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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE SUCCEED

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

PUBLISHED AT LONDON, ONTARIO. JULY 27, 1905. WINNIPEG, MANITOBA. No. 670

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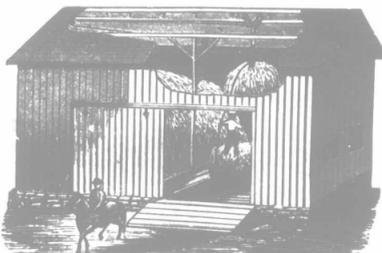
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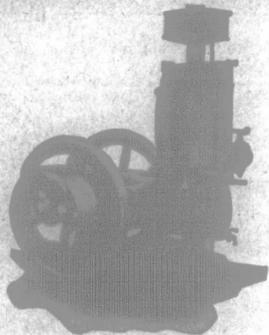
In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

HAVE YOU A BAD LEG

With Wounds that discharge or otherwise, perhaps surrounded with inflammation and swollen that when you press your finger on the inflamed part it leaves the impression! If so, under the skin you have poison that defies all the remedies you have tried, which, if not extracted, you never can recover, but go on suffering till death releases you. Perhaps your knees are swollen, the joints being ulcerated, the same with the ankles, round which the skin may be discolored, or there may be wounds; the disease, if allowed to continue, will deprive you of the power to walk. You may have attended various hospitals and had medical advice and been told your case is hopeless, or advised to submit to amputation; but do not, for I can cure you. I don't say perhaps, but I will. Because others have failed, it is no reason I should. Send at once to the Drug Store for ALBERT'S Grasshopper Ointment and Pills, which is a certain remedy for the cure of Bad Legs, Housemaids' Knees, Ulcerated Joints, Caruncles, Poisoned Hands, Abscesses, Corns and Bunions.

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The Farmer's Advocate

"PERSEVERE AND SUCCEED" and Home Magazine.

ESTABLISHED 1866.

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No. 670

EDITORIAL.

Can We Look Forward to This?

A writer in Farmer's Review pleads eloquently for the teaching of agriculture in public schools, quoting in support of his argument the following from a prominent American Agricultural lecturer: "It is well for the mental development of the child that the origin, composition and uses of the objects by the roadside between his home and the school be understood, and far better for his success in life than to be taught the heights of mountains that he may never see, and intricate problems in the higher mathematics, or the dead languages."

We believe that this is an agitation along the right line, and that the proper teaching of agriculture in our rural schools will do more towards raising a crop of interested, successful farmers than any plan yet invented. Our Agricultural Colleges and Farmers' Institutes are all right—indispensable components of every really prosperous agricultural Province. At the same time, it must be recognized that the actual agricultural college training, leaving out of account its indirect effects and the admirable literature circulated by the institution, touches but a very small percentage of the thousands of farmers in the Dominion. The farmers' institutes, too, useful as they are, are of necessity somewhat intermittent in character, but the rural public school course touches every child who will ever follow a furrow, and that, too, at a time when the child mind is most retentive, holding for "keeps" things which would be remembered with difficulty if presented later in life. For these reasons the effects of judicious and systematic teaching of agriculture in such schools must, within a generation, be tremendous.

We repeat the word "judicious." Some years ago "agriculture" was introduced as an "option" into our public schools. The experiment was a failure. In the first place, the recommended text-books, admirable as auxiliaries for the teacher, were mostly written by those who, though thoroughly up in the subject themselves, seemed to lack that long experience with children, and possibly that peculiar teachers' variety of sympathy with them, which is necessary to every one who would write a successful text-book for juvenile use. In the second place, the subject was taught by those who, as a rule, had had little training in the subject themselves, and, possibly, less interest than training—crude boys and girls, for the most part, using teaching as a stepping-stone to something else, and provoked at the "nuisance" of having a new subject added to a curriculum which already seemed full enough. Little wonder the experiment was a failure.

In order to have successful teaching of agriculture, two things are most evidently necessary. First, those who presume to teach it must themselves understand the subject, and be in thorough sympathy with it. We have always thought that rural teachers should be rural born. Young teachers from the town have, as a rule, but little sympathy with, or interest in rural life. Secondly, the text-books must "begin at the very beginning" of the subject, and be as simple, as practical and as interesting as it is possible to make them. Children readily learn anything in which they are interested. The consolidated school—like the one at Kingston, N. B., described in the last issue of the "Farmer's Advocate"—with its

spacious garden, would be, of course, the ideal place for teaching this really fascinating and profitable subject, but for it we must of necessity wait yet a season.

In conclusion, then, we think there is much sense in the words of the American lecturer re the advisability of eliminating some of the comparatively useless things with which our school courses are packed and padded to make room for a reasonable amount of practical matter. It is all right to be able to tell the "heights of mountains one may never see," or the "dates" upon which some fusty old king of centuries ago began his reign and ended it; it is all right to be able to calculate to a dot how long it will take to fill up with a quart measure a keg leaking at a rate which would prevent any sane creature from attempting to fill it without stopping to fix the leak, or to know how to divide a sum of money among A, B and C, in all sorts of tangled ways such as no sane will-maker would ever stipulate—provided there is plenty of time for these things. Such mental gyrations doubtless have their value as a training, but it does seem as though the gyrating might as well be done to a greater extent along those lines which will be of actual value and interest by and bye.

As the school system stands now, the boy who graduates with "Entrance" or "Leaving" from the rural school is little likely to know a rag-weed from a clod, much less how to rid a field infested with these weeds. He is utterly at sea as to what grains grow best on certain soils, the best methods of cultivation, and a thousand other things which he needs to know right away. He is not made interested in the things in the country world about him—the birds, the plants, the processes of nature; he is not taught to observe nor trained to do things, unless it be "sums" and the like, and, least of all, to respect at its worth the avocation of the farmer. If his father happens to be an A 1 farmer, and if he himself has sharpness enough to observe, and application enough to buckle down to studying really good agricultural books and papers, there is hope for him. If any or all of these essentials be lacking, he either finds himself up against a host of perplexities, or else—what is worse still—goes on half doing or wrongly doing things, without realizing his loss. The day has passed in which he might have been taught those things, and another may not present itself.

The change, giving agriculture a larger and some other things a smaller proportion of attention in school, might, possibly, necessitate some changes in the examinations for High-school Entrance, but it seems that this is a difficulty which might easily be obviated. In all of the cities nowadays a great deal of attention is being paid to "nature-study." Why should not agriculture be incorporated with nature-study in our rural public schools, with a separate examination paper expressly for rural pupils? More difficult things have been accomplished by our educational authorities.

Economical in Spots.

A few weeks ago the Postmaster-General, some private members of Parliament and a lot of newspaper organs were rolling up their eyes in a fine spasm of economy when it was resolved to turn down the proposal to give the farmer free rural mail delivery. Such ruinous extravagance was not to be thought of for one moment, but the scene changed with lightning rapidity when a huge salary grab came to be rushed through in the dying hours of Parliament. It was a case

of "Help ourselves, there's money to burn," and friends and foes (politically) joined in a generous saw-off, but the farmer was not in it. He comes in handy to grow the crops that foot the bills, but if he doesn't want to walk six miles three days a week for his mail after a harder day's work than most M. P.'s perform, he can hitch up the old gray mare to the buckboard.

Stock-raising in Asia.

As a result of the present war between Japan and Russia we shall see a new Asia spring into existence, with new customs, habits and manners. The demand for meat and other animal products from Canada is bound to increase in Japan. Her soldiers are learning the meat-eating habit, which will become national. Already we have sent pure-bred stock for breeding purposes to the little Island Empire. China is bound to follow Japan in adopting Western ideas.

There should be a rapidly-increasing demand for our pure-bred live stock from Japan. In consequence of the friendly attitude of the British Empire towards her, she will be naturally disposed to patronize Canada in such purchases, and the Dominion Department of Agriculture should put forth every reasonable effort to facilitate and encourage the development of a trade in pure-bred stock, as well as in all farm and animal products in that quarter of the globe.

United States Vice-Consul Cloud, writing from Hangshan, states that up to the present time the Chinese seem to have had little or no appreciation of the economic value of the vast areas of their verdant hill and mountain regions other than to use the scrubby trees as lumber or the brushwood as fuel. Apparently, the idea of using these vast areas of pasturage for grazing cattle, sheep or horses has never occurred to them, or, if it has, they have never put it into execution. In Chekiang province alone there are thousands of acres of hill land covered over the year round with a luxuriant growth of nutritious grasses, enough to feed and fatten almost countless cattle and sheep. Yet all this vast storehouse of wealth has been allowed to waste since the early days of the race. The fact that these hills and valleys abound in many varieties of deer, wild pig and various other wild animals is proof of the nutritious qualities of the flora of the region. The teachings of Buddha against meat-eating are now being unheeded, and now all classes of Chinese eat meat when they can get it, so that the supply is painfully inadequate, and prices so high as to make it almost prohibitory except to the well-to-do classes. Pork is the mainstay, with mutton a good second, and then beef in any form. Thus far desultory attempts at importing foreign cattle into China have been made, yet these attempts have been attended with most satisfactory results wherever they have been made. The German colony in Shantung has imported a number of heifers into that region, and farmers who are giving the matter serious attention are realizing most handsomely on their venture. Indeed, their profits are much greater relatively than they would be on the same amount of labor and capital employed at home.

There is an excellent opportunity for several enterprising stock-growers and dairymen to establish a most profitable business in the fertile and ideal grazing region adjoining Shanghai, the growing foreign metropolis. The stock-raiser would soon find a growing market for his breeders and meat cattle, while the dairyman would find an eager demand for all of his dairy products.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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

Passing of the Summer-fallow.

In a recent trip across Ontario, the writer was struck with the paucity of bare fallows. In a hundred-mile ride hardly a dozen were counted, where ten years ago they were numbered by scores. The subordinate place which fall wheat now occupies in the farm economy is no doubt partly responsible for a falling off in the practice of summer-fallowing, but a further explanation is that farmers have learned how to utilize their land more wisely, accomplishing, by clovering, manuring and the cultivation of hoed crops, the thorough preparation for wheat which it was formerly thought could be secured only by sacrificing a season's use of the land. With the introduction of the silo and corn-growing, improved implements and more intelligent cultivation, it is possible to clean a weedy field as thoroughly while raising twenty tons of feed per acre as it was formerly done in bare fallow, while the stock kept to consume the feed supplies manure to enrich the wheat ground and obviate the necessity of fallowing to liberate plant food. Thus, on the stock farm the cycle continues—good crops mean more manure; more manure means bigger crops, not only of wheat, but of everything else.

Summer-fallowing wastes fertility. It adds no plant food, except in so far as it favors the absorption of a small amount of atmospheric nitrogen. It renders soluble a large amount of plant food already in the soil, particularly nitrogen and humus, but in the absence of a growing crop to take these up a considerable proportion is lost by washing and leaching, leaving the land in poorer condition, chemically and physically, for future crops. Its saving virtue used to be that it went far to ensure a good catch of the nitrogen-gatherer, clover, which did much to restore the fertility wasted by fallowing; but we have now found that, by modern methods of cultivation, manuring and seeding, sowing the grain rather thin and the clover thick, we can get good catches, even with oats. Hence, a practice growing in favor is to follow a well-cultivated corn or root

crop with spring grain seeded to clover, plowed up in the third or fourth year of the rotation for another hoed crop, or, perhaps, peas or beans. Many striking instances show the wisdom of this plan, which is gradually supplanting the time-honored grain summer-fallow and timothy regime, to the great advantage of pocketbook and farm.

The Automobile Nuisance.

Elgin, Ont., Farmer: "The article in the 'Farmer's Advocate' on the automobile nuisance was a good one. It was right to the point, and strictly correct. The 'auto' was well-named by the writer a 'devil machine.' Keep up a discussion till something is done to curb these fellows who are making our highways dangerous to travel upon."

D. Messenger, a constant reader, Wellington Co., writes: "Your issue of July 6th, on the first page, contains an article on the automobile, every word of which I endorse most fully, and hope to see many of your readers express their views on this abomination through the medium of your valuable paper, so as to awaken the public to a sense of the danger to which the females of their families are exposed from these 'devil machines.' Allow me to suggest the advisability of publishing the new Ontario Act which came in force on July 15th, and was passed through the House a few days before its close, governing the use of such machines. I will say this much at present: Those using them do not consider the safety or convenience of their fellow beings, and will add that it is very easy to see that the poor man is not placed on the same footing with the rich, for if a poor man brings his horseless vehicle on the public highway he must send someone to herald his approach, and give all assistance in passing others by coming to a full stop and leading the frightened team or single horse past; but not so with the man who takes his ease in his auto at the expense of public safety."

The Argus, of Montreal, in the following paragraph, suggests high license as the remedy for the new road pest: "I would like to see a radical alteration in the law with regard to automobiles. It seems impossible to enforce the present law, which imposes penalties for driving beyond a certain speed limit, because of the impossibility to stop or to identify the offenders. A more sensible plan would be to impose a penalty upon every man selling or having in his possession a machine capable of going faster than the prescribed limit. The fact of a man going to the expense of buying a machine capable of making forty or fifty miles an hour is presumptive evidence that he intends to break the law and travel at the rate of forty or fifty miles an hour whenever he thinks it safe for him to do so."

The Prairie Farmer takes the ground that steps should be taken towards devising some means by which these machines will pay their portion of taxes in developing and maintaining good rural roads. This step has already been taken in New Jersey, where automobile operators will now be called upon to pay for the privilege of driving over toll roads. (Note.—What about the roads on which no toll gates exist?—Ed.) As a general proposition, the man who is able to support and operate a machine costing \$1,000 to \$2,500 and more, can afford a tax that will contribute toward the improvement of the highway. This seems especially true when he is so anxious for the improvement of the roads. Not only should automobiles be taxed for road improvement, but laws should be enacted by which their speed will be limited on all rural highways.

In regard to the request of a correspondent for the publication of the Ontario automobile law, we may say that the substance of it was given at length in the "Farmer's Advocate" for July 6th. The following circular has been issued by the Provincial Secretary to the automobile fraternity, and will be of interest:

A marker issued with permit, on registration, must be prominently and securely fixed on back of the body of the automobile.

The number on the marker must not be allowed to be obscured by dust.

From sunset to sunrise the marker must be illuminated by a lamp.

The marker number must be painted in black figures not less than two inches in height on the illuminated glass of a lamp to be carried prominently in front of the automobile, the glass being ground or stippled with white paint.

Not more than ten miles per hour within any city, town or incorporated village, and without the same not more than fifteen miles per hour.

Automobiles must not approach within 100 yards, a horse going in the same or opposite direction, at a speed of more than seven miles per hour.

On crossings and bridges speed must be slackened.

Every automobile must carry a bell, gong or horn to warn persons approached.

No automobile race will be allowed on highways.

Motor must be locked when on the highway and not in use.

The owner of vehicle will be responsible for all infraction of act or regulations.

The penalty for infraction of the act of regulations is \$25.

HORSES.

Attend to Your Horse's Teeth.

The average horse owner does not appreciate the necessity, or, at all events, the advisability of frequently examining his horse's mouth to ascertain the condition of the teeth. Of course, it requires some knowledge and skill to examine a horse's mouth, but any person who wishes can readily acquire this. In the first place he must become conversant with the normal condition of the teeth, in order that he may be able to recognize an abnormal state, or one that requires attention. The ability to rectify abnormal conditions is not so easily acquired. In order to do this a man must have expensive instruments, as a mouth speculum, tooth rasps of different patterns, tooth forceps of different kinds, tooth shears, etc., and he must by practice acquire skill in using them. The knowledge of what to remove, either by shears or rasp, is very important, as it is quite possible to remove too much, and instead of improving the case matters may be made worse. It is usually wise and profitable to take a horse whose teeth require dressing to a qualified veterinarian, rather than to some "handy man" who may own a tooth rasp, or to some so-called veterinary dentist, who may have an elaborate set of instruments but does not know how to use them properly.

Colts or horses of mostly any age may require attention. Horses that are not eating well, or possibly consuming sufficient food but not thriving, are often dosed with medicines of one kind or another without effect, when a little attention to the teeth is all that is needed. A colt when born has twelve molar or grinding teeth, three in each row. Between two and a half and three years of age the first and second in each row are shed and replaced by permanent ones, and between three and a half and four years the third tooth in each row is shed and replaced by a permanent one. When the permanent tooth is growing the fangs or roots of the temporary one become absorbed, and the crown forced out by the permanent one, and when the latter has passed through the gum all that is left of the temporary tooth drops off. In some cases the fangs do not all absorb, but sufficient remain to prevent the crown dropping off, and the permanent one forces it out until it projects above or below the wearing surfaces of its fellows, according to whether it be in the lower or upper row. When this condition exists the colt cannot masticate well, hence fails to eat sufficient, and does not thoroughly masticate what he consumes, hence he is unthrifty, fails in flesh, and becomes more or less weak. When colts of these ages are noticed to be dull and unthrifty their molars should be examined, and if there be any projecting crowns they should be removed with a pair of forceps, which is easily done, as there is usually very little holding them in place. At four years old a horse should have a full set of permanent molars, hence trouble from molar crowns no longer exists. At the same time, the teeth frequently require attention. The space between the rows of molars in the upper jaw is considerably wider than that between those of the lower, hence the process of mastication has a tendency to bevel the teeth, those of the upper jaw from without inwards, tending to leave sharp points on the outer edge, and those of the lower jaw from within outwards, tending to leave sharp points on the inner edge, and these points scarify the cheeks or the tongue, and thereby interfere with mastication. This condition, causing imperfect mastication, is often the cause of unthriftiness and, not infrequently, indigestion, either acute or chronic, usually the latter. In cases of this kind the sharp points should be removed with tooth rasps of different shapes. In fact, there are few horses that would not be benefited by having their teeth dressed every year. The usual charge for dressing teeth is \$1.00, and the horse owner would find it money well spent to have the teeth of every horse he owns dressed once each year. There are many cases where no apparent difficulty in mastication is noticed, but if the teeth be examined the sharp points mentioned will be felt, and their removal will be the means of allowing the horse to masticate more easily and thoroughly, and thereby receive more benefit from his food. This is a fact that is not generally appreciated, and if veterinarians were to tell their patrons that their horses' teeth required dressing when no noticeable difficulty in mastication existed, they would be blamed for trying to deceive them; but the fact remains all the same. Then, again, from different causes, it is not uncommon for one or more teeth to wear faster than their fellows, and as a consequence

the opposing tooth or teeth become higher than the rest, and thereby interfere materially with mastication. In such cases they should be clipped off with a pair of molar-tooth forceps and then dressed with a rasp. Occasionally a tooth decays, and should be extracted, or may become split and a portion extracted. In fact, there are a great many abnormal conditions which may occur which renders the services of a man skilled in veterinary dentistry necessary for the comfort and well-being of the animal. The incisor teeth seldom require much attention, except when a temporary one fails to shed and is displacing the permanent one, in which case it should be extracted.

We frequently notice supernumerary teeth, called "wolf teeth," in front of the first molars in the upper row. These are generally supposed to interfere with the horse's sight, but this is a mistaken idea. They seldom do any harm, but being supernumerary and having no functions, it is well to extract them.

The Disease of Automobilioussness.

Motor fever, or automobilioussness, is a disease which is becoming alarmingly prevalent, and which is already receiving much attention from scientists and careful investigators. As it is comparatively new in this country, scientific opinion has not yet crystallized as regards its significance and its probable effect on the race. Abundant clinical material is at hand, however, and much may be learned, even now, by a thorough study of the disease and its phenomena.

Authorities disagree as to the etiology of motor fever, but the exciting cause is generally believed to be the diplococcus finacii, although some observers insist that the bacillus getthereus is the chief causative factor. As the disease is never directly fatal, seldom resulting in anything worse than violent insanity in the patient, little opportunity for post-mortem investigation has as yet been afforded. It is supposed, however, that the cerebrum, which suffers the brunt of the attack, is overwhelmed by these micro-organisms, which multiply so rapidly as to seriously obstruct the wheels of that organ.

Of the pathology of this disease we also know little, but it is believed that there is a rapid hypertrophy of certain brain-cells, producing enlargement of the cranium, moral anæsthesia, and hypercussedness of the whole nervous mechanism. Gobbs reports one patient, killed by an irate farmer, whose brain exhibited extensive ecchymosis, but it is uncertain whether this was attributable to the disease or to the farmer's club.

The symptoms are mainly those of intense mental excitement. The patient exhibits a morbid desire to annihilate time and space, regardless of the consequences. His general condition is vividly, if not elegantly, described by the slangy expression, "chesty." He becomes impatient, autocratic, unreasonable, and acquires a strong aversion to officers of the law. Anorexia and insomnia sometimes develop in the later stages of the malady, hallucinations supervene, and the patient exhibits strange tastes, such, for example, as preferring the odor of gasoline to that of the well-known mephitic mephitica. The disease is slowly progressive, and in time the patient becomes a pitiable nervous wreck.

Diagnosis is not difficult, as a rule, although motor fever has been mistaken for mania a potu. In the latter disease, however, it is snakes that the patient sees about him and feels that he must kill, while in motor fever it is usually women and children, though sometimes dogs and small babies, only. Snoopers has mentioned a peculiar cold glitter to the eye that he has found pathognomonic, but other observers have not confirmed this. An expression of countenance verging on the satanic has been noticed in the later stages, but this is usually lacking in recent victims.

The prognosis, unfortunately, is bad. It is doubtful whether a patient who has the disease in its worst form ever recovers. Occasionally, a severe shock, such as might occur from a broken limb or a broken neck, produces a temporary amelioration of the symptoms, but they usually return at a later period, in a more violent form than ever.

The treatment of motor-fever, as it stands today, is irrelevant and chaotic. There are some in every community who argue in favor of the shotgun or the axe. As a prophylactic measure, this may at times benefit the people at large, for there is no doubt that this line of treatment is something of a deterrent, but there is no evidence to show that it has ever proven particularly satisfactory to the patient. It is the duty of the medical profession to discourage these heroic measures, for the disease is quite prevalent among doctors, and good men are already sufficiently scarce. A reputation and a fortune await him who discovers a remedy for motor fever—something that will do the work with neatness and dispatch, without endangering the life of the victim or jeopardizing the hereafter of the rest of the community.—[Medical Visitor.

STOCK.

Co-operation in Selling the Products of the Farm.

To the Editor "Farmer's Advocate":

Sir,—We read with pleasure an article by Justin L. McCredie, showing how the bacon industry can be made profitable in Ontario; and if in Ontario, why not in all Canada? Now, every farmer in Canada who has been raising bacon hogs will agree that, one year with another, they were receiving less than cost price for those hogs; and if the consumer was getting the benefit of this low price, it would not be quite so bad. But, while the producer received from four to six cents per pound live weight, the consumer had to pay from ten to fifteen cents per pound. All this great profit between the producer and consumer goes into the pockets of middlemen, who know little—and care less—what it costs to raise those bacon hogs. We find, by charging market value for feed and allowing living wages to those who attend them, that it costs from six to eight cents per pound live weight, taking it summer and winter, to produce the best kind of bacon. What is true of bacon is also true of beef and mutton, and many other products of the farm. Now, we ask any reasonable man how long would the great manufacturers and mining corporations stand if they were obliged to sell their products under cost? Is it any wonder that so many farmers are run out and mortgaged to make up the loss between the cost of production and the value received. We read and hear much about farmers leaving their farms to go to the cities, to swell up their already crowded population, and many remedies are suggested to keep them on the farm; but, in our opinion, the remedy is to give them as much pay per day as they receive in the cities, and we will soon have

trade fix or manipulate the price of every staple agricultural product, regardless of the supply or demand, and regardless of the rights and welfare of producers or consumers. From year to year the crowd of middlemen, speculators and gamblers have been on the increase, because they recognize the grand opportunities of operating between the horde or unorganized producers on the one side and an equal number of unorganized consumers on the other side. Notwithstanding the fact that all the agricultural products that have been produced in the past have been consumed, consequently should have always brought a profitable price to the producers, because they were desired, we all know that farmers have made less progress towards individual wealth than any other class of people. While this is a fact, and a deplorable one, it is no less astonishing that, among all the institutions, public and private, ostensibly maintained for the benefit of farmers, not one has ever attempted to better their condition through steady and profitable prices for his crops. Now, we have listened to a great many agricultural professors; also read a good many agricultural papers and books, and all their instructions aimed at the one thing, and that is to show us how to produce more and better products, and not one of them tried to tell us how we could get a profitable price. If by good seed, good breed, good cultivation and improved machinery we double the production of our farms, consequently we would be drawing double as much of the fertility of our farms; and if we were obliged to sell these products under cost, we would become bankrupt in half the time it would take under the present system.

