I will give a riddle:

What was beef the highest? Ans.—When the cow jumped over the moon.

IDA MARY MARSHALL.

Dear Cousin Dorothy,—I am a little girl, nine years old. I thought I would like to write to the Children's Corner. My papa takes "The Farmer's Advocate," and likes it very much. Merle, Mabel and I are going to school; Robert will be going to school next summer. We have two horses. The driver's name is Dot, and the other horse's name is Lucy B. Our dog's name is Sport. We have thirty-two pure-bred Bronze turkeys. There is a hill just outside our front gate, and we go coasting down as far as the bridge. We have two little twin brothers, one month old; their names are: George Burton and Frédrick Henry.

E. MARION HODGSON (age 9), Clandeboye, Ont.

Dear Cousin Dorothy,—I have read so many little letters in the Children's Corner that I would like to be a little cousin too. I have a mile to walk to school, and scarcely miss a day. I am going in the Second Book after Christmas. I am seven years old. I have three brothers; the oldest one is nine years old. We are always anxious to get "The Farmer's Advocate." My grandfather has taken this book for about forty years. NELLIE CLEMENT, Vanessa, Ont.

Dear Cousin Dorothy,—I enjoy reading the Children's Corner. We have 11 calves and about 150 hens and chickens. We have six horses; their names are: Floss, Gert, Fan, George, Jan, Maud. We have 100 acres. I go to school every day, and I am in the Third Book.

ALFRED H. HUSBAND (age 11), Ash P. O., Ont.

Pompous.—I would have you understand that I am a self-made man.

Sandy.—Weel, an' I'm glad o' that, mon.

Pompous.—Do you appreciate what that statement means?

Sandy.—Weel, noo, I dinna ken. But our dominie will have ane less act o' the Lord's to account for o' Sabbath!

The Quiet Hour.

Love Expressed Sacramentally

A woman . . . touched the border of His garment: and immediately her issue of blood stanch'd. And Jesus said, Who touched Me? When all denied, Peter and they that were with Him said, Master, the multitude throng Thee and press Thee, and sayest Thou, Who touched Me? And Jesus said, Somebody hath touched Me: for I perceive that virtue is gone out of Me.—St. Luke viii.: 43, 46.

What wonderful sacramental power there can be in a touch. Don't we all find that out at times? The multitudes may throng and press, touching one on all sides, but there is nothing sacramental in that heedless pressure. Then comes a touch with meaning in it—a touch of love—and the heart leaps responsively at the touch of a kindred heart. In Browning's "Any wife to any husband," the wife declares that if her hand can only touch her husband's, his heart can never withstand—

"The beating of my heart to reach its place."

But, let the hands drop apart, and—

"thou wilt sink,
Although thy love was love in very deed."

Unless there is "love in very deed," there can be nothing sacramental in a touch. Unless St. Peter had really loved his Master, the look which cut him to the heart would have meant nothing to him. Love is the reality, without which any sacrament would become a mere meaningless outward form, but love needs to be continually strengthened, refreshed and quickened by outward acts, which may seem trifling, and would, indeed, be entirely valueless without the love to make them sacramental. A costly gift from one person may be little valued, while a commonplace note from another may be treasured for a lifetime. In this, our way of valuing gifts, we are like God, who accepts gladly a simple cup of cold water given by love, but rejects the costliest offering in which there is no trace of love. But when love tries to keep strong and vigorous without any outward sign, it dwindles and dies. If you are away from home and seldom or never have any communication with your nearest relations, you can hardly fail to grow forgetful of them. If it is impossible to write, it is always possible to keep in touch with them by prayer. In and through Christ we can very really and effectively touch anyone. By prayer we can reach right into the heart of friend or enemy, though he may be at the other side of the earth—yes, or even at the other side of death. For we are all one Body, though part of the Body—the largest part—may be out of our sight above the clouds, yet we are as truly one with them as our feet are one with our

eyes. And especially in the great Sacrament of the Lord's Supper we can reach out a loving hand and touch, with thrilling, wonderful power, not only our Lord, but also those who, with us, are very members of His mystical Body, the Church. Then the doors of His Treasury stand open, and we may fill our hands with priceless gifts for our nearest and dearest.

"And then for those, our dearest and our best,

By this prevailing Presence we appeal;
O fold them closer to Thy mercy's breast,

O do Thine utmost for their souls' true weal;

From tainting mischief keep them white and clear,

And crown Thy gifts with strength to persevere."

The world needs sacraments, and we reach out instinctively to touch each other through them. Even the birds put on their brightest colors and sing their sweetest songs, reaching out in sacramental outward signs to get into touch with their fellows. So also the lad who is in what has been called "the necktie stage of life," tries the effect of a blue or a crimson tie, not to gratify his own vanity, but in order to please by an outward visible sign the woman who is his world for the time being. Even a little child with his clinging arms round your neck and his warm lips pressed to yours is expressing sacramentally the affection which no words can tell so effectively.

God Himself could not satisfactorily reach the men and women He had made without coming into close contact with them. The Incarnation, almost proves itself, for it fits so exactly our need.

'Tis the weakness in strength that I cry for! my flesh that I seek
In the Godhead! I seek and I find it.
O Saul, it shall be
A Face like my face that receives thee:
A Man like to me.
Thou shalt love and be loved by, forever!
A Hand like this hand
Shall throw open the gates of new life to thee! See the Christ stand!"

Christ heals the deadly leprosy of sin by actual touch of His flesh on our flesh. If He had only come into the world long ago, and then gone far away from it into heaven, we should have felt desolate and lonely. But He is with us "always." He is still the Ladder linking heaven and earth. He gives His Church a holy Sacrament of love to be celebrated continually until He comes again, so that we may be in constant touch with our unseen King. I know that Christendom is divided over the meaning of the mysterious words, "This is My body—This is My blood," but one thing is very certain, that by these outward signs He intends to hold His Bride close against His heart, in thrilling, quickening touch. Whatever may be our opinion as to the meaning and power of this

Sacrament, if we disobey our Master's dying command, "Do this in remembrance of Me," we are not only disloyal and disobedient, but we have no right to expect that our hearts can be kept in closest contact with His. Let us look reverently and carefully into the mysterious words, desiring to know to the full measure of our capacity the meaning of the token of love which our Prince has laid in our hands, but especially careful to keep it constantly in view. Would a loving wife thrust carelessly into a forgotten corner a token of love which the bridegroom had given her, only looking at it once or twice a year? Yet many who call themselves Christians treat far more disloyally than that the token given by Christ, the Bridegroom, to His Bride, the Church, the night before He died—died for her. Many thousands who claim to be disciples of Christ seem to think that His sacred, dying command does not concern them at all. And then they wonder why they don't make more progress in spiritual life! Where is spiritual life to come from if not from the Life of the world? If we want to grow strong enough to live for our Lord in joyful, loving service, or to die for Him as the early Christians did, let us go back to their custom, and at least meet together on the first day of the week "to break bread."—Acts xx.: 7.

How often our Lord healed people by the sacrament of touch. In one case, when healing a poor loathsome leper, we are expressly told by three Evangelists in exactly the same words that He "put forth His hand, and touched Him."—St. Matt. viii.: 3; St. Mark i.: 41; St. Luke vi.: 13. Evidently the "touch" was a most important part of the cure, just because it was sacramental—being the outward expression of tenderness. So also in the case of the poor woman who only ventured to touch the border of His garment. Others were crushing close against His body, yet He felt instantly the thrill of that one touch that was sacramental, being inspired by trust in His love and power. The woman thought she had only touched the garment's hem, while her hand really touched His heart—as every loving hand can do still. The soul instinctively reaches out through the body. Even in prayer there is, as Newbolt says, an intimate correspondence between the postures of the body and the emotions of the soul. "You cannot, as a matter of fact, feel in your inward soul a sinner's self-abasement before the sanctity of God, while you lounge back in a chair, with your arms across, and with eyes gazing unthinkingly on any object that may meet them."

Outward things are the visible manifestation of the soul within. One woman dresses flashily and is loud in her manner, while another is quiet in dress and modest in manner. Dress and manner are outward things, but we see the soul through them as through a window. They, too, are sacramental, being outward visible signs of that which is invisible and spiritual. Let us be careful not to waste our countless opportunities

of reaching out sacramentally. Our shortest way to man is through God, touching our brothers in the sacrament of prayer—which is an outward expression of love—and in the Lord's Supper, in which we not only touch them but are made more entirely one with them. "For we being many are one bread, and one body: for we are all partakers of that one bread."—1 Cor. x.: 17.

Let no one say dolefully, "I can't do anything to help." We can always pray, and so bring certain and mightiest aid to the brother at our side, or to the army in the thick of the fight. When Moses held up his hands, in the sacrament of prayer, the army of Israel prevailed, and when he let down his hands Amalek prevailed. How much of the weakness of the Church is the direct result of want of earnest prayer. If you really want to help—pray, and keep on praying. "If a man see his brother sin a sin which is not unto death, he shall ask and God shall give him life for them that sin not unto death." Oh, if we only used our mighty power of intercession to the utmost, what a transfigured world this would be!

"Thou art coming to a King!
Large petitions with thee bring!
For His grace and power are such
None can ever ask too much."

As a matter of fact, we ask too little, and then wonder why we accomplish so little.

And our shortest way to God is through man. We can really touch Him in the sacrament of Service—for service which is not a sacramental expression of love is of very little value in the eyes of God or man. This morning, while I was dressing, the dear lady who has made a real home for me in a city tenement, came to me with a cup of delicious coffee in her hand, saying, "You must drink this, for it will warm you this cold morning." That also was a sacrament, an outward expression of tender thoughtfulness.

Our dear Lord's life of ministry and His voluntary death were sacramental. Without those outward tokens of His undying love He could not have drawn our hearts into closest touch with His own. We naturally express our love to God and man sacramentally, reaching out and up in the active energy of constant prayer and loving service—from the cup of cold water to the laying down of life. Such sacramental service transfigures everything it touches. As Bp. Ingram says: "Oh! the band of the Lord's ministering helpers. With shining garments, to the eyes of God, they move about the world. What should we do without them?"

"The den they enter grows a shrine;
The gloomy sash an oriel burns;
Their cup of water warms like wine;
Their speech is filled from heavenly urns."

HOPE.

About the House.

What to Make When Eggs Are Scarce.

No-egg Cake.—One cup sugar and $\frac{1}{2}$ cup butter beaten to a cream, 1 cup milk, $2\frac{1}{2}$ cups flour in which 1 teaspoon cream tartar and $\frac{1}{2}$ teaspoon soda have been sifted, 1 cup raisins, spice to taste. May be used as cake or with sauce for pudding.

Apple-sauce Cake.—One-quarter cup lard and $\frac{1}{4}$ cup butter creamed, 1 cup raisins, 1 cup currants, 1 cup brown sugar. Stir 1 teaspoon soda in 1 cup apple sauce, and add. Then beat in two cups flour, $\frac{1}{2}$ teaspoon salt, $\frac{1}{4}$ teaspoon cloves, 1 teaspoon cinnamon, and lemon peel, if liked.

Shortbread.—One pound fine dry flour, 6 ounces caster sugar and $\frac{1}{2}$ pound butter. Knead well together, roll out, cut into shapes, place on a greased baking-tin, and bake very slowly.

Toasted Cheese.—Cut as many slices of bread as needed, butter over with cheese sliced thin, and heat in the oven until cheese is melted.

Oat Bread.—At night scald 2 cups

rolled oats thoroughly, so that it will run off the spoon easily. Beat in $\frac{1}{2}$ cup sugar, 1 tablespoon butter, a little salt, and $\frac{1}{2}$ yeast cake dissolved in $\frac{1}{2}$ cup milk. In the morning beat it up, pour in greased tins $\frac{1}{4}$ inch in depth, let rise 1 hour and bake.

Delicious Rolls.—Put 2 tablespoons butter and 1 tablespoon lard into a pint of milk. Let come to the boiling-point. Sift into a mixing bowl 1 pint flour, add to it one tablespoon sugar and a little salt. When the milk has cooled to lukewarm, stir it into the prepared flour, add 1 yeast cake dissolved in lukewarm water, and mix well, adding enough flour to make the mixture into a soft dough. Make this dough about breakfast time, and let it rise, kneading it or cutting it down several times during the day. Three hours before the rolls are required mix and form into long, slender rolls. Lay in a greased pan, let rise to double their size, brush over the top with milk, and bake. Serve for tea.

Drop Dumplings.—One pint flour, $\frac{1}{2}$ teaspoon salt (scant), 2 teaspoons baking powder. Sift all together two or three times, mix with milk to form a dough, and drop by the

teaspoonful into the water in which chicken or meats are stewing fifteen minutes before serving. These dumplings, having no shortening in them, are quite digestible, but must be served as soon as done.

Pork Cake.—Chop 1 pound salt pork very fine. Add $\frac{1}{2}$ pint strong, boiling coffee, 2 cups brown sugar, 1 cup molasses, 1 teaspoon soda, 2 heaping teaspoons cinnamon, 1 teaspoon cloves, 1 grated nutmeg, 6 cups flour, 1 pound seeded raisins, candied orange peel to taste. This makes two loaves. Bake in a moderate oven.

Sponge Gingerbread.—Melt a piece of butter size of an egg; mix with a pint of molasses, a tablespoon ginger and a quart of flour. Dissolve a heaping teaspoon soda in $\frac{1}{2}$ pint of milk, strain and mix with the other ingredients. Add just enough flour to make it roll out easily, roll half an inch thick, and bake on flat tins in a quick oven. Serve with butter.

Soft Gingerbread.—One egg, 1 cup black molasses, 1 cup sour cream, 1 teaspoon soda, 1 dessertspoon ginger, enough flour to make a little thicker than pancake batter. Bake in a long tin or gans, and eat while warm.

Kaffee-Kuchen.—One pint bread sponge, 1 tablespoon molasses, 1 cup sugar, 1 cup raisins, 1 egg, $\frac{1}{2}$ teaspoon soda, butter size of an egg. Spice to taste. Add flour to make a rather stiff batter. Mix with a spoon, let rise very light, and bake like bread. Serve in slices.

SOME MORE WINTER RECIPES

Cream of Carrot Soup.—Grate the carrots, cook in milk, and put through a sieve. Or you may boil the carrots, cut in pieces, with a dash of sugar, slice of onion, sprig of parsley and lump of butter. When tender (only a very little water should be used), rub the vegetables through a sieve into the water again, and add scalded milk. Thicken with butter and flour rubbed together.

Mashed Carrots.—Scrape and slice carrots and boil tender. Drain, rub through a colander, and mash with a potato beetle. Beat light with a tablespoon of melted butter, season, and serve very hot.

To Bake Potatoes Quickly.—Put them into boiling salted water and boil ten minutes. Pour off the water, put into a quick oven, and bake till soft. As soon as they are

soft break the skin immediately, to allow the steam to escape.

Pickled Pigs' Feet.—Wash, singe and scrape clean, then boil till very tender, and remove meat from the bones while hot. Do not chop it. Let the liquor the feet were boiled in stand till cold, then take off the grease from the top. Melt the jelly and strain, then season and add vinegar to make it as sour as required. Put in a crock, put the meat in, and set in a cold place. Slice out when required.

If you have to cook tough beef or chicken, try putting a spoonful of vinegar in the pot in which it is boiling. An old fowl may be made quite tender by steaming it nearly all day.

Cabbage Creamed.—Soak the cabbage 1 hour in cold water, then chop fine and boil till tender. Drain, cover with milk, reheat, then thicken to a cream with a little flour rubbed smooth in a small spoonful of butter. Boil 1 minute longer, stirring well to prevent scorching. Season and serve.

HOUSEHOLD HINTS.

When cooking onions, place a piece of stale bread in the cooking vessel with them. It will help to prevent the disagreeable smell produced by them.

When making soup, place a small, unpeeled onion in the soup kettle. It will serve as a magnet to draw the floating sediment to itself, and when lifted out will leave the soup comparatively clear.

Time-saving in Pie Crust.—One full

cup lard (cold), 3 good cups flour, 1 even teaspoon salt. Rub together till thoroughly mixed, and set away in a cold place. It will keep a long time. When you wish to make a pie take 1 cup of the mixture and as little cold water as you can get it together with, adding a few drops at a time.

If your feet become calloused and sore on the soles, place a bit of sticking plaster on each callous. The soreness will wear away after a short time.

To mend cracks or holes in the fire-pan of a stove, get some asbestos powder, mix to a paste with water and apply thickly. It will harden and keep the pan usable for a long time.

Dry unused bits of bread in the oven, roll them fine and put in sealers. The bread will keep thus indefinitely, and may be used for any purpose for which bread crumbs are requisite.

When icing a cake, let the cake become cold before applying the icing.

Should eggs happen to be frozen during the winter, do not put in cold water. Try placing them in boiling water. Leave them there from five to twenty minutes, according to the amount of frost in them. When opened the yolks will be found soft and fit for cooking.

Everyday glassware may be greatly toughened by placing it in a large pan of cold water, then let come gradually to a boil. Boil for an hour or two, then let remain in the water until it becomes cold.

Old blankets, if dyed, make good warm

petticoats for cold weather. They also make warm pajamas for children who are likely to kick the bed clothes off at night. Leave no opening for the feet.

After it gets too cold to keep the doors and windows wide open when sweeping, particular care should be taken to keep the dust down. Old newspapers may be used for this purpose. Soak, squeeze out the water, shred, and strew over the carpet, then sweep up. After sweeping, the windows and doors should always be opened and left so for a little while.

To extinguish a chimney on fire, throw a large handful of sulphur on the fire. The fumes will put out the fire in the chimney speedily.

To make flannel less inflammable, rinse it, after washing each week, in water in which 1 ounce of alum has been dissolved; good for little children's night-dresses, as children so often run close to the stove in the morning.

If woollen garments have become shrunken try the following: Stretch the article on the ironing-board, and place over it a piece of cheesecloth, which has been wrung out of cold water. Press with a hot iron until the cheesecloth is perfectly dry. The garment should show a marked improvement.

In frosty weather, put handkerchiefs, collars and small articles in the wash, to dry in a pillow-case. The articles will be saved whipping in the wind, and will freeze dry in the pillow-case.

For insomnia, try eating raw onions for supper.

An agreeable mixture for chapped hands is composed of 1 ounce glycerine, 1 ounce rose-water, and 20 drops of solution of benzoin. Apply at night, first washing the hands.

Indigestion.

A rather ghastly assertion appeared the other day in a contemporary magazine. It was this: "We dig our graves with our teeth." An astounding statement, truly, yet, in its paradox, there is, perhaps, more truth than nonsense. More people than one can well imagine injure their health, sometimes permanently, either by eating too much or by eating too quickly. A very short time of self-abuse such as this will suffice to turn a well person into a dyspeptic. A dyspeptic, it has been said, is "a person who blames everybody else because he eats too much." This is not a bad definition. Everyone about a dyspeptic is to be pitied, but, most of all, the poor sufferer himself. Little wonder that he is irritable. Every bite of food that he eats troubles him, sometimes to the verge of distress. Moreover, it is not yielding him the nourishment which it should. It is not being assimilated.

Slow eating, in moderate quantities, and exercise, are the price of good digestion. Every morsel of food taken into the mouth should be thoroughly masticated, and thus mixed with the salivary juices, which assist the gastric juices of the stomach in the work of preparing the food for absorption into the blood. Too much liquid should not be taken during meals; no one should ever, while at the table, drink more than a cupful. Careful attention to these details may save a great deal of trouble, and positive injury to health.

The Ingle Nook.

A few months ago, in a leading magazine appeared an article headed, "The Only Saint America Has Produced," a quotation from the enthusiastic encomium pronounced by Mr. J. W. Burns, a prominent U. S. official, in regard to Miss Jane Addams, of Hull House, Chicago. But a few weeks ago, in that city, the question was asked, and decided by a telephone vote of 400—"Who is the best woman in Chicago?" and again, by an almost sweeping majority, the choice fell upon Miss Addams; and now, in places far remote from that busy western metropolis, people are asking, "Who is she?" Briefly speaking, she is the soul of the "settlements" of Chicago.

Many years ago, when but a little lass of six years, Jane Addams became interested in the poor. When driving one day through the slum district of a city, she was shocked to see the miserable hovels in which part of humanity had to live; and then and there she made up her mind that when she grew up she would live in a handsome big house, but that she would build it right in the midst of just such huts as these, and have the people visit her there, and show them how to be clean and good. Such was the seed, and that it fell upon good ground has been amply shown by Miss Addams' subsequent career.

It was not, however, until nearly a score of years had passed, that the vague dream materialized. In the meantime, Miss Addams finished a course at college, and, with abundant wealth at her command, travelled extensively in Europe. While in London, the terrible hardships of the poor were again brought home to her. The following is her account of the experience.

On Mile End Road, from the top of an omnibus which paused at the end of a dingy street lighted by only occasional flares of gas, we saw two huge masses of ill-clad people clamoring around two hucksters' carts. They were bidding their farthings and ha-pennies for a vegetable held up by the auctioneer, which he at last scornfully flung, with a gibe for its cheapness, to the successful bidder. In the momentary pause, only one man detached himself from the groups. He had hidden in a cabbage, and when it struck his hand, he instantly sat down on the curb, tore it with his teeth, and hastily devoured it, unwashed and uncooked as it was. He and his fellows were types of the 'submerged tenth,' as our missionary guide told us, with some little satisfaction in the then new phrase, and he further added that so many of

them could scarcely be seen in one spot save at this Saturday-night auction, the desire for cheap food being apparently the one thing which could move them simultaneously. They were huddled into ill-fitting, cast-off clothing, the ragged finery which one sees only in East London. Their pale faces were dominated by that most unlovely of human expressions, the cunning and shrewdness of the bargain-hunter who starves if he cannot make a successful trade, and yet the final impression was not of ragged, tawdry clothing nor of pinched and sallow faces, but of myriads of hands, empty, pathetic, nerveless and workworn, showing white in the uncertain light of the street, and



Miss Jane Addams, Chicago.

clutching forward for food which was already unfit to eat."