How are we to find out the price of these 'farm products? Firstly, we must put a valuation on our property and allow bank interest on this stock; then allow living wages, or as much as a mechanic receives in the city, as it takes more intelligence and skill to

work a farm scientifically than any of the mechanical arts; secondly, we must put a commercial value on every pound of plant food that a ton of farm products takes out of the soil, as this is the farmer's bank; thirdly, we must allow for the wear and tear of farm machinery, buildings, fences, horse power, and taxes. When we put all these together, and add up the value received for the products raised on the farm, we can easily find out the profit or loss, and in this way we can find out the cost of everything we produce, and no reasonable consumer would wish to take our produce under cost, as the farmers are always willing to pay cost price for any goods produced by the other industries of the country.

Now, someone will say that if the farmer of Canada

da by co-operation will set an equitable or cost price, that other countries will sell for any price that is offered them. We find that this is not the case, for the American Society of Equity, with nearly a million of farmers on its roll, and who claim the higher price paid for wheat, cotton, and many other products, to be the result of co-operation to set a profitable price on these commodities. We find, also, that the Danes and many others are co-operating, to not only get a profitable price, but to manufacture many of the goods required by those farmers. As necessity is the mother of improvement, the farmers of the world, who were the first and best society in existence, and who produced the most essential products of the earth—which is food and clothing—must assert their right for equal justice with other classes or fall back to the ancient state of slavery from which our forefathers fought and bled to emancipate us. In conclusion, we hope that the "Farmer's Advocate," which is such a fearless exponent of public opinion, will continue to keep this important subject before the farmers of Canada, until, by co-operation and organization, they succeed in getting profitable prices for everything produced on the farm.

P. E. I.

NEIL McPHEE.

Do You Want to Sell Your Home?

THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE" IS THE PLACE FOR YOUR ADVERTISEMENT. SEE RATES UNDER THAT HEADING IN THIS PAPER. ADDRESS: FARMER'S ADVOCATE AND HOME MAGAZINE, LONDON, ONT.



Wizard of Maisemore.

Aberdeen-Angus bull. Winner of first prize and championship, Bath and West of England and Royal Counties Shows, 1905. Owned by Mr. J. J. Cridlan, Gloucester.

them back on the farm, for we know that life on the farm is healthier and happier than living in the city.

Now, if farmers were receiving more value or cost price for the products of the farm, they would be able to compete with the other industries in paying higher wages to their hired help. This would enable them to keep good men and women in their service; it would also entice wealthy people to farm, which would raise the standard of farm life all along the line. It is a generally-conceded fact that if farmers are prosperous, all other classes are also prosperous, as they are considered the backbone of the country. If farmers were receiving a fair margin above cost price for their products, it would not only enable them to buy the necessaries of life, but many of the luxuries. A large percentage of the money would flow back to other industries, enabling them in their turn to pay better wages and produce more and better goods, making good times for all classes, by allowing each an equitable price for his labor. In proof of this reasoning, see China and Russia; they pay the lowest wages and prices for everything, and their people are the poorest and most benighted—according to population.

The remedy is for farmers to organize and co-operate to set an equitable price on all farm products. This can be obtained by a large majority of the farmers joining in a society to set a profitable price, and hold their produce until it is required by the consumers. This would mean that each member would sell a twelfth part every month in the year, preventing the speculators from getting a monopoly of the food supply, that always enables them to set the price so high on the consumer. There was a time when supply and demand were the factors that fixed the price of nearly all kinds of products, but that time has been past these many years. Lately, organized non-producers and boards of

Sheep and Pigs at the Royal Show.

In writing a summary of the sheep section of the Royal Show of 1905 for Canadian readers and friends, the first thing we must do is to point out the fact that, so far as we were able to ascertain, no Canadian buyer was present. Amongst sheep men no face was more missed than the genial, honest one of Mr. Robert Miller, whose regular attendance at our Royal Shows for many years past made his absence this year all the more noticeable. On all hands it is trusted that this is but a temporary stoppage of the annual visits he has paid, and it is hoped that we may see him again next year.

The Southdowns made the largest entry of any breed in the show, doubtless due to some extent to the location of the show being very central for many of their breeders, but the fact of their entry being so much larger than any others shows that breeders of this class appreciate the opportunity that such a show affords them.

H. M. the King was deservedly successful, and the victory he secured by winning both male and female championship is a notable one. In the two-shear ram class the winners were the Duke of Northumberland, the Duke of Richmond, H. M. the King, and Mr. E. Ellis, in the order named, showing four superior two-shear rams. Probably the better one, so far as type, quality and flesh were concerned, is that with which the Duke of Richmond took second honors. In the section for yearling rams, with 27 entries, H. M. the King was first and third. The winning ram was made champion of the breed. He was somewhat narrow, but had beautiful quality of skin and fleece. The Duke of Richmond, who came in second, had one which distinctly showed to its fullest advantage the true type of the Southdown, so far as quality, flesh and fleece were concerned. Mr. O. H. Berners came in r. n., with a wide, deep and good-fleshed ram. Messrs. E. Ellis, J. Colman, O. R. W. Adeane, and the Earl of Cadogan, were all h. c. for rams of superior quality, scale, type and substance. A new class for pens of three yearling rams was instituted this year. Here again H. M. the King took first honors, and the three rams with which he won were of superior merit, and easily first; followed by the Duke of Devonshire and Mr. E. Ellis. The contest was very keen, and it is probable that Mr. Ellis' should have won; they were better matched.

The ram lamb and ewe lamb classes were of good merit, and the winning pens in each case were from Mr. Ellis' flock, and of these it may be said that the Summerbury flock never in its career has been represented in these two sections by more typical or more evenly-matched rams. Mr. O. R. W. Adeane was second in each of these classes. His pens, too, were of superior quality, with very grand flesh, and wide and deep in the carcass.

The yearling ewe class, in which H. M. the King also took first prize, and with this pen won the female championship, is one in which we cannot agree with the award, for the better pen, from the breed point of view, was that which won second prize, i. e., Mr. E. Ellis' pen. The Duke of Devonshire was third here.

The Oxford Downs were well to the fore in respect to quality and merit. Mr. A. Brassey has won many notable victories in bygone years, but none, we think, more thoroughly deserved than that he secured this year in winning first and second for yearling rams, and first for yearling ewes. They were fine sheep, with great scale. Mr. J. T. Hobbs was second and third for yearling rams, second and third for yearling ewes, first for ewe lambs, and third and r. n. for ram lambs—a record of success which at once stamps his flock as being full of merit, type and character, and needs no further comment to emphasize the high class of these exhibits. Mr. R. W. Hobbs won first and fourth in the ram lamb class, and r. n. in that for ewe lambs—a very fine collection, indeed, showing substance, type and character. Mr. James Horlick was represented by a very good entry indeed, and Mr. W. A. Treweeke, who was second and h. c. for ram lambs and third and fourth for ewe lambs, had a particularly fine lot of lambs on exhibition. They were very choice in quality, good in their fleeces, and of a scale and character that secured plenty of admiration.

The Shropshires, as is usual at this show, were largely represented, with a thoroughly typical exhibit. The two-shear ram class had Mr. R. P. Cooper's grand stud ram at its head, first as a ram lamb at the Royal, first as a yearling ram at the Royal, and now first as a two-shear, a record which shows the superior merit of this particular sheep. The yearling ram class was hardly so even in quality as we have seen it before. Of the winning rams there was no doubt that Mr. M. Williams' entry was the best; a ram of immense scale and substance, with good quality. He won easily. Mr. R. P. Cooper was second and r. n., for two very choice sheep of merit and quality. Mr. E. Nock took third honors, with another very nice ram. In the pens of five yearling rams, Mr. Cooper won again, and here was even type and good quality. Second honors went to Mr. M. Williams, who had a nice lot of sheep present, with good merit. The third prizewinners here were a very choice pen indeed, from Sir P. A. Muntz's flock, and these certainly received no more if as much recognition as their merit and type entitled them to. Mr. E. Nock followed with a pen of rams, of very good quality and merit. We may mention that the whole of Mr. Cooper's first-prize pen of five yearling rams were sold by auction at the show, and they averaged the high price of £70 2s. 9d. In the selling class for yearling rams, Mr. R. P. Cooper was notably successful, first, second, third, r. n. and

two h. c.'s were given to his entries. Mr. Cooper was again to the front in the yearling ewe class. Here he was first and second, with two grand pens of sheep; Sir P. A. Muntz taking third and Mr. P. L. Mills fourth honors. The ram lamb class was one in which merit and quality was found all through. Mr. E. Nock, with a pen of the choicest quality, went to the top, followed by Mr. R. P. Cooper, Jas. Harding and T. S. Minton, in the order named. The last-named exhibitor was first for ewe lambs, with a pen of excellent merit and superior quality. Mr. James Harding, however, ran him very closely indeed, for his too was a pen of high merit. Then came Mr. E. Nock's pen, and last, but by no means least in merit or type, was Mr. A. Tanner's pen.

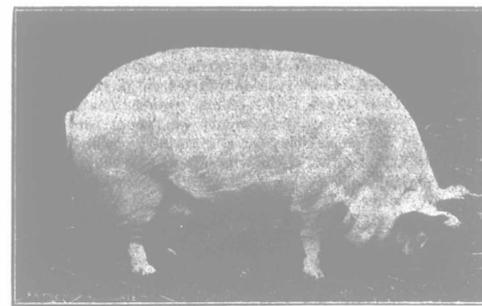
The Hampshire Downs made a very good entry. The



Shearling Shropshire Ram.

First prize, Royal Show, 1905. Exhibited by Mr. M. Williams, Whetton Hall, Wolverhampton.

old rams were a small class, all of which were sold by auction, and three out of the five so sold were for Australia and the Argentine. Mr. Carey Coles won here with a ram of great quality, full of good merit and true type. The yearling ram class found Mr. James Flower at its head, with a ram of very high quality indeed, a ram such as few other breeders could produce; he, too, has gone to the Argentine, together with half a dozen more from the same flock. Mr. T. F. Buxton followed, and then came a beautiful ram of Mr. Carey Coles' breeding—very rich in flesh, and excellent in merit. Then came a wide-topped, good-loined ram; from Mr. H. L. Cripps, who had to be content with r. n. The ram lamb class had Mr. James Flower's pen at its head, a pen which has secured for the flock from whence it came world-wide renown; this pen was easily first, and with equal ease won champion honors. Sir W. G. Pearce's pen was second, and Mr. H. C. Stephens third. In both of these pens merit and quality were found, but the scale of the latter was notable, and amongst them was one ram lamb that was sold at \$500 to go to the Argentine, to head one of the best flocks there. As has been the case for many years past, Mr. Flower won first for yearling ewes, his second entry taking second honors. It will suffice to say that these ewes were as good as could be. Mr. T. F. Buxton was third; Mr. H. L. Cripps r. n. In the ewe lamb class Mr. H. C. Stephens won, with a pen that has only known defeat once, and this only by the narrowest margin; a pen which is probably one of the best we have seen for some time.



Walton Jewel II.

Middle White sow. First and reserve champion, Royal Show, 1905. Exhibited by Sir Gilbert Greenall, Bart.

showing immense development combined with good quality. Sir W. G. Pearce took second honors. This pen had many admirers, but was not quite so perfect as the leading pen. Mr. Coles was third, with a very choice pen indeed, some of which were particularly good in flesh, fleece and type.

Suffolks.—This breed, which does not at the present time enjoy a large patronage from the export buyers, has undoubted merit, on account of its superior flesh. This year's entry at the Royal Show was not a large one, neither do we think it was quite so good as we have seen in recent years. The winning flocks were owned by Messrs. R. Barclay, H. E. Smith, S. R. Sherwood, M. G. Hale and the Earl Cadogan.

The Lincolns made an average entry. The merit

was superior, and the demand for these sheep was the keenest we have ever seen. Mr. Tom Casswell won in the two-shear ram class, with a masculine, square and deep carcassed ram. Mr. H. Dudding was second and r. n. with sheep of superior type and quality. The yearling rams had for their winner Messrs. Wright's notable ram, of whose merit and type no further comment is needed than the fact that it was sold for 1,000 gs. for the Argentine immediately after the award was given. Second and r. n. went to Mr. Dudding, but neither of these two sheep could be sold, as they are entered in Mr. Dudding's sale, a report of which will follow by next mail. Mr. Tom Casswell, with a choice-bred ram, compact and true in formation, was third, and Messrs. Dean and J. E. Casswell were h. c. In the class for pens of five yearling rams, Messrs. Wright won again, and immediately sold them at 300 gs. each. Mr. Tom Casswell came in second with another first-class pen. Mr. Dudding was third, and J. E. Casswell r. n. Messrs. Dudding and Dean won all the honors in the ram lamb and ewe lamb classes. The former was first and second for ram lambs, and third and r. n. for ewe lambs; and Messrs. Dean occupied the corresponding position in the ewe and ram lamb classes respectively. Type and character, combined with quality of flesh, were clearly apparent here. In the yearling ewe class, Messrs. Wright were first and second, with two of the best pens we have seen out for many a day. Messrs. Dudding and Dean were third and r. n., respectively. In the ewe hoggett class, shown in full fleece, Messrs. Dean were first and second, and Mr. H. Dudding third. The winning pens were all of very superior character. In the Lincoln wool class, Mr. Dudding's two entries were again first and second, and thus his unbeaten record for wool at the Royal Show has been continued.

The Leicester breed were very typically represented, Messrs. George Harrison and E. F. Jordan dividing the honors all through the four classes.

Cotswolds.—A dozen pens represented this breed, and the well-known flock of Messrs. W. T. Garne without difficulty secured leading honors for yearling rams, ram lambs and ewe lambs, and second for yearling ewes; Mr. W. Houlton, who has a very fine flock of this breed, taking first honors for yearling ewes, and second and r. n. for yearling rams.

Border Leicesters.—A small entry, but most typical of this breed, was present, each pen being of a very high merit indeed, the Right Hon. A. J. Balfour winning all through, and Mr. Thomas Winter, a breeder well known to Canadians, taking second honors.

The Kent or Romney Marsh sheep made one of the largest entries the breed has ever made at the Royal Show, and the importance of the demand for these sheep for export was one of the features of the show, quite a number of the exhibits, or of the flocks they represented, having been purchased at high prices for the Argentine.

The Wensleydale breed, with 21 entries, displayed to advantage the high merit, type and quality of this particular breed of sheep. The executors of T. Willis, Lord Henry Bentinck and Mr. E. Horseman were leading winners.

The Dorset Horn breeders have at last discovered that it is advantageous to their breed to enter at the Royal Show, and the entry made this year was of superior merit, real good quality, and excellent type. Mr. W. R. Flower was leading winner. He won first and second for ram lambs, first and champion for yearling ewes, first and r. n. for ewe lambs. These were all of superior merit, and about as good a lot of sheep as we have seen out from any flock for a long time. Mr. E. A. Hambro was first for yearling rams, a decision with which we do not agree. The second ram, from Mr. James Attrill's flock, was clean away first in the class, and of beautiful type. Mr. F. J. Merson won several prizes, with sheep of high character. Mr. E. A. Hambro was second and third for yearling ewes and ewe lambs, and Mr. S. Kidner, who had present a yearling ram of high merit, was omitted from the award list, for reasons we cannot understand.

PIGS AT THE ROYAL.

A full entry, and a representative one, was found in this section. Probably, taken as a whole, swine exhibitors have not made so excellent an entry for several years past.

The Large White or Yorkshire breed first claims attention. Worsley Duke 4th, owned by the Earl of Ellesmere, a lengthy, good-topped hog, took first honors in the senior boar class; Holywell Ezeca, from Messrs. S. Spencer & Sons, was second (and he certainly ran the winner very close); Watford Wonder 4th, owned by Mr. R. Ayre, came in third, and Fulwood Duke, from Mr. R. R. Rothwell, was r. n. The class for three boar pigs, born 1905, was a very large one. Here again the Earl of Ellesmere won first. They were good pigs, of very nice type. Mr. T. S. Jay followed with a useful pen, but we should have given preference to Mr. D. R. Daybell's third-prize winners, which had greater strength, and yet quite as much quality. The Earl of Ellesmere's second entry was r. n. The last-named breeder was first, second and third in the sow class, the leading sow, Worsley Sunbeam, being made champion of the section. Some exception was taken to the notable success of the Ellesmere herd, but whilst giving every credit to the very excellent pigs, particularly Lindsay A., owned by Sir Gilbert Greenall, that came r. n., we do not think any undue preference was given to this excellent exhibit. Again in the sow pig class, the Earl of Ellesmere was first, second and third, and Mr. D. R. Daybell was r. n. There is, of course, always room for difference of opinion, and here

we venture to express the opinion that the r. n. pen was fully as good as either of the preceding pens.

The Berkshire entry was of superior merit, and this, combined with true type and character, was notably prominent. Mr. J. Jefferson's grand boar, Peel Champion, won first in the old boar class, and was made champion of the breed. Polegate Dollar, a lengthy and well-bred boar, won second honors for the Duchess of Devonshire. Buscot Reliance took for Sir P. A. Henderson third honors, and in this boar was found great quality and a wealth of flesh that was most creditable. Mr. J. A. Fricker won first for the best three boars and for the best three sows of 1905. These six pigs were of especial merit, wealthy and of excellent conformation, with typical character. The second place in each class was occupied by Mr. G. Talfourd Inman, an exhibitor whose herd is rapidly forging ahead. The boar-pig class had for its third winners and r. n. two pens from the Duchess of Devonshire's herd. The third winners in the sow class were a very choice trio, with quality and type in abundance, from R. W. Hudson's herd, and the r. n. here went to three grand pigs from Mr. James Lawrence's old-established herd. The Duchess of Devonshire won first in the aged sow class, with Polegate Dahlia, who was made r. n. for champion honors. In Danesfield Pretty Polly, Mr. R. W. Hudson owned a very superior breeding sow. She was third, and the r. n. went to one of which the same may be said, i. e., Compton Rose, owned by Mr. Inman.

Tamworths.—Whilst not so large in number of entries, was represented by a very superior lot of pigs indeed, Mr. R. Ibbotson winning first and third honors for the older boar. The middle honor went to Whitacre Radium, owned by Mr. D. W. Philip, and Mr. H. C. Stephens' Monsieur V. took the r. n. A stronger class, or one more typical of its breed, we have not seen for some considerable time. The boar-pig was, like the sow-pig class, a small one, but of merit and quality. In the former Mr. Ibbotson won, and Mr. Stephens was second; in the latter Mr. Stephens won, and Mr. Ibbotson was second. Tamworth sows came out in good form, and in fair numbers. Mr. E. J. Morant won first and champion with an unnamed sow, whose position at the head of the class of registered Tamworth pigs was very much open to question, for without doubt the true type and characteristics of the breed were not found in her to the same full extent that they should have been found in a champion pig. Had Mr. Stephens' Cholderton Favorite 5th occupied this position instead, no exception could have been taken to the award. Whitacre Cactus, owned by Mr. Philip, was third, and she ought to have been second, and thus made room for Mr. R. Ibbotson's Cholderton Buzzard in the cash awards, instead of this excellent sow having to be content with the r. n.

"Encouragement of the Wool Industry."

To the Editor "Farmer's Advocate":
The figures furnished by Mr. Gunn on pages 540 and 541 of April 13th issue of the "Farmer's Advocate" are interesting data, especially at a time when prices for wool are looking up.

Is it not time the farmers and breeders of Canada were educated as to the needs of the woollen industry? If the farmers' institutes would look for speakers along this line, such firms as the R. Forbes Co., Hespeler; the Canada Woollen Mills Co., Toronto; the Wm. Pattinson Co., Preston, and many others, could furnish men capable and experienced, loaded with samples of cloth, including shoddy and cotton mixed goods, also samples of wool, and give us points on the handling of the flock for the production of wool, in particular the quantity and quality of fleece, density, softness, crimp, length of staple, classification of wool, commercial grades, soundness, purity, etc. I think that the time would be an opportune one to institute a kick against this abominable shoddy and rags, being we have no control of the manufacture or the manufacturer.
E. S.
Wellington Co., Ont.

The Air Cure for Milk Fever and Garget.

The remarkable success of the air treatment in the cure of milk fever in cows, the use of which has so often been recommended by the "Farmer's Advocate," has led to its adoption in the case of garget and other udder ailments, and, we believe, with a considerable degree of success. The owner of milking cows who neglects to provide himself with an outfit for filling the cow's udder with air in a possible case of milk fever, if it be only a common bicycle pump, or a bulb syringe and teat tube, takes chances of losing his best cow at calving, when he may save her life and usefulness by simply pumping her udder full of air and without any dosing with medicine or any further expense. Indeed, the attempt to give medicine in such a case is to court fatal results, as in most cases of milk fever, the throat of the cow becomes paralyzed, depriving her of the power to swallow, the consequence being that the medicine is apt to enter the trachea and lungs, causing inflammation and pneumonia, and causing the death of the cow. The only cases which we have known in which the air treatment has failed have been cases in which the cow has been drenched with medicine. The air treatment did its work in temporarily relieving the patient, but the medicine, which went the wrong way, defeated the object of the other treatment, and killed the cow.

We have knowledge of several cases of milk fever in which the cow died in a few minutes after being dosed with medicine, while it is well known that often in such attacks a cow will live for days after coma has set in and she has become entirely unconscious. And cows in this condition have been promptly cured by the air treatment when they have been considered as good as dead.

The air remedy is now being recommended for the treatment of garget and other ailments from which one or more of the quarters of the udder fail to perform their proper functions. The treatment is simple and safe where precautions are taken to keep the apparatus clean. The teat syphon should be dipped in boiling water before being used, each quarter of the udder should be pumped full of air, the teats tied with tape to prevent escape of air, and the udder well hand-rubbed or massaged to force the air up into the body and, if necessary, the operation repeated till relief is gained. In cases of milk fever relief is usually noticeable in half an hour, and the cure complete within two hours, with a single inflation, and with little, if any, falling off in the milk production, or ill effect on the health of the cow.

Short-turning Rack.

To the Editor "Farmer's Advocate":

In reply to B. M. C., concerning farm wagon rack, I will give a description of the rack I find most convenient for turning, etc. The bottom sills are 2x4 x 14 feet long, set in on the wagon bolster 6 inches on each side. Then use four pieces 2x6, cross sills bolted on these the width of your bolster; use two more 2x4 x 14 feet long, bolted on cross sills. Bolt to the bottom set of sills on each bolster a block 4x6 x 10 inches long, and the bottom of your rack is complete.
Kent Co., Ont. J. D. McPHERSON.

Teaching the Dog to Drive.

To the Editor "Farmer's Advocate":

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

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

To teach at the word "speak": By holding up something which he wants very much; for instance, food, when he is quite hungry. If you

wish him to go out, show him the door and say "go out"; the word "go" will start him, and in a little while he will become familiar with the word "out." Let him have a regular place to sleep, and teach him its name. If you already have a dog trained to drive, take the pup out with him to drive in the cattle. He will thus learn that they will run from him. Say nothing to him while he is with the other dog, unless he attempts to go to the heads of the cattle; this you must not permit. After two or three times take him out without the other dog and allow him to run after the cattle, provided they are used to being driven by other dogs. It will not do

to let him run where there is danger of being turned upon. If he runs them too fast say "steady," and as you use words with him only when they mean something, he will be apt to pay attention and go slower; if he does not, say "halt," and then "go," then "steady." He will gradually understand its meaning. Accustom him to the words "fetch" for sheep, and "get" for cattle. So, when you say go and get the cattle he knows you mean the cattle, instead of the sheep or horses. Teach him to know the left from the right, and to obey orders in that respect by the motion of your left hand and the word "left"; then by the motion with the right hand teach the word "right." By these motions and an appeal to the intelligence of the dog by your countenance and eyes, you can start him for the fields in any direction you choose, and he soon learns to do your bidding. Of course, it is presumed that the dog, to begin with, is bred from working stock.
A. JAS. EWEN.
Wellington Co., Ont.



Parsons' Photo. Doynton Brave Archer.
First-prize two year-old Shorthorn bull, Royal Agricultural Society's Show, 1905. Exhibited by Mr. J. D. and Mrs. W. J. Wiltis, Bapton Manor, Coxford, Wiltshire.

Yeast Treatment for Barrenness.