Yet for five years afterwards, during which time she continued her travels and studies in Europe, Miss Addams could make no decision in regard to her work. Finally, in a most roundabout way, she was brought to her Rubicon. While in Madrid, she went with a party of girl friends to see a Spanish bull-fight. Carried away by the excitement and adventure of it, she looked on, quite unmoved, until five bulls and many more horses had been done to death. Then she went to look for the rest of her party, who had disappeared. "I met them," she says, "in the foyer, stern and pale, with disapproval of my brutal endurance, and but partially recovered from the faintness and disgust which the spectacle had produced upon them."

Probably this "stern disapproval" was the angel in disguise sent to Miss Addams. That night, the reaction came, and in bitter self-examination she held herself, as it were, before herself. Now, her many years of dilettanteism, her epicurean dabbings in study, appeared to her as a monument of selfishness. "I had fallen," she says, "into the meanest type of self-deception in making myself believe that all this was in preparation for great things to come, and nothing less than the moral reaction following the experience at a bull-fight had been able to reveal to me that, so far from following in the wake of a chariot of philanthropic fire, I had been tied to the tail of the veriest ox-cart of self-seeking."

The next January found Miss Addams and an associate, Miss Starr, seeking for a building which might become the nucleus of a social settlement in the slums of Chicago. That was fifteen years ago, and since then "Hull House" has fully justified its purpose, as set forth in its articles of incorporation: "To provide a center for a higher civic and social life; to institute and maintain educational and philanthropic enterprises, and to investigate and improve the conditions in the industrial districts of Chicago."

To many readers of the Ingle Nook—women by whom pure air, freedom, the sight of green grass, trees and wild flowers are taken as a matter of course, things so common as to occasion but little thanksgiving—the full sacrifice of a life such as that which Miss Addams has led may not appear. Probably in no city in America are the slums "worse" than in Chicago. Imagine if you can whole districts of tumble-down buildings and tenement houses guiltless of ventilation or any sanitary precaution whatever, often a score of families or more huddled in a single building, occasionally a whole family confined to a single room, three flights up at that—no yard, no outdoor breathing space larger than the three or four square feet at the top of a rickety fire-escape—and even the denizens of such apartments as these happy compared with those who occupy the damp malodorous basement rooms below. Add to this an outlook of disreputable streets filled with dirt, and blowing papers, and little children with ragged garments, dirty faces and unkempt hair; not a blade of grass within miles not a single tree to break the monotony of smoke-grimed walls; and, oh, the smells, the heavy, reeking smells everywhere, in the houses and out of them! When on a flying trip through one of these districts a

few years ago, it seemed to me that the blessing of pure fresh air must surely be one of the greatest boons that earth has to offer. Of the wickedness, I saw and heard nothing, for wherever the white ties of a deaconess (it was a deaconess who accompanied me) appear, foul language dies away, and faces that would fain put on a good appearance are turned to meet hers. But then, as Miss Martin explained, we were not in the worst districts. "Halstead" was much worse.

Into just such localities as these, the settlement workers have come, establishing their settlement houses right in the midst of these dilapidated ones, where they stand as an example and an inspiration to cleanliness and right living. Each house is occupied by several workers—in the one of which I heard most while in Chicago there were nine—workers who often know no other home, but to whom every Christian home in the city is open. And yet, shut off as they are from nearly all that to more worldly minds seems to make life worth living, these settlement workers seem wonderfully happy. I did not see Miss Addams, but I met Rev. Dr. Gray, one of the most prominent members of the settlements at that time, and a more jubilantly, jovially happy man it would be hard to see. Probably these home missionaries know that the bright smile and the cheery laugh are good medicine in the slums, or, perhaps, only these strong sunshiny souls can stand the depression of such an atmosphere. If Miss Addams' face expresses anything it is sweetness, and one can well imagine it lighted up with tenderness, that of a veritable angel of the dark alleys of Chicago.

It Never Rains but It Pours.

The two following letters were received on the same day:

Dear Dame Durden,—I enjoy reading "The Farmer's Advocate," and, particularly, the Ingle Nook letters. I have never written before, but, as a farmer's wife, I cannot resist the temptation after reading Aunt Diana's letter. I quite agree with her as to the life of the majority of Canadian farmers' wives. I was raised on a farm, and have been a farmer's wife for about fifteen years, and have never known any of the hardships as mentioned in Ingle Nook. I would like if some of the Ingle Nook readers would be kind enough to help me plan a fifteenth-year wedding anniversary, as to bill-of-fare for dinner, also decorating of tables and dining-room, for about eighty or one hundred guests. It will be mid-winter when it will take place. Wishing

you all a Happy and Prosperous New Year.
AUNT LIDDIE.
Norfolk Co., Ont.

Dear Dame Durden.—Having been a reader of "The Farmer's Advocate" for so long, I have been very much interested in the "Ingle Nook" chats, and have found many of the recipes just fine. Now, I am going to ask what to have, and how to arrange for a twenty-fifth anniversary—dinner and decorations—1st of February. Also, how to entertain the guests during the day, and at the table. Please give me the recipes for: jellied chicken, bouillon and creamed fish.
Oxford Co., Ont. MAY.

The following menu will, we think, be found satisfactory for a mid-winter dinner:

MENU.

Consomme.	
Celery.	Olives.
Fish Timbales.	
Roast Turkey.	Giblet Gravy.
Cranberry Sauce.	
Pickled Peached or Sweet Apples.	
Potatoes (mashed or in croquettes).	
Browned Parsnips.	
Salad.	
Pudding or Pie.	Fruit.
Assorted Cakes.	
Ice Cream.	Coffee.

If preferred, oysters might precede or be substituted for the consomme, and boiled ham might be added to the meat course.

To make the consomme, put the soup pot on the stove, and put in it a heaping teaspoon of white sugar. Let it melt and brown, then add 1 cup cold water. Let boil 10 minutes. Then add 4 quarts cold water, 2 lbs. coarse beef (cut fine), and 2 lbs. knuckle of veal. Let simmer, skimming carefully until all the fat is taken off, then cover closely, still keeping on the back of the range. In all, it should simmer about 5 hours. A little onion, carrots, celery, etc., may be added, if liked. When done, strain carefully, and take off any remaining globules of fat with blotting paper. Your stock is now ready for elaboration. It will keep in a cold place in winter; so, if any is left over, it will not be wasted. You may finish the consomme almost in any way you choose. A very simple way is to reheat as much as will be needed, then add to every 2 quarts 4 tablespoons canned peas, 2 tablespoons cooked carrots and 2 tablespoons cooked turnips, both diced neatly. If liked, add a dash of onion juice. Season, and serve.

The one thing necessary in regard to the soup course is that, in a dinner such as this, it must not be too rich or too heavy. Its place is to serve as an appetizer, not as a substantial part of the dinner, a function which the consomme, as described, will be found to fill admirably.

For the creamed fish, or fish timbale, take 1½ lbs. of nice fish for every six persons. Remove the bones and skin, and pound the meat fine. Cook 1 cup breadcrumbs 10 minutes in a pint of sweet cream; add butter size of an egg, pepper, salt, and nutmeg to taste—about 3 small teaspoons salt and a salt-spoon of pepper will be enough to flavor the whole. When cold, beat in the fish, then add 4 beaten eggs, and place in a buttered mould. Set the mould in a deep pan, place in the oven, and pour water around to reach nearly to the top of it. Cover with buttered paper, and cook in a very moderate oven ½ hour.

For the salad, you might mix together minced apples, celery, and walnuts, or celery, oranges and nuts, mixing in the dressing just before serving.

In midwinter, and in the country, where flowers are scarcely to be had at this time of the year, the matter of decorations is somewhat perplexing. Were the dinner to be served at night, we would say to have both room and table decorated with evergreens, tufted with the snowiest of cotton batting sprinkled with diamond dust to represent glittering snow. In the center of the table you might have a large mirror with its edges concealed by the cotton and evergreens; in the center of the mirror a small glittering tree decorated only with red candles, one for each year of the married life of those whose anniversary

is being celebrated. Warmth of effect could be given by red shades about all the lights in the room. If the dinner is served at mid-day, however, as we judge from one of the letters, this scheme would not do, and we can only suggest decorations of such ferns or winter-flowering house-plants as can be procured; one plant used as a centerpiece for each table will be enough. China silk, with an outer draping of chiffon or tulle, may be bunched about each pot to conceal it, the silk matching the color of the flowers, the tulle white.

If preferred, dainty "place" cards, matching in some way the color scheme of the room, and each bearing the name of the person who is to sit at the place indicated, may be used. Nuts, olives, celery, etc., are placed on the table before the guests are seated, in small, pretty dishes. The knife, soup spoon and the napkin, with a piece of bread on it, are placed to the right of the individual service plate at each place, the forks at the left. The water glass is placed near the point of the knife. Nothing else appears on the table, the courses being brought in by the waitresses as required. Before the dessert is served, everything, except the water glasses and bonbons, is removed, and the crumbs are brushed with a napkin from the table into a plate.

Now for May's recipes:
"Creamed fish" is given above.
To make bouillon (which may be served instead of consomme), take 6 lbs. beef and bone, cut it in small pieces, saw the bones apart, and place in 2 quarts cold water. Heat slowly, and simmer 5 hours in a tightly-covered soup kettle. Strain, season, let get cold, and remove fat from top. Serve hot.

Jellied Chicken.—Simmer till the meat falls off, adding 1 pint cold water for every pound. Put in the feet, singed and skinned. When done, strain. Let the liquor get cold, and remove the fat. Chop the meat fine, removing the feet; reheat the jelly to melt it; add the meat; season; turn into a mould, and put in a cold place. If the jelly seems too thin, a little gelatine may be added when it is reheated.

In regard to entertainment, little should be needed except conversation and music. Those whose anniversary is being celebrated should, if possible, appear in some of the garments worn on the wedding day. An account of the wedding and wedding journey might be written by some humorous person, and read at the anniversary. It should be as amusing as possible, and might follow facts only in part, the character and habits of those described, especially of the "couple," being given directly opposite to the truth in every respect.

Wedding Cake Recipes.

Will you please publish, through your paper, one or two recipes for wedding cakes, also one for a good icing?
Essex, Ont. A SUBSCRIBER.

Wedding Cake.—One lb. brown sugar, 1 lb. butter (creamed together); add yolks of 16 eggs (beaten), then add 2 cups molasses, stirring well. Sift a little flour on 4 lbs. seeded raisins and 3 lbs. currants, which have been well washed. Beat these into the mixture, also ½ oz. cinnamon, ¼ oz. nutmeg, ¼ oz. cloves, and 1 wineglass brandy, if liked. Now, beat in 1 pound of flour. Last of all, add the beaten whites of the eggs. Line two cake tins with buttered paper; pour the mixture in, and bake 2 hours in a slow oven. This will keep for years, if kept in a crock or tin box in a cool place.

A Good Icing.—Place 1 cup granulated sugar, ¼ cup boiling water and ¼ teaspoon cream tartar in a saucepan, set in another containing boiling water, and boil six minutes, without stirring. Beat the white of an egg stiff, and gradually add to it the boiling syrup, pouring the syrup on the egg in a thin stream, and stirring quickly. Beat 5 minutes, and flavor to taste.

If the icing is for the wedding cake, and you want almond paste underlying it, better buy the paste at some confectionery store. It may be bought by the pound or in 1 lb. or 5 lb. cans, and directions for using accompany each can. A very fair substitute is made as follows. Boil ½ cup water with 3 cups white sugar until thick and waxy. Beat whites of 2 eggs to a froth, and pour the syrup over them, beating hard until almost cool.

then add ¼ lb. sweet almonds and two or three bitter almonds, all pounded together to a paste.

Pickling Beef—Curing Pork.

Dear Ingle Friends,—I enjoy reading the letters of the Ingle Nook very much, and also the valuable recipes that are given; but I have been patiently waiting for a recipe to cure pork for summer use, also to pickle beef. I would be very much pleased if some of your members would give these recipes. MARGUERITE.
Huron Co., Ont.

Pickle to keep beef, tongues and pork: To each gallon of water, add 1½ lbs. salt, ½ lb. sugar, ½ oz. saltpeter, and ½ oz. potash. Boil together, skim, and throw into a tub to cool. When cold, pour over the meat, covering it well, and leave four or five weeks. The meat should not be put into the pickle for two days after killing, but during this time should be slightly sprinkled with saltpeter to remove the surface blood. A small handful of mace and cloves thrown into the brine will improve the flavor. Before cooking, soak the meat over night. When boiling salt beef, a good flavor is given by the following method: Mix a tablespoon vinegar, same of Worcester sauce, a tablespoon brown sugar, teaspoon dry mustard, and a few cloves and allspice. Stir well, and add to the water just before the beef is done. Let the meat stand in the water until it is cold. Should the brine become sour at any time, drain it off, boil, skim well, and pour back on the meat when cooled.

To Cure Pork.—Make a mixture of 4 lbs. fine salt, 1½ lbs. brown sugar, 2 ozs. saltpeter, and apply it to each 100 lbs. meat. Repeat the application three times for hams and shoulders, and twice for bacon, rubbing the mixture well in. The meat should be cured in three weeks.

Breathing Through the Mouth

Tight dressing, though the most serious hindrance to the habit of good breathing, is not the only obstacle. There are careless ways of sitting and standing that draw the shoulders forward and cramp the chest; and it is as hard for the lungs to do good work when the chest is narrow and constricted as it is for a closely-banded hand to set a copy of clear, graceful penmanship. Then there are lazy ways of breathing through the mouth. Now, the nose was meant to breathe through, and it is marvellously arranged for filtering the impurities out of the air and changing it to a suitable temperature for entering the lungs. The mouth has no such apparatus, and when air is swallowed through the mouth, instead of breathed through the nose, it has an injurious effect upon the lungs. A story is told of an Indian who had a personal encounter with a white man much his superior in size and strength, and who was asked afterwards if he was not afraid. "Me never afraid of man who keeps mouth open," was the immediate reply. Indeed, breathing through the mouth gives a foolish and weak expression to the face, as you may see by watching any one asleep with the mouth open. It may be noted that an anæmic or low condition of the blood is seldom found where there is an established habit of full, deep breathing with the mouth closed.—[Bristol Times.

Recipes.

Gems.—One egg, 2 tablespoons melted butter, 1 cup sweet milk, 2 tablespoons sugar, 2 cups "Five Roses" flour, 1 teaspoon cream tartar, ¼ teaspoon soda.

Rolls.—Take 2 quarts "Five Roses" flour and work in a large spoonful of lard. Add ½ pint milk, boiled and cooled to lukewarm. Add ½ cup yeast and a little sugar. If for breakfast, mix at noon, and let rise till bedtime, then roll out and lay on the cake-board until time to bake for breakfast.

It is wise to admire, since this state of mind is due to all things grand and good in the world.

The admiration of goodness and greatness, and this will bring you nearer to exalted things than envy and censoriousness.

With the Flowers.

Some Winter-blooming Plants

Perhaps none of the winter-bloomers hold a place closer to the heart of flower-lovers than the primulas, of which the species obconica and Chinese primrose are the best known. Both have very fresh, pleasing foliage, and while the obconica is the most persistent bloomer, the Chinese variety has rather the prettier flowers. The flowers of the former are a pale pinkish lilac in color, those of the latter are either white or some shade from pink to crimson, usually suffused with lavender, and occasionally marked by an "eye" or by fringed petals.

As the members of the primrose family do not flower well the second winter, it is wise to start new plants each year. This may be done by sowing the seed in March and caring tenderly for the plantlets during the summer, repotting when necessary, and giving plenty of water. Great care must be taken, however, to have good drainage, and to keep water from lying on the "crown" of the plant, a condition which is sure to induce rot. In order to prevent this the soil, which should be a fine, spongy loam, should be built up high in the center, and lowered off to the edge next the pot.

Primroses do best in a rather cool place, yet they must never be chilled. As they require good light, yet not too much sunshine, an eastern window is, perhaps, the best situation.

THE PETUNIA.

The petunia, especially the single variety, is a winter bloomer that is sure to give good results with only a moderate amount of care. Even when it has exhausted itself flowering, it may, by simply cutting it down nearly to the root and giving weekly applications of manure water, be induced to shoot up again and produce flowers in great profusion.

Petunias may be grown either from seed or from cuttings. The soil should be loose—that scraped from about the roots of grass is excellent—and manure water may be applied every week with advantage. While making vigorous growth, and before the buds have begun to form, the plant should be pinched back from time to time in order to force the growth of new wood. It is upon the new shoots that the flowers appear, and by pruning judiciously a great many blossoms may be forced at the same time.

THE OXALIS.

The oxalis, often called shamrock, is a well-known and most deserving favorite. Nothing daintier than its small pink or white flowers appears in the whole range of house plants, while its habit of closing its leaves and apparently "going asleep" at night gives it an individuality of its own, a sort of human attribute most appealing to the affections.

In order to have the oxalis flower well in winter, it is absolutely necessary to give the tubers a long rest during summer. In spring the plant should be allowed to dry off, and should be kept almost dry in some out of the way spot until October, when it should be taken into the house and forced.

The soil should be a rich sandy loam, and plenty of water should be given, provided, of course, that the drainage is good, a necessity to the oxalis. As it rejoices in sunshine, a southern window is the best situation for it.

Think often of the virtues, the patience, sincerity, industry of the plainest and simplest people about you.

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Coal Ashes — Geranium Blossoms.

W. P., Quebec, writes: "Would you kindly let me know through your valuable paper if sifted coal ashes is good for garden ground that is inclined to be rather stiff. Could the ashes be used with good results to loosen the ground, instead of sand? Would the ashes be a detriment to the vegetables and flowers in any way? Would you also let me know what makes the small flower-buds turn yellow about two weeks after they put in their appearance on my geranium plants? The plants are young and very healthy-looking, but the buds drop off when about two weeks old."

Ans.—Coal ashes are of little or no value for the garden. The best place to make use of these is on walks or drives. If the ashes are thoroughly screened, they would not be a serious detriment to the garden for either flowers or vegetables. It would be better to use an abundance of manure to loosen up heavy ground rather than apply coal ashes.

Without seeing the plants, or knowing more regarding them, it is difficult to say just what may be the cause of the flower-buds failing to produce bloom. It may be inferred, in a general way, that the plants are suffering from lack of vigor, due to one or more of a number of causes. It may be that the plants are not yet strong enough to produce flowers, or that they are suffering from too much or too little water, or from poor condition of the soil, but it is impossible to say definitely what is the matter. The best thing to be done is to encourage a vigorous growth of plant, and give plenty of sunlight.

H. L. HUTT.

Song of the Souls that Failed.

We come from the war-swept valleys,
Where the strong ranks clash in might,
Where the broken rear-guard rallies
For its last and losing fight;
From the roaring streets and highways,
Where the mad crowds move abreast.
We come to the wooded byways,
To cover our grief, and rest.

Not ours the ban of the coward,
Not ours the idler's shame;
If we sink at last, o'erpowered,
Will ye whelm us with scorn or blame?
We have seen the goal and have striven
As they strive who win or die;
We were burdened and harshly driven,
And the swift feet passed us by.

When we hear the plaudits thunder,
And thrill to the victors' shout,
We envy them not, nor wonder
At the fate that cast us out;
For we heed one music only,
The sweet far voice that calls
To the dauntless soul and lonely
Who fights to the end, and falls.

We come—outworn and weary—
The unnamed hosts of life;
Long was our march and dreary,
Fruitless and long our strife.
Out from the dust and the riot—
From the lost, yet glorious quest,
We come to the vales of quiet,
To cover our grief, and rest.
—Marion Couthouy Smith, in McClure's.

The minister felt annoyed that a certain one of his flock always went to sleep shortly after he commenced his sermon. "Look here," said the minister to the little boy who always sat next to the old offender, "if you keep your grandfather from sleeping during the sermon I will give you a penny every Monday." "Well, I'll try," said the boy. The following Sunday Tommy kept his grandfather awake by poking his ribs in no gentle fashion. A week later the minister was surprised to see the old man drop into his former habit, while the boy seemed to pay no attention to his erring grandfather. "Why did you let your grandpa go to sleep yesterday, Tommy? Did I not give you a penny to keep him awake?" "Ay, a' ken that, but ma grandpa gied me tuppence to let him sleep."

Bob, Son of Battle.

BY ALFRED OLLIVANT.

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CHAPTER XIX.
Lad and Lass.

An immense sensation this affair of the Scoop created in the Daleland. It spurred the Dalesmen into fresh endeavors. James Moore and M'Adam were examined and re-examined as to the minutest details of the matter. The whole country-side was placarded with huge bills offering £100 reward for the capture of the criminal dead or alive. While the vigilance of the watchers was such that in a single week they bagged a donkey, an old woman, and two amateur detectives.

In Wastrel-dale the near escape of the Killer, the collision between James Moore and M'Adam, and Owd Bob's unsuccess, who was not wont to fail, aroused intense excitement, with which was mingled a certain anxiety as to their favorite.

For when the Master had reached home that night, he had found the old dog already there; and he must have wrenched his foot in the pursuit or run a thorn into it, for he was very lame. Whereat, when it was reported at the Sylvester Arms, M'Adam winked at Red Wull and muttered, "Ah, forty foot is an ugly tumble."

A week later the little man called at Kenmuir. As he entered the yard, David was standing outside the kitchen window, looking very glum and miserable. On seeing his father, however, the boy started forward, all alert.

"What d'yo' want here?" he cried roughly.

"Same as you, dear lad," the little man giggled, advancing. "I come on a visit."

"Your visits at Kenmuir are usually paid by night, so I've heard," David sneered.

The little man affected not to hear. "So they dinna allow ye indoors wi' the Cup," he laughed. "They know yer little ways then, David."

"Nay, I'm not wanted in there," David answered bitterly, but not so loud that his father could hear. Maggie within the kitchen heard, however, but paid no heed; for her heart was hard against the boy, who of late, though he never addressed her, had made himself as unpleasant in a thousand little ways as only David M'Adam could.

At that moment the Master came stalking into the yard, Owd Bob preceding him; and as the old dog recognized his visitor he bristled involuntarily.

At the sight of the Master M'Adam hurried forward.