Dr. A. S. Alexander, Chief of the Veterinary Dept. of Wisconsin Agricultural College, recommends a trial of the following formula for yeast mixture, to be used in case of barrenness of cows, sows and mares:

Mix an ordinary two-cent cake of yeast to a paste with a little warm water, and allow to stand for twelve hours in a moderately warm place; then stir in one pint of freshly boiled, lukewarm water and allow to stand for eight to twelve hours. Mixture then will be ready for use, and entire quantity should be injected into vagina of animals to be bred. Use the mixture when period of heat is first detected, and breed when period is about ended. The same treatment is recommended in the case of cows which have aborted.

Rape Does Not Bloat Lambs.

It seems that the lambs can revel in the rape field without danger, while the old sheep, to avoid bloat, must not be turned in until the dew is off and after their appetites are partly satisfied. The lambs are inclined to nibble at the rape, and balance up their ration as they go along by taking a bite here and there of whatever happens to be growing among the rape, while the old sheep are so ravenous for rape that they gorge themselves on that alone. They go after it very much as the cows do that are turned for the first time into a new clover field. In several years' experience of turning lambs on rape we have never had a single loss from bloat, while the losses among the old sheep were considerable, until we came to exercise considerable caution.—[Farmer.]

What the Royal Means to British Stock-breeders.

Besides being a place to display their wares, the big shows, such as the Royal, seem to be a splendid market place also. A Lincoln breeder parted with a ram for 1,000 gs. (\$5,000); a pen of five yearling rams brought \$7,500; a two-year-old Shorthorn bull 1,000 gs. (\$5,000), at auction.

Flies and profit don't go together. In this year of lush pastures the cattle should make rapid gains. Keep the flies off the stock!

FARM.

The Swallow.

Of the five or six varieties of swallows which inhabit Ontario, perhaps the most worthy of note are the Barn Swallow, the Purple Martin and the Chimney Swift. The last named never alights on the ground, but in other respects it very closely resembles the swallow.

To the swallows we are indebted to a great extent for the comparatively small number of winged insects, which in large numbers would be a considerable nuisance and torture to man and beast. Since we find these birds in the open and cultivated parts of the country, it is safe to infer that they keep this territory free from the insect pest, for in the closely-wooded section or near the swamp, where the swallows are not seen, we encounter swarms of black flies, gnats, etc.

The clearing is the feeding-ground of the swallows. As long as flying insects are plentiful these are the chief food. Even when a cold wind has benumbed the flies, the swallow will find them on the ground where the vegetation is scarce or on sandy places. During the summer the female ants come out with the ammunition and intentions required to form new colonies. But as soon as they come to an open space the swallows fill their stomachs with "ant preparation," and the new colonies of ants never materialize. Those ants which escape and shed their wings are very likely to become food for the swallows on the ground. Here the Purple Martin makes himself most useful.

The Swift, though it does not follow the insects on the ground, is very valuable in destroying them in the air. While the Swallows gather their food in the clear, hot day, the Swift chooses early morning and late evening as its time for eating. The night-hawk and Whip-poor-will do their part of the work in the night. Thus, the whole twenty-four hours is under the watchful eyes of these insect-eaters—all belonging to the Swallow tribe.

The Swallow builds a nest of mud, and lines it with soft feathers. The nest is stuck to the side of a rafter or under the eaves of a building. The Swift's nest is built of small sticks, which are glued together and fastened to the inside of a chimney, or on the inside wall of a wood-shed or driving-shed. How often we see an unseemly mass of straw, grass and feathers piled on top of one of these nests! This tells us that the owner of the nest has been driven out, and the conqueror—the English sparrow—has taken possession of the home. Sparrows and cats are the chief enemies of the swallows, and the swallows are worthy of our protection. We can help them a great deal by destroying all the sparrows, sparrows' nests and eggs which we see. One trap, well handled, will destroy more mice and rats than a whole barn full of cats; so good-bye "Mary Ann," or "Tommy Ann," as the case may be.

Grey Co., Ont.

LOCHIEL.

An Institute Trip in Western Nova Scotia.

Having received a pressing invitation from the Secretary of the N. S. Farmers' Association to take a short Institute trip in the Western end of this Province, and having never had an opportunity to visit that part of Nova Scotia, I boarded the train on Saturday afternoon for Truro.

For a few miles after leaving the busy manufacturing town of Amherst, the railway runs along the edge of the rich dyked marshes made by the alluvial deposit from the tides of the Bay of Fundy, then the country gradually becomes more hilly, and covered with quite a thick growth of undergrowth (what you in Ontario are accustomed to call "scrub bush"). We realize after a while that we are crossing a range of mountains, the Cobequid, and about Wentworth and Folley the scenery is wild and grand; Wentworth valley looks to be hundreds of feet below us, as we speed by, and here, right on top of this range of mountains, is a beautiful little lake (Folley Lake), and now we find ourselves descending the mountains, the train gaining speed at every revolution of the wheels, and soon we are again in sight of dyked marshes and the pretty town of Truro—the Athens of Nova Scotia. Here is the new Agricultural College, situated on Bible Hill, overlooking the town, and the Normal School near the center of the town.

Being obliged to wait until Monday morning for a train over the "Midland" Railway, I took a Sunday morning walk through Victoria Park, one of the most beautiful spots for a park that one could possibly imagine. A stream flows down a mountain gorge, supplying waterfalls, rapids and miniature lakes, alongside of which roadways have been made and several shady nooks fitted with band-stands and rustic seats.

On Monday we went over the Midland Railway, through a fairly good farming country, to Windsor, on the Dominion Atlantic Railway, and now began the ride through the famous Annapolis Valley—the garden of Nova Scotia. It is said that a railway always passes through the poorest section of a country, but if "The Valley" is any prettier or more fertile in any other section, it must indeed have claim to be called the apple orchard of the world.

Through the valley the grass crop must be a bumper one, and the grain and most of the small fruit needed for export. Some of the earliest varieties of apples had been ruined by a frost on the 9th of June, but for the most part the prospects are good for an abundant

crop. As we travel westward and get beyond "The Valley," we find the surface more hilly and rocky (granite boulders), but right among the boulders the apple trees grow splendidly, and where small fruit is cultivated it gives splendid returns. Along the western and southern shore the people are generally engaged in fishing, and as they produce little or no farm products there is a ready cash market for all that the farmers in that can produce.

My travelling companion on this trip was Mr. T. H. Mason, of Straffordville, Ontario, and while neither of us ever felt envious of the lot of our brother farmers in Shelburne and Queen's counties, we did often remark about the stalwart and intelligent men and rosy maidens of this end of the Province. Mr. Mason is a man of keen observation, and talks sense in his addresses, without shooting over our heads so much as some of the institute speakers from Ontario do; in other words, he sizes up the conditions of the men he is talking with.

C. H. BLACK.

Amherst, July 4th, 1905.

Lime Experiments in Rhode Island.

We print below some points from the syllabus of an illustrated lecture on acid soils, by H. J. Wheeler, Ph. D., Director of the Rhode Island Experiment Station:

The Rhode Island Station has given more attention than any other to the subject of acidity in soil and its effects on growing crops of various kinds. Acid soils are widely distributed everywhere. In one of the French departments clover could not be grown, and agriculture was at a low ebb. After liming, clover succeeded, the cattle industry thrived, and prosperity in farming was assured. Acid soils are found generally in New England, and cognizance of the fact is important. Anyone can test his soil for acidity by means of the blue litmus paper sold at drug stores. The soil to be tested should be moistened with water enough to make a thick paste, and should then be allowed to stand half an hour or longer. Then open it with a knife blade, and insert a piece of litmus paper half its length. Do not handle the ends of the paper before putting it in the soil, for the acid in the moist fingers may redden the paper. In an hour or so remove the paper without tearing it. Dip it in water to remove the soil adhering. If a distinct red color has taken place of the blue it may be concluded that the soil needs liming. In case of red soils it is often better to press the paper against the soil than to have it surround it. If in such case the paper turns red it shows that the soil is acid. In soils of a vegetable nature only a good test may be made with ammonia water. To make this, take two glasses, place a level tablespoonful of soil in each, and add water until the glasses are about two-thirds full. Now add to one of the glasses a tablespoonful of dilute ammonia water. Stir each glass with a different spoon. If, after standing some hours, the liquid in the one having the ammonia becomes dark brown or black, it shows that acid humus is present and that liming will be useful.

Wood ashes are also useful in correcting acidity. Experiments with various crops showed that, while there was no lack of plant food, the acidity of the soil made the crops poor, while lime restored them. Nitrogen in various forms was used, and, as before, the sulphate of ammonia poisoned the crop when no lime was used, while it greatly increased it after liming, showing that the acidity of the soil had a great influence on the assimilation of nitrogen by crops. In experiments with potatoes, it was found that acid conditions, in the soil were unfavorable to the fungus that causes the scab, and that, while an application of lime or ashes would sweeten the soil and improve the crop, it also increased the tendency to scab. On the other hand, the application of lime prevents damage from the fungus that causes the club-root in cabbages. In using lime on grass plots, it was found that a better effect was produced where the lime was well worked into the soil than where it was merely used as a top dressing. Acid soils have been found to be the rule in Rhode Island, and occur on light uplands as well as on heavy and moist soils. In an acid soil it was shown that, while there may be a sufficient percentage of phosphates present for the plants, it may appear to be deficient, while liming will bring it into use. The growth of different plants varied greatly on acid soils, some not being effected seriously by the acidity, while others were so. Muskmelons fail on acid soils, while the watermelon seems to prefer a sour soil. Cabbage is helped by liming on such soils. Alfalfa is not suited to acid conditions in the soil, and lime has often a wonderful effect on its growth. Red-top grass thrives on acid soils, while timothy is helped by lime. While crimson clover will grow on a soil slightly acid, it is helped greatly by liming. Sweetening the soil with lime is very important to the onion crop. Lime also promotes the growth of the pumpkin on acid lands. Asparagus showed finely the effects of lime, but cranberries do not need lime. Quince trees were injured by lime, as also were Norway spruces, but lime is an advantage to apple trees. Sandy soil should not be heavily limed, half a ton per acre

being enough, while heavy soils need twice as much. It is advised to harrow in the lime at once, and lime should be applied after potatoes and not before.

The Nurse and the Farmer.

To the Editor "Farmer's Advocate":

Sir,—In your issue of June 29th I noticed an article written for the benefit of farmers in general, signed by "Nurse." I have read her letter, but I cannot be convinced by it that all Canadian farmers are as she states. If it were so we would be more fit for associates of the dumb brutes than for human beings. I can also claim the privilege of having some knowledge of farmers in different parts of Ontario, and I have also lived in the city, and as far as my experience goes, I find as much filth in the one as the other. I have yet to find the farmer who will walk straight into the parlor without cleaning the barnyard dirt off his boots, and, although it may be so, it is a rare thing to find an incubator in the kitchen. Of course, I will admit that farmers do not appear as neat and tidy as those of other occupations, but you must allow that some of the farmer's work is very dirty, and that it is almost impossible to get his boots perfectly clean. Does "Nurse" think that a farmer must change his clothes outside and appear as a clerk with collar and tie on, or be followed all over the house by his wife with a broom and dust-pan? Does she think that a man will find comfort in his home if that were the state of affairs? If a wife is so extravagant as to place a nice carpet where her husband has to step in his everyday life, well, let her take the blame, for it has no right there. If "Nurse" has happened in some dirty farm homes, I do not see why she should condemn all because of the few. My experience has been rather wide, and I have yet to find a farmer in whom I could find the faults as she describes them. FARMER.

Hastings Co., Ont.

Timothy and Oats Affected by Thrips.

To the Editor "Farmer's Advocate":

I am in receipt of your favor of the 14th enclosing stalks of timothy and of oats. I believe that both of these injuries are due to the same or a similar insect, a species of thrips, probably *Phloethrips poaphagus*. The injury is known in timothy as "silver top," and is caused by minute insects attacking the base of the stem inside the sheath. In the oats the injury is caused by these same minute insects attacking the ovaries in unopened florets. This injury is intermittent, and very much worse in some seasons than others. I know of no remedy for it, except, perhaps, short rotation by which grass lands are plowed down at short intervals and the land used for other crops. The silver top in grasses is particularly noticed in meadows. It is exceptionally abundant this year both in timothy and June grass. Some of the heads of the oats had the stems severed. This is not the result of the attacks of the insects, and I can only surmise that it may have been caused by a very rapid succulent growth, due to the great heat and excessive rain just at the time the plants were heading out. There is no appearance of the tissues having been gnawed or punctured. The small insects seen by your correspondent were probably the thrips, which is just such an insect as he describes. The effect on the panicle of oats is to blast the flowers at the base, leaving them white and paper-like when it heads out, and, of course, dead without any grain. Occasionally, the same insect continues its attacks on the sheaths of florets higher up the panicle, but in that case little harm is done, beyond bleaching the coverings of the seed.

J. FLETCHER, Entomologist and Botanist.
Central Experimental Farm.

Says She Told the Truth.

To the Editor "Farmer's Advocate":

Sir,—Since reading the letters in reply to the open letter of "Nurse," I feel compelled to say something in vindication of the truth. "Nurse" deserves praise for her courage in exposing some of the disagreeable habits of ordinary people, for, the statements of "A Farmer's Wife" to the contrary notwithstanding, the faults complained of and many worse ones are only too common; in fact, households are too scarce where some of them are not in evidence. Most people try to hide such things from their neighbors, but they are generally known, though seldom mentioned. The statements of "Nurse" may be one-sided (women have their little shortcomings also, I take it), but they are, unfortunately, not exaggerated. I could mention cases of most of those mentioned. I do not contend that they are the common actions of the people referred to, but they are worse, because they are committed with the express purpose of annoying or punishing, as I have heard them say, their unfortunate and weaker companions, and this by men who call themselves and pass in the community as good Christians. But enough has been said; we all have our faults, which are glaring enough in other people's eyes. Simcoe, Co., Ont. A FARMER'S SON.

Making Hay Under Difficulties.

To the Editor "Farmer's Advocate":

When one reads the recently-published methods of haymaking, so nicely set forth in your interesting columns, some of us less fortunate ones may be pardoned for a slight feeling of envy. "Cut after the dew is off, gathered up, and perhaps drawn in that day," we would be less than human did we not covet at least our neighbor's weather. In Central Ontario last summer one section had, between the 12th of July and 18th of August, a spell of four consecutive days during which no rain fell; otherwise, it rained more or less every day or every other day. In fact, since 1901, when good weather prevailed, the conditions have been decidedly trying. Already this season, between the 3rd and 13th of July, there has been one day only on which no rain fell.

Of course, slow, rapid, or any other fancy theoretical style of making hay in such circumstances, read like descriptions of King Solomon's Mines. We have, therefore, because of the rainy weather, two practical ways of handling hay—the one costly and tiring, the other easy and unprofitable. The first is that adopted by Scandinavians, which consists of forking the green grass onto racks of poles, very much as one would hang it on the bars of a gate. This certainly makes good hay, but involves a tremendous lot of very heavy labor. The second is that of the happy-go-lucky fellow, who mows when the weather is fine and gathers up the residue when it is dry enough, be the intervening time ten days or twenty.

Between two extremes there is always said to be a happy medium. Well, Mr. Editor, I just want to send you word by this that if there is a heart-racking job it is held down by the Central Ontario farmer who, in the "happy medium," tries to make good hay these years from the very heavy crop of grass which the otherwise highly beneficial rains bring him. X. I. C. Northumberland Co., Ont.

Making Money on Wheat.

A steady, monotonous wheat market is a condition under which legitimate milling business thrives best, but it is death to the man with a ticker and his customer, the victim of tickeritis. He wants something doing all the time. The essence of gambling is excitement. Without it, the game waxes dull and its victims grow weary. A long period of even prices wears away the heart of the option trader. He is after sensations with which to stir up the gambling spirit of his victims from whom he derives his diamonds and his automobiles.

A large, fat and prosperous group of these gentry has centered in Minneapolis, and during the last year they have fairly revelled in wealth, all shaken out of the pockets of the speculative populace. They are actually embarrassed to find ways in which to spend their money. Their expensive automobiles block the streets, and the smell of the perfumery with which they besprinkle their persons overpowers the odor from their gasoline tanks. Some of them have need of strong smells with which to counteract the fragrance of a somewhat malodorous past.

At this time of the year, these people are very busy with the growing crop. There is absolutely no condition known to nature that would not afford them opportunity for sensational reports. If the weather is dry, they conjure up visions of drouth and hasten to relate them over the wires to distant parts of the world in order to stir things up. If it is wet, the crop is ruined by too much rain. If it is hot, the wheat is being burned up. If it is cool, the crop is not maturing. The hot, dry winds, red rust, black rust, bugs, frost—a hundred things can be invoked for the purpose. Nature never produced weather conditions which could not be turned to the advantage of the wheat gambler anxious to stir up flagging interest in the option market. If all else should fail, there are wars and rumors of war which will do to tide over a dull day when the weather topic has become a trifle overworked.—[Northwestern Miller.]

The British museum has approved of a suggestion for the preservation of phonograph records of the voices of prominent singers, orators, actors, and the works of instrumentalists. When the idea was first submitted to the trustees the objection was raised that the records would not be of a sufficiently permanent character. This objection has, however, now been removed, and the records for the national collection will be master records of nickel, from which records for service may be moulded as desired. A similar collection is already being formed in Italy. The collection for the British Museum is to be started immediately. All the most prominent public men singers and musicians of the day will be requested to make records. As years go by, the collection will increase in value and size, and it is certain to become one of the most valued of the nation's treasures. The records, however, will not be available for immediate use, but will be reserved for reproduction in the next generation.—[The Scientific American.]

"Sanitarium for Montreal Office Boys."

To the Editor "Farmer's Advocate":

Sir,—In your issue of July 6th I notice an article on the sale of the Provincial Farm, at Compton, Que., in which your correspondent says: "The institution has been a complete failure, being nothing more or less than an asylum for younger sons across the sea, and the annual net cost to the Province was about \$5,000."

With regard to the Englishmen being an expense to the Province, they were required to pay a monthly premium of \$10 or \$12, all Provincial students being taken free. The percentage of English students was very small; I should say that not more than twelve (12) were enrolled. With one or two exceptions, only, they were from the upper class, and came out with an earnest desire to learn farming, which is far more than can be said of the Canadians, the majority of whom, certainly, did not intend to farm, and made the place a summer resort. I only know of one Canadian student who is farming at present, while four (4) of the Englishmen have taken it up, and the majority of others, have settled at some occupation in Canada. The course was supposed to extend over two years, at the end of which the student was entitled to a certificate of proficiency. Proficiency in what? Principally mowing the lawn in the summer and doing the rough chores in the barns in the winter. As for being taught the handling of machinery, the Government could not run the chance of breakages, so the student was obliged to gain his experience on his own farm later, or at the expense of some farmer he might hire out to. Any questions asked regarding the work were usually met with some sarcastic reply which effectually quashed all interest the student may have had.

These are a few of the reasons, coupled with the fact that three or four hired men were kept to do the principal work which the students should have been taught, which made the institution a failure for students.

Its failure as a farm no one attempts to explain.

This sounds rather like striking a man when he is down, but I felt bound to say a few words in justice to the "younger sons across the sea," who have attended the "asylum," or, as it should be more appropriately called, a "sanitarium for Montreal office boys." V. E. H.

[Note.—A despatch from Quebec City, dated July 21st, states that the Government have sold the Compton Model Farm for \$12,000 to Mr. Dominique Bolduc. The land alone originally cost \$11,000.—Ed.]

Dunn Co., Wis., School of Agriculture.

Prof. K. C. Davis, in the Prairie Farmer, gives the following information regarding agricultural high schools in Wisconsin, a subject referred to in a recent issue of the "Farmer's Advocate." Our contemporary states that the Dunn County School of Agriculture graduated eight students in its long course last May, and gave eleven certificates to short-course students. The way in which statements of enrollment are sometimes padded out, and the long list of things which the Wisconsin school purposes to do for the farmers of the county "free gratis for nothing," would seem to indicate that the staff of the Dunn County school does not find itself working overtime training young men and women:

The State of Wisconsin was the first in the Union to encourage the establishment of schools for the teaching of agriculture, manual training and domestic economy to the rural classes. County schools of agriculture were created in 1901. The first law allowed two counties to build and equip such schools at their own expense. Dunn County was the first to organize a county school board under the law, and Marathon County soon followed. These counties opened schools in October, 1902, with courses which were planned by the two principals and the State superintendent. The expense for equipment of buildings, furniture, apparatus, machinery and stock was borne by the county in each case. But the State aids each school to the extent of \$4,000 a year to apply on the running expenses. The schools are both prospering. The Dunn County School of Agriculture has just completed its third year. Forty students have completed the school course at the two graduation exercises. The enrollments for the three years were 64, 79, and 73. These young people are mostly from the farms of the county, and all of them attend the school to prepare for farm life. While the State College of Agriculture is preparing young men to fill positions in colleges, experiment stations and U. S. Government work, the county agricultural schools are fitting young men and young women for the actual work of the farms in the counties where they are located. Besides the regular school work, the Dunn County School of Agriculture does

a great many things for farmers free of charge. The principal of the school and the instructors are ready to help farmers in many ways. The school costs the farmer about twenty cents per year for each thousand dollars of his assessment. The school can give him twenty dollars a year of free help, besides teaching his sons and daughters.

- Here are some of the different offers:
- Milk and cream tested for butter-fat.
- Farm and garden seeds tested.
- Clover and other legumes treated for bacteria.
- Oats treated for smut, and potatoes for scab.
- Grafting of apple trees when scions are furnished.
- Good roads planned.
- Barns, silos, poultry and milk houses planned.
- Water systems for houses and barns planned.
- Drainage and sewage systems for barns and homes planned.

Information regarding feeds, stock, crops, new plants, planting, weeds, diseases, insects, spraying, fruits, machines, powers, and all farm subjects.

- Pure-bred stock selected for buyers.
- Bulletins on all farm subjects free.
- The instructors, aided by leading farmers, hold twenty farm institutes a year in the county. These are each attended by hundreds of interested farmers with their families.

The school also aids in the preparing of teachers to teach the useful subjects of agriculture, manual training and domestic economy in rural schools. This summer, from July 24 to August 5, will be held a special summer session to train teachers in these subjects. K. C. DAVIS.

[Here is a copy of the last commencement programme, which indicates the nature of the addresses given by the graduates:

- The Care and Use of MeatEmma Hoehn
- The Knowledge of Scientific Feeding...John Brill
- Poultry-raising for Women.....Christine Hanson
- The Preservation of Foods.....Lottie Ludvigson
- Soil, Nitrogen and BacteriaLewis Rudesill
- Domestic HygieneBertha Betzner
- The Adulteration of Foods.....Emma Bentson
- Seed TestingHarry Hubbard
- Music—SelectedMale Quartette
- Presentation of Graduating Class..Prof. K. C. Davis
- Address to Graduates.
- Presentation of Diplomas and Certificates...

Hon. J. H. Stout

DAIRY.

Factory Floors.

Substitute as soon as possible a cement floor for the wooden one now in the factory. Grade the ground to a slant of one inch in six feet to a central gutter, then pack the earth firmly and cover with four to six inches of gravel. Pound the gravel solidly. Mix sand and gravel with good cement in the proportion of four or five to one, and lay with grouting about four inches thick on the firm gravel. Finish with one coat of screened, sharp sand and the very best brand of cement, mixed in the proportion of two to one for the finishing coat. Have the surface smooth, so that pools of water will not lie on the floor. The gutter should have a fall of one inch in six to eight feet to an outlet, and should be made specially solid and even on the side and bottom. Employ a skilled workman to lay the floor, and use none but the very best material. Place a bell trap at the outlet from the gutter. Use sewer tile with cemented joints in underground drains near the factory, to prevent sewage soaking into the well. The sewage may be disposed of by means of a filter-bed or by the sub-earth system. Do not allow it to accumulate about the factory.—[Prof. H. H. Dean, in Bulletin 143, O. A. C.]

Wasting Skim Milk.

The kind of dairy meeting the instructor likes to see was held at the Dunkeld (Ont.) creamery two weeks ago, when a good-sized audience assembled, of whom almost one-half were women. Mr. G. H. Barr addressed the meeting on the advantage of sending rich cream to the creamery, pointing out that the patron who sent 20 per cent. cream was sending from his farm with each cwt. of cream 80 pounds of valuable skim milk that was of no use to the buttermaker. The richer the cream, the more skim milk left at home for feeding. Separator agents are partly to blame for the dissemination of erroneous ideas on this point. A member of the audience told of a certain agent, anxious to make a sale, who asked a farmer to bring him a creamer can of skim milk. This being brought was run through the separator, and from it there was extracted two quarts of cream. There is cream and cream, and the fact of sending a large pailful does not increase the patron's returns at the factory; it only robs the calves and pigs. No patron should skim cream containing less than 30 per cent. of butter-fat.

Effect of Corn Silage on Flavor of Milk.

Ever since silage has been used as a feed for dairy cows, there has been more or less controversy over its effect on the flavor of milk, the objection being occasionally raised that milk from silage-fed cows had an unpleasant, if not a disagreeable flavor. To determine what foundation, if any, there was for this belief, the experiment herein described was undertaken and conducted by the University of Illinois Agricultural Experiment Station in the following manner:

The University dairy herd was divided into two lots, one of which was fed forty pounds of corn silage per cow per day, which is the maximum amount for economical feeding, together with a small amount of clover hay and grain. The feed for the other lot consisted entirely of clover hay and grain.

The milk from both lots was cared for in exactly the same manner, being removed from the barn as soon as drawn and taken to the dairy building where it was cooled. After standardizing to four per cent. butter-fat, that there might be no difference in the flavor of the milk from the two lots on account of a variation in this respect, the milk was put in half-pint bottles and sealed.

In each case, before asking for a comparison, a bottle of milk from each lot of cows was agitated to incorporate the cream thoroughly, and the milk in each bottle was poured into a separate glass. Three questions were then asked the person whose opinion was desired: First, "Is there any difference in the two samples?" Second, "Is there anything objectionable about either?" Third, "Which do you prefer?" In every case the milk was known by a number only, and those whose opinions were obtained were not told concerning the manner of production, that their judgment might be unbiased by any prejudice they might have had as to the use of silage in milk production.

The people whose tastes were consulted were divided into three classes: ladies, men of the faculty, and men students. In the first case, as reported in a table, the silage had been fed one hour before milking. Of the 29 ladies, 10 preferred the silage milk, 14 the non-silage, and 5 had no choice. Of the men of the faculty, 27 preferred silage milk, 20 the non-silage, and 7 had no choice. Of the students, 20 preferred silage milk, 4 non-silage, and 4 had no choice.

A preference for silage milk was indicated by 51 per cent. of the 111 tests made when silage was fed one hour before milking. When silage was fed at time of milking, 71 per cent. preferred silage milk; and when fed after milking, 51 per cent. reported the same preference.

The summary of all results shows, that of the 372 tests made, 223, or 60 per cent., preferred silage milk; 40, or 11 per cent., had no choice; and 109, or 29 per cent., preferred the non-silage milk. The people who chose the non-silage milk were, as a rule, those who do not drink milk, hence their opinion is not so important as is that of the people who consume milk more freely.

Samples of silage and non-silage milk were sent to five milk experts in Chicago and other cities, accompanied by a letter asking the same three questions. One of these experts had no choice, one decided in favor of the non-silage, and three preferred the silage milk.

It was noticed that most people could detect a difference in the flavor of the two samples of milk, but it was expressly stated in every case that there was nothing objectionable about the flavor of either sample.

To determine further whether the public generally objects to silage milk, twelve half-pint bottles of such milk were delivered at the best hotel in the Twin Cities each day for a month, making 360 samples in all. These were served to guests who drank milk, and no complaint or criticism of any kind was made.

For the past nine years the Department of Dairy Husbandry at the University has delivered from 100 to 150 quarts of milk a day to people in the two cities. During this time the cows have been fed an average of about forty pounds of silage per day, except when on pasture, and no complaints of a bad flavor in the milk have been received.

Mr. H. B. Gurler, of DeKalb, who is one of the most progressive dairymen of the State, has been producing certified milk for the past ten years, and selling it in Chicago at twelve cents a quart. All of this time Mr. Gurler has been feeding silage to his cows, excepting during the season of the year when pasture was abundant, and with the best of results.

This is strong evidence that if the silage is of good quality, and used in reasonable amounts in connection with other feed, it is one of the best feeds obtainable for dairy cows when pasture is not available. It must be remembered that in all of this work nothing but good silage was fed, and no spoiled silage was allowed to accumulate in or around the silo. When silage imparts a bad or disagreeable flavor to the milk produced from it, almost invariably the cause is

that the silage has not been fed properly, or that spoiled silage has been used.

It should not be understood from this discussion that the time of day a food is fed, which may impart a bad flavor to the milk, is of no consequence. All the feeds of this nature should be fed after milking and not before, to avoid the possibility of producing an unpleasant flavor in the milk. And the milk should not be allowed to remain many minutes in the stable uncovered after being drawn, as it will quickly absorb injurious flavors from the atmosphere of place.

Thirty-day Cow Tests.

The Dairy Commissioner's Branch of the Dominion Department of Agriculture is conducting a series of 30-day tests of individual cows in herds supplying milk to certain factories in the provinces of Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island. Following are the results of the first test:

Herd No.	No. of cows.	Average per cow.		Highest per cow.		Lowest per cow.	
		Milk lb.	Fat %.	Milk lb.	Fat %.	Milk lb.	Fat %.
1	18	1074	3.2	34.8	3.4	45.8	3.5
2	20	842	3.6	30.6	3.8	38.3	3.6
3	12	910	3.5	32.5	4.9	41.1	3.8
4	11	791	3.3	26.2	3.7	35.7	3.3
5	15	733	3.6	27.3	3.8	34.9	3.4
6	16	932	3.3	32.0	3.9	45.2	2.3
7	29	877	3.6	31.8	3.6	43.5	3.4
8	19	1022	3.5	35.9	3.6	45.7	3.7
9	20	996	3.5	35.8	4.0	52.0	3.0
10	25	935	3.4	31.8	3.6	49.1	4.0
11	12	938	3.3	31.2	3.8	40.4	3.0
12	6	812	3.8	31.1	4.4	36.3	3.3
13	10	980	3.6	33.9	4.0	42.2	3.1
14	8	1090	3.5	39.0	3.9	55.3	3.3
15	10	676	3.6	24.5	3.5	30.8	3.7
16	9	879	3.8	33.4	3.9	51.8	4.0
240		914	3.4	32.1		650	

INDIVIDUAL RECORDS OF DAIRY COWS.

Test for 30 days, ending July 10th, 1905, at North Oxford cheese factory, Ingersoll, Ont.

Quiet Heifers.

Each dairyman knows that it pays well to be on intimate terms with all his animals, young and old. "But," says one, "there is other work to do besides petting the calves." True, and yet it often pays to drop some of the other work and handle these developing animals. Groom them, and convince them that you are their best friend. Manipulate the udder frequently, and go through the motions of milking. This may help to develop the udder and familiarize the animal with the process, and soon she enjoys it, and expects you to thus handle her. How often do I hear people ask: How can I cure a kicking cow? If you bought her, sell her again as soon as you can. If your heifer or cow kicks, you are to blame, not the animal. In fact, you have no business to have a kicking cow. The heifer's udder for a few days after calving is swollen and inflamed; she is nervous and excited. She has entered, to her, a new world. If you have handled her and fully gained her confidence previously, she will now look upon you as "a friend in need," and if you approach her gently, speaking to her kindly, first rubbing the udder, and then drawing the milk very gently, using plenty of time and patience, she will feel the great relief, and not only have full confidence in you, but transfer to you her maternal affections, and ere long she would suffer torture ere she would lift a foot. This is not preaching. Every animal in my stable was raised on my place, and I can go in and set the pail under any one, from the seventeen-year-old to the eighteen-months-old that had a calf but a few weeks ago, and sit on my stool and finish milking, and not a foot will be lifted. It pays in more ways than one to be on intimate and friendly terms with your animals. —[Dairyman.

Preparation and Use of a Culture.

That there has been such a strong prejudice against the use of cultures in the minds of some of our best cheese buyers is not to be wondered at when we consider the careless, slipshod methods in which some makers prepare cultures, and the unrestricted use of them by others, regardless of the ripeness of the milk, or the acidity and flavor of the culture. The flavor of the culture used will largely determine the flavor of the cheese or butter made; the need of full and exact knowledge of the proper method of preparing and using cultures is manifest.

First, provide suitable cans. It is better to have a duplicate set, if possible. Cans similar to the ordinary shotgun cans, which are eight inches in diameter and twenty inches deep, are quite suitable. When the milk is in small lots it can be more readily heated and cooled than if kept in larger quantities. For convenience in heating and cooling, a special box or tank, large enough to hold the cans containing the culture for one day's use, should be provided. This should have steam and cold water connections. The cans may be left in this box, so as not to be influenced by the outside temperature.

In starting a culture, it is advisable to use a commercial pure culture. Such may be obtained from our Bacteriological Department, or from any of the dairy-supply houses. Empty the mother culture into a quart of cooled pasteurized milk, and allow it to stand at a temperature of 75 degrees F. until coagulation takes place. Two per cent. of this culture may then be added to pasteurized milk at a temperature of 70 degrees for the next propagation.

After selecting the milk for culture, heat to a temperature of 185 degrees, stirring occasionally while heating. Allow it to stand at this temperature for 20 or 30 minutes, then cool rapidly to a temperature of 65 or 70 degrees F. To this milk add sufficient of the culture already prepared to develop an acidity of not more than .7 at the time the culture is required for use.

If the culture is to be kept for more than 24 hours, it is advisable to use a lower temperature—60 degrees F., or under. Aim to produce the same acidity from day to day. Before using, remove one or two inches of the milk from the surface of the can, as the surface is more liable to contamination from outside sources; break up the remainder by stirring well in the can. At this time take out a small quantity to propagate culture for next day. A glass sealer should be provided for this purpose.

The indications of a good culture are as follows: The whole mass is firmly coagulated, no liquid is found on top, and it has a milk-acid flavor pleasant to taste and smell.

A culture may be used to advantage when the milk is maturing slowly, or when it is tainted or gassy.

One-half of one per cent. is the greatest quantity which should be used at any time, and this quantity should be used only when the milk is known to be in a sweet condition.

Milk should be set slightly sweeter when culture is used. With gassy milk its use is especially beneficial. Culture with bad flavor or with too high an acidity should not be used.—[W. Waddell and A. McKay, in Bulletin 143, O. A. C.

Of Interest to Our Butter Exporters.

The Inspector for the Department of Agriculture, at Bristol, England, in reporting to the Extension of Markets Division on the perishable cargo ex the S. S. Turcoman, which arrived from Montreal on June 27th, makes the following reference to a shipment of butter, put up in one-pound blocks, wrapped in parchment paper, and packed 50 in a box:

"Thirty-nine cases butter: These boxes were opened by the Customs authorities, and were found to contain 50 one-pound prints, and the whole lot was detained owing to the wrappers on the prints not being stamped, in accordance with the Merchandise Marks Act."

The Act referred to provides that packages containing cheese or butter imported into the United Kingdom must be stamped with the name of the country of their origin.

The highest object of pure breeds is to improve the common stock. The faster it can be done, the greater the benefit. The dairy tests disclose to the practical dairymen the best blood for their use. The show-ring only indicates where typical members of the breed—not necessarily those of greatest dairy capacity—can be found. But when people go into the dairy business for the sake of profits and not for the sake of simply going into dairying, then there is no longer an alternative. You have but one course to follow. You must have a specialized dairy animal, and accord her that treatment which is part of, and inseparable from, her make-up. You must feed her liberally of suitable feeds, give her kind and generous treatment, place her in warm, well-ventilated stables, and never expose her to any conditions that would excite or discomfort the animal.—[John Mitchells, in Michigan Farmer.

GARDEN AND ORCHARD.

Lawn Fertilizing.

Some recently-published notes on lawn-fertilizing experiments from the famous Rothamstead Station, in England, show the striking influence of fertilizing on the character of a lawn, and at the same time afford valuable hints to agriculturists and graziers.

Forty-seven years ago twenty plots of about one-half acre each were marked off on an old lawn at Rothamstead, and these areas have been subjected to various schemes of fertilization, practically without change of programme ever since. It is said that a glance at these grounds now would give one the impression that the different plots had been brought in from different countries, so varying is their vegetation.

On the unfed or underfed plots the herbage is scanty and is largely composed of weeds. Plots heavily fed with complete fertilizers show abundant herbage, but of only a few species. In fact, the entire composition contains chiefly three or four kinds of grasses, clovers and weeds being almost entirely absent. Plots treated with potash and phosphoric acid, but receiving little or no nitrogen, on the other hand, have run to clover. Noteworthy differences were found, also, in the results given by different forms of nitrogen. Sulphate of ammonia encouraged the shallow-rooted grasses, such as sheep's fescue and sweet vernal, while nitrate of soda proved more favorable to deep-rooted species. This is said to be because the nitrate of soda dissolves rapidly and leaches down deeply into the soil, while the sulphate of ammonia remains at or near the surface.

From the above results a few conclusions seem warranted:

1. Lawns require liberal fertilizing. Many Canadian lawns are underfed.
2. Liberal feeding is the best antidote for weeds. Abundant moisture and plant food furnish conditions for a luxuriant growth of grass, which will crowd out almost all kinds of weeds.
3. It is very important, in establishing a lawn, to choose soil originally deep, fertile, and in good physical condition.
4. Fertilizers rich in nitrogen and poor in potash give the most grass and the least clover; they are, therefore, preferable for tennis courts, greens and similar situations.
5. Clover follows potash; it is also favored by lime, because lime sweetens the soil and liberates potash.
6. On a lawn sour and mossy, with failing herbage, use lime and potash (there is no better potassic fertilizer than unleached wood ashes). This will bring in a liberal growth of clover, which can afterwards be largely supplanted with grasses, by withholding the mineral fertilizers and using one or two cwt. per acre of nitrate of soda.
7. Remember that a vigorous growth of clover is a good thing because it enriches the soil in nitrogen and humus, rendering it in the very best condition for a succeeding crop of grass.

Soda-Bordeaux (Burgundy Mixture).

Prof. Frank T. Shutt, M. A.

During the past three weeks a number of reports have been received, both from Ontario and Nova Scotia, stating that serious injury has resulted from the use of Soda-Bordeaux on apples, plums, cherries and peaches. These communications have been accompanied by requests for information respecting this newly-introduced mixture. A brief account of certain experiments recently conducted at the Experimental Farm, Ottawa, may therefore be of value and interest to fruit-growers generally.

In Soda-Bordeaux, or Burgundy mixture (suggested as an alternative for the ordinary Bordeaux mixture for potato blight and rot), washing soda (carbonate of soda) is substituted for lime in the preparation of the spray. Two formulas have been recommended:

	A.	B.
Copper sulphate (bluestone).....	6 lbs.	4 lbs.
Washing soda (carbonate of soda) 7½ lbs.		5 lbs.
Water	40 gals.	40 gals.

A simple calculation will show that the proportion of bluestone to washing soda is the same in each, but "B" is naturally a more dilute preparation.

As far as the writer can learn, Paris green, white arsenic, or some other arsenical compound, had been added to the Soda-Bordeaux in every case in which injury was reported from application to fruit trees. When Paris green is mixed with ordinary Bordeaux mixture it is not dissolved, but remains in suspension, and experience has shown that no injury results from the use of such a spray. When, however, Paris green is added to Burgundy mixture it is partly dissolved (owing to the alkaline character of the spray) and becomes an active arsenical compound more or less corrosive to foliage. It has long been known that soluble arsenical compounds have this injurious effect upon foliage, and, consequently, cannot be used in insecticidal mixtures. It follows from this consideration that the addition to

the Burgundy mixture of a solution made by boiling white arsenic and sal soda (resulting in the formation of arsenite of soda), as practiced by some, would render the spray extremely injurious. For the same reason it might well be conjectured that the addition of Paris green or arsenic in any form to the Burgundy mixture would render it unsafe for use on fruit trees.

Our recent experiments comprise trials on apples, cherries and plums with the following mixtures:

"A"—Soda-Bordeaux (Burgundy mixture)—	
Copper sulphate (bluestone)	4 lbs.
Washing soda	5 lbs.
Water	40 gals.

The bluestone and washing soda were dissolved separately in half the total volume of water, and the resultant solutions mixed. This mixture, it will be observed, contains no Paris green or arsenic in any form.

"B"—Soda-Bordeaux as above, to which was added 4 ozs. of Paris green.

"C"—Soda-Bordeaux as above, to which was added a solution made by boiling together 8 ozs. of white arsenic and 2 lbs. of washing soda with 1 gallon of water.

RESULTS AND CONCLUSIONS.

"A"—No apparent injury to the foliage of apples, plums and cherries.

"B"—Apples: A few leaves slightly scorched at the edges. The probabilities are it will be found that the varieties differ somewhat in their ability to resist the corrosive action of this spray, but the results obtained so far indicate that its use would be attended with a considerable degree of danger in the apple orchard.

Plums: Scorching of the leaves quite evident, though injury not very serious.

Cherries: Results very similar to those obtained on apple foliage. It is extremely doubtful if this spray could be used for this crop with safety.

"C"—Apples, Plums and Cherries: In every instance in which this spray was used, excessive injury resulted. The foliage was badly scorched, subsequently becoming crisp and falling. The damage was such as to show conclusively that this spray is quite unsuitable and dangerous in the highest degree for all classes of fruit trees.

In a word, Burgundy mixture, pure and simple, has shown itself, as far as our experiments have gone, to be non-injurious to foliage. When, however, Paris green is added the spray becomes more or less corrosive to foliage, and its use is attended with danger. The addition of soluble arsenical compounds, as in "C," renders the spray extremely injurious to foliage, entirely prohibiting its use.

When it is desired to use Paris green as an insecticide in the spray, Bordeaux mixture made with lime should be used.

NEWS OF THE DAY.

Canadian.

According to insane asylum reports just issued for last year, insanity is alarmingly on the increase in Ontario.

A large abattoir and pork-packing factory will probably be built on the property of the Union Stock-yards at Toronto Junction.

A site of ground near Alliston, large enough for the training of 10,000 men, has been selected as favorable for a military camping ground for Western Ontario.

Parliament was prorogued at Ottawa on July 20th. For the first time in the history of Canada, the speech from the throne was delivered by the Governor-General standing.

T. Eaton's new store on Portage Ave., Winnipeg, was formally opened to the inspection of the public on July 15th. The total floor space of the new building is 6.52 acres.

The Ontario Government has revoked the license of the Anglo-Canadian Gold Estates, Limited, a company organized in Great Britain to exploit mining properties in the Rainy River district.

The C. N. R. will before long resume construction on the Neepawa-Clan William branch. The line when completed will make the distance between Winnipeg and Edmonton 300 miles shorter than by the C. P. R. route.

Mr. Rider Haggard, Commissioner for the Imperial Government, has sent a letter to the Premier, asking for a grant of land, consisting of 240,000 acres, or ten townships, upon which to settle families of English poor. Sir Wilfrid has expressed himself as favorable to the scheme.

The Canadian rifle team at Bisley has won the Rajah of Kolapore's challenge cup, the best team-price offered. One of the Canadians, Capt. A. Elliott, 12th York Rangers, also made the highest total score in the competition, 303 out of a possible 105.

On July 17th it was announced to the Dominion Parliament that a substantial increase in salaries has

been made. In future the Premier will receive \$12,000 instead of \$8,000 annually, and the leader of the Opposition \$7,000 annually; these sums in addition to a sessional allowance of \$2,500, which is to be the salary of all members of Parliament henceforth, instead of \$1,500. There will also be an increase in the salaries of judges, and all ex-Cabinet Ministers of five years' consecutive service will receive an annuity of half their salary. Sir Mackenzie Bowell's and Sir Charles Tupper's shares in the general distribution of good things will amount to \$4,000 a year.

British and Foreign.

The work of double-tracking the Siberian Railway will be resumed at an early date.

15th of the political parties in Japan are in favor of extending the Anglo-Japanese alliance.

Another attempt has been made to kill Governor-General Trepoff by a bomb at St. Petersburg.

The Chinese, in retaliation for the exclusion laws of the United States, have begun a boycott of American goods.

Lieut. Peary is en route for the North Pole in his new vessel, The Roosevelt, Captain Bartlett. The crew will consist of eight picked Newfoundlanders.

During the past week deaths by the score and prostrations by the hundred because of the heat have been reported daily from the cities of the United States.

According to the Accident Bulletin, issued for the United States, the total number of deaths on U. S. railroads during the months January, February and March of this year was 904. The number injured was 14,397.

Holman Hunt, the famous British artist, a reproduction of whose painting, The Light of the World, recently appeared in the "Farmer's Advocate," has just completed another large picture, The Lady of Shalott, which is said to equal any of his former work. Mr. Hunt is 78 years of age.

Hostilities in the Far East are at present confined to the Island of Sakhalin, where repeated skirmishing has taken place, and Russians to the number of 461 have been taken prisoners. It is believed that, owing to shortage of supplies, the Russians still on Sakhalin will be unable to hold out much longer.

M. Witte, whose appointment as chief peace plenipotentiary has given unbounded satisfaction to Russians in general, is of the opinion that the terms demanded by Japan will be such as Russia cannot accept. He says Russia is by no means crushed as the foreign press has it, and that, although the Empire is coming through an internal crisis, it is far from being on the verge of dissolution.

THE FARM BULLETIN

The largest land deal of the season in B. C. has been made by the purchase of a large tract of land from the C. P. R. by P. A. Paulson & Co., of Cranbrook. The tract will be utilized as the largest hay ranch of the Province.

A report from Belleville, Ont., says that apples are likely to be a comparatively short crop in that district, buyers already making contracts at \$1.50 per barrel, and also contracting for orchards. The crop of one seven-acre orchard of eight-year-old trees, mostly Ben Davis, is said to have been purchased at \$375 cash.

In deference to many requests and suggestions, coupled with the difficulty of securing the speakers desired for an August meeting, the convention of the American Pomological Society has been postponed till September 19-21, 1905. It will occur at the Coates Hotel, Kansas City, the place first announced, and under the same auspices. This change assures a good attendance, a good fruit exhibit, a cool pleasant temperature, and an excellent programme. John Craig, Secretary, Ithaca, N. Y.

Secretary T. E. Orr advises us that the next annual meeting of the American Poultry Association will convene at Cincinnati, Ohio, at 3 p. m., on Thursday, Jan. 18th, 1906, the place to be announced later. An adjourned meeting will be held at Hagerstown, Md., on Thursday, October 12, 1905. The new edition of the Standard of Perfection will be ready about August 1st.

The Hudson's Bay Outlet.

Mr. J. W. Tyrell, who is known as an authority on the Hudson's Bay and its environments, having spent much time, and made many trips across and around it, has expressed an opinion that the big inland sea is destined, at no very distant day, to become "the great outlet for the produce of the Canadian Northwest," the first link in an important ocean route from the Northwest to Europe. He says he is convinced that the Hudson Straits are safely navigable for five months of the year, the Bay itself being always navigable, as, with the exception of the harbors, it never freezes over. Whether this water route

will materialize as soon as Mr. Tyrell predicts or not, it certainly seems evident from his report of the resources of the Bay in seals, whales and fish, and of the surrounding shores in mineral products, that this immense northern land and water district is but one more treasure-chamber of the great Dominion which is only waiting for the key of time to unlock.

Huntingdon County, Que.

The present season opened up early, and seeding was well completed in April, except on the low-lying lands, but the weather was cold and backward; grain seeds germinated slowly. Owing to the splendid covering of snow and the absence of repeated freezings and thaws, the grass fields came on remarkably well, giving early pasturage. May and the early part of June was very cool, yet frequent showers brought on vegetation with remarkable rapidity, until about the 15th of June. Since then we have had an excess of moisture and excessive heat, with the result we have had a great growth and prospects are good for abundant crops. Our pastures never were better, and, consequently, there has been an increased flow of milk. Despite the low prices of dairy products last year, I think the output of dairy products will be larger than ever. Prices of dairy products are good for this season of the year. At our dairy board here last Friday white cheese sold at 9½c. and colored at 9¼c. Fresh butter sold at 21c., and salted at 20¼c. The butter output is growing here from year to year; many of the cheese factories have put in butter plants, and nearly all such are making butter exclusively. There has been a great deal of agitation here in regard to the weighing of butter and cheese in Montreal, and we notice it has been brought to the attention of our legislative fathers by the member for Huntingdon, Dr. Walsh. Prices of live hogs have ruled high all season. There has been a shortage of hogs here this spring; farmers did not winter as many as usual, owing to the low prices prevailing last fall. That, with a heavy mortality among young pigs, has caused a shortage. Prices of wool have been better than for many years, from 18c. to 20c. for unwashed. Fewer sheep are kept than formerly, many having sold out their flocks and gone heavier into dairying, finding it more profitable, as much milk and cream goes from here to supply the City of Montreal. The condensed-milk factory takes about 30,000 pounds daily, while another firm here handles milk for the manufacture of butter and casein; the two latter firms pay 90c. per cwt. for the summer season. Hay is an abundant crop; many of the new meadows will cut over three tons of clover per acre, but so far the weather has been very unfavorable for the making of hay. Grain in many places, owing to too much rain, has made a very rank growth, and is likely to lodge badly. The fruit crop promises well. We have had small fruits in abundance; plums do not promise well, but the apple crop will be a good one. On the whole, the year promises to be a fat one.