"I did but come to ask after the tyke," he said. "Is he gettin' over his lameness?"

James Moore looked surprised; then his stern face relaxed into a cordial smile. Such generous anxiety as to the welfare of Red Wull's rival was a wholly new characteristic in the little man.

"I tak' it kind in yo', M'Adam," he said, "to come and inquire."

"Is the thorn out?" asked the little man with eager interest, shooting his head forward to stare closely at the other.

"It came oot last night wi' the poulticin'," the Master answered, returning the other's gaze calm and steady.

"I'm glad o' that," said the little man, still staring. But his yellow, grinning face said as plain as words, "What a liar ye are, James Moore."

The days passed on. His father's taunts and gibes, always becoming more bitter, drove David almost to distraction.

He longed to make it up with Maggie; he longed for that tender sympathy which the girl had always extended to him when his troubles with his father were heavy on him. The quarrel had lasted for months now, and he was well weary of it, and utterly ashamed. For, at least, he had the good grace to acknowledge that no one was to blame but himself; and that it had been fostered solely by his ugly pride.

At length he could endure it no longer, and determined to go to the girl and ask forgiveness. It would be a bitter ordeal to him; always unwilling to acknowledge

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a fault, even to himself, how much harder
would it be to confess it to this strip
of a girl. For a time he thought it was
almost more than he could do. Yet,
like his father, once set upon a course,
nothing could divert him. So, after a
week of doubts and determinations, of
cowardice and courage, he pulled himself
together and off he set.

An hour it took him from the Grange
to the bridge over the Wastrel—an hour
which had went to be a quarter. Now,
as he walked on up the slope from the
stream, very slowly, heartening himself
for his penance, he was aware of a
strange disturbance in the yard above
him: the noisy cackling of hens, the
snorting of pigs disturbed, and above
the rest the cry of a little child ringing
out in shrill distress.

He set to running, and sped up the
slope as fast as his long legs would carry
him. As he took the gate in his stride,
he saw the white-clad figure of Wee Anne
fleeing with unsteady, toddling steps, her
fair hair streaming out behind, and one
bare arm striking wildly back at a great
pursuing sow.

David shouted as he cleared the gate,
but the brute paid no heed, and was al-
most touching the fugitive when Owd Bob
came galloping round the corner, and in
a second had flashed between pursuer and
pursued. So close were the two that as
he swung round on the startled sow, his
tail brushed the baby to the ground; and
there she lay kicking fat legs to heaven
and calling on all her gods.

David, leaving the old dog to secure
the warrior pig, ran round to her; but he
was anticipated. The whole matter had
barely occupied a minute's time; and
Maggie, rushing from the kitchen, now
had the child in her arms and was hurrying
back with her to the house.

"Eh, ma pet, are ye hurted, dearie?"
David could hear her asking tearfully, as
he crossed the yard and established him-
self in the door.

"Well," said he, in bantering tones,
"yo'm a nice wench to ha' charge o'
oor Anne?"

It was a sore subject with the girl, and
well he knew it. Wee Anne, that
golden-haired imp of mischief, was for-
ever evading her sister-mother's eye and
attempting to immolate herself. More
than once she had only been saved from
serious hurt by the watchful devotion of
Owd Bob, who always found time, de-
spite his many labors, to keep a
guardian eye on his well-loved lassie. In
the previous winter she had been lost on
a bitter night on the Muir Pike; once she
had climbed into a field with the High-
land bull, and barely escaped with her
life, while the gray dog held the brute
in check; but a little while before she
had been rescued from drowning by the
Tailless Tyke; there had been numerous
other mishaps; and now the present
mishap. But the girl paid no heed to
her tormentor in her joy at finding the
child all unhurt.

"Theer! yo' bain't so much as scatted,
ma precious, is yo'?" she cried. "Rin
oot agin, then," and the baby toddled
joyfully away.

Maggie rose to her feet and stood with
face averted. David's eyes dwelt lovingly
upon her, admiring the pose of the
neat head with its thatch of pretty brown
hair; the slim figure, and slender ankles,
peeping modestly from beneath her print
frock.

"Ma word! if yo' dad should hear tell
o' hoo his Anne—" he broke off into a
long-drawn whistle.

Maggie kept silence; but her lips
quivered, and the flush deepened on her
cheek.

"I'm fear'd I'll ha' to tell him," the
boy continued. "Tis but ma duty."

"Yo' may tell wham yo' like what yo'
like," the girl replied coldly; yet there
was a tremor in her voice.

"First yo' throws her in the stream,"
David went on remorselessly; "then yo'
chucks her to the pig, and if it had not
bin for me—"

"Yo', indeed!" she broke in con-
temptuously. "Yo'! 'twas Owd Bob
reskied her. Yo'd nout to do wi' it,
'cept lookin' on—'bout what yo're fit
for."

"I tell yo'," David pursued stubbornly,
"an' it had not bin for me yo'
wouldn't have no sister by noo. She'd
be lyin', she would, pore little lass, cold
as ice, pore mite, wi' no breath in her.
An' when yo' dad coom home there'd be
no Wee Anne to rin to him, and climb on
his knee, and yammer to him, and beat

his face. An' he'd say, 'What's gotten
to oor Annie, as I left wi' yo'?' And
then yo'd have to tell him, 'I never
took no manner o' fash after her, dad;
d'reckly yo' back was turned, I—'"

The girl sat down, buried her face in her
apron, and indulged in the rare luxury of
tears.

"Yo're the cruellest mon as iver was,
David M'Adam," she sobbed, rocking to
and fro.

He was at her side in a moment,
tenderly bending over her.

"Eh, Maggie, but I am sorry, lass—" she
wrenched away from beneath his
hands.

"I hate yo'," she cried passionately.

He gently removed her hands from be-
fore her tear-stained face.

"I was nob'but laffin', Maggie," he
pleaded; "say yo' forgie me."

"I don't," she cried, struggling. "I
think yo're the hatefulest lad as iver
lived."

The moment was critical; it was a
time for heroic measures.

"No, yo' don't, lass," he remonstrated;
and, releasing her wrists, lifted the little
drooping face, wet as it was, like the
earth after a spring shower, and, holding
it between his two big hands, kissed it
twice.

"Yo' coward!" she cried, a flood of
warm red crimsoning her cheeks; and
she struggled vainly to be free.

"Yo' used to let me," he reminded her
in aggrieved tones.

"I niver did!" she cried, more in-
dignantly than truthful.

"Yes, yo' did, when we was little
uns; that is, yo' was allus for kissin'
and I was allus agin it. And noo,"
with whole-souled bitterness, "I mayn't
so much as keek at yo' over a stone
wall."

However that might be, he was keek-
ing at her from closer range now; and
in that position—for he held her firmly
still—she could not help but keek back.
He looked so handsome—humble for
once; penitent yet reproachful; his own
eyes a little moist; and, withal, his old
audacious self,—that, despite herself, her
anger grew less hot.

"Say yo' forgie me and I'll let yo'
go."

"I don't, nor niver shall," she
answered firmly; but there was less con-
viction in her heart than voice.

"Iss yo' do, lass," he coaxed, and
kissed her again.

She struggled faintly.

"Hoo daur yo'?" she cried through
her tears. But he was not to be moved.

"Will yo' noo?" he asked.

She remained dumb, and he kissed her
again.

"Impudence!" she cried.

"Ay," said he, closing her mouth.

"I wonder at ye, Davie!" she said,
surrendering.

After that Maggie must needs give in;
and it was well understood, though
nothing definite had been said, that the
boy and girl were courting. And in the
Dale the unanimous opinion was that the
young couple would make "a gradely
pair, surely."

M'Adam was the last person to hear
the news, long after it had been common
knowledge in the village. It was in the
Sylvester Arms he first heard it, and
straightway fell into one of those foam-
ing frenzies characteristic of him.

"The dochter o' Moore o' Kenmuir,
d'ye say? sic a dochter o' sic a man!
The dochter o' th' one man in the world
that's harmed me aboon the rest! I'd
no ha' believed it gin ye'd no tell't me.
Oh, David, David! I'd no ha' thoct it
even o' yo', ill son as ye've aye bin to
me. I think he might ha' waited till
his auld dad was gone, and he'd no had
to wait lang the noo." Then the little
man sat down and burst into tears.
Gradually, however, he resigned himself,
and the more readily when he realized
that David by his act had exposed a
fresh wound into which he might plunge
his barbed shafts. And he availed him-
self to the full of his new opportunities.
Often and often David was sore pressed
to restrain himself.

"Is't true, what they're sayin' that
Maggie Moore's no better than she
should be?" the little man asked one
evening with anxious interest.

"They're not sayin' so, and if they
were 'twad be a lie," the boy answered
angrily.

M'Adam leant back in his chair and
nodded the head.

"Ay, they tell't me that gin ony man
knew 'twad be David M'Adam."

David strode across the room.

"No, no mair o' that," he shouted.
"Y'ought to be 'shamed, an owd mon
like you, to speak so o' a lass." The
little man edged close up to his son, and
looked up into the fair flushed face tower-
ing above him.

"David," he said in smooth soft tones,
"I'm 'stonished ye dinna strike yer auld
dad." He stood with his hands clasped
behind his back as if daring the young
giant to raise a finger against him. "Ye
maist might noo," he continued suavely.
"Ye maun be sax inches taller, and a
good four stane heavier. Hooiver,
ablin's ye're wise to wait. Anither year
twa I'll be an auld man, as ye say, and
feebler, and Wullie here'll be gettin' on,
while yo'll be in the prime o' yer
strength. Then I think ye might hit me
wi' safety to your person, and honor to
yourself."

He took a pace back, smiling.
"Feyther," said David, huskily, "one
day yo'll drive me too far."

CHAPTER XX.

The Snapping of the String.

The spring was passing, marked
throughout with the bloody trail of the
Killer. The adventure in the Scoop
scared him for a while into innocuous-
ness; then he resumed his game again
with redoubled zest. It seemed likely
he 'would harry the district till some
lucky accident carried him off, for all
chance there was of arresting him.

You could still hear nightly in the
Sylvester Arms and elsewhere the asser-
tion, delivered with the same dogmatic
certainty as of old, "It's the Terror, I
tell yo'!" and that irritating, inevitable
reply: "Ay; but wheer's the proof?"
While often, at the same moment, in a
house not far away, a little lonely man
was sitting before a low-burnt fire, rock-
ing to and fro, biting his nails, and
muttering to the great dog whose head
lay between his knees: "If we had but
the proof, Wullie! if we had but the
proof! I'd give maright hand aff my
arm gin we had the proof to-morrow."

Long Kirby, who was always for war
when someone else was to do the fight-
ing, suggested that David should be re-
quested, in the name of the Dalesmen, to
tell M'Adam that he must make an end
to Red Wull. But Jim Mason quashed
the proposal, remarking truly enough that
there was too much bad blood as it was
between father and son; while Tammas
proposed with a sneer that the smith
should be his own agent in the matter.

Whether it was this remark of Tammas's
which stung the big man into action, or
whether it was that the intensity of his
hate gave him unusual courage, anyhow,
a few days later, M'Adam caught him
lurking in the granary of the Grange.

The little man may not have guessed
his murderous intent; yet the black-
smith's white-faced terror, as he crouched
away in the darkest corner, could hard-
ly have escaped remark; though—and
Kirby may thank his stars for it—the
treacherous gleam of a gun-barrel, ill-
concealed behind him, did.

"Hullo, Kirby!" said M'Adam cordial-
ly, "ye'll stay the night wi' me?" And
the next thing the big man heard was
a giggle on the far side the door, lost
in the clank of padlock and rattle of
chain. Then—through a crack—"Good-
night to ye. Hope ye'll be comfie." And
there he stayed that night, the following
day and next night—thirty-six hours in
all, with swedes for his hunger and the
dew off the thatch for his thirst.

Meanwhile the struggle between David
and his father seemed coming to a head.
The little man's tongue wagged more bit-
terly than ever; now it was never at
rest—searching out sores, stinging,
piercing.

Worst of all, he was continually drop-
ping innuendoes, seemingly innocent
enough, yet with a world of subtle
meaning at their back, respecting Maggie.
The leer and wink with which, when
David came home from Kenmuir at
nights, he would ask the simple question,
"And was she kind, David—eh, eh?"
made the boy's blood boil within him.

And the more effective the little man
saw his shots to be, the more persistent-
ly he plied them. And David retal-
iated in kind. It was a war of re-
prisals. There was no peace; there were
no truces in which to bury the dead be-
fore the opponents set to slaying others.

And every day brought the combatants nearer to that final struggle, the issue of which neither cared to contemplate.

There came a Saturday, toward the end of the spring, long to be remembered by more than David in the Dale.

For that young man the day started sensationally. Rising before cock-crow, and going to the window, the first thing he saw in the misty dawn was the gaunt, gigantic figure of Red Wull, hounding up the hill from the Stony Bottom; and in an instant his faith was shaken to its foundation.

The dog was travelling up at a long, slouching trot; and as he rapidly approached the house, David saw that his flanks were all splashed with red mud, his tongue out, and the foam dripping from his jaws, as though he had come far and fast.

He slunk up to the house, leapt on to the sill of the unused back-kitchen, some five feet from the ground, pushed with his paw at the cranky old hatchment, which was its only covering; and, in a second, the boy, straining out of the window the better to see, heard the rattle of the boards as the dog dropped within the house.

For the moment, excited as he was, David held his peace. Even the Black Killer took only second place in his thoughts that morning. For this was to be a momentous day for him.

That afternoon James Moore and Andrew would, he knew, be over at Grammocho-town, and, his work finished for the day, he was resolved to tackle Maggie and decide his fate. If she would have him—well, he would go next morning and thank God for it, kneeling beside her in the tiny village church; if not, he would leave the Grange and all its unhappiness behind, and straightway plunge out into the world.

All through a week of stern work he had looked forward to this hard-won half-holiday. Therefore, when, as he was breaking off at noon, his father turned to him and said abruptly:

"David, ye're to tak' the Cheviot lot o'er to Grammocho-town at once," he answered shortly:

"Ye mun tak' 'em yo'sel', if ye wish 'em to go to-day."

"Na," the little man answered; "Wullie and me, we're busy. Ye're to tak' 'em, I tell ye."

"I'll not," David replied. "If they wait for me, they wait till Monday," and with that he left the room.

"I see what 'tis," his father called after him; "she's give ye a tryst at Kenmuir. Oh, ye randy David!"

"Ye tend ye' business; I'll tend mine," the boy answered hotly.

Now it happened that on the previous day Maggie had given him a photograph of herself, or, rather, David had taken it and Maggie had demurred. As he left the room it dropped from his pocket. He failed to notice his loss, but directly he was gone M'Adam pounced on it.

"He! he! Wullie, what's this?" he goggled, holding the photograph into his face. "He! he! it's the jade herself, I war'nt; it's Jezebel!"

He peered into the picture.

"She kens what's what, I'll tak' oath, Wullie. See her eyes—sae soft and languishin'; and her lips—such lips, Wullie!" He held the picture down for the great dog to see; then walked out of the room, still sniggering, and chucking the face insanely beneath its cardboard chin.

Outside the house he collided against David. The boy had missed his treasure and was hurrying back for it.

"What ye' got there?" he asked suspiciously.

"Only the pictur' o' some randy quean," his father answered, chucking away at the inanimate chin.

"Gie it me!" David ordered fiercely.

"It's mine."

"Na, na," the little man replied. "It's no for sic douce lads as dear David to ha' any touch wi' leddies sic as this."

"Gie it me, I tell ye, or I'll tak' it!" the boy shouted.

"Na, na; it's ma duty as yer dad to keep ye from sic limmers." He turned, still smiling, to Red Wull.

"There ye are, Wullie!" He threw the photograph to the dog. "Tear her, Wullie, the Jezebel!"

The Tailless Tyke sprang on the picture, placed one big paw in the very centre of the face, forcing it into the muck, and tore a corner off; then he chewed the

scrap with unctuous, slobbering gluttony, dropped it, and tore a fresh piece.

David dashed forward. "Touch it, if ye daur, ye brute!" he yelled; but his father seized him and held him back.

"And the dogs o' the street," he quoted.

David turned furiously on him.

"I've half a mind to brak' iver yone in yer body!" he shouted, "robbin' me o' what's mine and throwin' it to yon black brute!"

"Whist, David, whist!" soothed the little man. "'Twas but for yer ain good yer auld dad did it. 'Twas that he had at heart as he ay has. Rin aff wi' ye noo to Kenmuir. She'll mak' it up to ye, I war'nt. She's leebleral wi' her favors, I hear. Ye've but to whistle and she'll come."

David seized his father by the shoulder. "An' ye gie me much more o' your sauce," he roared.

"Sauce, Wullie," the little man echoed in gentle voice.

"I'll twist yer neck for ye!"

"He'll twist my neck for me."

"I'll gang reet awa', I warn ye, and leave you and yer Wullie to yer lone."

The little man began to whimper.

"It'll brak' yer auld dad's heart, lad," he said.

"Nay; ye've got none. But 'twill ruin ye, please God. For ye' and yer Wullie'll get ne'er a soul to work for ye—ye' cheese-parin', dirty-tongued Jew."

The little man burst into an agony of affected tears, rocking to and fro, his face in his hands.

"Waesucks, Wullie! d'ye hear him? He's gaein' to leave us—the son o' my bosom! My Benjamin! my little David! he's gaein' awa'!"

David turned away down the hill; and M'Adam lifted his stricken face and waved a hand at him.

(To be continued.)

The Housewife and the Hammer.

There are many things a clever woman can evolve from a few boards, a handful of nails and a pot of good stain, but even if she possesses the ideas without the faculty for carrying them out herself, she can get most excellent results by having a carpenter carry out her ideas.

The modern house seldom has many closets, roomy or otherwise, while in the average apartment they are, as a general thing, most decidedly conspicuous by their absence, and if there should be space for one, the landlord is more than apt to register an objection to having one built in, as it might disfigure the walls. This, however, need not cause the woman of ideas to despair, for there are two ways, at least, of getting around this obstacle, and having a portable closet built after her own plans. For a few dollars a carpenter will make a large boxlike affair, with no door, that is six feet in height, forty inches wide, and almost thirty deep. In this case, about one foot from the top he puts a shelf, and then leaves the rest to be done by the owner.

A small can of stain the color of the woodwork in the room makes the closet retire to the background, so to speak, in a most unobtrusive fashion; a small brass rod and curtain complete the front, while nickel rods for coat and skirt hangers screwed to the under side of the shelf, and rows of hooks around the sides, give abundance of room for clothing of all sorts, leaving the shelf for hats, while the lower part of the closet may be boxed off for shoes and slippers.

Another idea for a portable closet is even simpler, for it is nothing more nor less than a hanging shelf. Secure a strong plank, of the required size, attach to it several strong hooks, and suspend it from the picture-molding by means of slender but strong brass chains slipped over several picture hooks, screw clothes

hooks in the shelf, put a curtain in front, and you have a most convenient little wardrobe.

This shelf may be made to do its duty in various ways, and is a boon to the occupant of the average boarding-house room or to the college student, for it is easily hung in any part of the room, holds books, bric-a-brac or the paraphernalia needed in "light housekeeping," while it may be as decorative or as unostentatious as desired.

A most convenient shoe box of home manufacture may be made of the leaves of an old-fashioned extension table, and bears the stamp of an heirloom. An ordinary board forms the bottom of the box; the sides are made of a leaf, sawed in two lengthwise; pieces of another forms the ends, and an entire leaf is used for the top; simple brass hinges are attached, and the nails used are quite hidden by little wooden pegs. This box costs practically nothing, for no polishing or staining is required; the nails and hinges are apt to be in the box of odds and ends, and about two hours' work is all that is necessary.

The lover of books requires more and more space as the treasured volumes accumulate, and many charming bookshelves may be made by any woman who can drive a nail straight, and it is an exploded idea that this feat is quite beyond one of the feminine persuasion. These shelves, built in the angle formed by wall and chimney, fill a most unlovely spot and give as well an appearance of cheer and comfort to the chimney corner.

Built in sections, low and broad, they may be set around the room in unbroken line, and the top utilized for many things.

A satisfactory and artistic effect is given to bookshelves on one side of the room only, if they are built in three sections with the shelves of the middle one differing in height from those on each side, as in this way the line is broken and variety given.

A charming effect may be obtained by having a perfectly plain settle made with a high back, and shelves of the same height placed at each side. This will prove a deliciously cosy and comfortable nook in which to spend a rainy afternoon.

An excellent device for the kitchen is a shelf that is placed at a convenient height over the range, on top of which may be kept cake pans, mixing bowls, and all the things that can't be hung up; screw under the shelf the small brass hooks used in china closets for cups, and hang up the saucepans where they may be easily and quickly reached. Under this shelf is placed a rack to hold the many covers and tops of the cooking utensils.—[N. Y. Mail.

Gender in English.

A very good story is current among the recent visit of Japanese naval officers to England. A certain hostess, we will not specify exactly at which port, where the ships companies of the Katori and Kashima spent some time, had done all in her power to make the visit of a group of officers, with whom she came more prominently into contact, of a pleasant nature. With feelings of gratitude, her guests came to express their final thanks, and the spokesman of the group, after recording their united appreciation of what she had done, expressed the fear that they had "cockroached" much on her valuable time. The kindly hostess had made them so much her friends that she had arrived at suggesting corrections in occasional lapses of the English language. She gracefully acknowledged the thanks, and intimated that, far from "encroaching" on her time, what she had been permitted to do had been to her, a great pleasure. The correction was noted, and her guest, with profuse apologies, said he was greatly sorry that in addressing a lady he had overlooked to use the feminine form. —[Times (Bangkok).

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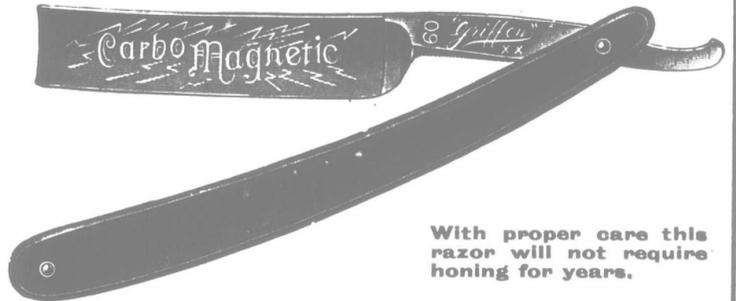
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GOSSIP.

Mr. M. J. McGillicuddy, Kenilworth, Wellington County, Ont., claims January 31st as the date for an auction sale of Shorthorn cattle, further notice of which will be given next week.

Mr. Wm. Smith, Columbus, Ont., makes a change in his advertisement of Shorthorns in this issue. There is offered a most desirable opportunity to exchange stock bulls. Shorthorn breeders who desire an exchange should look up the advertisement.

The annual meeting of the Canadian Ayrshire Breeders' Association will be held in the Monument National Building, No. 296 St. Lawrence Boulevard, Mont- real, Que., on Thursday, the 14th of February next, at 10 a.m. The directors will meet at the Queen's Hotel (corner Windsor and St. James Sts.), on the evening of February 13th, at 8 o'clock. W. F. Stephen, Sec.-Treas.

"Now, children," said the teacher of a class in Greek history after an earnest lecture of half an hour on Spartan en- durance, "who can tell me what we call a person who bears the greatest suffer- ing without wincing; who, even if a wolf were gnawing at his vitals, would make no complaint?"
For a moment no response was made, and then a little girl named Carrie Brown called out: "I know—a Christian Scientist."

Mildred is a bright little girl of six. The other day she was with her mother in the park when she saw a dog whose species was entirely new to her. That evening she thus described it to her father:

"It was such a funny dog, father; it looked about a dog and a half long and only half a dog high, and it had only four legs, but looked as if it ought to have six."

Needless to say, her father recognized from her graphic description that Mil- dred had seen a dachshund.

INFORMATION FOR INVESTORS.

The buyers of the lakes will hardly need ores if they make a sale. If silver is not sought for in vain, it may be found in vein.

Sixteen to one is the ratio of capital to labor in the Temiskaming mines. Well, it cannot be truthfully said that the promoter is resting on his oars.

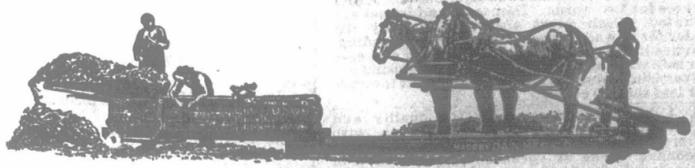
If there was a mine wherever adver- tised, Cobalt would be one vast ex- pensive hole.

Those fellows who buy the beds of the Cobalt lakes should have no difficulty in watering their stock.

The future of Cobalt would be brighter if the promoters would work the mines more and the public press less.

"Speech," says the proverb, "is silver," but how can you expect silver to make a good speech when it is not in the vein?—[Kincairdine Review.]

Started His Third Dain



We had the pleasure of starting the third **Dain Press** for Mr. Harry Hunter, of Napanee. He is perfectly satisfied with the **Dain** machine. Sells his hay in all the different markets: Montreal, Boston, New York, Toronto, and also for the lumber woods.

Expresses his satisfaction. Has had no breaks and vexatious delays. Gets out a capacity of over a ton an hour, and his machines are going every day. Mr. Hunter tells us that the **Dain Press** is away ahead of any other he has ever had any experience with.

Load after load of hay is being teamed to the cars at Napanee and other stations in that district, pressed with the **Dain**. Each bale is a model of beauty, and each man expresses himself as thoroughly satisfied with the **Dain Press**, and has no hesitation in saying that the **Dain** is the best horse press on the market.

If you are thinking of buying a press, why not get one of the kind which are giving better satisfaction than any other on the market, bar none? Our prices are right. Higher than some, lower than others. Tell us what terms you desire to buy on, and give us references.

We sell under a stronger guarantee than any other firm will put up.

THE DAIN MFG. CO., PRESTON, ONT.

The Fairchild Co., Winnipeg, Man.,
Western Agents.

Important Dispersion Sale!

One of the oldest and best flocks of Cotswold sheep in Canada will be sold at the **ROYAL HOTEL STABLES, WOODSTOCK, ONT., on**

WEDNESDAY, JANUARY 23rd, 1907.

50 Registered Cotswold Ewes

From one to five years old. All bred to the imported shearing ram, champion at the Canadian National Exhibition, Toronto, 1906. This grand ram is also included in the sale. Sale to commence at 1 p. m.

VALENTINE FICHT, PROPRIETOR, ORIEL, ONT.

E. R. Almas, Auctioneer.



MITHS' OVARY TONIC MAKES HENS LAY

Your hens will lay all the year round, if you will give them Smith's Ovary Tonic once a week.

One teaspoonful to four fowls keeps hens healthy—strengthens and invigorates the egg-producing organs—and renews wasted tissue due to prolific laying.

Only 25c. and 50c. a bottle. Sold by druggists, grocers, etc.

NATIONAL DRUG & CHEMICAL CO., LIMITED, MONTREAL.

AUCTION SALE

At Maple Hurst Farm, KENILWORTH, on

Thursday, Jan. 31st, '07,

At 1 p.m. sharp.

Consisting of seven bulls, ranging from one to two years old; twenty females, twelve of which are choice young cows of good milking strains, with calf or calf at foot, sired by present stock bull, Prince 61878, by Prime Favorite (imp.), a Marr Princess Royal, and the balance are a choice lot of young heifers, of the thick, mossy type. Also a few matched pairs of road and carriage horses will be offered, and a few pure-bred Yorkshire and Berkshire sows.
Farm: one mile from Kenilworth, seven miles from Arthur, eight from Mt. Forest, on C. P. R. All trains met on day of sale.

M. J. MCGILLICUDDY, Proprietor.

The only medium which conveys weekly to the farmers of Canada, the advertiser's place of business, 52 times a year, is **THE FARMER'S ADVOCATE AND HOME MAGAZINE**. Subscription, \$1.50.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 20 cents.

LAYERS—They show the quality and breeding. At three exhibitions, with strong opposition, they swept 31 firsts and 30 seconds. Cocks or cockerels \$2.50; pullets or breeding hens, \$1.50. Varieties: White, Buff, Golden and Silver-laced Wyandottes, White, Brown and Buff Leghorns, White and Barred Rocks, White and Black Minorcas, Buff Orpingtons, Spangled Hamburgs, White-crested Black Polish, Silver-pencilled guineas, \$2.50 pair. Pigeons: Tumblers, Jacobins, Pouters, Homers, Fantails, \$1 pair. Minter's Poultry Yards, Hanover, Ont. Box 108.

BRONZE turkeys. Bred from prizewinners at Ottawa Poultry Show. White Wyandottes and Barred Rocks. Geo. R. Bradley, Carsonby, Ont.

FOR SALE—Some extra well-bred Barred Rocks. Prices right. Write A. S. Werden, Aneida Farm, Bethel, Ont.

FOR SALE—Choice White Wyandotte cockerels at reasonable prices. T. A. C. Tier, Idington, Ont.

FOR SALE—High-class Mammoth Bronze turkeys. Bred from imported stock on both sides. Write: E. Hodgson, Clandeboye.

FOR SALE—Pure-bred cockerels—Barred Rocks, Buff Orpingtons, White Leghorns, Guinea fowl—\$1.00 each. John B. Morgan, Wales, Ont.

FOR SALE—Bronze turkeys. Large young toms with brilliant plumage. Chas. W. Bainard, Glanworth, Ont.

HEAVY-LAYING White Leghorn hens and cockerels to go at a bargain. Write for particulars. Jas. L. McCormack, Brantford, Ont.

MAMMOTH Bronze turkeys, bred from imported prizewinning toms and hens. Part of stock from the first-prize Pan-American winners (Hilop's strain). Pairs mated not akin. B. G. Rose, Glanworth, Ont.

MAMMOTH Bronze Turkeys, Silver-Gray Dorkings, Barred Rocks, from prizewinning. Pairs not akin. Alfred E. Shore, White Oak, or 550 English St., London.

MAMMOTH Bronze turkeys, bred from imported stock. We have an extra heavy and well-colored lot. T. Hardy Shore & Sons, Glanworth, Ont.

237 EGG-STRAIN Barred Rocks. Cockerels now. Eggs in season. J. R. Henry, Waterdown.

White Wyandottes We have a fine winter-laying strain, with single birds or breeding pens, at reasonable prices. Also prizewinning Shropshire. W. D. Montman Bondhead, Ont.

Hatch Chickens by Steam with the EXCELSIOR INCUBATOR OR WOODEN HEN
Simple, perfect, self-regulating. Hatch every fertile egg. Lowest priced first-class hatchers made. GEO. R. STARK, Quincy, Ill.
Send for free Catalogue.

MONEY IN CANARIES

More profitable than poultry. Experience unnecessary. We give advice free. Our new 25c booklet, "Money in Canaries," tells all about it. With book we send free, if you name this paper, a nice packet BIRD BREAD. Also, "How to R. Birds of Lice," and "Bird Magazine." Send 2c to-day; stamps or coin. Refunded if you buy birds from us. Birds shipped anywhere any time. Write us before buying. Ad. res.:

COTTAM BIRD SEED

25 Bathurst St., London, Ont.

POULTRY PAYS Our Book, "Poultry for Profit" showing 35 best paying varieties and mailed for 10 cents. Pleasure and Profit. Delavan Poultry Farm, F. E. R. Goetz, Manager, Box 23, Delavan, Wis.

EDMONTON LANDS

Farms—Improved and unimproved. All kinds. Easy terms and right prices.

W. D. Jones & Sons
Box 214, Edmonton, Alberta.
Opposite C. N. R. station

The London (Eng.) Hackney Horse Show for 1907 is fixed for the dates, March 5th to 8th. Very liberal prizes are offered in many classes, including breeding, Hackney and pony Hackney stallions, mares and fillies, for produce and family groups, and harness stock in great variety. Notice is given that in 1908 and future years, stabling will be provided for 700 horses. The secretary is Mr. Frank F. Euren, 12 Hanover Square, London W.

AYRSHIRES FOR ABROAD.

The Scottish Farmer says that Ayrshire Scottish herds are becoming more and more popular in increasing demand in many countries. Recently purchased by the Transvaal, and

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

Miscellaneous.

LEGACY LIST.

Is any record kept in this country of legacies left to heirs in Canada by parties in England?

Ontario.

Ans.—No.

A LAPSED LEGACY.

A father and mother died, the mother dying about twenty-four hours ahead of the father. They left three daughters, two sons, and one grandson belonging to a daughter now deceased. The whole estate was worth eight thousand dollars. The father had given the oldest son a farm worth twenty-five hundred dollars, but took a one-thousand-dollar mortgage on it. A will was left which read as follows: The oldest son was to receive the mortgage clear, with all back interest. The grandson was to receive two hundred dollars, to be put in the bank till he become of age. The wife was to receive one thousand dollars for herself at his death, the rest to be divided among his three daughters and the youngest son. As the wife died first and never fell heir to the one thousand dollars willed to her, how will it be divided?

Ans.—The thousand dollars in question falls into and becomes part of the residuary estate, and goes, accordingly, to the three daughters and youngest son.

CREAM HARD TO CHURN.

We have twelve cows milking, and are feeding ensilage, turnips, oat chop and bran. We have a separator, and always cool our cream before mixing it. We cannot bring good butter without churning an hour and twenty minutes, sometimes more. We churn our cream at 68 degrees; if we raise the temperature any higher the butter comes soft, and we do not get all the butter out of the cream. We have four farrow cows. Would that make any difference? The cows have all the salt they wish.

Ans.—The most probable cause of the trouble is that the cream is too thin. A sample taken to the creameryman, or to some neighbor who has a Babcock-test machine would settle this point. In winter, a cream should be skimmed testing, at least, 30 per cent. butter-fat, and 35 per cent. is all the better. Such will churn much more quickly than cream testing only 20 per cent. fat, and give a more exhaustive churning besides. The four farrow cows, if they have been milking for some time, would tend to make the butter come more slowly, but a few fresh ones should counteract the tendency. There is, however, a very great difference in individuality of cows in this respect. There is also some general difference in breeds. Jersey milk churns easily, as a rule, because the globules of fat are large. On the other hand, Ayrshire milk churns less easily, because its fat globules are small.

SHEEP DIP—STOCK FOOD.

Please give a recipe for sheep dip, also a stock food suitable for pigs. I feed a lot of them, and some of them get stiff on their limbs in cold weather. Also state whether same food is good for other stock.

Ans.—We know of no sheep-dip mixture that is cheaper or more effective than the advertised proprietary preparations, except tobacco, which answers the purpose of destroying ticks and lice, but does not improve the healthfulness of the skin and growth of fleece as do the coal-tar preparations, such as Zenoleum, Little's and Cooper's sheep dip, sold by druggists, which are easily prepared, needing only to be mixed with cold water, hot water being added to make the solution work to best advantage, and of the desired strength, as per directions on packages.

Stock foods, so called, are generally of the nature of condiments or stimulants to aid digestion and sharpen the appetite. Most of the advertised stock foods are made up largely of the following mixture,

which, as a tonic, is recommended, and is suitable for other stock as well as pigs: Two ounces each of ferric sulphate, pulverized gentian, pulverized nuxvomica, and nitrate of soda. Mix these, and give a teaspoonful night and morning. Exercise daily, and access to wood ashes and salt, mixed, and kept in a low box in the pigpen, should be helpful in the case mentioned.

In the advertisement of Messrs. Campbell & Argue, expert well drillers, of Plantagenet, Ont., by an inadvertency they were represented as exporters of well-drilling machines. It should have read importers. See their advertisement in another column.

Mr. J. M. Gardhouse, Weston, Ont., writes claiming Thursday, February 7th, as the date for a clearing sale of Clydesdale and Shire horses, Shorthorn cattle and Leicester sheep, advertisement of which may be looked for in these columns later.

Mr. John McFarlane, Dutton, Ont., writes that he has recently sold to Mr. John H. Wight, Dutton, the beautiful red bull calf, Malcolm, by Royal Prince (imp.), and has yet for sale eight well-bred ones, from six to twenty months old. He also offers cows for sale, with calves by their side or to calve shortly, also eleven registered Oxford Down ewe lambs.

Mr. W. H. Gibson, Manager of Huntwood Farm, Beaconsfield, Que., has a special advertisement of young Shorthorn bulls in this paper, and writes: "These are really a very superior lot of young bulls. The herd is in grand shape just now; calves coming on fast. The first-prize cow at Toronto, Lavender 44th, has just dropped a very good roan bull calf, by Imp. Gold Cup, and her dam, Lavender 42nd, has a beautiful red bull calf, by Imp. Cicely's Pride."

There is a wonderful demand in all the eastern cities of the United States for combination saddle and harness horses with size and beauty. Such horses bring big prices and are snapped up as quickly as they appear on the market. Riding, by the way, seems to be increasing in popularity, and especially among women, and it is a source of pleasure to know that in most cities women are adopting the cross saddle, which makes riding more healthful, more sensible and much safer. A combination horse which can be used under saddle and in harness also, makes riding and driving possible to many who would not, otherwise, be able to enjoy both forms of recreation.

At this time of the year a good deal of permanent injury is often inflicted upon horses, which may slip on ice-bound or greasy roads without appearing to suffer any serious consequences at the time. Yet the animals may have contracted a sprain or internal injuries, the effects of which were not immediately apparent, though a careful examination the next morning might prove the existence of some injury. A sprain may or may not lead to serious consequences, but under the most favorable circumstances it is sure to do so if neglected. Therefore, if detected, a period of rest is essential, though the actual treatment must depend upon circumstances. Opinions differ regarding the efficacy of cold or hot water applications for sprains, but in any event one or the other remedy should be resorted to. If the injury is to a leg, and the cold-water cure is decided upon, the limb may be bandaged and placed in a pail of water every few hours.

TRADE TOPIC.

A GREAT SEED BOOK.—Ferry's great seed book is now ready for distribution. This book is really more than a catalogue. It differs from others inasmuch as it really helps each farmer or gardener to choose intelligently the varieties best suited to his particular needs. The wise selection of varieties results in bigger, better paying crops. The experience gained in fifty years of successful seed-growing is thus at your command. For freshness, purity and reliability, Ferry's seeds are remarkable. They are known all over the land, and farmers everywhere have confidence in the name of Ferry, and know for a certainty that their seeds can be relied upon. They know that every package has behind it the reputation of a house whose business standards are the highest in the trade. Just drop a postal to D. M. Ferry & Co., Windsor, Ont., and they will send you a copy of their 1907 seed annual. It's absolutely free.

QUESTIONS AND ANSWERS.
Miscellaneous.

ROSEBUDS BLASTING-BEGONIAS-INK STAINING.

1. We have several rose trees which remain outdoors; some of the bulbs bloom out, but more than three parts of them die away; seem to rot before blooming. Would like to know the cause.

2. We have several Begonias which have insects; on one I notice they are white and seem to cling into every little slip; and on others the insects are green. They say the smoke of a pipe is good. I have done that, and also washed the plants, and that seems to have done very little good. Would like to know of something better, for the plants seem to be dying away.

3. What is good to take stains of ink out of linen?

Ans.—1. Sour soil, arising oftentimes from imperfect drainage, poor soil, or extreme dryness of the soil for even a short time, or too much water at the roots, will spoil the flowers. Roses like moisture, but not enough to sodden the soil.

Buds produced from wood not properly hardened or ripened are often imperfect. Early in December is a good time to put a light covering on roses that are not quite hardy. Keep the covering on until about 1st of April, as March is a trying month usually. Uncover them in dull mild weather, if possible, even if you have to wait a few days for suitable weather. It is usually an extreme condition of some kind that causes the trouble; oftentimes as much from mistaken overkindness as from neglect.

2. The insect on your Begonias is probably the mealy bug. To remove it, syringe the plant with fir-tree-oil-soap solution. For directions, see "With the Flowers" of this issue.

3. To remove ink stains from linen, apply liquid solution of oxalic acid, 1 pint of the solution to be mixed with 2 parts water. Rub in with a soft cloth, then wash well, and, finally, rinse in ammonia to prevent rotting of the fabric.

RATION FOR DAIRY COWS.

Please tell which is the best of the following feeds for milking cows: Gluten, \$1.25; corn meal, \$1.20; bran, \$1 per cwt.

Ans.—Our inquirer should have specified whether he meant gluten meal or gluten feed. Gluten feed is the entire corn grain less the starch it carries. It is rich in ether extract (fat) and protein, and is well suited for dairy cows. Gluten meal does not contain either the hull or germ and is usually richer, pound for pound, than gluten feed. Both gluten meal and gluten feed, however, vary widely in composition, according to the particular brand. The following figures will give a fair average idea of how they compare with corn meal and bran:

	Per cent. protein.	Per cent. carbohydrates.	Per cent. fats.
Gluten meal...	25	40	10
Gluten feed...	20	50	4
Corn meal...	6.26	65.26	3.50
Wheat bran...	12.01	41.23	2.87

From the above, it is plain that a good brand of gluten meal or even gluten feed at \$1.25 per cwt. is a much more economical feed for dairy cows than bran at \$1, and very much cheaper than corn meal at \$1.20. Of course, if the roughage consisted of alfalfa or clover hay, a certain amount of corn would be advantageous to help balance up the ration; but, ordinarily, the roughage is such that a concentrate rich in protein, as gluten meal, gluten feed, or oil cake, is needed. Bran is excellent for the purpose, being valuable for its effect on digestion, as well as for its composition. Bran also possesses an ash content that makes it a specially valuable contribution to the manure pile. It is nearly always advisable to use a little bran in a ration for dairy cows, but at present prices it is economical to substitute a part of the usual bran allowance with gluten meal, gluten feed, cottonseed or oil-cake meal. We would suggest, confining ourselves to the above-mentioned feeds, a ration of: Bran, 3 lbs.; corn meal, 3 lbs.; gluten meal, 2 lbs. per head per day, to be fed in conjunction with clover hay and corn silage or corn fodder.

CEMENT WALL AND FLOOR.

I have sent one new subscriber, and instead of marking date six months forward, tell how many yards of sand and broken stone and how many barrels of cement (doors and windows every 10 feet, window 2½ feet by 4 feet) are needed for stable 46 x 86 x 9 feet; the wall to be 15 inches thick.

2. Also, how many yards of sand and broken stone and barrels of cement for floor, 4 inches thick?

3. For cement arch, 12 feet by 24 feet, for approach to barn.

Ans.—1. When ordinary gravel is used, and mixed ten parts to one of Portland cement, 128 cubic feet of gravel and 3 barrels of cement are sufficient for 100 cubic feet of wall. Enough sand should be used with broken stone to fill up interstices, one-half as much sand as stone would probably be enough, and the proportion of cement required would not differ greatly from that used with gravel. According to this, 90 barrels of cement and 110 cubic yards of sand and broken stone would be necessary.

2. For floor, 40 barrels of cement and 50 yards of sand and broken stone.

3. A tremendous amount of concrete is required for construction of arch approach, the amount depending, of course, on thickness and style. To lessen cost, some are now, with good results, using ordinary walls, with level or slightly-sloping cover of about a foot in thickness, strongly reinforced with steel wire.

UNSATISFACTORY WINDMILL.

I gave an order for a windmill a year ago last November; it was guaranteed to work as good as any other mill. It does not do so. The agents have tried to make it work, but cannot. The order called for settlement on Nov. 1st, 1906; but the mill does not work, and has not been settled for by note or payment of any kind.

1. Can the company collect payment?

2. Is the order null and void after Nov. 1st, 1906?

3. I gave the company warning to take the mill away in order to get something else in to put water into my stables; but they would not do so. We have to take our stock out quite a distance to water, and one of my horses came near being killed on the ice while going to water. Can I come on the company for damages?

Ans.—1. No.

2. No; but it is not effective for the purpose of compelling payment by you, under the circumstances, for the windmill in question.

3. You are entitled to some compensation for the windmill being left on your hands after notice to the company to remove it, and you should make a demand on them for such compensation, and at same time renew your notice to them to remove the mill.