July 19th, 1905.

W. F. S.

The Horse Show Outdoors.

It seems that a revolution in the programme and method of management of the horse show is due in America. The indoor show, which, owing to its cramped arena, has been merely an exhibition of equine conformation, given in a bad light, is about done. The outdoor exhibition, with a large arena, in which that most desirable of equine possessions, speed, will have a chance to assert itself, and in which the light-harness horses and the jumpers can be properly exhibited, will soon supplant the indoor exhibition.

By giving the show outdoors, and in a large arena, the trotters and jumpers, whose exhibitions are so pleasing to the public, will have space and light to enable them to give satisfactory performances. The most thrilling feature of the indoor show has been the galloping of the four-in-hand teams, after the awards had been made. This feature, augmented by four-in-hand races, will be a great attraction out of doors. In the light-harness classes, where speed counts for so much, competitors can be fully extended. The exhibitions in hunter classes, which will perhaps interest the casual spectator more than any other, will be incalculably better when given outdoors. Even the heavy-harness classes can be shown to better advantage out of doors than in.

It is not easy to find a point in favor of the old indoor nocturnal exhibition, given in a cramped arena, when contrasted with the outdoor show. It may be said that in this work-a-day world attendance might be larger at the night exhibitions. The class of people who attend horse shows are not so closely tied to business that they cannot take an afternoon off. Indeed, the only point in favor of the indoor winter show—and it is a doubtful one—is that it may be more of an occasion for dress parade than a show held during the fine weather. This may cut some figure, from the point of the subscribing merchant. We do not think that there will be any great difference between the outdoor and indoor shows on this point. In any event, the advantages of giving a show outdoors are so many that a small and extraneous consideration like this cannot amount to very much when weighed against them.

[Horse Show Monthly.]

Sanilac County, Mich.

Farmers are becoming very restless, on account of the long continued showery weather, which is causing an enormous growth of vegetation. Most of the soil through this section is of a very rich nature. One of the strangest things about this part of the country is the price of land, considering its quality and nearness to market, the very best of land rarely exceeds \$50 per acre, including improvements. Having just returned from a pleasant trip through three different counties, I can say that I have seldom or never seen such crop prospects. It is surely a land of milk and honey. Fruit also seems to grow and thrive of the very finest quality, and any person taking it up as a specialty is sure to make a success, as prices for smaller fruits especially seem almost extortionate. Prices for poultry also rule high; having cold storage equalizes prices. Cattle are doing exceedingly well, on account of an abundance of grass, which from all appearance is assured us for this season. The increase in the output of dairy produce of this section is very encouraging to those interested. The Babcock test is quite an eye-opener as to the value of different cows in the herd. Having gone through a similar experience some 16 years ago in Eastern Canada, when farmers began to find out the value of dairying in connection with progressive farming, it is amusing to hear some discussions here on this subject. Returns for the last part June was 18c. per pound for creamery butter. Hogs are running \$6 to \$6.50 per cwt.; scarce, with a small crop of shoats. Beef cattle are scarce and high, as most of them were foolishly sold off the fall before as stockers, a thing that farmers should discontinue if they want to become successful. Good horses are all picked up faster than they can be grown, as very often the good young mare is sold at a tempting figure, which should have been retained on the farm. Sheep are a paying animal at present, wool being at war prices almost, and the American loves his lamb and green peas. Clover being such an immense crop of late years has naturally caused an increased number of ewes to be kept. Dog laws and remuneration to farmers from damage by dogs is encouraging to the sheep farmer.

Wheat at present is far above the average, and is changing color fast; a much larger acreage than in former years. Oats are largely headed out too; heavy lodging. Barley good. Peas damaged, and a failure. Haying begun, and about half of the clover crop rotting in the swath and coil. Timothy lodged, and spoiling to quite an extent. School meetings were held all over the other evening. A whole lot of wrangling occurred over petty affairs, and the moral and intellectual condition of our future men and women was apparently never thought or spoken about.

J. K. F.

Sugar-beet Crop Prospects.

WALLACEBURG.

To the Editor "Farmer's Advocate":

Sir,—We have 7,000 acres of sugar beets this year in excellent condition. At the present time we are getting rather too much rain, but, with fairly favorable weather during the balance of the season, the crop will be better than ever before in this section. There has not been any serious difficulty in securing labor, and our crop is practically all taken care of.

The Wallaceburg Sugar Co., Ltd.

BERLIN.

To the Editor "Farmer's Advocate":

Sir,—Our contract acreage is somewhat over 4,100, distributed among 1,333 farmers in small acreages, varying from 1½ acres to 5. We have very carefully avoided placing any contracts larger than the farmer is able to handle with his own available help, and in nearly all instances the small acreages of sugar beets that each farmer has is grown partly in place of his other root crops, he depending upon the pulp as a stock food, at least to some extent, in place of his other roots. The contract acreage this year is over 610 acres greater than last year's measured acreage. We are now engaged with our staff of field inspectors measuring up the beet crop throughout the Province, as far as grown for our factory. Reports are coming in daily from all districts. These reports indicate so far that the actual beet crop will be equal to and probably exceed the contract acreage. They also show that the beet crop throughout the entire territory has been thinned in due season, and, upon the whole, thoroughly well cultivated, and the distribution as above indicated has proved itself to be an entire solution of the labor question that was such a vexing one at the beginning of the industry. We have not had one instance complaining that labor cannot be secured. My own judgment is that the labor question on Ontario farms is beginning to be easier, but, as a-mentioned, the beet crop has not occasioned a single complaint to our office in reference to the labor question, because, I suppose, of the distribution of our crop so that the farmers growing beets handle them with their own available help. In and about Berlin and other places in the County of Waterloo the acreages are considerably larger in some places, but there has been in every instance an abundance of labor locally supplied to handle the crop in proper time.

The Ontario Sugar Co.

Farm Tendencies in Maine.

Haying is in progress, and the crop will be excellent. Hoed crops are looking well. Corn has a fairly good start, and the outlook for it is good in some sections. In Newport and Corinth, where corn-packing is carried on, a large acreage is planted. The superintendent of the factory stated that often in July and the early part of August, let the corn be ever so backward, a few hot days would start it, and September see a large yield.

Aroostook methods of potato-raising have been introduced into Penobscot County, and the growth, not only of the tubers, but of the industry, is being watched with interest. It is estimated a third more potatoes were planted in the county this year than last. The soil, not being quite so new as in Aroostook County, requires a large amount of fertilizer to the acre, but as land is cheaper here some of our northern farmers have sold their farms at a large profit, and bought in this section. These changes make the introduction of more and different machinery a necessity, and the implement business is looking up.

Though potatoes were at lowest ebb in price the past winter and spring, farmers in Aroostook County have not lessened their acreage, but in many cases have planted more.

The method of marketing in some sections of Aroostook is in a fair way to be changed. Many of the farmers felt that the profit of the middlemen was larger than it ought to be, as they compared Boston and New York quotations with what they actually received, and there has been some talk of the Grange taking some action in the premises.

The apple trees of this section, particularly the Baldwin, have not received such a setback for 30 years as the overbearing of the season of 1904 has given them, says Prof. W. M. Munson, Horticulturist of Maine University. Many of them have been killed outright, and others more or less injured, according to the amount of fruit borne.

The sheep industry is not what it was years ago, but it is picking up some. The higher price paid for wool will have a tendency in this direction, but, it is thought, not as yet to any marked extent. More attention is paid to the grade of the wool than formerly, and the introduction of pure-bred males is becoming general.

A flock of Angora goats attracts attention of those travelling the back road to Winterport, the animals being quite a novelty in our country.

While many were fairly successful in raising chickens, there has been considerable complaint that this is an off year in the poultry business as far as the general farmer is concerned.

Maine, July 6th.

A.

Healing Sore Shoulders.

There are several things that might require to be done when a horse gets sore shoulders. There may be a fistulous growth that should be dissected out; there may be a pocket with pus in it that requires opening; there may be a "sit-fast" (a piece of skin remaining on a galled surface) that requires cutting out; or there may be nothing more than an ordinary gall. Before trying to effect a healing of the sore spot by homely methods, it is best to make certain the knife is not required. If a horse with a sore shoulder must be worked, do not place an old stocking stuffed with straw or hair crosswise of the collar to keep the draft off the sore, but cut a piece out of a pad so the pressure will be removed from the gall; then put some clean cotton in the hole in the pad to keep the stuffing of the pad from irritating the sore. At noon and evening bathe the sore well with cold water, and in the evening also, after work, bathe with a saturated solution of alum—that is, water to which all the alum that will dissolve has been added. Dry the wound, and rub on the following application: Carbolic acid one ounce, camphor five ounces, resin one ounce, methylated spirits fifteen ounces.

Heads Poorly Filled and Grain Shrunken.

I herewith enclose some heads of wheat. Can you tell me what is the matter with them? Many fields in this vicinity are affected the same way; fields that promised full crops are injured from a quarter to a half in yield. Heads not affected are filled with plump grain. All varieties seem to be affected much the same, as nearly as I can learn. The wheat looks all right to glance at it as you pass by, and many farmers who have not examined it say their wheat is all right. The land where the enclosed sample was grown was a clay loam, out stubble, well manured. The field is level, with very fair drainage. We had slight frosts about the time the wheat began to head, and before; no drought, excessive wet ever since the middle of April; straw usual length, some rust on blades, not much on the stalk. The grain which promised to be plump a week ago is now ripened and shrunken slightly. I am afraid the excessive wet is responsible.

Essex Co., Ont.

P. LAMARSH.

[Note.—The wheat heads enclosed were rather small and not well filled, while the grains were somewhat shrunken. The occurrence of frost seems to explain the poor filling, as there is no doubt it affected the pollen of some of the florets at blossoming time. Excessive wet weather and rust is sufficient to account for the shrunken kernels.—Ed.]

MARKETS.

Toronto.

LIVE STOCK.

Receipts of live stock at the Western Cattle Market last week amounted to 123 cars, and included 1,592 cattle, 3,044 sheep, 1,802 hogs, and 457 calves.

Export Cattle—Choice, \$4.60 to \$4.90; good to medium, \$4.30 to \$4.60, and others, \$4 to \$4.30; cows and bulls run at \$3 to \$4.

Butchers' Cattle—Picked are quoted at \$4.50 to \$4.70; good to choice, \$4.20 to \$4.50; fair to good, \$3.50 to \$4; common, \$2.75 to \$3.50; and cows and bulls, \$2.50 to \$3.75.

Stockers and Feeders—Trade quiet, few cattle offering, and demand light. Stockers are quoted at \$2.50 to \$3.80, and feeders at \$2.50 to \$4.

Milch Cows—The demand for good cows is still active; \$30 to \$50 each.

Calves—3½c. to 5½c. per pound, and \$2 to \$10 each.

Sheep and Lambs—Export sheep at \$3 to \$4 per cwt., and culls at \$2 to \$3.50; lambs at \$2.50 to \$5.25 each.

Hogs—The markets for meats in England have had a sudden advance recently, owing to the big demand and the shortage in Danish hogs.

Flour—Ontario—90 per cent. patents are quoted at \$4.15 to \$4.25, buyers' sacks, east and west, with 15c. to 20c. more for choice.

Wheat—Ontario—No. 2 red and white are offered at 90c. to 91c., east and west, goose 78c. to 80c., and spring, 85c. to 86c.

Barley—Demand falling off. No. 2 is quoted at 46c. to 47c.; No. 3, extra, 44c. to 45c., and No. 3, 43c. to 44c., outside.

Corn—Canadian, 54c. to 55c., Chatham freights; American, unchanged, 64½c. for No. 2 yellow, and 64c. for No. 3 yellow.

Peas—Wanted, at 73c. to 75c. for No. 2, outside.

Butter—While receipts of butter are large, the demand continues active, and prices are firm in tone.

Creamery, prints 19c. to 21c. do. solids 18c. to 19c.

Dairy lb. rolls, good to choice 16c. to 17½c. do. medium 14c. to 15c.

Do, tubs, good to choice 15c. to 16c. do, inferior 13c. to 14c.

Cheese—Is quoted unchanged at 10½c. to 10¾c. per lb. for job lots here.

Eggs—The shrinkage continues heavy. 17c. to 17½c.

Potatoes—The demand is good, and the market for new has a steady tone at \$2.25 per barrel.

Beans—Hand-picked, \$1.75 to \$1.80; prime, \$1.65 to \$1.70, and under-grades, \$1.25 to \$1.50.

Honey—New stock is coming forward well and is steady. Combs are quoted \$1 to \$1.50 per dozen, and strained, 6½c. to 7c. per lb.

Baled Hay—Trade is quiet, and the market easy in tone at \$7.50 per ton for No. 1 timothy in car lots, on track, here, and \$6 for No. 2.

Single drivers, 15 to 16 hands \$125 to \$200

Single cobs and carriage horses, 15 to 16.1 hands 150 to 225

Matched pairs, cobs and carriage horses, 15 to 16.1 hands 300 to 700

Delivery horses, 1,100 to 1,200 lbs. 125 to 175

General-purpose and express horses, 1,200 to 1,350 lbs. 125 to 200

Draft horses, 1,350 to 1,750 lbs. 150 to 225

Serviceable second-hand workers 60 to 100

Serviceable second-hand drivers 60 to 110

Burns & Sheppard, of the Repository, report the present range of prices as follows:

Single roadsters, 15 to 16 hands \$140 to \$175

Single cobs and carriage horses, 15 to 16.1 hands 140 to 190



Capital Authorized, \$2,000,000.00. Head Office, Toronto, Ont. Edward Gurney, President.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED. Special attention given to accounts of Cheese Factories, Drovers and Grain Dealers, and all out-of-town accounts.

Delivery horses, 1,100 to 1,200 lbs. \$125 to \$170. General-purpose and express horses, 1,200 to 1,350 lbs. 125 to 180.

BREADSTUFFS. Wheat—Ontario—No. 2 red and white are offered at 90c. to 91c., east and west, goose 78c. to 80c., and spring, 85c. to 86c.

Butter—Despite a falling off in quality, owing to the hot weather that has prevailed, butter is as firm in price as ever, or firmer.

Country Produce. Butter—While receipts of butter are large, the demand continues active, and prices are firm in tone.

FARMERS' MARKET. (Retail Prices.) Wheat, white \$1.00 to \$1.02. do, red 1.00 to 1.02. do, spring .90.

Wheat, white \$1.00 to \$1.02. do, red 1.00 to 1.02. do, spring .90. do, goose .75.

Butter 20 to 21. Eggs 22 to 24. Old chickens, dressed 10. Spring chickens 15 to 20.

still meets with a demand, but prices are easier than they were a few weeks ago, being 9c. to 9½c., according to quality.

Cheese Board Prices. Sales reported from the cheese boards, the latter part of last week, were: Napanee, colored 9½c., white 9½c.;

Chicago. Cattle—Good to prime steers, \$5.25 to \$5.75; good to medium, \$3.60 to \$5.15; stockers and feeders, \$2.10 to \$4.40.

Buffalo. Hogs—Fairly active; heavy, \$6.25 to \$6.30; mixed Yorkers and pigs, \$6.30 to \$6.35;

British Cattle Market. London.—Cattle are quoted at 10½c. to 12c. per lb.; refrigerator beef, 9½c. per lb.;

Man's greatest compliment to woman is to seek her companionship, give her his confidence and ask her advice. That is the true compliment of the 20th century, the sort woman seeks.

The Brampton Jersey Herd again makes a start for the fairs. On Saturday, July 15th, Messrs. B. H. Bull & Son, Brampton, Ont., leave with two carloads of Jerseys for Manitoba's greatest fair to be held at Winnipeg, July 20-28.

Mr. Thomas Butler, of Jacksonport, Door County, Wis., is the inventor of a new sugar-beet blocker, which, it is claimed, will block and clear out two rows of beets at once without injury to the plants, at the same time cutting out the weeds and "mulching" the ground, leaving it clear.

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



Life, Literature and Education.

Dominion Heraldry.

J. A. M., of Tregarva, Assa, asks us to describe the Dominion Coat of Arms.

The Arms of the Dominion are composed of the arms of the four original Provinces—Ontario, Quebec, Nova Scotia, and New Brunswick—quartered or combined in one shield, as is shown below, the upper left



Arms of the Dominion.

quarter being Ontario's, below that Nova Scotia's, upper right Quebec's, and lower right New Brunswick's. It is not unusual to add the armorial bearings of the other Provinces that have been brought into the Union since 1867—Prince Edward Island, Manitoba and British Columbia, the latter two illustrated below,



ARMS OF
MANITOBA.



ARMS OF
BRITISH COLUMBIA.

but this cannot be done without express royal authority, and until this is so ordered the correct and legal Dominion shield is as stated above.

Dominion Flags.—The famous English Flag, commonly called the

"Union Jack," is flown from all the fortresses and garrisons of Canada, whether under the charge of Imperial military authorities or Colonial militia forces. The Union Jack is a combination of three flags. The red cross on the white ground is for England, the white cross with the Arms placed diagonally on a blue ground for Scotland, and the red cross with the Arms placed diagonally on a white ground for Ireland.

The Dominion of Canada has also authority to display on all public occasions a national flag, viz., the red or blue ensign, a flag of plain red or blue, having the Union Jack in the upper "canton," or corner next the mast, and the Dominion Coat of Arms in the "fly" or field of the flag.

The red ensign is displayed at the opening and closing of Parliament, and on national occasions. The blue ensign is a distinguishing flag of the Government vessels of Canada; the mercantile marine of the Dominion has a right to use the red ensign.

The Governor-General has authority to use a plain Union Jack in the center of which are the Dominion Arms, surrounded by a garland of maple leaves and surmounted by a crown. Imperial regulations at present, for some reason, limit the use of this flag to occasions when the Governor-General is "embarked in boats and other vessels." The Union Jack is ordered to be flown at the Government House at Ottawa on ordinary occasions, the Royal Standard at the Government Houses at Ottawa and Quebec, and at the citadels in Quebec and Halifax (an Imperial garrison) on the Queen's birthday, and on the days of His Majesty's accession and coronation. On the Toronto Government House the private flag of the Lieutenant-Governor is used, and other Lieutenant-Governors have, presumably, the same right, though the Union Jack is flown on ordinary occasions at Quebec. This Provincial capital appears, also, to occupy an exceptional position with respect to the uses of the Royal Standard.

William of Germany.

Whether William of Germany has it in mind to figure as a second Frederick the Great in Europe, is at present an interesting subject of conjecture. Personally, there is no doubt whatever that his tastes are warlike and his ambitions almost wholly military. He is, moreover, of a peculiarly erratic and visionary temperament, exactly the kind of disposition which leaves little margin as to what may be expected, of one endowed with it. He is, however, most popular with the German people, and during his regime Germany has become a prosperous and powerful nation, with a standing army which has lost nothing of its former efficiency, and a new and untried fleet which promises to be truly formidable. It is, however, just possible that, whatever his ambitions may be, he may have judgment enough to recognize how far he may go with impunity, and that, whether to his credit or not, his country may be spared the horrors of a false glory, and his reign marked in history by the better and nobler halo of peace.

How the Door was Opened in Japan.

It seems a rather discreditable reflection upon nations which proudly vaunt themselves as peace-loving, that such a war as that which has been raging in the Far East should have been necessary to the advertisement of Japan. Marvellous, to be sure, its revelations have been. It has shown the Japanese as a people of wonderful resources, skilled in every artifice of modern art and science; and yet for the space of less than half a century before the war broke out Japan was making strides in intellectual, political and commercial lines quite as wonderful as those which she has since proved in the arts and artifices of war. It is interesting to note that almost every advancement in modern civilization which Japan has made has been accomplished since 1853.

For two hundred years before that Japan had been completely closed to foreigners—a little nation, made up of a people who toiled away on their patches of farms, cultivated their flowers, fought their tribal battles, and put their criminals to death

"rulers of Japan, a misconception which was due, doubtless, to the great difficulty of obtaining any reliable information as to interior conditions of the country, and to the fact that, in the first intercourse with the island empire, negotiations were carried on wholly with the Shogun. Under such conditions it was scarcely wonderful that the Mikado came to figure pretty much as a myth.

YANKEES TO THE FORE.

To the United States is due the credit of having begun the work of opening the door to Japan. In 1853 Commodore Perry sailed up to the islands with two or three warships and opened negotiations with the Shogun, demanding certain trading privileges, to be confirmed by treaty. The Shogun and his men looked with awe on the big warships and their cannon, and, deeming discretion the better part of valor, made haste to assent to the American proposals, it may be necessary to state, however, without the slightest intention of keeping their agreement. To gain time was, at the present juncture, the main consideration.

For the next ten years the history of the opening door was chiefly made up of a series of not very vigorous attempts—since the resources of Japan were not yet fully understood—upon the part of other nations, to secure a foothold on the islands, the Japanese, meanwhile, making every effort to increase their fighting numbers and strengthen their fortifications. During this time anti-foreign sentiment was very strong amongst them, and its demonstrations frequent. Upon several occasions, indeed, missionaries and merchants who had boldly taken up their residence in the country were murdered, sometimes tortured, then hacked to pieces in the most brutal way.

THE ENGLISHMAN'S FIST APPEARS.

At last, in 1863, some prominent English officials were thus killed, and the British Government demanded the punishment of their murderers. No notice was taken of the demand, and a detachment of the British fleet was sent to enforce compliance. The warships anchored off Kagoshima, which had been especially fortified as the Japanese then best knew how. Instead of submitting, the little brown men opened fire, and the British vessels retaliated by bombarding the forts, which, needless to say, were speedily obliged to capitulate.

A WONDERFUL REVOLUTION.

Now occurred a revolution unparalleled in the history of the world. Convinced by the Battle of Kagoshima that there were other nations more powerful than Japan, and much to be learned from them, the "Clansmen of Satsuma" immediately resolved to profit by their enemies. Immediately their arms were opened wide to the aforetime "foreign devils." Western customs were adopted, Japanese students were sent abroad to learn, foreign merchants were admitted to the "towns of Nippon," and, in 1868, all the



William II., Emperor of Germany.

The Man by Reason of Whom All Europe is in Hot Water.

with horrible torments, all very much in the way of the savage East. In those days the civilization and literature of China were the only ones known to Japan. Her religion was either Shintoism, with its ancestor worship and sacrifices to dead heroes; or Buddhism, with its creed of transmigration of souls, and Nirvana, or "nothingness," as the ultimate destiny of the blessed. And her Government was, for many years, a strange medley, in which the hereditary but nominal emperor, the Mikado, and his party were in constant conflict with the usurping ruler, the Shogun, and his adherents. Out of this dual government arose the fabrications, prevalent in the geographies of thirty years ago, regarding the "actual" and "spirit-

trading privileges were granted which had been refused to the United States in 1853. From that day civilization advanced, not with steps, but with leaps and bounds. With the free entrance of foreign ships and peoples came also the free entrance of all their inventions and institutions. Occidental science, occidental education and literature, everything occidental, in fact, which had been proved useful or powerful, was seized upon with an insatiable avidity, and all, doubtless, looking to the time when the Land of the Rising Sun should be no more the least among the nations.

The system of government, too, was revolutionized. Long since the people had abolished the Shogunate, and put the reins of power into the hands of the Mikado and his advisers; and a little later, by a "voluntary act of abdication," they had abolished the ancient feudal system under which the land had been held, in order that a united Japan might turn its face to the world. Now, in 1885, the Cabinet system was introduced, parliamentary government was established on the most approved basis, and the criminal law revised, so that never again might atrocities such as those that had disgraced the name of Japanese, even as late as in 1867, be as a blot on the fair name of the land of flowers.

To-day, not a single art or artifice known to the Western world is strange in Japan. Steam, electricity, the science of building—all are hers. In addition, she has launched out into investigation on her own account, and has made inventions and discoveries of no little moment, especially in medicine and surgery, while her sanitary system is the most perfect in the world.

She has hundreds of little experimental farms. One day a few years ago, a wide-awake Jap called at the "Farmer's Advocate" office to get samples of a few extra good issues and ideas how to run a first-class agricultural paper. Despite the tremendous efforts expended in the war, her agricultural and other operations have gone on as usual. A wholesale dealer told us a while ago that Japanese tea is being exported just the same as if no war was in progress.