AN ERRONEOUS CERTIFICATE.

A is a candidate at an examination, which is divided into two groups. Failure in one subject means failure in the whole group, but does not nullify success in the other group. A writes on one group, and is successful in all the subjects but one. B, who is one of the examiners, informs A verbally that he has failed. Shortly, later, A receives a certificate from the Board of Directors to the effect that he has passed with honors in both groups, when he only wrote on one; the mistake being all on the part of one of the examiners. Could A force the Board to recognize and accept his certificate, and, if so, what steps should be taken?

Ans.—No.

POLL TAX-DIVIDING LINE FENCE.

1. A young man who is out of the country at the time of the annual school meeting, wishes to know if he is exempted from paying poll tax.

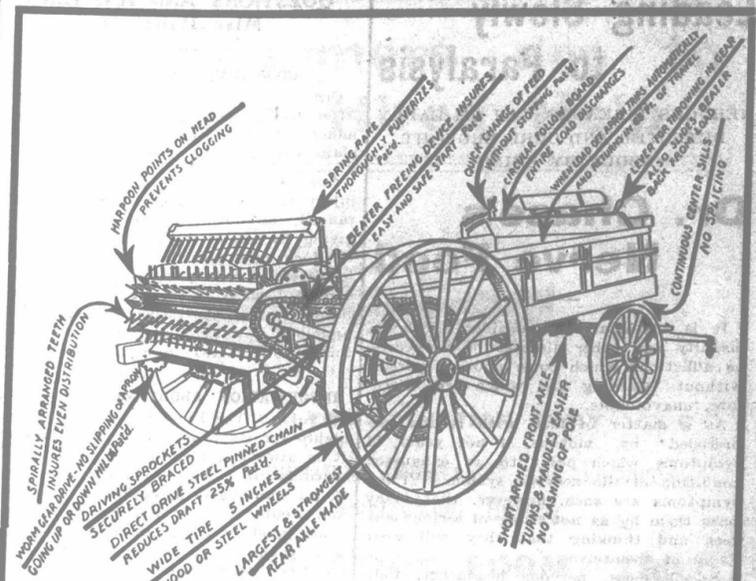
2. Can a man with property refuse paying school tax (poll tax), though away from the country?

3. A and B wish to have a line fence equally divided. Should the width of a main road which runs through B's share be left out, or must it be measured?

Ans.—1. Probably not.

2. Yes, assuming that he is assessed for such property.

3. It ought to be left out of the reckoning.



Buy the Strongest Manure Spreader
The "Success."

You never saw a "SUCCESS" Manure Spreader with the sides of the box bulging out, or the sills separated and sagging. They are more strongly built than other manure spreaders. Made of WHOLE UNSPLICED TIMBER and firmly braced, so that there is not a single weak spot in the whole machine. Indeed, so strongly constructed is the "SUCCESS" that it will stand the heaviest kind of strain without weakening. Bumping along uneven ground with a heavy load does not injure "SUCCESS" in the slightest. CENTER SILLS are continuous—not weakened by splicing as in most machines—but strengthened with heavy steel braces, so that the frame is exceptionally rigid and strong. Besides being the strongest machine, it is also the simplest. Consists of less parts than any other; easier to set up, easier to operate, less to get out of order. The "SUCCESS" will prove a profitable investment—not an annoying expense. Complete detailed information given in our Free Illustrated Catalogue. Write for it to-day.

THE PARIS PLOW COMPANY, LIMITED
Paris, Ont., and Winnipeg, Man.

BRANTFORD
"ASPHALT" "RUBBER"
ROOFING

BRANTFORD
ROOFING

We don't need to say our Roofing is so much better than others. Our customers say so, and that is good enough for us. A roofing which is soft in freezing weather is filled with cheap oil and other composition. Such goods will not stand the heat of summer, but will evaporate and perish quickly. No material for roofing is so durable as "asphalt." All Brantford Roofing is made of it. We have the popular goods. Our repeat orders say so. If you cannot get them from your local dealer write us direct.

BRANTFORD ROOFING CO., Limited, BRANTFORD, CANADA.

CARNEFAC

IS JUST WHAT

THAT THIN HORSE NEEDS

THOSE STEERS that are not thriving need only **CARNEFAC** to bring them on. **CARNEFAC** brings results **SURE** and **QUICK**.

The Carnefac Stock Food Co.,
Toronto.

When Writing Advertisers Kindly Mention this Paper.

Leading Slowly to Paralysis

NERVOUS DISEASES CAN BE EARLY DETECTED AND CURE BROUGHT ABOUT BY USING.

Dr. Chase's Nerve Food

It is customary to consider paralysis, insanity and other diseases of the nerves as afflictions which come upon a person without warning and which are, therefore, unavoidable.

As a matter of fact, such results are preceded by months, if not years, of symptoms which point to an exhausted condition of the nervous system.

Sleeplessness, nervous headaches, indigestion, bodily weakness, fainting spells, twitching of the nerves, inability to concentrate the thoughts and loss of memory are among the most common indications of a run-down nervous system.

Stimulants and narcotics, though sometimes affording temporary relief, only hasten the exhaustion of the nerves.

Naturally, gradually and certainly this great medicine instils into the blood and the nervous system the life-sustaining principles which replenish the nerve force in the body and so effect lasting benefit.

Miss Emma Scott, Athens, Ont., writes: "Dr. Chase's Nerve Food has done me a world of good. I was troubled with fainting spells, bodily weakness and spent restless, sleepless nights."

"I doctored with several doctors, and they told me I was threatened with paralysis. They gave me relief, but could not cure me. After suffering for three years, I began the use of Dr. Chase's Nerve Food, and it has done me more good than all the medicines I ever used."

Dr. Chase's Nerve Food, 50c. a box, at all dealers, or Edmanson, Bates & Co., Toronto.

CHAMPION EVAPORATORS

and Sugar-Makers' Supplies.

Over 67,000 Champions sold throughout the maple belts of Canada and the United States.



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QUESTIONS AND ANSWERS. Miscellaneous.

COW GIVES THICK MILK

One of my cows gives thick milk. After being separated, a thick substance adheres to the separator. Can you explain the cause? W. R.

Ans.—This cow has either received an injury to the udder, or her system is deranged, or both. We should recommend giving her about 1 1/2 lbs. Epsom salts in the form of a drench. Her udder should be carefully examined, and if any injury can be located, bathe with some form of liniment, such as turpentine, vinegar and ammonia, or ammonia, turpentine and linseed oil, mixed in equal parts.

O. A. C. H. H. DEAN.

INFORMATION ABOUT CEMENT SILOS.

I value "The Farmer's Advocate" very highly for its practical worth to me, and it is always a pleasure to speak a good word for it. Just now, I am interested in the building of a cement silo in spring, and would be pleased if you can suggest some good practical work on this subject that would be helpful to one in building same, who has experience in building concrete floors, etc.

Ans.—More practical and up-to-date information on the construction of round cement silos will be found in the early 1906 issues of "The Farmer's Advocate," especially the January 11th number, than in any book or bulletin we know of.

COW HOLDING UP HER MILK

What is the cause of a cow holding up her milk, and what the cure? A. S.

Ans.—It is generally supposed to be a nervous affection, due to fright or strange surroundings. It is frequently due to rough treatment, grooming with a club, a fork, or a milking stool, in which case the protest of the cow is shown in holding up her milk, and is justifiable obstinacy. The cure is kindness, gentle grooming with a brush, and a feed of a couple quarts of meal or bran, given while being milked.

TO AVOID TURNIP FLAVOR.

I would like to hear from some one or more men who have had experience in feeding turnips, whether they can be fed without affecting the flavor of milk. B. C.

Ans.—This is an old point of dispute, on which the most voluminous discussion never seems to result in agreement. Turnips are rarely fed without danger of affecting the flavor of the milk; but by feeding moderate quantities, and always after milking, so as to avoid the smell of cut turnips in the stable where the milking is done, the effect on milk or butter may be reduced to an imperceptible quantity.

LICE ON HORSES—CORN FOR BEEF CATTLE.

1. What is good for lice on horses? 2. Which is the better to feed beef cattle just corn, or is it better to feed a little chop, or is whole grain better? C. C. M.

Ans.—1. Try one of the proprietary sheep and cattle washes. A cheap and simple remedy for lice in cattle, recommended at the Ontario Winter Fair a year ago, reported in these columns, and since approved by a subscriber who tried it, is a mixture of ordinary dry cement and insect powder sifted into the hair on the back of the animal.

2. Corn is the best one grain for fattening stock; but a mixture is better than any single kind. Chop is usually preferred to whole grain for cattle, although soaked corn answers well.

OX-EYE DAIBIES IN HAY.

I have bought some hay at an auction sale, in which there is ox-eye daisy, which I did not know was there. I gave my note for the hay before I started to draw it away. Can they compel me to take the rest of the hay, or any? I have drawn 3 1/2 tons. I took this in one day. The hay was \$10.25 per ton. I have sent some of the seed to Guelph for analysis. I don't know if the seed is matured in the hay or not.

Ont. A SUBSCRIBER.

Ans.—Judging, as we must, from the facts contained in the foregoing statement alone, we think that you are legally bound to accept the balance of hay, and to pay the note at its maturity. It may be that there were representations made in the advertisements of the auction, or by the vendor, or auctioneer at the time of the sale, that might materially affect the matter, but there is nothing in the statement before us to indicate that such was the case.

MUSHROOM-GROWING.

I have a large, vacant, frostproof cellar, and am thinking of using it for mushroom-growing. Can you give me any information as to how to start and manage the beds, and the probable costs and profits, etc.? OLD SUBSCRIBER.

Ans.—It would not be advisable to grow mushrooms in the cellar under an occupied house, as the odor of the manure which must be used would go through it. If your cellar is apart from the house, it may answer the purpose very well. Mushroom culture is not, however, easy, so much depends upon the spawn being good, and upon the conditions being exactly right.

The cellar should have some ventilation, but there should be no air currents crossing the beds. The best material for the beds has been found to be horse manure without much coarse straw. The manure should be piled in some sheltered place in a pile from 3 to 4 feet deep, and should be allowed to heat, but not to burn, a condition which will be shown by its turning white inside.

It is very risky venturing an estimate of the profits of mushroom culture, for the crop is so very uncertain, and much also depends upon the markets. Sometimes the crop is grown—or not grown—at a dead loss; in other cases it proves highly remunerative.

Labor, however, is an important item.

Look into this roofing question



Get book on "Roofing Right" and see how little risk you take when you roof any building with

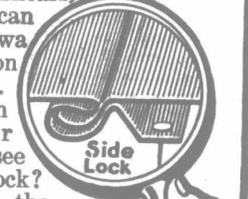
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QUESTIONS AND ANSWERS. Miscellaneous.

A HEN CONUNDRUM.

Our hens are such a conundrum to us I would like a little advice. The flock consists of about 100 pullets, year-olds and two-year-olds. They were fed all fall on a mixture of wheat and oats, and had lots of range. Since going into winter quarters, they have been fed pulped sugar beets, of which they eat a quantity, hot mash stiffened with chop, wheat and oats liberally sprinkled in a foot to two feet of dry litter in a scratching pen. They have free access to gravel, poultry grit, dust-box, and fresh drinking water. They also get an occasional beef head, hacked up with an axe, or any other meat scraps that are left. We think we have been attending to them well, and yet they remain pale and mopy-looking; don't sing, nor appear as if they would lay for a month or two yet. Do you think they need a tonic? G. O.

Ans.—Nothing is said about the housing of the birds. From the description of the stock I would be inclined to believe there are too many birds in the house for the floor space, and, in addition to this, the house is ill-ventilated. Personally, I have not much faith in hot mash. The sugar beets are all right, but I get better results from mangels. If I had this flock of hens I would give them in the morning some whole grain in straw. I would use about one foot of straw over the floor of the pen and sow the grain on it, in the same manner as you would sow a field, using say 1 1/2 gallons of grain. This should be buried in the straw, the most convenient way is to use a fork. With us, where fowls are in large flocks, we would sow this after dark at night, and take the fork and turn the straw over it. Early in the morning, the birds get up and go to work. At noon, I would give them the roots and whatever meat you have. I would like to see the ration changed from oats to wheat or barley, if this is possible. Also give the birds a forkful of clover hay every day, or better still, the clover leaves or clover chaff which you find about the barn. At night, you could feed from troughs, oats that had boiling water poured over it six or seven hours previous, or give them a mash if you like. If you want to use a tonic, I think one is as good as another. In this case it might do some good, but I would not advise you to use it too freely. You might use it for about a week or two on trial as per directions, but there is a danger from its use, in that you might injure your birds constitutionally. I have used these foods occasionally with good results. When the birds appear to get out of condition and need a condition powder, or need a little tonic, I think some of these poultry foods are all right. W. R. GRAHAM. O. A. C.

BUTTER DOES NOT COME.

Butter does not come. We feed our cows two bushels of sugar beets per day, one in the morning and one at night, pulped, and all the good hay they will eat. We are milking three cows, two of them calved last spring, and one calved two months ago. The cream froths up. W. L.

Ans.—We could arrive at a more positive conclusion if we knew by what method the cream is raised. If a separator or a creamer is used, the probability is too thin a cream is being skimmed. The cream should test 25 or 30 per cent. butter-fat. A sample taken to the creameryman would be the means of ascertaining whether too thin a cream were being taken. The thicker the cream the easier it churns. It may be the churning temperature has been too low. Then, too, there is a very great difference in the churnability of milk from various cows. Try skimming thicker cream, ripening more carefully, and churning at higher temperature. If the trouble persists, churn each cow's cream separately once or twice, and the principal trouble will probably be laid at the door of one of them.

TOULOUSE GESE.

Could you, through your columns, tell who has Toulouse geese for sale?

SUBSCRIBER.

Ans.—Breeder's having geese for sale should advertise them.

STIFFENED LIMBS OF PIGS.

I have a pair of Yorkshire sows, about eight months old, that I am keeping for brood sows; am keeping them in a roomy box stall in a bank stable on a good dry plank floor. They have been very thrifty till about two weeks ago, when, suddenly, they seemed to get stiffened up in their limbs, and go right off their feet. They laid around for two or three days, and then seemed about all right again for a while, but took another bad spell. I have been feeding them a liberal quantity of good chop mixed with bran, also a few mangels twice a day. Will you please tell me, through the columns of your valuable paper, what is the cause of the trouble, also what treatment I should give them in the future? G. W. H.

Ans.—Lack of exercise is probably the principal cause, together with too liberal feeding. They should run in the barnyard every day for a few hours, some grain being scattered on the ground, or a plank platform for them to pick up, keeping them in exercise. A mixture of wood ashes and salt should be kept in a low box in their pen, so they can take it at will. We should not expect strong litters from sows cooped up in a box stall in a bank barn. Clover leaves or cut clover hay mixed with their meal, or with pulped roots, would be good for them.

Veterinary.

SPRAIN OF GASTROCNEMI TENDONS.

Horse became lame in rear hind leg, and is getting worse. The back part of the leg, above the hock, is swollen, and the cords are very hard. G. H. H.

Ans.—This is sprain of the tendons. Blister with the following: Two drams each biniodide of mercury and cantharides mixed with 2 ounces vaseline. Clip the hair off; tie so that he cannot bite the parts; rub well with the blister daily for two days, and on the third day wash off and apply sweet oil. Turn loose in a box stall now, and oil every day. If not better in two weeks, blister again. V.

SKIN DISEASE.

Brood mare has scales all over her back. Under the scales is a thin matter. She has been on pasture all summer and fall. W. W.

Ans.—This is either eczema or mange. If the latter, very prompt measures must be adopted. The Dominion Government must be notified, and a man will be sent to isolate and treat her, and take all other means of preventing a spread of the disease. If the trouble is eczema, a cure can be effected by dressing, every second day, with a four-per-cent. solution of creolin or Zenoleum, heated to 100 degrees Fahr., and applied thoroughly with a brush. I would advise you to call your veterinarian in to examine and advise. V.

LUMP JAW.

I have a heifer with a hard lump on throat, just at swallow, inside of jawbone. Please advise me what is best to do. W. H. R.

Ans.—Doubtless it is a case of lump jaw. If the bone is not affected, have your veterinarian dissect out the lump. Stitch the skin neatly, and dress with a five-per-cent. solution of carbolic acid until healed. Meantime, administer the iodide of potassium treatment. Commence by giving dram doses, three times daily, gradually increasing the doses until appetite fails, she refuses to drink much, saliva runs from the mouth, or tears from the eyes. When any of these symptoms of the state called iodism appear, cease giving the drug. In three or four weeks repeat treatment, if necessary.

LYMPHANGITIS.

For three or four years my horse, about this season, has gone suddenly lame in off fore leg, with swelling and great tenderness from the breast to the knee. He is worse this year than ever. J. S.

Ans.—This disease is called lymphangitis, a shot of grease, etc. It usually attacks a hind leg, but occasionally the fore. Purge him with 8 drams aloes and 2 drams ginger. Follow up with 3 drams nitrate of potash twice daily for 3 days. Bathe the inside of the leg long and often with hot water. Rub well after bathing, and apply camphorated liniment. As soon as the lameness ceases, give regular exercise. V.

How Farmers are to Obtain Hired Help



Thos. B. Coombs, Commissioner.



THOS. HOWELL, Sec'y for Immig'n. HEAD OFFICE: James Albert Sta. TORONTO.

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Immigration Department and Farmer's Employment Bureau.

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This form should be carefully filled in and signed by the applicant, and returned to BRIGADIER HOWELL, James and Albert Sta., Toronto, Ontario.

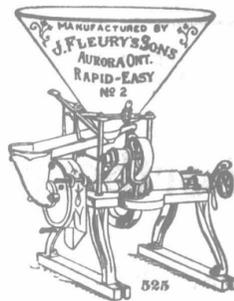
Should you engage help elsewhere please notify us without delay, to prevent applicants being sent to places already filled. This application will stand good unless you advise us to the contrary.

Particulars relating to wages do not constitute a contract, but are required to enable us to judge the current rate of wages in your neighborhood.

- 1. Can you employ and accommodate a married man with family?
2. Have you a separate house? If not, what accommodation have you for a married man?
3. Can you employ wife?
4. Nature of wife's duties
5. What wages (separate) per month will you pay wife?
6. How many single men do you require?
7. Do you require experienced or inexperienced help?
8. What wages per month will you pay an experienced man?
9. What is the current rate of wages in your locality for inexperienced men?
10. If we cannot furnish experienced man, do you agree to inexperienced help being sent?
11. Can you employ man all the year round?
12. Probable date on which man will be required?
13. Did you receive a man from the S. A. Immigration Office last year?
14. Have you applied to any other Immigration agency for help?
15. Should you desire to cancel your application, and your request not reaching us in time to stop your man, will you kindly undertake to furnish accommodation for night, and interest yourself in finding him another situation? (We take this precaution to avoid unnecessary hardship.)

REMARKS (Outline fully your requirements)

Name in full
P. O. Address
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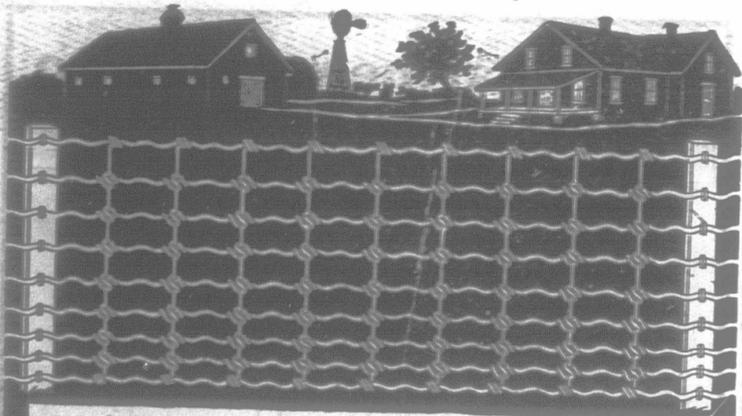
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33 Shorthorns

At Glen Park Farm, Clinton,

Tuesday, January 15th, 1907.

17 Cows, 12 Heifers, 4 Bulls.

Comprising my entire herd of choicely-bred Shorthorns. Sale held under cover. Terms cash or 9 months' credit on approved joint notes bearing 5 per cent. interest. Sale to commence 1 p. m.

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Capt. T. E. Robson, Auctioneer.

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— OF THE —

Huron Herd of Shorthorns

— AT —

BLYTH, JANUARY 16th, 1907.

12 Cows, 11 Heifers, 8 Bulls

Being my entire herd of well-bred Shorthorns. Terms cash, or nine months' time on approved joint notes bearing 5 per cent. interest. Sale to commence at 1 p. m. Sale catalogue on application. All trains met day of sale. Trains arrive at Blyth 7:10 and 9:30 a. m. and leave 4:15 and 7:10 p. m.

Capt. T. E. Robson,
Auctioneer.

A. H. Jacobs, Blyth
Ontario.

QUESTIONS AND ANSWERS.

Miscellaneous.

GESE.

1. What should their ration be?
2. Do they need a warm pen?
3. In laying time, should eggs be taken from nest as soon as laid? If anyone who has made a success in raising them would give his or her mode of management in the columns of "The Farmer's Advocate" it would be gratefully received.

C. L.

Ans.—1. Pasture in summer, or green feed if kept in confinement; in winter a rather light ration of grain, taking care not to let them get too fat.

2. No; but the quarters should be dry.
3. Not necessarily, unless there is danger of frost. We second our inquirer's request that those who have had experience with geese communicate their methods in detail.

BEST DUCKS AND HOW TO FEED THEM.

1. Which is the most profitable duck, and which the easiest to raise?
2. Which is the best food to fit them for the market and when laying?
3. When should they start to lay?