Never was advancement so rapid and complete, and yet the little brown people do not boast. Silently they are going on as they went on before; not less startling, it may be, will be their future achievement. Like all other Orientals, they are hard to understand, and they have been applauded to the echo, and idealized as the incarnation of integrity and honor. Yet here and there a dissenting voice has arisen. The Australians fear and distrust the Japanese. "We like the Chinese better," says a writer in the recent Australian Review of Reviews. It may be that the admirers of the little Eastern giant are right, and that he is in all respects as worthy of confidence as any of his Occidental brothers. At all events, he has demonstrated his place among the other giants of the world, to whom the open door of Japan will henceforth be a matter of solicitude and, possibly, even of concessions.

A MEAN MAN.

John T. McCutcheon, whose "Bird Center Cartoons" have achieved an amazing popularity, told a Bird Center story at a recent dinner.

"The mean man of Bird Center," he said, "took his little boy fishing one day. The boy sat with his feet hanging over the end of the pier, and, losing his balance somehow, he fell head foremost into the water.

"A bystander plunged after him. This hero had to dive down to the bottom time after time before he found the boy. At last he got him, and altogether exhausted he climbed painfully out, and handed to the father his wet and unconscious son.

"What have you done with his hat?" the father said."



Making a Man.

Once I was at a Sunday-school convention, when a worried teacher said to a superintendent: "Can you tell me what to do with bad boys?" Quick as a flash his answer came: "I don't believe there are any bad boys."

You may be sure I agreed with that remark, for, after about twenty years' experience with boys in Sunday School, I have failed to find such a monstrosity. But, though really "bad" boys may be hard to find, some are certainly much nicer than others. Some don't seem to be putting much heart into their fight against evil. Every boy should make his life "tell" in the world. It is a very poor ambition to aim at simply "getting on" in business, or to set the heart on becoming a millionaire. You country boys of Canada have your country's future, to a large extent, in your hands. Are you shouldering that heavy responsibility with a will? Are you laying strong foundations of personal integrity—honesty and loyalty in your relations with God and man, truthfulness, fearlessness, and pure-hearted honor and self-respect? You can make your life "tell" even now—at home, in school, in the playground—if you will only go the right way about it. The boys who influence others for good, and are respected by every-

hearted in your determination to make the most of these most important days. Many a man would gladly give all he has to have the chance of starting fair again. You have the chance; don't throw it away. "The boy is father of the man" in very truth, and you are making a "man" now—adding a little to him every day. Do you think you will admire him or be ashamed to own him when he is made? One thing is very certain, whether you like his company or want to get rid of him, he will stick to you as persistently as the Old Man of the Sea did to Sinbad the Sailor. The "making of a man" is too important a business, both to the man himself and to the world, to be trifled with. A very small boy once applied for a position in a store, and was asked whether he expected to engage as a "whole boy or half a boy." The proprietor of the store said that he didn't question the fact that the little chap had the usual number of arms and legs, but was afraid his mind might not be all there. It might, he suggested, be wandering about after a baseball game or something interesting of that sort.

The small, freckle-faced lad drew himself up and answered proudly: "I like" baseball first-rate; but when I'm here, I'll be all here, and when I'm through here, I'll be all there. I'll play for all I'm worth both places, but I ain't big enough to divide."

And he wasn't, of course—who is? I know that women sometimes have to keep their mind on half a dozen things at once—when they have to watch the children, cook the dinner, wash the clothes, etc.—but these are only outside things. No one can be a real servant of God if he is only half-hearted in the matter. Unless you are climbing up—and feel that it is a real climb—then, look out! for you must be slipping down, and spoiling the man that is being made inside the boy.

Then, there is another thing to be considered. You want to be a gentleman, I suppose, and a real gentleman—you would scorn to be only a sham article—a real gentleman always takes special care to wear his best Sunday-go-to-meeting manners at home. He is ready and obliging to his sisters, obedient and respectful to his father, and tenderly thoughtful of his mother. I sometimes go unexpectedly into a neighbor's house, and find the boys of the family washing the dishes, cleaning the lamps, or doing some other indoor "chore," and looking as bright and jolly as possible over the job. Don't you think it is more "manly" to lift the heavy burdens of the women a little, instead of carelessly making extra work for them? And the women would probably prefer to do these things themselves, no matter how overburdened they might be, if the boy's help be given grudgingly or snappishly.

Lastly—you are tired of this sermon, are you not? but it is nearly done—lastly, I want to remark that if you set yourself to manufacture a really satisfactory article in the shape of a man, you must make him dependable. He must not think that the easy excuse, "Oh, I forgot!" justifies him in neglecting

his work or failing to keep his promises. He should cultivate the habit of being prompt in trifles. A young Prince was once in a very dangerous position in Africa, and was urged to retire. "Oh," he said, "let us stay here ten minutes and drink our coffee." Before the time was up the Zulus arrived and he was killed. Perhaps you think that was only an unfortunate accident; but it was really the natural consequence of a boyish habit. His mother said afterwards: "That was his great mistake from babyhood. He never wanted to go to bed at the right time, nor to arise in the morning. He was constantly pleading for ten minutes more. When too sleepy to speak he would hold up his little hands with the ten fingers spread. On this account I sometimes called him 'Mr. Ten Minutes.'" Strange—and yet, not so strange after all—that a childish nickname should prove so well-founded.

A little boy was once pacing up and down in front of a tent in the orchard, and could not be tempted away for any other amusement, because, as he declared, "I'm a sentinel on guard." Later in the day his mother sent him to the store for some groceries. "Now, don't be long," she said, "for I want those things as soon as possible."

An hour later his uncle found him idly throwing stones into a creek.

"Hello, Neddie!" he said, "I thought you were on duty."

"No, sir, was the surprised answer," we are not playing soldiers now. Mamma sent me on an errand."

"I thought I heard her giving you a commission which was to be executed with promptness and despatch; and, knowing you to be such a soldierly fellow, who could not be tempted away from duty for a moment, I wonder, rather, to see you standing here."

Neddie saw the point of his uncle's remark, and was off to the village like a shot.

A dependable boy—one who can be depended upon to act like a soldier on duty, out of sight as well as in sight—is a far more valuable person to have around the place than a clever or handsome boy.

The boy who is bright and witty,
The boy who longs for fame,
The brilliant boy, his teacher's joy,
And the boy who leads each game—
Right cordially I greet them
And wish them every joy,
But the warmest part of my
heart

I give the dependable boy,
COUSIN DOROTHY.

Going-on-Nine.

If I didn't forget how old I was,
Do you think I'd act like I often does?
Do you think I'd swing on the front-yard gate,
If I could remember that I was eight?

If I didn't forget how soon I'd be
Grown-up and "proper," you'd hardly
see

Such a picture as this of a jolly child,
Who looks like a tom-boy all run wild.

Do you think I'd make my ma so cross
By staining my frock with bright green
moss?

Would daddy call me a "rattle-pate,"
If I didn't forget I was half-past
eight?

If I could remember, do you suppose
I'd climb like this and tear my
clothes?

Would I scratch my legs on a horrid
tree,
Would you, if you were as old as me?

If I didn't forget, do you s'pose that I
Would ever be baby enough to cry?
Now, don't you suppose I'd behave just
fine,

If I didn't forget I was going-on-nine?
Pa says he believes I was meant for a
boy—

Though sometimes he calls me his
"dearest joy"—

An' aunt Lou says she don't suppose
I'll ever behave, but ma—she knows,
An' she hugs me close with a kiss, be-
cause

She says I "forgot how old I was."

—Selected, with variations.



Going-on-Nine.



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Thank God, there's still a vanguard
Fighting for the right!
Though the throng flock to rearward,
Lifting, ashen-white,
Flags of truce to sin and error,
Clasping hands, mute with terror,
Thank God, there's still a vanguard
Fighting for the right!

Through the wilderness advancing,
Hewers of the way,
Forward! far their spears are glancing,
Flashing back the day.
"Back!" the leaders cry, who fear them;
"Back!" from all the army near them;
They, with steady step advancing,
Cleave their certain way.

"Slay them!" From each drop that
falleth
Springs a hero armed.
Where the martyr's fire appalleth,
I.e. they pass unharmed.
Crushed beneath the wheel, oppression,
Hold, their spirit holds possession,
Loud the dross-purged voice out-calleth,
By the death-throes warmed.

Thank God, there's still a vanguard
Fighting for the right!
Error's legions know their standard,
Floating in the light.
When the league of sin rejoices,
Quick outring the rallying voices:
"Thank God, there's still a vanguard
Fighting for the right!"

Hillsburg, Ontario, June 6th, 1905.
Dear Hope,—It was with very great pleasure and thankfulness I read the "Quiet Hour" page, "The Kingliness of Manhood," in the "Farmer's Advocate," May 11th. I think it is high time someone should sound a warning note along that line throughout Canada, and we hope it may inspire many to be up and doing the work that is calling them. It is as you said, "grandly true" that there are "many kingly men eagerly pressing after that ideal." We see here and there in nearly every paper that all eyes are turned to Canada. Deputations and parties from all lands are visiting Canada, for the purpose of investigating, sight-seeing, learning, etc. Realizing this fact, it is evident that the Dominion is before the world, and being compared with the other nations and countries. Emigrants, thousands of them, are entering this country, and Canadian ways of living will be largely followed. They will become Canadianized, or we shall become foreignized. Which shall it be? Can Canada unblushingly point to her sons as worthy examples—stalwart and brave leaders? It is with patriotic pride we say, she can—to some—to many of them, but ah! what of the remainder?
Many thinkers predict a great future for Canada. If this be true, what of the present? The young men of to-day are to be the workmen in the world's work to-morrow, and the little tots, who are now cooing in the cradle and those building sand castles, will be entering their various vocations and looking hopefully towards the future. Canada is nearing a crisis. Will she be able to meet it? Much, so very much, depends on the mothers. Oh, who can estimate a mother's power for good or evil! Also, the "Canadian Girl" has her own share of responsibility. I think, as a general rule, Canadian women are not anxious for public work or public speaking (and we hope this condition may continue, for so doing is not her divinely-appointed sphere); she rather desires to be the worthy and honored helper of man, and loves to follow a capable and worthy leader, whom she can reverence. Further, to have the ideal relationship, that leader will follow Christ, and here lies the secret of a nation's greatness. In proportion as we, as individuals, and as a nation, live close to Jesus, shall we rise or fall. One of the most needed things in this country is more Bible study and

close communion with Christ by all professing Christians, and also heart-to-heart talks with each other on Bible themes.

How is the problem of Bible teachers in our churches to be solved? Why is the Sunday school mostly treated as if it were an organization for women, children and weaklings only? The Bible contains truths deep enough, and literature, history, tragedy and romance enough for the mightiest and broadest mind of man to study and feast on for years; also the gospel is simple enough to be understood by all who are willing to investigate. What, then, is the cause of the present apathy in regard to the greatest of all books? Is it because we do not care to exert our minds by searching the Scriptures? It is when nations make great strides in civilization and prosperity the people are in danger of forgetting God in reality. Our heads and hearts are apt to be turned by the thirst for wealth, fashion, education and worldly pleasures, unless we hold fast to the Hand which will never lead us astray. If we cannot afford to spend some of the time God has given us to His World and work, a dark future awaits our land, but "Happy is that people whose God is the Lord." Is it because of this growing prosperity we do not fully realize the great need at the present time for studying and using the "Sword of the Spirit?" Throughout St. Paul's epistles we learn that men are to be "apt to teach" and women are to "learn in quietness." What then? Can the problem be solved by the girls and women quietly, leaving Sunday-school teaching undone, and silently praying that young men, filled with the spirit, with wisdom and zeal, may nobly come forward and do the work? Is this unreasonable? If we believe in the power of prayer, why not ask for this?

Because of the lack of interest in Bible study on the part of many young men, and older men also, the boys of about twelve and thirteen often drop out and drift away from the Sunday school. This is only natural and reasonable, because any normal boy wants to do what he thinks is manly, and can anyone blame him for following the example of his elders? May we hope that Canada's sons and daughters will give this subject due thought, and arise to the present and future need of the land we love.

"O, Canada, fair Canada, the home of the
Stalwart, the brave and the free."

Can we still remain listless and unmoved, when we think of the vast crowds in our native land who are without Christ? Listen to Amos, the prophet. In the midst of our comfort, luxury and music, we should not forget the "affliction of Joseph." Can we afford to "Fill high the bowl with Samian wine," and dance, sing and play, simply for our own and other's amusement and gratification, while the souls of men and women are starving, dying, for the pure gospel of Christ? In the seeking after happiness, the heart goes hither and thither, but in Christ alone can it be found if we seek it the right way. "But rather seek ye the kingdom of God; and all these things shall be added unto you."
With best wishes to you and the "Quiet Hour."
A. B. CURRIE.

Recipes.

Drop Cakes—Three cups "Five Roses" flour, 1 1/2 cups sugar, 3 teaspoonfuls baking powder, butter to make like pie-crust, currants and chopped lemon peel as desired; mix with milk to a very stiff batter, and put in small heaps on a well-greased pan; bake in a quick oven.

Rough Buns—Three cups "Five Roses" flour, 3 teaspoonfuls baking powder, 1 cup raisins or chopped figs, butter and hard size of an egg each, 1 tablespoonful sugar, enough milk to wet a little at a time into a stiff dough; bake in rough heaps in a quick oven.

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With the Flowers.

Rose, Carnation, Phlox.

Dear Flora Fernleaf,—Your suggestions have been so helpful to me that I thought you might help me solve a few questions in flower-growing. I intend next spring getting three plants—an ever-blooming rose, a carnation and a perennial phlox. I wish to know, first, what kind of rose of that strain would be best to get (I prefer white), and, second, how should I plant, care during summer and treat the whole three at the approach of cold weather? Yours, etc., BELLE. Ottawa.

THE ROSE.

Ans.—You do not say whether the rose you intend getting is to be for outdoor or house blooming, but we judge the former. In your climate you are likely to have best satisfaction with the hardy hybrid perpetuals, sometimes called "ever-blooming," although they are not actually so. Of these, Merville de Lyon, Margaret Dickson and Kaiserine Augusta Victoria are among the best of the whites, and may be relied on more than most of those exploited in the catalogues. Among the darker varieties, Charles Lefebvre; General Jack (or General Jacqueminot), a brilliant crimson rose; Jules Margotten; Alfred Colomb, cherry passing to crimson; Baron de Bonstettin, one of the darkest of crimson roses; Mrs. John Lang, a soft pink; Baroness Rothschild; La France, in different shades of pink; and Paul Verdier, crimson with a purplish bloom, may all be recommended.

Roses may be planted in fall, although early spring, before growth has started, is the better time. The rose-bed should be placed in a sunny, well-drained situation, not too close to trees or large shrubs, although some protection to the north, and possibly the west, is desirable. The best soil is a good clay loam, thoroughly pulverized for a depth of two feet, and made very rich with well-rotted cow manure, and the beds are the better of being made a few days before the bushes are planted, in order to give time for the soil to settle. If the soil is light in your vicinity you will do well to procure some good clay, if possible, to mix with it.

When the plants are received, get them into the ground as quickly as possible, to prevent undue exposure of the roots. Placing the latter in a pail of water until the very minute of planting will be found helpful. Before setting in examine the young bushes carefully, and if they appear to be "budded" stock (grafted on to briar shoots) insert so that the point where the graft was made is placed four inches at least below the surface of the ground—this in order that roots may sprout from the rose as well as the briar part of the stem—then pack in the soil very firmly, and give the plants partial protection for a few days. A few wisps of hay loosely bound around will protect both from the sun and from any frosty winds that may blow after the bushes are planted.

During the summer cultivate frequently, and in the early months work in a liberal application of hardwood ashes about the roots, from time to time. Water thoroughly and frequently if the season be dry, and when sturdy growth has set in, not before, water the roots once a week with manure water, diluted until it is about the color of ale. If thrips, or little yellowish-white flies, appear, drench the under sides of the leaves frequently with the garden hose, if you have one, or spray with a strong solution of whale-oil soap (a pint to three gallons of water), to which has been added about one-twentieth part of the extract of tobacco. For rose slugs, which are small green caterpillars, dust the leaves when wet with hellebore. Rose bugs, dark-striped beetles, may be got rid of by spraying with Paris green solution, and mildew or black-spot, which is a fungous disease, by Bordeaux mixture.

In fall bank up about the stems with clay, over which throw three or four

inches of coarse manure, and bind the upper portion with straw. If the winters are very severe, a good plan is to bend the bushes down somewhat, and invert over them boxes with close lids at the top to keep out rain, but with openings at the side to permit ventilation. Dry leaves or loose litter of any kind should be packed in loosely around the bushes, and the lids set on and weighted.

Regarding pruning, some discretion must be exercised. The best time is in early spring, before the sap has begun to run. Cut out all weak shoots and dead or winter-killed wood, and if the centers of the bushes are very thick, thin out to give free circulation of air. Since it is only new wood that bears flowers, in order to encourage its growth the shoots should be cut back, to three or four "eyes," as a rule, if only a few flowers of large size are wanted; to seven or eight if quantity rather than quality is the chief consideration. The amount of pruning also depends somewhat on the rose. Margaret Dickson, for instance, will not bloom well if severely pruned, while some other varieties require to be sharply cut back. Paradoxical as it may seem, the strongest growers, as a rule, require the least pruning. During the blooming season roses should be "picked" as freely and with as long stems as possible, in order to keep those that are to follow of the best quality until the end of the blooming season.

CARNATIONS.

Re carnations, you may procure plants from the greenhouse or raise them from seed. To do the latter, sow one-eighth of an inch deep in the hotbed in April. The plants will appear in about a week, and when large enough to handle should be transplanted into shallow boxes. When two or three inches high move to small pots filled with a mixture of three parts good loam and one of leaf mould, and when the weather is warm set out one foot apart each way, in beds of loam, well enriched with old manure. During summer give enough water to keep moist at the roots, not wet; cultivate frequently, and occasionally work in a little ashes or soot. If you want to raise the plants in the fall and take them into the house for winter blooming, pick off all the buds that appear before September. Otherwise protect well during the winter, either by covering well with litter or by taking the roots into a very dry cellar, where they can be kept just above freezing point. The first year but few flowers are likely to appear, but in the second, if they have wintered well, there should be a good show of bloom. Carnations will not stand a second winter, hence in order to secure a continuous supply it is necessary to plant seed every year.

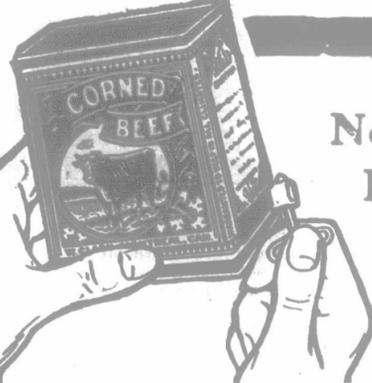
PERENNIAL PHLOX.

With the phlox you will have very little trouble. You may raise them from seed if you choose, but as plantlets so raised do not usually bloom the first season, you may prefer to get the roots, which may be obtained from any good seedsman, and may be planted either in fall or spring. Any good rich loam will do for phlox. Cultivate often enough to keep the weeds away and give plenty of water. During the winter very little if any protection is necessary, unless the plants are in an exposed position, where the snow is likely to blow off. Some of the new varieties of perennial phlox are very beautiful, especially the pure white and deep crimson kinds, but there are many kinds which show all sorts of variations, some with "eyes" of contrasting color, and these are preferred by many. The best plan is to send for a seed catalogue and specify the kinds you want when ordering.

A little girl was overheard talking to her doll, whose arm had come off, exposing the sawdust stuffing:

"You dear, good, obedient dolly! I knew I had told you to chew your food fine, but I didn't think you would chew it so fine as that!"

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



A-2-05

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 CITY HALL, TORONTO.

Canning and Preserving Fruit.

By Elizabeth Clarke Hardy, in July Housekeeper.

BLACK RASPBERRIES.

Pick the berries over carefully and place them in the kettle, adding nearly water enough to cover the berries. As soon as they begin to boil add one-half cup sugar to two quarts berries, let boil until scalded, and then can.

PINEAPPLE MARMALADE.

Pare the pineapple and dig out the eyes with a sharp silver knife; chop the fruit and cook it in its own juice, adding a very little water. When tender, add the sugar and cook about an hour, when it will be thick and smooth.

RASPBERRY MARMALADE.

Cook the raspberries until soft in a small amount of water and then press through a puree strainer. Add three-fourths pound sugar to every pound of the pulp and cook slowly, stirring constantly until, when a portion is cooled, it can be cut with a knife.

RASPBERRY AND CURRANT JAM

Either raspberries or currants may be made into jam by this rule, but the mixture of raspberries and currants is much more delicious. To five pounds raspberries and five pounds currants add five pounds granulated sugar; mash the fruit and sugar together and boil gently until it will jelly upon a cold plate. Put in small jars and cover.

RED RASPBERRIES.

Sprinkle sugar over the raspberries in the same proportion as for strawberries. As soon as the fruit comes to a boil, carefully remove the scum and fill the cans. A cupful of ripe currants added to each quart of either red or black raspberries greatly improves their flavor, as raspberries are rather insipid in flavor without the addition of some tart fruit.

QUINCE MARMALADE.

Pare and quarter and core the quinces; and cook the cores one hour, strain the juice through a strong jelly bag to extract all the gelatinous substance. The quinces should, in the meantime, have been covered with cold water. Drain the fruit on a cloth, add the juice, mash through a coarse colander, add the heated sugar, and cook about 15 minutes, or until thick and smooth.

PLUM MARMALADE.

Plums come a little later in the season, but the knowing just how to make a marmalade that will not have the bitter twang that is found in most plum preserves, may not come amiss. The plums should be perfect and not over-ripe. Cover them with ice-cold water and let them just come to a boil, dip out and throw the water away. Cover them again with ice-water and heat up, being careful not to break the skins. Throw this water away, also, then cook the plums in as much water as will keep them from burning, until tender, rub them through a sieve, add pound for pound of sugar, and cook until thick and shining.

In preserving the freshness of cut flowers, salt is invaluable. If one wishes to prevent roses or other flowers from opening too widely, place some salt in the water with the stems.

If several large new marbles are dropped into the kettle where fruit is cooking, they will prevent burning on the bottom, the marbles being kept in motion by the boiling. Try it when making apple butter, marmalade or catsup, requiring constant stirring.



We have to-day two letters which will be read with much interest, the first an answer from Octavia to all the enquirers who have been asking for her; the second a very helpful letter in regard to house-furnishing, which has been written for us by one who, through sheer love of the subject, has made a study of it, and who has, in consequence, won for herself much more than a local reputation in the matter of artistic arrangement of the home. We are sure her letter will be, not only a practical help, but an inspiration to many.

Octavia's Answer.

"Edith," in the "Farmer's Advocate," and several others have asked me how to make "useful copy," and also what it is. I think that it is best described in the words of an editor who wrote to me once. He had made some extremely kind remarks concerning me in his paper, and I wrote to tell him that I was a little surprised as well as pleased, as I always considered myself in the light of a stop-gap. He said that the agricultural journals, papers, etc., were like a fence round a field, and now and then that a rail was wanting—a gap required stopping, or the best use of the fence was gone. The writers from outside, who are not those on the regular staff, were the old rails and stop-gaps that kept the whole fence together. Now, when you read a journal, magazine or paper constantly, you will very quickly begin to learn where each class of story, anecdote or piece may be found. In most papers, the agricultural journals especially, you are sure to find some subject that interests you—almost always there is room for some subject that you study deeply. It may be only swine tending, but if you are considering your work, you will learn something fresh every day. There are many others who would like to learn this fact too. It may be some serious difficulty that you have learnt either to overcome or avoid. If you are successful in any branch, give there is room for some subject that you headings, don't say I think, but say it is so, if you have proved it to be so. Now, to proceed: Don't lose your temper under adverse criticism; don't worry the editor; send a stamp, if you want it returned—your copy, I mean. Concerning the advertisements, there are many poultry and farm journals that are willing to give you the value of your copy in advertising your poultry, pigs, or what not, in return for a steady contribution. You see a steady advertisement is the only kind that is a credit to you. My name is really (Mrs.) Octavia Allen, but I don't want to be a poultry-breeder when I am talking to my friends in the Ingle Nook, so I like to sign myself—
OCTAVIA.

Some Hints on House Furnishing.

Dear Dame Durden.—Your suggestion in Ingle Nook Chats, May 25th, has interested me greatly, and I have felt I should like to write a few hints upon home furnishing; am glad you have taken up this subject. I know of no factor in homemaking more important. The elevating tendencies of a home depend so largely upon the articles contained in it—the colors affect us either consciously or unconsciously. I shall merely give a few first considerations in this letter, and should any of your patrons desire more information, perhaps they would be good enough to write you stating just upon what lines.