F. W.

Ans.—1. I am inclined to believe that the best ducks for market purposes are Pekins. There is not, so far as I can see, a great deal of difference in the cost of producing a pound of gain in the various breeds. We made a test this year of Pekins, Indian Runners and Cayugas, a full report of which will be found in the Annual Report now in the printers' hands. There was practically no difference in the amount of food it took to make a pound of grain; that is to say, what difference there was, might be accounted for in the individuality of the birds representing the various grades. Indian Runners lay many eggs, but the ducks are small, and our commission men do not seem to like them at all. They mature earlier than the other breeds, I would say by about a week. The Pekins grow very rapidly, and lay well. The Cayugas would be my preference for personal use. They lay fairly well, and eggs hatch well. The young ducks grow well, but they are black in color, which is a serious objection from a market standpoint. If you want the ducks to run on the stream and not market until fall, I think the Cayugas and Rouens would have the preference. The objection to the Pekins is that they are hard to pick. My experience is that a colored duck always picks easier than a white one, but considering all things from a market standpoint, one cannot go by this variety.

2. Regarding feed, we use bran, shorts and corn meal in about equal parts mixed with skim milk, or, if we have no skim milk, we add about ten to fifteen per cent. beef scrap or other animal food. To this wants to be added some grit—use a pound to every pail of food. Ducks need water when they are feeding, but not necessarily to swim in; in fact, they will grow better without water. In addition to this, they need some green food and shade. As the ducks reach nearer the marketing point, which should be, at least, at ten weeks of age, the amount of corn meal should be increased considerably. Laying food is practically the same, i. e., equal parts of corn meal, bran and shorts, or you could use almost any grains that are about the farm that would make a mash fairly palatable. For instance, you could use ground oats and barley in about equal proportions, and could mix with this one-third cooked roots. Ducks will eat pulped roots and clover hay, but will eat the roots better if they are cooked.

3. If you want eggs in the winter, you should use plenty of clover hay, steam the leaves and mix in the mash, also use some cooked roots, and I have found it necessary to use about 20 per cent. of meat or beef scrap. Probably if you mix with skim milk, you would do as well. We usually feed them mash in the morning and at night, all they will eat, and a little whole grain at noon, preferably corn. I doubt whether it will pay you to get eggs from ducks in winter. My experience is that winter eggs do not hatch very well. In the spring, when the ducks are running about, they do not need to be fed nearly as well; in fact, if you throw them a little whole grain once a day, and have a stream or pond they

could go to, they would do all right. They get great quantities of snails, etc., when running about; at night they pick up quantities of earthworms.

O. A. C. W. R. GRAHAM.

GOSSIP.

During the thirty-eight years that a champion prize open to all breeds has been awarded at the shows of the Smithfield Club, it has been won sixteen times by Shorthorns, eleven times by Aberdeen-Angus, five times by cross-breeds, three times by Herefords, and three times by Devons.

Poultry Prize List Ontario Winter Fair.

BRAHMA, LIGHT.—Cock—1, W. C. Wilson & Son, Hawkesbury; 2, Bartlett & Brown, Colborne; 3, W. B. Nantel, St. Jerome. Hen—1, L. C. Sage, London; 2, Bartlett & Brown; 3, W. B. Nantel. Cockerel—1 and 3, W. B. Nantel. Pullet—1 and 2, Bartlett & Brown; 3 and 4, H. R. K. Tozer.

BRAHMA, DARK.—Cock—1 and 3, L. C. Sage, London; 2, W. B. Nantel, St. Jerome. Hen—1 and 3, L. C. Sage; 2, C. A. R. Tilt, Doon. Cockerel—1 and 3, W. B. Nantel; 2, L. C. Sage. Pullet—1 and 3, L. C. Sage; 2, C. A. R. Tilt.

COCHIN, BUFF.—Cock—1, Hugh Wyatt, London; 2 and 3, Holmhurst Poultry Yards. Hen—1, Holmhurst Poultry Yards; 2 and 3, Hugh Wyatt. Cockerel—1 and 2, Hugh Wyatt; 3, Holmhurst Poultry Yards. Pullet—1, 2 and 3, Hugh Wyatt.

COCHIN, PARTRIDGE.—Cock—1, W. G. Murray; 2, W. B. Nantel; 3, G. J. Lawrie. Hen—1, R. Oke; 2, W. G. Murray; 3, W. B. Nantel. Cockerel—1, 2 and 3, W. B. Nantel. Pullet—1 and 3, W. B. Nantel; 2, R. Oke.

COCHIN, BLACK.—Cock—1 and 2, W. G. Murray; 3, A. J. George. Hen—1 and 3, W. G. Murray; 2, W. B. Nantel. Cockerel—1, W. G. Murray; 2, A. J. George; 3, H. Tozer. Pullet—1 and 2, W. G. Murray; 3, H. Tozer.

COCHIN, WHITE.—Cock—1 and 2, W. G. Murray; 3, W. B. Nantel. Hen—1 and 2, W. G. Murray; 3, W. B. Nantel. Cockerel—1, Allan Bogue; 2 and 3, W. G. Murray. Pullet—1, A. Bogue; 2 and 3, W. G. Murray.

LANGSHAN, BLACK.—Cock—1, R. McCurdy; 2 and 3, C. A. R. Tilt. Hen—1, R. McCurdy; 2 and 3, J. Burgess. Cockerel—1, C. A. R. Tilt; 2 and 3, R. McCurdy. Pullet—1 and 3, R. McCurdy; 2, C. A. R. Tilt.

LANGSHAN, A. O. C.—Cock—1, Wm. J. Teale; 2 and 3, J. Philpot & Son. Hen—1, Wm. J. Teale; 2 and 3, J. Philpot & Son. Cockerel—1, Wm. J. Teale; 2 and 3, J. Philpot & Son. Pullet—1 and 2, J. Philpot & Son; 3, Wm. J. Teale.

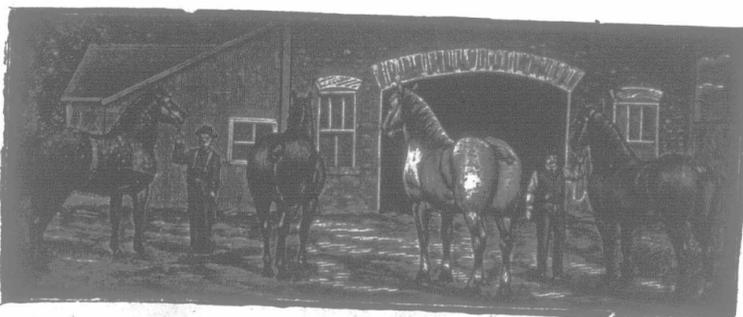
BARRED PLYMOUTH ROCK.—Cock—1, 3 and 4, Newton Cosh; 2, I. K. Millard; 5, John Pringle. Hen—1 and 4, J. Pringle; 2, Newton Cosh; 3, J. R. Boyce; 5, 6 and 7, I. K. Millard; 8 and 9, Jas. R. Balfour; 10, Elias Snyder. Cockerel—1, 5 and 2, I. K. Millard; 3, 4 and 6, N. Cosh; 7, Thomas Lawless; 8, F. W. Krouse; 9, Frank Westbury; 10, J. R. Boyce. Pullet—1, J. Pringle; 2 and 8, N. Cosh; 3, E. Snyder; 4, 5 and 6, F. Westbury; 7, J. Balfour; 9, G. Morton; 10, J. Pringle.

WHITE PLYMOUTH ROCK.—Cock—1, J. A. Carrol; 2, Geo. E. Munroe; 3, Daly & Dill; 4, F. W. S. McNiven; 5, W. Hoggarth. Hen—1 and 4, Geo. A. Robertson; 2, W. E. Hoggarth; 3, Daly & Dill; 5 and 6, Geo. E. Munroe; 7, W. E. Hoggarth; 8, F. A. Andrews; 9 and 10, H. H. Wallace. Cockerel—1 and 9, H. H. Wallace; 2, Geo. E. Munroe; 3 and 4, F. A. Andrews; 5, John M. Shaw; 6 and 8, Geo. A. Robertson; 7 and 10, Daly & Dill. Pullet—1 and 2, F. A. Andrews; 3 and 10, Geo. A. Robertson; 4, F. W. S. McNiven; 5 and 6, Geo. E. Munroe; 7, H. H. Wallace; 8, Wm. E. Hoggarth; 9, J. A. Carrol.

BUFF PLYMOUTH ROCK.—Cock—1 and 2, J. A. Carrol; 3, J. R. Boyce. Hen—1, J. A. Carrol; 2, J. R. Boyce; 3, F. W. Krouse. Cockerel—1, J. R. Boyce; 2, Dr. D. Marr; 3, F. W. Krouse; 4, Dr. D. Marr. Pullet—1 and 2, Dr. D. Marr; 3, J. R. Boyce; 4, Peter Gould.

WYANDOTTE, BUFF.—Cock—1, W. Moebus & Son; 2, Spry & Mick; 3, Bartlett & Brown. Hen—1, W. Moebus & Son; 2 and 4, Packham & Allison; 3,

(Continued on next page.)



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JAVA, BLACK.—Cock—1, Richard Oke. Hen—1, R. Oke; 2, F. W. Krouse. Cockerel—1, F. W. Krouse; 2, J. & G. Bogue. Pullet—1, F. W. Krouse; 2, J. & G. Bogue.

JAVA, MOTTLED.—Cock—1, R. Oke. Hen—1, J. & G. Bogue; 2, R. Oke. Cockerel—1, J. & G. Bogue; 2, R. Oke. Pullet—1, J. & G. Bogue; 2, R. Oke; 3, W. H. Reid.

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(Continued on next page.)

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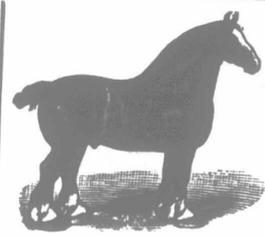
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Dalgety Bros. have at their stables, London, Ont., choice selection of the above. If you want a good one, come and see them.

JAMES DALGETY, Glenora, Ont.

We have a second consignment of choice big Clyde fillies to land about end of December.

GREENGILL HERD of high-class SHORTHORNS

We offer choice Scotch bulls and females, representing such families as Duchess of Gloster, Village Girl, Rosebud, Orange Blossom, Mysie, Victoria, and other popular families, either imp. or Canadian-bred.

R. MITCHELL & SONS,
Nelson P.O., Ont.; Burlington Junc. Sta.

KENWOOD STOCK FARM. SHORTHORNS.

Headed by (Imp.) Jilt Victor—4517W. Offerings are two bull calves, an 11-months Miss Ramsden, from imp. sire and dam a 13-months Missie, by Blythesome Bull and other bulls; also heifers of choice breeding. A few choice Berkshire pigs just off the sow.

HAINING BROS., Highgate, Ont. Kent Co.



SHORTHORNS

Just closed out the season's crop of bulls of breeding age, but have a few very nice young ones coming up. Anyone wishing a stock bull from the noted Derby imp.,

send orders ahead, as they are all picked up as soon as ready. **W. J. SHEAN & SON,**
Box 558, Owen Sound, Ontario.

Sunnyside Herefords

Present offering: 13 bulls, serviceable ages. Cows safe in calf or calves at foot or open heifers. Younger stock carrying the blood of the great March On and Protector. Prices within reach of all.

ARTHUR F. O'NEIL,
Maple Grove, Ont.

SHORTHORNS & OXFORD DOWNS

Herds headed by Protector, Imp., Vol. 52 E. For sale: Bulls from six to twenty months—three from imported dams and imported sires. Also females in calf. Also eleven registered Oxford Down ewe lambs. All at reasonable prices. **John McFarlane & W. H. Ford, Dutton, Ont.,** Elgin Co. M.C.R. and P.M. Railways. Long-distance phone.

Spring Valley Shorthorns

Offer some nice young heifers and cows in calf and with calves at foot; also two nine months' bull calves, both very choice, sired by Imp. Bapton Chancellor. Prices reasonable. Write, or come and see them.

KYLE BROS., - Ayr, Ontario.

Private Sale of SHORTHORN cattle at SHORT-cut prices for SHORTHORN time. Choice strains. Bulls Cows Heifers Write **A. M. SHAVER, Ancaster, Ont.**

GOSSIP

Messrs. W. J. Shean & Son, Owen Sound, Ont., report the following recent Shorthorn sales: To Mr. G. Shaw, Kemble, a fine young bull, by Highfield Prince; to L. Goldsmith, a grand young bull, by Derby (imp.), and out of a fine Duchess cow, by a son of Saladin (imp.); to J. Crawford, Desboro, a grand young bull, by Derby (imp.), and out of the Wildame cow, Vendetta; to J. W. Hodgson, Owen Sound, the Duchess cow, Amable Queen, by a son of Saladin (imp.); to Chas. W. Dunlop, Meaford, the bull, junior champion at Owen Sound, 1906, got by Derby (imp.), and out of Loretta, by a son of Indian Chief (imp.); to Jas. Findlay, Tara, a choice young bull, by Favorite (imp.), a son of Golden Fame, and out of the well-bred Augusta sow, Augusta 3rd.

SCOTCH Shorthorns FOR SALE

Two imported yearling bulls. Two imported bull calves. One home-bred yearling bull. All good individuals, rightly bred. Also imported cows with calves at foot and heifers, different ages, of good quality. Write or call on

H. J. Davis,
WOODSTOCK, ONT.
Importer and Breeder of Shorthorns and Yorkshires.

SHORTHORNS & BERKSHIRES

For Sale: Six extra fine young bulls, some belong to grand milking strains. Also a fine lot of young sows, bred to farrow in March and April, and a grand lot of young sows and boars from three to five months old.

S. J. PEARSON, SON & CO.,
MEADOWVALE, ONT.
Stations: Streetsville and Meadowvale, C.P.R.

Wm. Grainger & Son

Baythorn herd of deep-milk ing Shorthorns, Aberdeen Hero (imp.) at head of herd. Eight grand young bulls, also females, all ages. Prices reasonable.

Londesboro Station and P. O.

SUNNYSIDE STOCK FARM

For sale: A number of young SHORTHORN BULLS, red and roan, from imported sire and dams; good enough to head pure-bred herds. Apply: **JAMES GIBB,**
Brookside, Ont.

High-class Shorthorns—We are now offering five young bulls and 3 heifers, two, three and four years of age. Marigolds, the eldest, a daughter of Imp. Royal Amber, has a calf at foot by Sailor Champion. This is an extra good lot.

THOS. REDMOND, Millbrook P.O. and Stn.

E. Jeffs & Son, BOND HEAD, ONT., breeders of Shorthorns, Leicesters, Berkshires, and Buff Orpington Fowl. Eggs per setting (15), \$1.00. Choice young stock for sale. Write for prices or come and see.

Scotch-bred Shorthorns

Seven bulls from 10 to 18 months old, also cows and heifers in calf to Good Morning, imp., at let-live prices.

L. K. WEBER, Hawkesville, Ont.

Shorthorns Stamford's English Ladies, Mildreds, Marthas, Nonpareils. 3 choice bulls 14 months old. 3 heifers 2 cows. Breeding unsurpassed. Canadian and American registration. **F. W. FWING, Salem P. O., Elora Station.**

Shorthorns for Sale—Five choice bulls, all from imp. sire, and three of them from imp. dams; also females of all ages Scotland's Fame (imp.) at head of herd. **ALEX. BURNS, Rockwood P.O. and G.T.R. Sta.**

Imp. Shorthorn Bull, Ben Lomond (80468) change Ben Lomond for an imported bull, roan preferred. Address: **W.M. SMITH, Columbus, Ont.** Stns: Brooklin & Oakawa, G.T.R.; Myrtle, C.P.R.

Kee. Pullet—1, Harry McKee; 2, Wallace McGlennan; 3, Allan Bogue.

DORKING, COLORED.—Cock—1, J. H. Warrington; 2, Jas. M. McCormack. Hen—1, Jas. M. McCormack; 2, J. H. Warrington. Cockerel—1 and 3, Jas. M. McCormack; 2, J. H. Warrington. Pullet—1 and 3, Jas. M. McCormack; 2, J. H. Warrington.

DORKING, WHITE.—Cock—1, J. H. Warrington; 2 and 3, Allan Bogue. Hen—1 and 3, Allan Bogue; 2, J. H. Warrington. Cockerel—1, Allan Bogue. Pullet—1, J. H. Warrington.

ORPINGTON, BUFF.—Cock—1 and 5, Colin M. Blyth; 2, A. W. E. Hellyer; 3, W. Dawson; 4, H. A. Hoffman. Hen—1 and 2, J. W. Clark; 3, Colin M. Blyth; 4 and 5, A. W. E. Hellyer. Cockerel—1, J. W. Clark; 2, P. E. Aird; 3, A. W. E. Hellyer; 4, H. A. Hoffman; 5, Robert Barnes; 6 and 9, Alfred Boulbee; 8, Colin M. Blyth; 7, J. S. Niven; 10, Wm. Daniels. Pullet—1, 2 and 3, Robert Barnes; 4, Dr. D. Marr; 5 and 10, A. W. E. Hellyer; 6, Jacob Sanderson; 7 and 8, P. E. Aird; 9, G. B. Carbert.

ORPINGTON, BLACK.—Cock—1, H. A. Hoffman; 2 and 3, H. J. Hurd; 4, Kemp & Waterman. Hen—1, H. A. Hoffman; 2 and 5, W. Dawson; 3, E. A. Rawlings; 4, M. H. Stroth. Cockerel—1, M. H. Stroth; 2, C. J. Daniels; 3 and 5, Kemp & Waterman; 4, Jas. R. Hamilton. Pullet—1, C. J. Daniels; 2, R. Beard; 3, P. E. Aird; 4, 8 and 9, H. A. Hoffman; 5, W. Dawson; 6, C. J. Daniels; 7, W. Dawson; 10, H. J. Hurd.

ORPINGTON, A. O. C.—Cock—1, W. A. Roberts; 2 and 3, W. Dawson. Hen—1 and 2, W. Dawson; 3, W. H. Reid. Cockerel—1 and 2, W. A. Roberts; 3, W. Dawson. Pullet—1 and 2, W. A. Roberts; 3, W. Dawson.

HOUDAN.—Cock—1, Geo. Degroff; 2, G. J. Lawrie; 3, Wm. Wilson & Son. Hen—1, Percy Charlton; 2, H. S. Ruby & Son; 3, George Degroff. Cockerel—1, G. & J. Bogue; 2, Smith & Brown; 3, George Degroff. Pullet—1, G. & J. Bogue; 2, Percy Charlton; 3, Allan Bogue.

HAMBURG, SILVER-SPANGLED.—Cock—1, Wm. Cadman; 2, R. Oke. Hen—1, Jas. Baptie; 2, Wm. Cadman; 3, R. Oke. Cockerel—1 and 2, R. Oke; 3, Wm. Cadman. Pullet—1, J. Baptie; 2, F. W. Krouse; 3, W. Cadman.

HAMBURG, GOLDEN-PENCILLED.—Cock—1, R. Oke; 2, H. Liszt. Hen—1 and 2, R. Oke; 3, H. Liszt. Cockerel—1 and 2, R. Oke; 3, T. McMurray. Pullet—1 and 2, R. Oke; 3, T. McMurray.

HAMBURG, SILVER-PENCILLED.—Cock—1, W. Wilson & Son; 2, R. Oke. Hen—1, R. Oke; 2, W. H. Reid; 3, W. Wilson & Son. Cockerel—1 and 2, R. Oke; 3, W. Wilson & Son. Pullet—1 and 2, R. Oke; 3, W. Wilson & Son.

HAMBURG, BLACK.—Cock—1 and 2, R. Oke. Hen—1 and 2, R. Oke. Cockerel—1 and 2, R. Oke; 3, F. W. Krouse. Pullet—1 and 3, R. Oke; 2, F. W. Krouse.

RED CAP.—Cock—1 and 3, E. Wells, Jr.; 2, C. J. Daniels. Hen—1, J. H. Warrington; 2, E. Wells, Jr.; 3, C. J. Daniels. Cockerel—1, W. E. Wright; 2, G. & J. Bogue; 3, C. J. Daniels. Pullet—1, G. & J. Bogue; 2, W. E. Wright; 3, E. Wells, Jr.

TURKEYS, BRONZE, two years and up.—Cock—1, W. J. Bell, Angus; 2, W. E. Wright, Glanworth; 3 and 4, A. McDougall & Son, Milton. Hen—1, 3 and 5, W. J. Bell; 2, A. McDougall & Son; 4, Chas. Gould, Woodgreen.

TURKEYS, BRONZE, under 2.—Cock—1, A. McDougall & Son, Milton; 2, W. J. Bell, Angus; 3, W. H. Beattie, Wilton Grove; 4, Chas. Gould, Woodgreen; 5, William Collins, Union. Hen—1, 2 and 4, W. J. Bell; 3, A. McDougall & Son; 5, Chas. Gould. Cockerels—1, W. J. Bell; 2, Chas. Gould; 3 and 4, A. McDougall & Son. Pullets—1 and 4, A. McDougall & Son; 2 and 5, W. J. Bell; 3, W. E. Wright, Glanworth.

TURKEYS, WHITE.—Cock—1 and 5, W. H. Beattie, Wilton Grove; 2 and 3, Baker Bros., Guelph; 4, Hastings Bros., Crosshill. Hen—1 and 4, W. H. Beattie; 2, Baker Bros.; 3, Miss Mary Colwell. Cockerel—1, A. G. W. Luxton, Milton West; 2 and 3, Baker Bros.; 4, W. H. Beattie. Pullets—1 and 3, W. H. Beattie; 2 and 4, Baker Bros.

TURKEYS, A. O. V.—Cock—1, Baker Bros., Guelph; 2 and 3, A. G. H. Luxton. Hen—1, Baker Bros.; 2 and 3, A. G. H. Luxton; 4, W. H. Beattie, Wilton.

(Continued on next page.)

IF WOMEN ONLY KNEW

Thousands of women suffer untold miseries every day with aching backs that really have no business to ache. A woman's back wasn't made to ache. Under ordinary conditions it ought to be strong and ready to help her bear the burdens of life.

It is hard to do housework with an aching back. Hours of misery at leisure or at work. If women only knew the cause. Backache comes from sick kidneys, and what a lot of trouble sick kidneys cause in the world.

But they can't help it. If more work is put on them than they can stand it's not to be wondered that they get out of order. Backache is simply their cry for help.

DOAN'S KIDNEY PILLS

will help you. They're helping sick, overworked kidneys—all over the world—making them strong, healthy and vigorous. Mrs. P. Ryan, Douglas, Ont., writes: "For over five months I was troubled with lame back and was unable to move without help. I tried all kinds of plasters and liniments but they were no use. At last I heard tell of Doan's Kidney Pills and after I had used three-quarters of the box my back was as strong and well as ever."

Price 50 cents per box or three boxes for \$1.25, all dealers or The Doan Kidney Pill Co., Toronto, Ont.

HOLLYMOUNT SHORTHORNS

Pure Scotch, imported, and the set of imp. stock. **25 HEAD** Anything for sale, I young bulls, breeding gilt-edged and unsurpassed. A few heifers. Prices right.

W. J. Thompson, Mitchell P. O. & Sta.

MAPLE GROVE SHORTHORNS

My present offering: Several imp. cows with calves at foot; also 4 young bulls. Heifers 6 months to 2 years old. Prices and terms reasonable.

C. D. WAGER,
Enterprise Stn. & P.O., Addington Co.

"GLENORO" Shorthorns and Lincolns

Imp. Marr Roan Ladies, Missie, Broadhocks, Ramsdens, and Ury's. Choice individuals. Winners at Canada's leading fairs. One hundred head of grand Dudding-bred Lincolns. Unsurpassed for size, quality and fleece. Long-distance phone. **A. D. McGugan, Rodney, Ont.,** Glenoro Stock Farm.

A. EDWARD MEYER

Box 378, Guelph, Ont., Offers for sale, at prices you can stand, young SHORTHORN BULLS

Four of them from imported sire and dams. Several cows with heifer calves at foot by imp. Scottish Hero, and a few yearling heifers. All are of the choicest Scotch breeding. Write, or better come and look them over. Long-distance phone in house.

Oak Grove Shorthorns—My present offerings are two bull calves, one heifer calf from imp. cows, got by Nonpareil Duke (imp.). They are a good lot. Prices right to suit the times. **W. J. ISAAC, Harwood, Ont.**

SHORTHORNS FOR SALE—Imported Trumvir, and two young bulls—one dark roan 11 months old, and one red 5 months old—by the imported bull. Also young cows. **DAVID GLOW, Whitechurch P.O. and Station.**

Because we tan the leather from the raw hide we eliminate the risk of having skillfully tanned imitations palmed off on us for genuine goods. Some imitations are clever enough to defy an expert, you know.

And because

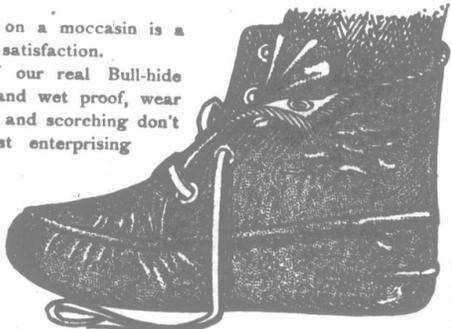
"CLARKE'S"

moccasins are tanned in our own tannery—do not buy skins already tanned, as other makers do—we share with you the tanner's big profit, giving you extra value for your money.

Clarke's stamp on a moccasin is a guarantee of certain satisfaction.

Try a pair of our real Bull-hide Moccasins. Heat and wet proof, wear like iron. Scalding and scorching don't harden them. Most enterprising dealers have them.

A. R. Clarke & Co.
LIMITED
Toronto, Canada



Burnside Ayrshires

Imported and Canadian-bred. Prizewinners at all the leading shows. I hold the award of merit given by the Bd. of Dir. of World's Fair, St. Louis, to the breeder of largest number of prizewinning Ayrshires at said Exposition. Females of all ages for sale, imported and Canadian-bred.

R. R. NESS, JR., HOWICK, QUE., P.O. AND STATION.

Annandale Holstein Herd

Prince Posch Calamity heads the herd. His dam (Calamity Jane) and sire's dam (Alta Posch) in official test, averaged 86 lbs. milk a day, and over 26 lbs. butter a week, one of the greatest sires living.

A number of good young bulls, 1 to 10 months old, for sale, from great sires and A1 cows.

GEO. RICE, Ontario.
Tillsonburg.

HOLSTEINS AND YORKSHIRES

R. HONEY, Brickley, offers for sale a choice lot of young boars fit for service—also sows ready to mate

Maple Hill Stock Farm Scotch Shorthorns—A special offering of a red bull calf of Missie family, sired by Rustic Chief (imp.) = 40419 =; also some choice females by Wanderer's Star = 48585 =, and Lucerne (imp.) = 50053 =. **WM. R. ELLIOTT & SONS, Guelph, Ont.**

MAPLE PARK HOLSTEINS Home of the great De Kol Pietertje and Posch families. Schulling Sir Posch, son of Annie Schulling, testing over 4% butter-fat officially, and grandson of Alte Posch, stock bull.

S. MAOKLIN, PROP., STREETSVILLE. Imperial Holsteins—An Advanced Registry herd for sale. One-year-old bull, a Toronto champion, four bulls from 6 to 8 months of age. A. R. on both sides. Imp. in dam from the U. S. **W. H. SIMMONS, New Durham P.O. & Sta.**

MAPLE GROVE HOLSTEIN HERD is made up of Record of Merit cows and heifers with large records, and headed by Lord Wayne Meekside Calamity. Young bulls fit for service at reasonable prices. **Walburn Rivers, Folsden's, Ont.**

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshire sows, about 9 months old, for sale cheap. True to type and first-class. Bred from imported stock. **THOS. B. CARLAW & SON, Warkworth P.O., Campbellford Stn.**

HILTON STOCK FARM—Holsteins, Cotswolds and Tamworths—Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig. **R. O. MORROW & SON, Hilton P.O., Brighton Tel. and Stn.**

Evergreen Farm Holsteins is headed by DeKol, which we are offering for sale; sire of daughters in Record of Merit; also a choice lot of young bulls fit for service, from Record of Merit cows with large records. **C. PETTIT & SON, Burgessville Ont.**

HOLSTEINS FOR SALE



Four imported and one home bred bulls from 8 to 18 months old; also our entire crop of spring bull calves from wean old up.

Sired by the grandly-bred imp. bull, Sir Howick B. Pietertje, whose dam records over 32 lbs. milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 12c. Don't delay if you want one from this herd.

G. W. OLEMONS, St. George, Ont.

CENTRE AND HILLYVIEW HOLSTEINS Bulls 1 year and under for sale, from great-testing dams and sires, all in A. R. O. Records. Our prizes in milk test in America's A. R. O. Records is, 1st prize in 30-day; 5th in 7-day; 5th in 7-day, over 8 months milking.

P. D. EDE, Oxford Centre P.O., Woodstock, C.P.R. or G.T.R.

Lyndale Holsteins. For Sale A number of bull calves from one to four months old, out of Record of Merit cows, and sired by Beryl Wayne Paul Concordia, whose four nearest dams have official butter records averaging 22 lbs. 11 ozs each. **BROWN BROS., LYN, ONT.**

"GLENARCHY" HOLSTEINS 45 head of big, deep-flanked, heavy-producing Holsteins, many of them milking from 50 to 60 lbs. a day on grass. Young stock of both sexes for sale. A straight, smooth lot. **G. MACINTYRE, Renfrew P.O. and Stn.**

GROVE HILL HOLSTEINS—We now offer for sale our stock bull, Verbeke 4th's Count Calamity. Born December, 1902. Only two of his daughters have been tested, and both are in Record of Merit. He is a show animal, and a persistent stock-getter. If you want a bargain write: **F. R. MALLORY, Frankford P.O. and Stn., C. O. R., Trenton Stn., G. T. R.**

Greenwood Holsteins and Yorkshires For sale: A few richly-bred bulls from one to eighteen months old. Also a few choice females of all ages. Yorkshires of either sex. **D. Jones, Jr., Caledonia P. O. and Sta.**

DRESSED POULTRY.

Pair Brahmas of 1906, any variety.—1, 2 and 3, Scanlon Bros., Ennotville.
Pair Cochins of 1906, any variety.—2, Samuel J. Plastow, Rockton; 3, Scanlon Bros., Ennotville.

Pair Langshans of 1906, any variety.—2, Scanlon Bros., Ennotville.

Pair of Plymouth Rock cockerels of 1906, any variety.—1, Adam A. Armstrong, Fergus; 2, The Matthew Edwards Co., Port Perry; 3, Scanlon Bros., Ennotville; 4, Mullock Bros., Waterdown.

Pair of Plymouth Rock pullets of 1906, any variety.—1 and 2, Adam A. Armstrong, Fergus; 3 and 4, Scanlon Bros., Ennotville.

Pair Wyandotte cockerels of 1906, any variety.—1 and 2, W. Howard, Guelph; 3, Scanlon Bros., Ennotville.

Pair Wyandotte pullets of 1906, any variety.—1 and 2, Scanlon Bros., Ennotville. Pair Minorcas or Andalusians of 1906, any variety.—1 and 2, Scanlon Bros., Ennotville; 3, Howard Woodrow & Son, Burgessville.

Pair Leghorns of 1906, any variety.—1 and 2, Scanlon Bros., Ennotville; 3, Howard Woodrow & Son, Burgessville.

Pair of Dorkings of 1906, any variety.—1, 2 and 3, Scanlon Bros., Ennotville.

Pair Houdans, La Fleche or Creve Coeurs of 1906, any variety.—1, Scanlon Bros., Ennotville; 2 and 3, G. & J. Bogue, Strathroy.

Pair Game of 1906, any variety.—1 and 2, Oswald Barber, Guelph; 3, Scanlon Bros., Ennotville.

Pair Javes of 1906, any variety.—1, G. & J. Bogue, Strathroy.

Pair Hamburgs of 1906, any variety.—1 and 3, Wm. McNeil, London; 2, Scanlon Bros., Ennotville.

Pair Orpington cockerels of 1906, any variety.—1, W. Howard, Guelph; 2, E. Fraleigh, St. Mary's; 3, Scanlon Bros., Ennotville.

Pair Orpington pullets of 1906, any variety.—1, Howard Woodrow & Son, Burgessville; 2, J. W. Clark, Cainsville; 3, Scanlon Bros., Ennotville.

Best pair in class 231.—1, Adam A. Armstrong, Fergus.

Turkey, any age, male.—1, 2 and 3, Howard Woodrow & Son, Burgessville.

Pair turkeys, any age, female.—1, 2 and 3, Howard Woodrow & Son, Burgessville.

Pair Turkeys of 1906, male.—1, 2 and 3, Howard Woodrow & Son, Burgessville.

Pair turkeys of 1906, female.—1, 2 and 3, Howard Woodrow & Son, Burgessville.

Best entry in class 232.—1, Howard Woodrow & Son, Burgessville.

Pair geese of 1906, white.—1 and 3, Scanlon Bros., Ennotville; 2, Howard Woodrow & Son, Burgessville.

Pair of geese of 1906, colored.—1, Scanlon Bros., Ennotville; 2, F. & G. Parkin, Oxford Centre; 3, Howard Woodrow & Son, Burgessville.

Pair Ducks of 1906, white.—1 and 2, Isaac T. Knight, Guelph; 3, Mullock Bros., Waterdown.

Pair ducks of 1906, colored.—1, Isaac T. Knight, Guelph; 2, Howard Woodrow & Son, Burgessville; 3, G. & J. Bogue, Strathroy.

Best pair in class 234.—1, Isaac T. Knight, Guelph.

Six Brahmas, Cochins or Langshans of 1906.—1, Scanlon Bros., Ennotville.

Six Plymouth Rocks or Wyandottes of 1906.—1, Adam A. Armstrong, Fergus; 2 and 3, Scanlon Bros., Ennotville; 4, The Matthew Edwards Co., Port Perry.

Six Minorcas, Andalusians or Javes of 1906.—1, Scanlon Bros., Ennotville; 2, Howard Woodrow & Son, Burgessville.

Six Dorkings, Houdans, La Fleche, Creve Coeurs or Orpingtons of 1906.—1 and 2, Scanlon Bros., Ennotville; 3, J. M. Clark, Cainsville.

Six Games of 1906.—1, Scanlon Bros., Ennotville; 2, Oswald Barber, Guelph.

Six Leghorns or Hamburgs of 1906.—1 and 3, Scanlon Bros., Ennotville; 2, Wm. McNeil, London.

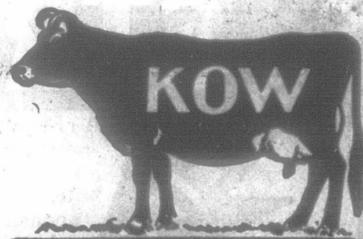
Six turkeys of 1906.—1 and 2, Howard Woodrow & Son, Burgessville; 3, Scanlon Bros., Ennotville.

Six geese of 1906.—1, Scanlon Bros., Ennotville; 2, Howard Woodrow & Son, Burgessville.

Six Ducks of 1906.—1 and 2, Isaac T. Knight, Guelph; 3, Howard Woodrow & Son, Burgessville.

One dozen eggs, heaviest and best, brown.—1, F. W. Krouse, Guelph.

Six squabs.—1, A. & T. Readwin, Guelph.



CURES

by the thousands — profitable herds and vigorous calves by the score testify to the efficacy of KOW-KURE. It is not a "food"—it is a medicine, and the only medicine in the world for cows only. Made for the cow and, as its name indicates, a COW CURE. Barrenness, retained afterbirth, abortion, scours, caked udder, and all similar affections positively and quickly cured. No one who keeps cows, whether many or few, can afford to be without KOW-KURE. It is made especially to keep cows healthy, and healthy cows give more milk, make richer butter and with less care. If you are having any trouble with your cows you can cure them with KOW-KURE. Our book, "The Cost of a Lost Cow" contains many helpful hints, free. Write for it. Dairy Association Co., Ltd., Lyndenville, Vt., U. S. A.



DEHORNING STOPS LOSS.

Cattle with horns are dangerous and a constant menace to persons and other cattle. Dehorn them quickly and with slight pain with KEYSTONE DEMORNER. All over in 5 minutes. Not a harsh method. Leaves a clean, clean cut. Cows give more milk; steers make better beef. Send for free booklet. **K'S. McKenna, Folsen, Ontario, Can.**

Ayrshires and Yorkshires

We always have on hand choice animals of above breeds, of any desired age. Prices reasonable. Write us before buying. Intending purchasers meet at Hoard's. Alex. Hume & Co., Menie P. O.

AYRSHIRES—Choice stock of either sex, different ages, for sale. Prices reasonable. For particulars apply to **H. EYREMAN, Hickory Hill Stock Farm, Dundas Stn. & Tel. or Chappelen, Ont.**

HIGH-CLASS AYRSHIRE CATTLE

Bulls and heifer calves, two to nine months old, cows and heifers all ages. Prizewinners from this herd include Tom Brown and White Floss, sweepstakes at Chicago. **DAVID BENNING & SON, "Glenhurst," Williamsburg, Ont.**

SPRINGBURN STOCK FARM—North Williamsburg, Ont., H. J. Whitaker & Sons, Props., breeders of pure-bred Ayrshire cattle, Oxford Down sheep, Berkshire pigs, and Buff Orpington fowls. Young stock for sale. Visitors welcome.

Ayrshire Bulls—A select pair (18 months old) by a son of the champions Douglasdale (imp.) and Minnie of Lennessock (imp.), and out of daughters of imp. cows; also two March calves and one May (all select). **W. W. BALLANTYNE, Stratford Ont.** Long-distance phone.

Wardend Ayrshires We are offering young bulls from 1 to 3 years old; also a choice lot of spring calves from deep-milking dams. Sired by White Prince of Menie No 1825; bred by A. Hume, Menie. **F. W. TAYLOR, Wellman's Corners, Hoard's Stn., G. T. R.**

Ingleside Ayrshires won more prizes in 1906 than all other competitors combined. Young stock of either sex for sale. **H. C. HAMILL, Fenelon Falls, Ont.** Tel. P. O. or Lorneville Stn.

Pine Ridge Jerseys For sale some choice young bulls, bred in the purple, of ideal type; also a few heifers and heifer calves, and some Cotswold shearing rams and ram lambs. **Wm. Willie & Son, Newmarket P. O. & Stn.**

HIGH GROVE JERSEYS AND YORKSHIRES. For sale cheap, several choice young bulls and a few heifers, some of them prizewinners at Toronto this fall; bred from the best. Twenty young sows just ready to breed. Prices, extended pedigrees, and all information for the asking. **ROBY TUFTS & SON, Tweed P.O. and Stn.**

Brampton Jersey Herd For sale: 10 bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. For full particulars address: **B. H. BULL & SON, Brampton, Ont.** Phone 68.

DURABILITY

STRENGTH

A cream separator that is worth buying must give long service. To do that, it must be built strong and the construction must be simple. To have simple construction in a separator you must have a Sharples Tubular. There is no other cream separator made that will perform its work so well for so long a time as the Tubular because there is

SIMPLICITY

no other separator so strongly built, or so simple in construction.

Sharples Tubular Cream Separators

get all the cream, have low supply can, are easy to run, easy to clean, because there is only one little piece in the bowl to cleanse after each running, and the machine oils itself. It combines Utility, Simplicity and Durability. A glance at the pie-plate construction of most separators will give you a fair idea of what we mean by "simple construction" and "strength." For full information about the Sharples Tubular write for booklet E. 193



Mr. E. Carpenter, Davenport, Wash., says "Having used a Sharples Cream Separator over sixteen years can say it is just fine."

THE SHARPLES SEPARATOR CO.
Toronto, Can. WEST CHESTER, PA. Chicago, Ill.

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: **HOWBRAY HOUSE, Norfolk St. LONDON, W. C., ENGLAND.**
Cables—Sheepcote, London.

Shropshires and Gotswolds

I am offering for sale 100 yearling ewes, home-bred and imported; also an extra good lot of yearling rams and ram lambs of both breeds, some of each fitted for showing.

JOHN MILLER, Brougham, Ontario.

STOP! LOOK!! LISTEN!!!

The Fairview Shropshires have maintained their reputation as winners and producers of winners at both the Chicago International and Guelph Winter Fair. Won at the International: 3 championships, 12 firsts, 1 second, 10 thirds, and 2 fourths—totaling \$397. Won at Guelph: 1 championship, 11 firsts, 12 seconds, 2 thirds and 1 fourth—equal to \$201. Won 1st, 2nd and 3rd twice in very keen competition. At Chicago, Wisconsin Agricultural College's wethers—our strongest opponents—were all sired by rams sold from Fairview. Wishing you all a joyous festive season, I remain, yours cordially,
John Campbell, Woodville, Ont.

Canadian Agents for the Original **McDougal's Sheep Dip & Cattle Dressing** Imported direct. Price: Imperial pints, 50c. Imperial half gallon, \$1.25; imperial gallon, \$2.50. Sold by druggists, or charges prepaid on one gallon tin. **THE WORTHINGTON DRUG CO., Toronto, Ontario.**

18 DORSET SHEEP

For sale, selected from flock of Col. J. A. McGillivray.

Morris & Wellington, Fonthill, Ont.

We are offering **SHROPSHIRE EWES**, bred to prolific, imp., at \$15.00. Ram and ewe lambs, \$10.00 to \$12.00. Six-week **YORKSHIRES**, \$7.00 each. Pekin ducks and Barred Rock cockerels. **W. R. BOWMAN, Mt. Forest P. O., Co. Grey.**

Duroc Jerseys—Imported and home-bred sows and boars ready for service. Pigs fit to wean; also Buff Orpingtons and Buff Leghorn cockerels.
MAC CAMPBELL, Harwich, Ont.

When Writing Mention this Paper.

My Shropshires Won the Flock Prize at Toronto.

And I have imported and home-bred **RAMS and EWES**

for sale that are of the same stamp. All kinds of good

DOTSWOLDS and SHORTHORNS as well.

Prices always reasonable.

ROBERT MILLER, Stouffville, Ontario

FARNHAM FARM OXFORDS

We are offering for sale 100 strong, vigorous good-quality ram lambs, a number from best imported sires. We also have for sale 50 yearling and two-year ewes, and a number of ewe lambs. **Telegraph Guelph.**
HENRY ARKELL & SON, ARKELL, ONT. Guelph, C. T. R.

Southdowns

Imported and home-bred ewes in lamb to imported and prize-winning rams. **COLLIES**—Puppies by imported Holyrood Clinker; also bitches in whelp.

Robt. McEwen, Byron, Ont.
Long-Distance Phone.

Ship Your **HIDES SHEEPSKINS FURS** to **E. T. CARTER & CO., Toronto**

Maple Grove Yorkshires

are among the leading Canadian herds for size, quality and truthfulness to type, and are prizewinners all around. For sale are both sexes. All ages. Bred from imp. and home-bred stock. There are none better.

H. S. McDIARMID, Fingal P. O., Sheddin Station
Breeder and Importer.

Maple Lodge Berkshires—A number of shire sows, bred and ready to breed. Young stock on hand of both sexes. Stock registered and crated for b. Prices reasonable.
JOSEPH NAUMAN, Fisherville, Ont.
Nelson's Corners Sta., G. T. R.

GOSSIP.

KYLE BROS.' SHORTHORNS.