We are all more or less hemmed about by circumstances, and have in our possession many things we would rather not have, and cannot just afford to give away, so in making new purchases let us be most careful, think twice, and never buy without a distinct plan in mind, furnishing always according to plan.

You have spoken of a dining-room and "sitting-room," or living-room, I would rather call it. First of all, we must consider location and light, as certain colors must be used with certain lights

in order to be successful. For example, in a north room, where light is cold and does not change, use yellow in some form; in a bright, sunny west room, use cooler color, green, and so on.

Having decided upon your color, commence with your floor. Have it darker in color than walls or ceiling, and if you care for design, use a self-tone or flat design. By flat, I mean one that will not obtrude itself as you walk over it.

Your wall paper should harmonize in color with your floor, and have it plain, or self-tone design, if you wish to have it as a background for pictures or china. Your ceiling must be plain, and several tones lighter than your walls, but in harmony. This plan will give a restful tone to your room, and be in no way disturbing to the eye.

These points settled, think of your furniture and fittings. Have in your dining-room a nice round or square table, simple in design, chairs either leather-cushioned or rush-seated, but with plain, straight lines in frame, a plain sideboard and dinner wagon, and a china cabinet, if you wish, with glass doors. Curtains may be of art muslin, either cream or colored to suit your color scheme. Should less expensive curtains be desired, use plain muslin with frills, either draped back with cords or hung straight from simple, inexpensive extension rods.

In a home where a furnace is used, have a fireplace in your room; it always gives cheer as well as improving ventilation—two necessary points. Over your fireplace have a simple board shelf, stained or painted to match your wood-work and furniture, and on it place your brass or pewter candlesticks, old china, etc.

THE LIVING-ROOM.

The sitting-room, or living-room, too, must be comfortable and cosy. Always remember what it stands for—a resting place, after the day's work is over, where the family may gather for a quiet hour. Make sure of your color according to light, and, first of all, have your generous fireplace, with dog-irons, where you may burn your driftwood caught from the river in early spring. A large, covered, stained box with iron hinges may stand beside the fireplace, filled with the wood. Your dog irons may be most inexpensive, even made by your nearest blacksmith to serve the purpose admirably. The fireplace does not mean extra work to the housewife, as, by means of a swinging bottom leading to a cellar ash-box, ashes may be left a whole winter without being removed. By having such a fireplace, two points are gained: the artistic appearance enhanced, and economy in fuel secured.

Have a nice, large, round library table—walnut, if you can—with a lamp nicely shaded for reading in the center of it; some comfortable armchairs placed near it; a good soft sofa in front of your fireplace; chairs and smaller tables about the room for sewing, etc.; a few plants in your windows, and with a few good photographs of famous pictures on your walls, and some bookshelves with books about the room, you will feel your living-room a rest-room, and one which will delight your friends.

RE EXPENSE.

Without a definite room in view, with proper estimates and measurement, it is impossible to give any idea of prices, but comfortable rooms may be furnished at a low figure. It is not necessary to use more than a simple stain for wood-work to have effective results, and this item alone makes a great difference in the cost of a room. Merchants usually have cheap sales during the "between season" period, and many changes may be made inexpensively.

When arranging for material for your rug carpet next season, try not to have in mind a broad-striped pattern with a dash of bright color in it. Rather dye all your material olive green, and use green warp to weave it with. When finished put it in your living or



Advertisements will be inserted under this heading, such as Farm Properties, Help and situations Wanted, and miscellaneous advertising.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

CHOICE RHODE ISLAND REDS.—Pullets and cockerels, bred from imported stock with special reference to early laying. Two dollars each. Five dollars for trio. H. E. Williams, Knowlton, Quebec.

FOR SALE—50 or 100 acres; good farming land; good buildings and good water; situated 2 1/2 miles east of Beamsville. Apply to A. S. Culp, Vineland, Ontario.

FARM FOR SALE—115 acres, near Wellington, Prince Edward County, fronting on West Lake and overlooking Lake Ontario. The finest property and location in the County. Price low and terms easy. For further particulars apply to owner on premises, or address: Samuel Noxon, Wellington, Ontario.

FOR SALE—First-class Dairy or Stock Farm, 180 acres; well watered; 8 miles from Toronto; large new bank barn, hog-pen, poultry-house, new solid brick house. Possession next spring. For further information address, F. G. Garbutt, 234 Euclid Ave., Toronto, Ont.

FOR SALE—Desirable homestead of 169 acres, 140 under cultivation; balance timber and pasture; first-class brick house, bar k barns and out-buildings; well fenced and watered. Adjoining Kinilworth village and C. P. R. station. Must be sold. Oliver Hayward, Kinilworth P.O., Wellington Co.

FOR SALE—Two of the best ranches located in Chinook Belt, in Southern Alberta. One with improvements and one without. Good grass, plenty of shelter and water. Large leases in connection. Range for several thousand head. W. M. Loch, Lethbridge, Alta.

FOR SALE—2,000 acres of wood lands, en bloc or in lots, to suit purchasers. Principals only dealt with. E. W. Hay, Falkenburg Station.

GINSENG—Canadian roots best. Write E. Beattie, Highgate.

IMPROVED FARMS—Best part Parry Sound District; send for list. Jnc. Carter, Sundridge, Ontario.

KAMLOOPS, British Columbia—Ranching and farming properties for sale in all parts of the interior. Write for lists to Martin Beattie, real estate, Kamloops, B. C.

SASKATCHEWAN—610 acres—3 and 6 miles from Wimmer, on C. N. R.; magnificent soil; wood and water. Box 82, Saskatoon, Sask.

THOROUGHBRED COLLIE PUPS for sale. King Edward Collie Kennels, 7 Concord avenue, Toronto.

WANTED—Single man, experienced with Short-horns and fattening cattle. Yearly engagements. References required. W. H., Easterbrook, Ont.

WANTED—Improved stock and grain farm; good buildings; no noxious weeds; good locality. T. Geddes, Manctick, Ont.

100 ACRE FARM. Good farm, Lot 23, C. N. 5, Markham. Apply to J. H. Trudgson, Markham P.O.

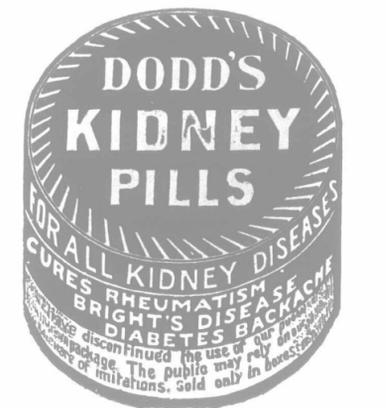
Barred Plymouth Rocks—Eggs from pen No. 1 of E. B. Thompson's pullets, \$1.50, and from No. 2, headed by cock whose sire was winner at New York, at \$1 per setting. These are from good laying strain. C. & J. CARBOTHERS, Coburg, Ont.

IF YOU WANT A MACHINE FOR Well DRILLING OR PROSPECTING

with either Rope or Pipe Tools, write to us describing your work, stating depth of wells and size of Bits or Drills you want. Our machines are the latest and most durable, and the greatest money earners ever made! Results guaranteed. **LOOMIS MACHINE CO., TIFFIN, OHIO.**

Flat broke—I'm sorry I can't pay that bill now—you'll have to wait a while. And I'd like a suit right away, too. Tailor—You'll get it. I'm going to start one to-morrow.

Dugald Ross, Streetsville, Ont., expects to sail for the Old Country within a month or so to bring out an importation of top-notch Clydesdales, Shires and Hackneys.



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

dining room and see how lovely it will look. Your dye will cost you but a few cents, and when you have the carpet on your floor, you will be repaid for your trouble.

Should your chairs be the worse of wear, use some green paint on them—a lighter shade than the floor. Should your woodwork require freshening, use the olive green; then, also, have a green and cream paper on your wall, some nice soft muslin curtains (not cheap lace) on your windows, and just think how sweet and fresh your room will be! Your woodwork could be white, and your walls green, if you prefer, and all will cost you very little. Keep a vase of fresh flowers on your table in summer, and a nice plant from your window in winter. Your meals taste so much better for the small amount of time expended.

I hope, Dame Durden, to hear from your column again.

ONE INTERESTED.

Cousin Bee.

Cousin Bee's questions re canning peas had been answered by the time her letter arrived. We add a few recipes for pickles, which she may find useful. Do any of our readers know of any way of keeping cauliflower (other than by means of vinegar) for winter use? If so, Cousin Bee will be pleased to hear from them. . . . We shall be pleased to have your recipe for keeping tomatoes whole, Cousin Bee.

A Few Pickle Recipes.

Pickled Cauliflower.—Take good white heads, break in pieces, and boil for ten minutes in rather strong salt water. Take out the pieces and lay on a towel to drain; when cold, put in a pickle jar and cover with hot vinegar in which has been boiled a few whole cloves, sticks of cinnamon, and a dash of cayenne pepper.

Sweet Pickles.—Over steamed fruit of any kind pour a hot syrup made of three pounds sugar and one pint vinegar for every seven pounds fruit. Spice to taste may be added to the syrup, preferably tied up in a thin bag.

Curried Cauliflower.—Shred and steep in brine two days; drain dry, and put in a pan of vinegar in which three ounces curry powder per quart has been steeped for three days. Let come to a boil.

An Excellent Mustard Pickle.—One quart ripe cucumbers, cut fine, also one quart small green cucumbers, one quart green tomatoes, one large cauliflower, six green peppers, all cut fine; add one quart small onions. Put all in a weak brine for twenty-four hours; drain, and boil a few minutes in equal parts vinegar and water; drain again, and pour over the pickles a dressing made as follows: Take six tablespoons mustard, one tablespoon turmeric, one and a half cups white sugar, one cup flour, and one-quarter pound mustard seed; mix, and add two quarts best vinegar; cook, and pour over the pickles.

Humorous.

"There's nothing like perseverance. It wins out in the long run." "Not always. Did you ever see a hen on a porcelain egg?"

"Have you any fireworks suitable for small children?" asks the young mother. "Yes, ma'am," answers the dealer. "We have some splendid firecrackers, Roman candles, and all such things." "But I fear my little boy is not old enough for them."

"Then here are some pinwheels, and—" "O, the very thing! Have you some safety pinwheels? My little boy is not yet a year old."

At Bishop Fraser's first ordination one of the archdeacons was asking an old friend of the bishop's how he accounted for the hold which the bishop, even then, had taken of the diocese. "The great point about Fraser," was the friend's reply, "is that if he sees anything needs doing, and he can do it, he does it!" At that moment the door of the room opened, and the bishop appeared carrying a coal scuttle in his hand: He had seen that the fire needed replenishing, and, instead of asking anyone else, he got the coals himself. "That," whispered the bishop's old friend, "is an example of what I mean."

THE LEAVENWORTH CASE.

By A. K. Green.

CHAPTER XXXIV.—Continued.

"Nor I, sir. I used to try and explain it by thinking her sensibilities had been blunted, or that she was too ignorant to comprehend the seriousness of what had happened, but as I learned to know her better I changed my mind. There was too much method in her gaiety for that. I could not help seeing she had some future before her for which she was preparing herself. As, for instance, she asked me one day if I thought she could learn to play on the piano. And I finally came to the conclusion she had been promised money if she kept the secret and was so pleased with the prospect that she forgot the dreadful past and all connected with it."

"Wait one moment," Mr. Gryce broke in. "You speak of her endeavors to improve herself. What do you mean?"

"Her desire to learn things she didn't know, as, for instance, to write and read writing. She could only clumsily print when she came here."

"I thought Mr. Gryce would take out a piece of my arm, he gripped it so. When she came here! Do you mean to say that since she has been with you she has learned to write?"

"Yes, sir. I used to set her copies and—"

"Where are these copies?" broke in Mr. Gryce. "And where are her attempts at writing?"

"I don't know, sir. I always made it a point to destroy them. I didn't like to have such things lying around. But I will go and see."

"Do," said he; "I will go with you. I want to take a look at things upstairs, anyway."

At the end of ten minutes they returned with a lot of paper boxes.

"The writing paper of the household," observed Mr. Gryce; "every scrap and half sheet which could be found. But before you examine it look at this." And he held out a sheet of bluish foolscap, on which were written some dozen imitations of that time-worn copy: "Be good and you will be happy."

"Mrs. Belden says this girl has known how to write as good as this for more than a week. But let us look at the paper she used to write on."

Dashing open the covers of the boxes, he took out the loose sheets and scattered them out before me. One glance showed they were all of an utterly different quality from that used in the confession. "This is all the paper in the house," said he.

"Are you sure of that?" I asked, looking at Mrs. Belden. "Wasn't there one stray sheet lying around, foolscap or something like that, which she might have got hold of without your knowing it?"

"No, sir. I had only these kinds; besides, Hannah had a whole pile of paper like this in her room, and wouldn't have been apt to go hunting round after any stray sheets."

"Look at this one," said I, showing her the blank side of the confession. "Couldn't a sheet like this have come from somewhere about the house?"

"I never had a sheet of paper like that in my house."

The mystery seemed impenetrable, and I was beginning to despair of success, when Mr. Gryce leaned toward Mrs. Belden and said:

"You received a letter from Mary Leavenworth yesterday?"

"Yes, sir."

"Was the letter, as you see it, the only contents of the envelope in which it came? Wasn't there one for Hannah enclosed with it?"

"No, sir," replied she. "There was nothing in my letter for her, but she had a letter herself yesterday. It came in the same mail with mine."

"Hannah had a letter!" we exclaimed, "and in the mail?"

"Yes; but it was not directed to her. It was directed to me. It was only by a certain mark in the corner of the envelope that I knew—"

"Mrs. Belden," cried I, "where is this letter? Have you got it?"

"No," said she, "I gave it to the girl. I haven't seen it since."

"It must be upstairs, then. Let us take another look."

"You won't find it," said Mr. Gryce.

"I have looked. There is nothing but a pile of burned paper. By the way, what could that have been, Mrs. Belden?"

"I don't know, sir. She hadn't anything to burn unless it was the letter."

"We will see about that," murmured I, hurrying upstairs and bringing down the washbowl with its contents. "If the letter was the one I saw in your hand at the post office, it was in a yellow envelope."

"Yes, sir."

"Yellow envelopes burn differently from white paper. Ah, the letter has been destroyed; here is a piece of the envelope."

"Then there is no use looking here for what the letter contained," said Mr. Gryce. "We will have to ask you, Mrs. Belden?"

"But I don't know. It was directed to me, but Hannah told me when she first requested me to teach her how to write, that she expected such a letter, so I didn't open it when it came, but gave it to her."

"You, however, stayed by to see her read it?"

"No, sir; I was in too much of a hurry. Mr. Raymond had just come, and I had no time to think of her."

"But you surely asked her some questions about it before the day was out?"

"Yes, sir, but she had nothing to say. She didn't even admit it was from her mistress."

"Ah, then you thought it was from Miss Leavenworth?"

"Why, yes, sir; what else was I to think, seeing that mark in the corner? Though, to be sure, it might have been put there by Mr. Clavering," she added, thoughtfully.

"You say she was cheerful yesterday; was she so after receiving this letter?"

"Yes, sir; as far as I could see."

"Wait!" cried Mr. Gryce, and beckoning me into a corner, he whispered, "Now comes in that experience of Q's. While you are gone from the house and before Mrs. Belden sees Hannah again, he has a glimpse of the girl bending over something in the corner of her room which may very fairly be the washbowl we found there. After which he sees her swallow in the most lively way, a dose of something from a bit of paper. Was there anything more?"

"No," said I.

"Very well, then," cried he, going back to Mrs. Belden.

"When I went upstairs to bed, I thought of the girl, and going to the door, opened it. The light was extinguished and she seemed asleep, so I closed it again and came out."

"Did you notice how she was lying?"

"I think on her back."

"And that is all you can tell us?"

"All, sir."

"You know Mr. Clavering's handwriting when you see it?"

"I do."

"And Miss Leavenworth's?"

"Yes, sir."

"Now, which of the two was upon the envelope of the letter you gave Hannah?"

"I couldn't say. It was a disguised handwriting, and might have been that of either; but I think that it was more like hers than his."

With a smile, Mr. Gryce enclosed the confession in his hand in the envelope in which it had been found. "You remember how large the letter was which you gave her?"

"Oh, it was large, very large; one of the largest sort."

"Large enough and thick enough to contain this?" laying the confession before her.

"Yes, sir," giving it a look of startled amazement, "large enough and thick enough to contain that."

"Mr. Gryce's eyes flashed around the room."

"Do you need to ask now," whispered he, "where and from whom this confession comes?"

"What are you going to do?" I asked.

"I am going back to New York. I am going to find out from whom came the poison that killed this girl, and by whose hand this vile forgery was written."

"But," said I, "Q and the coroner will be here presently, won't you wait to see them?"

"No," said he; "I can't afford to wait."

"If I am not mistaken they have al-

ready come," said I, as a tramping of feet announced some one at the door.

Judging from common experience we had every reason to fear that an immediate stop would be put to all proceedings on our part, as soon as the coroner was introduced upon the scene. But happily for the interest at stake, Dr. Fink, of R—, proved to be a very sensible man. He had only to hear a true story of the affair to recognize at once its importance, and the necessity of the most cautious action in the matter.

CHAPTER XXXV.

Fine Work.

Mr. Gryce had told me enough of his plans for me to understand that the clew he intended to follow was that given by the paper on which the confession was written.

I was, therefore, not surprised when upon visiting his house the next morning I beheld him seated before a table on which lay a lady's writing-desk and a pile of paper, till he told me the desk was Eleanor's. "What," said I, "are you not yet satisfied of her innocence?"

"Oh, yes; but one must be thorough." "Did you see Miss Leavenworth this morning?" I asked.

"Yes; I was unable to procure what I desired without it. But it would have made but little difference if she had known the truth! There's nothing here she need dread having seen."

"But let us see what we have here," pursued he, drawing the package of paper toward him with a look of great expectation. "I found this pile, just as it is, in the drawer of the library table in Miss Leavenworth's house, in Fifth Avenue. If I am not mistaken, it is what we want."

Taking the confession from his pocket and a sheet from the pile before him, he looked at them closely, then held them out for my inspection. A glance showed they were of the same color.

"Hold them up to the light," said he.

I did so; the appearance presented by both was precisely alike.

"But," cried I, "isn't there any room for doubt? This paper is of the commonest kind. Every family on the block might easily have specimens of it in their library."

"That isn't so," he said, "it is letter size, which has gone out. Mr. Leavenworth used it for his manuscript, or I doubt if it would have been found in his library. But, if you are still incredulous, let us see what can be done," and, jumping up, he carried the confession to the window, and finally discovering what he wanted, came back and pointed out one of the lines of ruling that was markedly heavier than the rest, and another which was so faint as to be almost undistinguishable. "Defects like these often run through a number of consecutive sheets," said he. "If we could find the identical half-quire from which this was taken, I might show you proof that would dispel every doubt;" and taking up the one that lay on top, he rapidly counted the sheets. There were but eight. "It might have been taken from this one," said he; but upon looking closely at the ruling, he found that it was uniformly distinct. "Humph! that won't do!" came from his lips.

The remainder of the paper, some dozen or so half-quires, looked undisturbed. Suddenly he took up the next half-quire. "Count the sheets," said he, thrusting it toward me, and himself lifting another.

I did as I was bid. "Twelve."

He counted his and laid them down. "Go on with the rest," cried he.

I counted the sheets in the next; twelve. He counted those in the one following. Twelve again.

With a sigh of impatience he flung it down on the table and looked up. "Halloo!" cried he, "what is the matter?"

"There are but eleven sheets in this package," I said, placing it in his hand. "Oh, beautiful!" he exclaimed. "See! the light line on the inside, the heavy one on the outside, and both in positions corresponding to those on this sheet of Hannah's. What do you think now?"

"The veriest doubter could ask no more," returned I.

"Did you have an interview with Miss Mary Leavenworth this morning?" I asked.

(To be continued.)

GOSSIP.

Messrs. H. Cargill & Son, Cargill, Ont., write: "At this, the most beautiful season of the year, it seems to us that the unfortunate individual who does not own a few good Shorthorns must certainly miss one of the great pleasures of life. The green grass and foliage are, no doubt, fine, but when you have some nice cows and calves dotted here and there it doubles the pleasure derived therefrom. The things of nature change each year as the seasons come and go, and while the calves come in their season also, there is an added interest on account of the fact that you have had something to do with the mating of their parents, and you feel that you are responsible to some extent for their living, and if the result is what you anticipate—i. e., good—the thought that you are pleasing yourself and bettering things in the interest of humanity is very pleasant indeed. These thoughts are suggested by the fact of seeing some 60 calves meandering around the orchards and paddocks in connection with our farm, and we may modestly intimate that they look very good to us, as also to some of the good people who visit us occasionally, as evidenced by the following sales: Last month we shipped to D. R. Hanna, of Ravenna, Ohio, seven cows and five calves at foot, the other two being in calf, a lot that would warm the heart of any modern lover of Scotch Shorthorns, all being of the one type—short-legged, thick-fleshed, grandly-bred animals, all of them. Mr. Robertson, the manager of Cottage Hill Farm, whose herd won at St. Louis last year, informed us that they had sold their show cattle in California, and he bought these to replace them. In his hands, we expect to hear from some of the youngsters later. When a few years ago he visited Canada and bought Village Belle 2nd, the International champion, it was here he saw her, she not having been shipped to Mr. Platt, and in looking around, he fancied a little white Missie heifer calf and bought her. Her first calf was junior champion at St. Louis last year, and this year she has a roan bull, which he considers a better one. This we take to be evidence that we have at least a few of the kind that win at the shows, when given an opportunity. Last week we sold to Jno. Clough, Brook, Ont., the beautiful, dark-red bull, Count Victor, calved Sept. 28, 1904, sired by Imp. Golden Drop Victor (76780), and out of the splendidly-bred Victoria cow, Marengo's Victoria Countess (imp.), who, as her name indicates, was sired by the great Marengo (69068). Her dam was Victoria Countess, by Count Lavender (60545). Count Victor is a very smooth bull of grand conformation and good size, and we look for him to grow into an A1 stock bull. Along with him were shipped the cow, Diamond 25th (imp.), five years old, and her roan heifer calf, sired by the Missie bull, Merchantman (imp.) (81686), a good, useful pair of females, which we have no doubt will fill the bill as a foundation for a new herd, which Mr. Clough intends building. We also sold James Cowan, of Seaforth, a nice bunch to augment his present lot, as follows: The three-year-old imported cow, Choice, with heifer calf at foot, by Diamond Rex (imp.). This is an excellent young cow, good enough for show if put in condition, but necessarily a bit thin now from suckling her calf; two yearling heifers, Scotch Beauty 3rd and Roan Lady 40th, a beautiful pair out of imported dams, and sired by the Missie bulls, Lord Mistletoe (imp.) and Merchantman (imp.) respectively. The roan heifer calf, Snow Girl C, also goes out of an imported dam, and by Lord Mistletoe, and we predict a show-yard career for her if she continues to go along as she has been doing. Last, but not least, is the splendid red bull calf, Golden Emir, out of the Marr-bred cow, Emma 35th (imp.), one of the celebrated Potts' Emmas, and sired by Golden Drop Victor (76780). Twenty-eight of the thirty-one sires in the pedigree of Emma 35th were bred by A. Cruickshank, one by Nelson & Sons, and one by Mr. Bothie. In addition, this bull has the proper conformation, quality and character to make a show bull and a sire. Now, while we have described a few of the good ones, we do not wish the reader to make up his mind that the good ones are all sold. We have a lot more, not quite as old, consequently not

so well finished, but they will come all right. We have a nice lot we are not ashamed to show visitors, and shall be glad to send catalogue to probable buyers upon request."

On the edge of a small river in the County of Cavan, in Ireland, there is—or used to be—a stone with the following inscription cut upon it, no doubt intended for the information of strangers: "N. B.—When this stone is out of sight, it is not safe to ford the river."

Mr. John Campbell, Woodville, Ont., writes: "The keen demand for Fairview bred and fitted Shropshires has exhausted the supply in all lines, except that of two-shears-and-over ewes." So intending customers are notified in his change of advertisement elsewhere in this issue. Mr. Campbell has been making weekly shipments for some time, including four to far-off Texas, and some to Wisconsin, New Hampshire and Indiana, with a few to Canadian points. Other ordered lots go out later on. He has been for years a strenuous advocate of the sheep industry, and now rejoices in the "growing time," as politicians say. All over the continent sheep hunger is very evident.

Indications of sheep prosperity are seen on every hand. Even the audacious, ubiquitous and ever-active cattle rustler is taking an interest in the industry.