Spring Valley Stock Farm, the property of Kyle Bros., breeders of high-class Shorthorn cattle, lies about 2½ miles south of Ayr, on the C. P. R., and about 7 miles north of Paris, on the G. T. R. Few Shorthorn breeders in Canada have come to the front more rapidly than Kyle Bros. In founding their herd, they fully realized that there was neither money nor glory in keeping inferior stuff, also that the bull was more than half the herd. With this ever before them, they purchased as breeding animals only the best. To-day, their herd numbers over 40 head of the Marchioness, Village Maids, Jealousy, Golden Drop, Rosebud, Broadhocks, Duchess of Gloster, English Lady, Lovely, Clementina and Butterfly families, several of them being imported, notably Fairy Queen 2nd (imp.), by Golden Thistle; Village Maid 29th (imp.), by Prince Frolic, the sire of the champion, Merry Hampton; Village Maid 27th (imp.), by the Missie bull, Mozart; Pennon Broadhocks (imp.), by the Clipper bull, Cornelius; Marchioness 4th (imp.), and so on. Lady Cloud, by the Toronto winner, Roan Cloud, is a show cow, weighing 1,700 lbs., and a beauty. Butterfly Duchess 3rd, by the Wimple bull, Wimple's Chief, is another big, 1,800-lb. cow, built on show lines. In fact, the herd is essentially a high-class one, many of them weighing from 1,600 to 1,800 lbs., and put up right, while their breeding is gilt-edged. The stock bull is Bapton Chancellor (imp.), by the champion Silver Plate, a Rosewood, dam Crocus, by the Sittyton Cicely bull, Captain of the Guard. Bapton Chancellor stands in the front rank as one of the greatest sires ever imported to Canada, his get always being in the money wherever shown. Second in service is Imp. Clipper Chief, by the Lancaster bull, Lochaber, dam Czarina, by the Clipper bull, Corner Stone. This is the making of a show bull of a high order. In young bulls for sale is a roan seven-months-old, by Bapton Chancellor, out of Lovely Lassie, a Cruickshank Lovely. This young bull is an extra good one, the making of a high-class herd-header. Another is a roan ten-months-old, by the same sire, out of the 1,800-lb. cow, Butterfly Duchess. This, too, is a show bull in type and conformation—an extra good one. Still another is a red seven-months-old, by the same sire, out of Village Maid 27th (imp.), a nice thick calf, low-down and smooth. In heifers, there are about a dozen, from seven to twenty-four months old, nearly all by Bapton Chancellor, and some of them out of imported cows; show stuff among them, and all well balanced and up-to-date. Any or all are for sale, together with the young bulls mentioned. Kyle Bros. report the last year as away ahead of any former year for enquiries and sales. All through, their stock is getting to be known for what it is.

TRADE TOPIC.

BOY BEHIND THE GUN.—The Army Schools at Aldershot (England) have begun to put into practice the preaching of Lord Roberts, who is always advocating the need of the rising generation to be taught the use of the rifle, says the London Illustrated News, in an article entitled "The Boy Behind the Gun." The schoolmasters now instruct the boys in the principles of rifle-shooting by the aid of tripods, sandbags, etc. In America, there is no warmer supporter of the beliefs of Lord Roberts than the J. Stevens Arms & Tool Co., of Chicopee Falls, Mass. The propaganda of this company has done much to train the faculties of girls as well as boys through increasing their interest in rifle-shooting, which teaches boys and girls to be alert, careful and decisive, while the outdoor life does much to improve their health. Every lover of a firearm should have a free copy of the new 140-page gun catalogue, issued by the Stevens Company. It has much interesting information about sights, targets, ammunition, firearms, etc. It is sent for four cents in stamps to cover postage.

SCALDED BY BOILING FAT

COULDN'T USE HAND FOR A MONTH.

Zam-Buk Then Applied and Gave Instant Relief.

An accident in a Toronto home the other day might have had very serious consequences had it not been for Zam-Buk. Miss Martha Green, of 9 Claremont St., in taking a pan of boiling fat from the oven spilt it over her right hand. "The boiling fat ran into the palm of my hand," she says, "and over all my fingers. You may well imagine the agony I suffered in consequence. I was almost wild with the pain. The hand became swollen, and large blisters formed all over the palm and along the fingers. For over a month I was unable to use the hand at all. I tried several kinds of salves and liniments, but the wound seemed apparently no better. It was altogether too severe for these preparations to heal. About this time I was advised to try Zam-Buk. I stopped using all other preparations and applied Zam-Buk instead. The very first application soothed my hand and seemed to draw out the fire and inflammation; and as I kept on using Zam-Buk, the blisters gradually dried up and disappeared. In a very short time the scald was healed completely."

This is but one instance of the uses to which Zam-Buk can be so advantageously applied. It is equally effective for burns, cuts, bruises, abrasions, sprains and stiffness. It also cures eczema, ulcers, sores, blood poison, ringworm, scalp sores, chronic wounds, acne, blackheads, pimples, cold sores, chapped hands, and all skin diseases and injuries. Rubbed well on to the chest, in cases of cold, it relieves the aching and tightness, and applied as an embrocation it cures rheumatism, sciatica, neuralgia, etc. All druggists sell Zam-Buk at 50c. a box, or it may be obtained from the Zam-Buk Co., Toronto, upon receipt of price. Six boxes for \$2.50.

Maplehurst Herd of Tamworth Swine, Bronze Turkeys, Toulouse Geese, Pekin Ducks, S.-C. W. Leghorns.

For sale: A large herd of Tamworths, of excellent breeding and ideal bacon type. This herd won sweepstakes at Toronto and London, 1905-6. Among our winnings at World's Fair, St. Louis, 1904, both premier championships, sweepstakes aged and junior herd, and two grand championships. Inspection and correspondence solicited. For further particulars apply to **D. DOUGLAS & SONS, Mitchell, Ont.**

NEWCASTLE HERD OF TAMWORTHS and Shorthorns.—We have for immediate sale several choice boars ready for service, and sows bred and ready to breed, together with a lot of beautiful pigs from two to four months old. Also a few choice heifers in calf to Donald of Hillhurst No. 44690, and a few nice bull calves and heifer calves. All correspondence answered promptly. Daily mail at our door, and prices right. **Colwill Bros., Newcastle.**

Mount Pleasant Herd of Tamworths and Holsteins. A large herd of choice pigs of all ages on hand. Mount Pleasant type of hogs are profitable breeders and ideal bacon hogs. Pairs not akin. Herd headed by Colwill's Choice No. 1243. Won sweepstakes and silver medal at Toronto, 1901-2-3. Also a few bulls.
Bertram Hoskin, The Gully

Maple Leaf Berkshires
High-class Berkshire of showing quality, bred from imp. stock, for sale. Two seven-months boars, by imp. Polgate Doctor; two sows by same sire, bred: 10 sows, 34 months old, by King of the Castle, and young boars. A choice lot.
Joshua Lawrence, Oxford Centre P. O., Woodstock Station

CHESTER WHITE HOGS

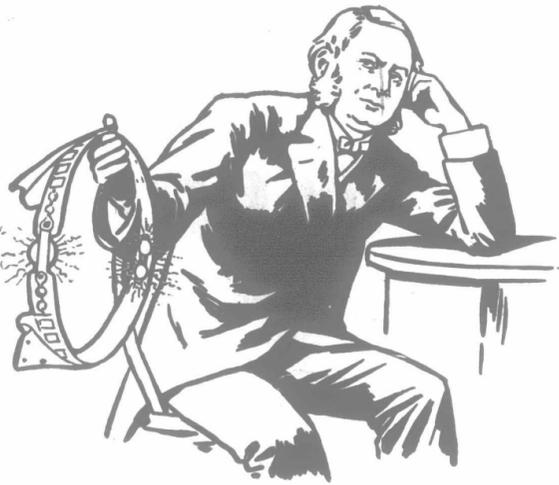
The largest herd of bacon-type Chester White hogs in Canada. Strictly high-class. Have won highest awards. Young stock of both sexes always on hand. Satisfaction guaranteed.

ROBERT CLARKE, 41 Cooper Street, Ottawa, Ont.

LARGE ENGLISH YORKSHIRES

We have a limited number of choice young pigs for sale, bred from our choicest sows, and got by the imported boars, Dalmeny Joe 13577 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat Stock Show last March for the best dressed carcasses and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders. **Joseph Featherston & Son, Streetsville.**

FREE UNTIL CURED



Not One Penny in Advance or on Deposit

Forty years ago, when I first discarded drugs and devoted my whole attention to the study of Electricity, I could not afford to do business on to-day's basis, but I have so perfected my Electric Appliances, and the knowledge I have gained from all these years of experience and research is so great, that I will now give my world-famed Dr. Sanden Electric Belt, with Electric Suspensory, to any man who suffers from Nervous Debility, Varicocele, Losses, Rheumatism, Lamé Back, Stomach, Liver and Kidney Troubles, absolutely

FREE UNTIL CURED

I don't ask you to pay or deposit one cent until I convince you. Simply call or write for a Belt and wear it for two months, and if cured pay me the usual price—in many cases not over \$5.00. If not cured, return the Belt, and that ends the matter. If you prefer to pay cash, I give you the usual wholesale discount. Be sure you get the genuine. My great success has brought forth many imitators, and I must caution the public against their worthless, blistering imitations. Call to-day and take a Belt along, or write for one and my two valuable books on Electricity and its medical uses. Sent, sealed, free by mail.

DR. B. W. SANDEN, 140 YONGE ST., Toronto, Ont.

Office Hours: 9 to 6; Saturdays until 9 p. m.
DINEEN BLDG., ENTRANCE 6 TEMPERANCE STREET.

Woodstock Herd of Large English Berkshires

I have for sale pigs of all ages, both sexes, from prizewinning stock. Sires in use: Imp British Duke, assisted by Woodstock Laddie, son of Polgate Doctor. Come and see or write for prices. My herd was in the front rank of prizewinners at the leading exhibitions this fall.

CHAS. T. SEYMOUR, Herdsman, Box 1, Woodstock, Ont. DOUGLAS THOMSON, Box 1, Woodstock, Ont.

BERKSHIRES 50 IMPORTED AND CANADIAN - BRED 50

Motto: "Goods as Represented." Mail orders receive careful attention. H. M. VANDERLIP, GAINSVILLE, ONT.

Rosebank Berkshires

Present offering: Sows ready to breed. Choice young stock ready to wean, sired by Maple Lodge Doctor and Sallie's Sambo (imp.), a Toronto winner. Lefroy, G.T.R. JOHN BOYES, JR., Churchill, Ont. Long-distance Phone

Cherry Lane Berkshires

Are strictly high-class Toronto winners. Of all ages. Young stock of both sexes for sale. Pairs supplied notakin

Sam Dolson, Alloa P. O., Norval Stn. COUNTY PERL.

Cedar Lodge Yorkshires

100 head brood sows (imp.) and the product of imp. stock, weighing from 500 to 800 lbs. each. Stock hogs by imp. sires and dams, very large and full of quality. Young stock of both sexes constantly on hand for sale. Pairs not akin. Satisfaction guaranteed. P. O. COLLINS, Bowesville P.O., Ont. Manotick Sta., C.P.R.

ELMFIELD YORKSHIRES

Have a few young sows from 4 to 7 months, bred and ready to breed; also some young pigs weaned and ready to wean from imp dam and sire. G. R. Muma, Av. Ont.

When Writing Please Mention this Paper

HILLCREST HERD OF ENGLISH BERKSHIRES

Instead of exhibiting, we advertise and do a mail-order business. Vine Station, G.T.R. JOHN LAHMER, Vine, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

PONIES WANTED.

I would like the names of Ontario parties breeding ponies—Welsh, Hackney or Shetland. NEW SUBSCRIBER.

Ans.—Parties having ponies for sale may find it to their advantage to advertise in "The Farmer's Advocate," as this is not the only enquiry for such that we have received in the last few weeks.

ABNORMAL APPETITE IN SOW.

I own a pure-bred Yorkshire sow. A week or so ago, while running out, she ate three fat ducks; now she chases hens and has ate four. She had the cat by the back the other day, but the cat came back. She will farrow 1st of February. Will she eat her pigs, and what will prevent her doing so?

Ans.—Give her variety in her food, including roots, and clover leaves, or cut clover (steamed), or mixed with pulped roots, or ensilage. Keep a mixture of salt, sulphur and ashes in a low box where she may take at will. If, when she farrows, she shows a disposition to eat her pigs, place her in a crate, with a feed box in front, and the lower bar off so the pigs can suck and she cannot get at them.

CRUSHING OATS FOR COWS—OATS OR OATS AND BARLEY.

1. Does it pay to crush oats for cows, it being four miles from mill, and costing 7c. per cwt.?

2. Milking cows, being fed corn and clover hay and grain, and dry cows having straw instead of the hay, which is the better: clear oats, or equal parts barley and oats? DAIRYMAN.

Ans.—The American author, Jordan, probably strikes it about right when he says that if the miller's toll is more than one-tenth, it probably does not pay to grind grain, especially for ruminants. In the case under consideration, the haul is worth at least as much as the cash charge for grinding, making a total expense of about 14 cents per cwt. We do not believe oat chop is worth 14 cents per cwt. more than whole oats for feeding to cattle. In fact, whole oats mixed with bran are recommended by many for calf-feeding. We are often pointed to undigested kernels of grain in the dung of cattle as conclusive evidence of the need of grinding, but it is probable that nearly as much passes through undigested when the grain is fed in form of chop, only the particles being much smaller are not so conspicuous. Instead of grinding, our correspondent might try soaking the grain.

2. Probably about 2 or 3 parts oats and 1 part barley (ground) would be better than oats alone, or oats and barley in equal parts.

RATION FOR BULL.

Give a grain maintenance ration for a bull of two years, weighing about 1,500 lbs. Is flaxseed meal good for such, and about what quantity per day or meal? Can they digest whole oats sufficiently well when fed with bran? Should six quarts of chopped oats and middlings and four quarts bran a day keep him in good life for active service?

SUBSCRIBER.

Ans.—We would be chary about feeding flaxseed to bulls, preferring oil cake, which is safer. The economy of crushing oats for cattle has been discussed in answer to "Dairyman" in this issue. In brief, it may be said that oat chop is slightly preferable to whole oats, though whether the advantage pays for the expense is open to question. The ration suggested should keep the bull in pretty fair condition, though it might be economical to substitute a pound of oil cake for two pounds of the middlings, making a ration composed of three pounds chopped oats, 1 pound middlings, 1 pound oil cake, and five pounds bran per day. This, with a few roots, mixed or clover hay, a bit of straw, a small amount of silage, if available, should make a satisfactory ration. If he shows any sign of delicate appetite, reduce accordingly.

MILBURN'S LAXA-LIVER PILLS

are mild, sure and safe, and are a perfect regulator of the system.

They gently unlock the secretions, clear away all effete and waste matter from the system, and give tone and vitality to the whole intestinal tract, curing Constipation, Sick Headache, Biliousness, Dyspepsia, Coated Tongue, Foul Breath, Jaundice, Heartburn, and Water Braak. Mrs. R. S. Ogden, Woodstock, N.B., writes: "My husband and myself have used Milburn's Laxa-Liver Pills for a number of years. We think we cannot do without them. They are the only pills we ever take."

Price 25 cents or five bottles for \$1.00, at all dealers or direct on receipt of price. The T. Milburn Co., Limited, Toronto, Ont.

SUNNYMOUNT BERKSHIRES.

Sunnymount Berkshires are unsurpassed for ideal bacon type and superior breeding. For immediate sale: 3 sows 11 months old, in pig; several sows from 5 to 7 months old; 3 boars 11 months old, and several 5 to 7 months old, and younger ones of both sexes. Imp. sires and dams. JOHN McLEOD, Milton P. O. and Sta., C. P. R. and G. T. R.

OAKDALE BERKSHIRES.

Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not akin. L. E. MORGAN, Milliken Stn. and P. O.

Fairview Berkshires

Bred from imported and Canadian-bred sires and dams, and bred on prize-winning lines. My brood sows are large, choice animals. Young stock of both sexes. Some sows bred to imp. boars. HENRY MASON, SCARBORO P. O. Street cars pass the door.

MONKLAND YORKSHIRES

Imported and Canadian-bred. We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right. JAS. WILSON & SONS, FERGUS, ONT. G. T. R. and C. P. R. Long-distance Phone

Ohio Improved Chester Whites

100 Pigs to Offer of the long, deep, heavy sort. Breeding stock selected from the most noted families, with a view to size and quality. Booking orders for choice spring pigs; also a few fall pigs for sale. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed. H. E. GEORGE, Brampton, Ont.

GLENBURN HERD OF YORKSHIRES

Winner of gold medal three years in succession. Offers for sale: 15 young boars, 4 months old; a large number of sows, same age; also 80 suckling pigs, both sexes. Also a grand good Shorthorn bull (roan), 10 months old. David Barr, Jr., Box 3, Renfrew, Ont.

Glenhodson Yorkshires.

Sows bred or ready to breed. Young pigs from three to six months old. Pairs not akin. Satisfaction guaranteed.

GLENHODSON COMPANY, Myrtle Station, Ont. Long-distance phone at farm. Lorne Foster, Mgr

IMPROVED YORKSHIRES.

Choice young stock from imported prizewinning stock for sale. GEO. M. SMITH, HAYSVILLE, ON.

As the years go by, customers find our reputation dependable. Reference to Dominion Swine Records in sales of Berkshires in Ontario, finds me on the front bench with the fellows who "do the big shows." Our guaranteeing to replace non-breeders is novel, and rarely put into practice. We do this. At present, some very choice things of various ages are yours for the price.



Worth Its Weight in Gold to Weak Men!

This is the way my patients write about

DR. McLAUGHLIN'S ELECTRIC BELT.

Read what Wm. Bowers, P. O. Box 196, Brantford, Ont., says :

Dr. McLaughlin :

Dear Sir,—I purchased one of your strongest Belts for Nervous Debility about four years ago. I had been taking medicine when I first got sick, and they did me some good, but they did not give me the results I desired, and I did not want to get my system full of medicine, so I thought I would try one of your Belts. Before I commenced to wear it, I would wake up in the night with bad spells with my heart, which caused a deathly feeling to come over me. I would get up and open a window and rub myself, but I have not had any of those spells for over two years, and I do not want any more. I believe the electricity cured me. I am feeling well generally, and doing hard work on the farm every day. Yours truly,
WM. BOWERS.

My way of restoring strength is different from all others. It is my own plan, and it is as simple as anything can be. I find a man suffering from stomach trouble, arising from a weakness of the organs of digestion and assimilation. Now, what is the use of pouring drugs into that poor stomach? It does not want drugs to force an action. It wants strength.

The proof of this argument is substantiated by the following letter from W. I. Chase, West Gore, N. S., who has worn my appliance :

Dr. McLaughlin :

Dear Sir,—After wearing your Belt for only one week I am glad to tell you that it has greatly helped my stomach, kidneys and liver. From this out, I shall be pleased to let everyone know what the "Dr. McLaughlin Belt" has done for me, as it is well worth advertising. W. I. CHASE.

You know there is not an organ in the body which will not do its work well if it has the strength. You will never feel a pain or moment of distress unless some part of your body is weak. Remember that, and don't paralyze your poor stomach with poisons. My plan is to give strength to the part that is ailing. I do that, and the trouble is gone before you understand why.

My treatment is a success in any case where strength is lacking, whether in the nerves, stomach, heart, kidneys, liver or any other part. My appliance gives a soothing, constant electric glow, which is taken by the body just as a sponge takes up water. It cures weakness in any guise, as well as any other form of pain. My cures prove the truth of my argument.

I don't think there is any case of weakness, failure of vitality or of any trouble resulting from the imperfect action of any organ of the body that I can't cure. Of course, I do not cure all cases, but I do cure any case I undertake. I have such confidence in my treatment that

I Will Cure You First, and You Can Pay Me After the Work is Done.

All I ask is that you secure me while you are using it. I don't ask you to take any chances. I am willing to do that.

My strongest arguments are the letters from prominent people whom I have cured. Every man or woman who comes into my office gets a practical illustration of my method of cure, and goes away convinced that the claims I make for my ELECTRIC BELT are TRUE. After seeing original letters from the cured (letters which I am permitted to exhibit) their doubts are expelled. They know that I have not only proven that electricity is the substance of life and organic vitality, but I have perfected the best known appliance in the world for replenishing that force in the body when it is lost.

My Electric Belt is the result of years of scientific study, coupled with experience and mechanical skill.

My cures are simply marvellous; take the case of James Becker, Innisfail, Alta.:

Dr. McLaughlin :

Dear Sir,—I am more than pleased with the results of your Belt. My general health is greatly improved. I feel like a new-made man. My digestion is perfect; my bowels move regularly every day; the Piles are almost gone, and the Catarrh is getting better. To be free from such a disagreeable, loathsome disease as Catarrh I consider is worth the price of the Belt itself, and to be cured of torturing Piles, I cannot tell what a relief that is to me. All scrofulous affection of the skin has disappeared. I will recommend your Belt to anyone that is in bad health, as I consider you worthy of it, because you tell the truth in your advertisements as well as in your letters. So many nowadays can give a whole lot of smooth talk, but in the end they do not live up to it. In conclusion, I thank you ever so much for being the means of bringing a cure about in my case. I consider your Belt is the greatest invention of this age. May success attend your endeavors to cure suffering humanity is the wish of your friend,—
JOHN BECKER.

I am an enthusiast, you say. Why should I not be? I have the gratitude of thousands of people who have been cured by my Electric Belt after the failure of the best physicians. I am enthusiastic because I know that I offer suffering humanity the surest cure for the least expenditure of money that is known to-day. I have gained my success by learning how to treat my patients, and then curing them. I understand the action of the current on the human system. My years of experience have taught me how to apply electricity. I charge nothing for my knowledge, knowing that it helps me. My patients are my friends. They are advertising my business.

You can talk with the men and women who have been cured by my treatment, and that's worth considering. I might preach for years in my efforts to gather converts to my way of curing disease, and nobody would pay any attention to my arguments, but when I tell you I have cured your neighbor, Mr. A. Smith, or your old friend, Mr. Johnson, and you can go and ask them about me, and they tell you I have cured them, then I have given you proof, and you know that I do all I claim. And I want you to give me credit for what I prove. There's nothing surer than the word of an honest man, and when such men as these admit that I have cured them, you know that I can cure you.

Free Book

Every man who admires the perfection of physical strength should read my beautiful illustrated book. It tells how strength is lost and how I restore it with my Electric Belt. I will send this book, closely sealed, free upon request. If you are not the man you should be, write to-day.

Put your name on this Coupon and send it in.
DR. M. S. McLAUGHLIN, 112 YONGE STREET, TORONTO, CAN.

Dear Sir,—Please forward me one of your books as advertised.

NAME

ADDRESS

Office Hours—9 a. m. to 6 p. m. Wednesday and Saturday until 9.00 p. m.

Subscribe for The Farmer's Advocate. \$1.50 per Year.