Since wool has become so valuable, bands of wool thieves have become the latest novelty on the range. In some instances sheep were shorn on the range, and in others the thieves took the wool from storage places. Wyoming sheepmen are preparing to make a number of arrests in the near future, and it is claimed that there are several organized outfits at work.

This will give the cattleman a rest and impose on the sheep-growers responsibility for suppressing crime on the public domain. Not long since, neither sheep nor wool were worth stealing.—[Live-stock World.]

Registrar H. G. Wade, of the Shorthorn Association, announces that the Shorthorn department of the National Live-stock Records is now prepared to issue the new form of registration certificates to Shorthorn breeders. Owing to the fact that the Live-stock Record Act had not been assented to by the Governor-General-in-Council, the Shorthorn Association have been obliged to issue their certificates without the seal so as to prevent a standstill in the record business. Now that the bill has been signed, the Registrar requests that all breeders who have received their certificates without seal should return them, when they will be duly sealed and returned immediately. The cost of registration has not been changed, and new application forms will be supplied to all who apply. It would be well for breeders to send in their applications this month so as to have them ready for the coming exhibitions.

TRADE TOPICS.

THE MIDLAND GASOLINE ENGINE for all power purposes, manufactured by the Georgian Bay Engineering Works, at Midland, Ont., makes a strong bid for public favor, as will be seen by their advertisement in this paper. These engines are evidently bound to win favor as a farm and factory power, being reasonable in price, convenient and easily managed. See the advertisement and send for their circular and price list.

LABOR-SAVING DEVICES are a boon to the farmer in these times of scarcity of help and high wages. Of these, the horse fork and slings for unloading hay and sheaves are amongst the most helpful and saving of hard work, and the beauty of it is that the cost is so little that any farmer can afford to have them; indeed, none can well afford to be without them, as they save valuable time as well as labor, and they last a lifetime with practically no outlay for repairs, as they seldom, if ever, need any. The Wortman & Ward Co., 541 York St., London, Ont., are leaders in this class of appliances. See their advertisement in the "Farmer's Advocate" and write them for what you want, or call on their agents in principal towns.

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.

Veterinary.

INDIGESTION IN CALVES.

Calf, four months old, has been doing fine until within the last two weeks. She does not eat to amount to anything. She girts four feet now, but has not gained any for the last three weeks. I fed new milk until two weeks old (three quarts twice a day), and after gradually shifted to skim milk set in the well in a cooler. I give her now four quarts of milk twice a day, with four tablespoonfuls of oil cake, and a mixture of oatmeal and corn meal, all she will eat, but eats very little. Would like to exhibit this calf the middle of September, and should like to know the way to feed to make her grow and get fat. Have kept her in a clean box stall with plenty of sun and fresh air.

2. Calf, three months old, has been fed same, but has never done well, as she has scoured every two or three weeks.

W. H. B.

Ans.—We suspect you have been feeding cold milk, which would easily account for the difficulty in both cases, causing indigestion and scours. The milk should be given at a temperature of 90 degrees. Use a thermometer to make sure you are right, for nothing will derange the calf's digestion so quickly as changing from warm to cold milk. Do not mix the oil cake with milk, but feed it dry, mixed with chopped oats and bran till the appetite improves, then add corn meal in moderate proportion, say one-half as much as of oats, and give good clover hay.

DR. OSLER AT MUKDEN.

Kuropatkin in retreat, a most dejected man. He sat in contemplation on an empty vodka can, and as the little yellow men their cordon closer drew, he muttered low in Muscovite, "If Osler only knew!"

"That little fellow Nogi, though he's past three score and ten, is prancing like a three-year-old around my Russian men, is tying Tie Ling in a knot that breaks my line in two—If Osler only knew of this, if Osler only knew!"

"Then there's that old Oyama, who my stubborn center stormed, He certainly is past the age he should be chloroformed; Yet there he stands performing tricks that younger men should do—If Osler only knew of this, if Osler only knew!"

"Kuroki's getting on in life and surely should retire; Then, what's he doing on my left directing of the fire, And doing other bovish things an old man shouldn't do?—If Osler only knew of this, if Osler only knew!"

"That old man Nogi's worth about three hundred thousand boys, But, oh, my military pride it certainly annoys To be defeated by this superannuated crew, Who'd be retired and fossilized, if Osler only knew!"

The Belgians have long been accustomed to horse meat as food, but of late importations of the animals, mainly from England, have shown so many that were emaciated, weak and obviously unfit for food that the superior council of agriculture has recommended that such importations shall cease, or that broken-down horses, unfit for work, shall be classified as cattle, in which case the high duty will keep them out. The measure has not yet been adopted, however, owing to the difficulty in finding a substitute for horse meat, which is, in many cases, the only kind which the poorer classes are able to afford.

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GOOD HORSES SCARCE; PLUGS PLENTIFUL.

A recent market report said "good horses are scarce; plugs are plentiful." This will always be the case, for the good horses will find ready buyers while the plugs will either have to be kept on hand or sold as plugs and at plug prices. Probably with the march of time and the progress in breeding, plugs will not be as plentiful as they are now, but every practical man knows that no matter what breed of horses a breeder takes up, breeding has not reached that state of perfection which produces no culls. The wise breeder will choose his breeding stock with a view of the production of as few culls as possible, but until breeding makes considerable progress there will be more or less culls to fill up the plug class.—Horse World.

CATTLE.

Live-stock Agent McMullen, of the C. P. R., estimates that Alberta will send out 45,000 head of export beef cattle this summer, provided market quotations continue fairly favorable, as they have been up to date.

Mr. James A. Cochrane, of Hillhurst Stock Farm, who has changed his post office address to Compton, Que., writes: I have sold all my Shorthorn bulls old enough for service, and have only two bull calves, five and six months old, for sale.

Mr. Cochrane writes: Cattle are doing well, pastures were never better, the hay crop looks like a record one.

A remarkable occurrence, says the Aurora Banner, was the destruction by lightning stroke and subsequent explosion of the barn of James Brack, near Thornhill station. On Tuesday evening a sharp electric storm was passing over this section, and a bolt struck Mr. Brack's barn. Almost instantly a deafening explosion occurred. The sides of the barn were burst outwards as by a giant charge of dynamite, and the roof was tossed fully 100 feet away, alighting on the G. T. R., crushed beneath the falling timbers. Fortunately, no fire resulted.

Messrs. Kohrs and McTague, ranchmen, of Montana, have gone to the Canadian Northwest to spy out a suitable range for their cattle, and upon their return, if they have found conditions favorable, they will round up their cattle and load them on cars at Deer Lodge for transportation to their future range in the far Northwest. Although it will be necessary to pay a duty to export the cattle into Canada, and then pay another duty when the beef stock is imported into the U. S. in the fall, they have figured it out that they can even pay two duties and make money by the transaction. It is said that other Powell country stockmen may follow these two concerns into the far North. Montana stockmen are already quite numerous in the Northwest Territory.—[Ex.]

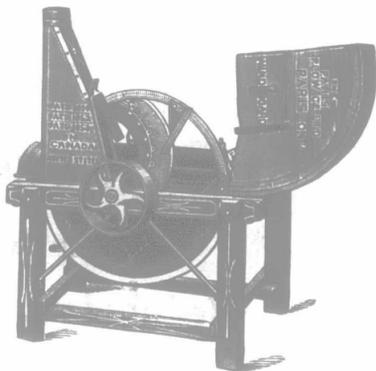
MR. FLATT'S CLYDESDALE SALE.

The auction sale to take place at Hamilton, Ontario, on August 23rd, of 50 imported registered Clydesdale fillies, as announced in his advertisement by Mr. W. D. Flatt, should interest very many farmers throughout the Dominion, affording as it does a rare opportunity to secure good breeding mares of the type that is in general demand for the production of the class of horses that sell readily at paying prices, even when times are dull, and in these prosperous times are taken at any figure within reason that the seller may ask. These fillies have been carefully selected by competent judges, with a view to suiting the Canadian trade. They are the get of some of the best sires in Scotland, and a number have been stunted to high-class stallions before being shipped. Interested parties will do well to apply for the catalogue and plan to attend the sale.

STOCK AT PORTLAND AND NEW WESTMINSTER.

In reply to an enquiry by Mr. A. P. Westervelt, Ontario Director of Live Stock, Mr. W. H. Keary, Manager of the Dominion Exhibition at New Westminster, B. C., writes: "The dates have been arranged so that stock shown at Portland can be shown here. While our exhibition opens on the 27th of September, the stock exhibit does not open until October 3rd. This was arranged to permit exhibitors at the stock show at the Lewis & Clark Exposition, which closes on the 29th of September, ample time to reach here by the 3rd of October, as it is really only a day's journey, if they push right through from Portland to New Westminster." Entries for Portland Show close August 15th. The trip of a lifetime at a moderate cost is open to Eastern people who wish to attend either or both of these two exhibitions, as the C. P. R. gives a very cheap excursion rate to Portland, Oregon, via New Westminster, and return, good for three months.

ENSILAGE CUTTER



When you buy an Ensilage Cutter you want one which will not give everlasting trouble with breaks, getting out of gear, running hard, choking up, and the hundred other complicated ways that common cutters make trouble.

You want one that is simple, easy to run, strong, and will do good, fast and fine work.

Our Ensilage Cutter, with Thom's Patent Blower Elevator, is Canada's leading cutter simply because it never gets out of order and always does the work it is expected to do. Write for free booklet telling all about this successful cutter. Made by

The Paris Plow Co., Limited
Paris, Ont.

The outlook for the wool clip in the Territories, says a Winnipeg despatch, is splendid. The total will be about 700,000 pounds, of which Alberta will give about 290,000 pounds; Medicine Hat, 60,000 pounds; Walsh, 90,000 pounds, and Maple Creek, 220,000 pounds. The best class of Western wool is very fine, almost pure merino, and will clean up to 60 per cent. of scoured wool.

Through all Scotland, says Andrew Night, writing in 1778, sheep are only of two different kinds, termed the short and the long. It is a great question among farmers whether long sheep would answer in grounds stocked with short; but all agree that short sheep will do everywhere. It is also a question which of the two kinds is preferable. The long dinmonds and widders sell higher, as also the ewes and lambs. The wool is much finer, and I think there is more of it. The advocates of the short sheep allege that they take less maintenance. I doubt the fact, upon the authority of a very sensible farmer in my neighborhood. He came here much prejudiced in favor of short sheep, and has stocked the one-half of his farm with them. He says that the short ewe eats as much as the long. The short sheep are more hardy, and will thrive on grounds unfit for the long.

"Why is his face wrinkled?"
"From care."
"And why is his coat wrinkled?"
"From carelessness."

MANITOULIN CAN DO HER PART

Showing the Good Work Dodd's Kidney Pills Are Doing.

Mrs. Thomas Rumley One of the Many Who Found Health in the Great Canadian Kidney Remedy.

SILVER WATER, Manitoulin Island, July 24.—(Special).—Every part of Canada seems to be testifying to the good work Dodd's Kidney Pills are doing, and there is no reason why Manitoulin Island should not do her part. Many a man and woman here blesses them for aches relieved and health restored. Take, for instance, the case of Mrs. Thomas Rumley. She says:

"I doctored for years and did not seem to get any better. It seemed to be my kidneys that was the trouble, so I thought I would try Dodd's Kidney Pills, and they helped me very much.

"I cannot say how many I have taken for my house is never without them, and whenever I don't feel right I take a few. My husband also takes them once in a while. I find them a splendid medicine to have handy."

Dodd's Kidney Pills are the greatest family medicine of the age. They can be taken by young or old with perfect safety. They cure all kidney ailments, and nine-tenths of the sickness of the present day springs from bad kidneys.

If the sheep man is anywhere at present, he is on Easy Street, and on the shady side of that luxurious thoroughfare.

No longer does the bargain counter occupy a conspicuous position in the sheep-house. It has been "knocked down" and put away in the dim and unfrequented storehouse of the past. The sheep man neither takes off his hat nor bends the suppliant knee to the buyer. His product is like money in the bank, and he knows it.

There will be no cheap live mutton this year, simply because the sheep-grower is not in the position of a man who has to sell. He has feed and credit, while wool is as good as the yellow article mined on the Klondike.—[Live-stock World.]

BLACK POLLS AT GLASGOW.

At the Highland Show for 1905, there were 67 entries for Aberdeen-Angus cattle. Mr. Jas. White's three-year-old, Irish-bred bull, Jim of Devlin, was first in aged bulls. Mr. Macpherson's Khar-tum of Ballindalloch was second, and Mr. Geo. Cran's Jeshurun, who was second at the Royal, was third here. The young bull classes were not strong. In a good class of cows, Mr. R. W. Hill's three-year-old Bartonla of Glamis was first; Mr. J. R. Findlay's Pride of Honor second, and Mr. Willsher's Merry Nell third. Mr. Kerr scored with two-year-old heifers with Juana Erica; Mr. Hunter's Ruritania being placed second, and the King's Princess Irene 9th was third. The King won in yearling heifers with Gwylich. The championship went to Jim of Devlin, and Mr. Wylie Hill's cow, Bartonla of Glamis, was reserve number. She won the Ballindalloch cup for females.

Galloways made a good showing, there being 38 entries, of which 16 were males and 22 females. In a class of seven aged bulls, the four-year-old, Defiance, shown by Mr. Fox-Brockbank led, the second prize going to John McCormick's three-year-old, Othello of Kilquhanity. War Cry, shown by Mr. Jas. Wilson, was third. Mr. Cecil Randolph was first in two-year-old bulls with Chief III.; Mr. Thos. Graham second with Marchfield Stanley and Major Maxwell third with Campfollower of Glenlair. Yearlings were not strong, and of the four forward, first award went to Black Pearl, shown by Mr. Robt. Graham. The first prize for aged cows went to Mr. A. B. Matthews for the six-year-old Knockstock's Jessie, an animal of fine quality and almost perfect in outline. The Castlemilk cow, Alice II., was placed second, and Luxury, of the same herd, was third, while Lady Alice of Castlemilk won first in two-year-old heifers, Messrs. Biggar & Sons being second with Baroness of Chapelton, and Mr. Jas. Wilson third with Harriet VII. The yearling heifers, a good class, were led by Mr. David Brown's Evelyn of Stepford, followed by Messrs. Biggar's Bonny Jean VI. and the Castlemilk Countess III. The President's medal for the best Galloway of either sex went to the first-prize cow, Knockstock's Jessie, and the silver medal for best bull of the breed to Mr. Graham's Defiance.

"Is your son industrious?"

"It depends," answered Farmer Cornfossil. "He's liable to take his time doin' chores, but if you ever get him on second base with a good hitter up he's liable to be about the busiest thing on earth."

SHORTHORNS AT THE HIGHLAND.

At the Highland Society's Show at Glasgow this month, the Shorthorn class was judged by Mr. James Roger, Keir Mains, Dunblane, and Mr. R. Stratton, Newport, Monmouthshire. In the aged bull class of eight entries, Mr. A. J. Marshall, Stranraer, won first and champion with Roan Conqueror, by Collynie Conqueror, who was champion of the Royal Dublin and second and reserve champion at the English Royal, where Royal Emblem was rated above him. The latter was not at Glasgow. Strowan Champion, shown by Capt. Graham, Sterling, was second, the third award going to Primrose Knight, by Primrose Pride, shown by Mr. Marshall. In a class of ten two-year-old bulls, Mr. R. P. Cooper's white bull, Meteor, by Moonlight, and who was second at the Royal, was here first, followed by Lady Gordon Cathcart's Edgar of Cluny, by the Collynie sire, Royal Pride, as second, and by Mr. Geo. Harrison's Pioneer, bred by the King, as third. In the big class of yearlings, Mr. Deane Willis captured first honors with Orphan Chief, who was second at the Royal. Mr. A. T. Gordon's Fascinator, who was third at the Royal, was second here, and Mr. Harrison's Royal Ensign, another white, bred by Mr. Duthie, and got by Royal Edward, was third. In a small class of cows, Mr. Willis' white cow, White Heather, of the Kiblean Beauty tribe, was first; Mr. Harrison's Ursula second, and Sir Jno. Gilmour's Annie Wenlock, by Brave Archer, third. Mr. McWilliam won in two-year-old heifers with Hilda 2nd, by Bright Stone. Mr. Cameron was second with Butterfly 89th, by Ruthven, and third went to Mr. Malcolm's Lady Kathleen, by Golden Thistle. Mr. Haley, with Bright Jewel 6th, by Sir George, won first in yearling heifers, followed by Mr. Sowerby's Eastthorpe Gem and Lord Lovat's Lady Teazle. Roan Conqueror was champion Shorthorn, and the yearling, Bright Jewel 6th, was female champion.

AYRSHIRES AT GLASGOW.

The show of Ayrshires at the Highland Society's Show this year was the best seen out in many years. The aged cows in milk were especially grand. The first prize went to Mr. Robt. Wilson's noted old cow, Harvey 6th of Manswrae, who was also the champion female, and won the President's prize as the best animal of the breed. The second award went to Dr. Douglas, M. P., for Heather Blossom, and Jas. Laurie, West Newton, was third and fifth. Three-year-old cows in milk were led by Mr. Jas. Neil's Topsy 2nd of Barleith. Messrs. Kerr, of Old Gretna, were second with Sonsie 6th, the third going to Mr. Robt. McAllister's Queen I. The class for cows in calf was led by Mr. Alex. Cross' Royal winner, Lady Jane of Knockdon, Mr. McAllister was second with Ardnoe Fairy, and Mr. Wm. Brown's Kate of Springs was third. In the Derby for three-year-old queys, Mr. Jas. Neil was first and third with Topsy 2nd and Hover-a-Blink, and Messrs. Kerr second with Sonsie 6th. In two-year-old heifers, Mr. Jas. Howie, Hillhouse, was first with Snowdrift, by Gentleman John. Mr. Robt. Osborne was second with Selina Sedilia, by Gigantic Stunner, and Mr. Andrew Mitchell third with Handsome Nell, bred by Mr. Jas. Howie. In yearling heifers, Mr. Howie was first and second for Whinflower and Semolina, and the third went to Mr. Robert Osborne for Faustina Scafe, by Wynholm Dunning.

The first-prize aged bull and male champion was Mr. Jas. Kennedy's four-year-old, Safeguard of Glenshamrock; Mr. Jas. Howie's three-year-old, Wynfette, being second, and Mr. Andrew Mitchell's Duke of Lochlmond third. In two-year-old bulls, first award went to Mr. Thos. Barr's Uzomo-sal; Mr. Howie's Give and Take being second, and Mr. R. Osborne's Epicarmus third. Yearling bulls, or "bull stirks," as the Scots call them, were led by Mr. Robt. Woodburn's Rising Sun, a close second being Mr. John Cochrane's Spivy Sam, by Not Likely of Hillhouse. Mr. Jas. Robb's Moneymaker, by Full Bloom, was third.

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

HORSE OWNERS! USE
GOMBAULT'S
CAUSTIC BALSAM.
A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all blemishes from horses. Impossible to produce scar or bluish. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Toronto, Can.



\$100 Reward
for a case of disease in horses that Tuttle's Elixir will not cure, if we recommend it to do so. It is the only remedy that stops pain at once and cures quickly and permanently distemper, founder, pneumonia, and many other horse ailments.
For Race Horses
It prevents stiffness, cures sprains, locates and cures lameness, and as a body wash keeps the circulation in good condition under hard driving.
Tuttle's Heat and Healing Ointment cures all hoof diseases. Tuttle's White Star is the best healer known. Our 100-page book "Veterinary Experience" free.
Tuttle's Elixir Co. 66 Beverly St. Boston, Mass.
Beware of so-called Elixirs. Tuttle's only is genuine. Avoid all others they are only temporary relief.
LYMAN, KNOX & SON, AGENTS,
Montreal and Toronto, Canada.



ABSORBINE
Will reduce inflamed, swollen joints, Bruises, Soft Bunches, cure Boils, Fistula, or any unhealthy sore quickly; pleasant to use; does not blister under bandage or remove the hair, and you can work the horse. \$2.00 per bottle delivered. Book 8-B free.
ABSORBINE, JR., for man kind, \$1.00 per bottle. Cures Varicose Veins, Strains, Bruises, Etc. Mfd. only by
W. F. Young, P.D.F., 73 Monmouth St., Springfield, Mass.
Canadian Agents, Lyman, Sons & Co., Montreal.



"THE REPOSITORY"
Burns & Sheppard, Proprietors,

Cor. Simcoe and Nelson Sts., TORONTO

Notion Sales of Horses, Carriages, Buggies, Harness, etc. every Tuesday and Friday at 11 o'clock.
Special Sales of Thoroughbred Stock on quota. Consignments solicited. Correspondence will receive prompt attention.
This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.
SMITH & RICHARDSON'S
CLYDESDALES
Columbus, Ontario.
We are now offering for sale the finest lot we ever imported, at reasonable prices. Amongst them, Baron Gartley, winner of 1st prize and sweepstakes.
Stations: Oshawa and Booklin, G. T. R. Myrtle, C. P. R. Long distance Telephone at Residence.



Clydesdale Stallions and Fillies.
Imported and Canadian-bred. For sale: Three 2-year-old stallions and imported mares with foals at foot, from imp. sire and dams. Also **SHORTHORN** Cows and Heifers for sale. Reasonable prices. For particulars write to
JAS. W. INNES,
Cityview Farm, Woodstock, Ont.
Clydesdales, Shorthorns and Leicester's—
Present offering: One choice mare, 4 years old, from imp. sire and dam. Two young bulls (sired by Golden Count 26440). Prices reasonable.
WM. McINTOSH, Prop. Burgoyne P. O. Port Elgin Stn. and Telegraph.

DEATH TO HEAVES Guaranteed
NEWTON'S Heave, Cough, Distemper and Indigestion Cure. A veterinary specific for wind, throat and stomach troubles. Strong recommendations. \$1.00 per can. Mail or express paid.
The Newton Remedy Co., Toledo, Ohio. Your druggist has it, or can get it from any wholesale druggist.



QUESTIONS AND ANSWERS.
Miscellaneous.

BLACK MEDICK—THRIPS IN OATS.
What is the cause of oats being as they are in sample, also name of weed enclosed?
E. A. B.
Haldimand Co., Ont.

Ans.—The cause of the blasted condition of the lower part of the head of oats is a species of "thrips," regarding which see note by Dr. Fletcher in the Farm Dept. of this issue.
The plant enclosed is evidently black medick, although we cannot be absolutely certain in identifying such small specimens without any of the blossom.

BARNYARD BARREN AFTER A FIRE.
A few years ago my barn was burned, a pile of manure being consumed at the same time. The soil in the barnyard is a sandy loam, though hardly its natural color now, as it seems burnt by the manure. Have worked this land up, fall-plowing it twice and plowing it deeply. The first year it was planted with potatoes, the next year mangels, the next year corn, and this year beans, but nothing grows on it.
A. T.

Ans.—It is a pretty clear case that the humus or organic matter has been destroyed by the fire, consequently the soil is not in a good physical condition, and is almost certainly deficient in nitrogen. Then, besides, we suspect there is an excess of soluble mineral salts, particularly potash, which would certainly render the soil sterile until the excess had been removed by leaching or some other means. Had the ashes, after the fire, been hauled away and scattered over the fields, they would have been a source of profit instead of loss. Now that they have been incorporated with the soil, their removal is not possible without entailing the handling of a lot of dirt. We would suggest by way of experiment, manuring with an application of coarse barnyard manure, or green manure. If, even, a small crop of buckwheat or clover could be grown and turned under, it would supply humus and nitrogen, at the same time tending to counteract the effect of the excess of mineral salts. The tendency will be for this land to come back in time to a state of productivity.

TRADE TOPIC.
THE CANADIAN RUBBER COMPANY OF MONTREAL, LIMITED.—The Canadian Rubber Company, of Montreal, Limited, have issued some handsome catalogues during the past few weeks. Catalogue "G" deals comprehensively with interlocking rubber tiling, and other unique rubber floor coverings. It is printed in several colors, and all the illustrations are in halftone. As a departmental catalogue, illustrating a very special line of goods, this publication is designed to be far and away the finest issued by any rubber company in Canada or the United States. Catalogue "D" is devoted exclusively to rubber belting and rubber-covered rolls. This book comprises 90 pages, with a handsome embossed cover in gold and black. A mass of valuable information concerning the care and use of rubber belting has been inserted, and the illustrations, of which there are a great number, are all in halftone. This belting catalogue will, no doubt, be keenly sought after by the trade. As a reference book on everything pertaining to the care and use of rubber belting under all conditions, Catalogue "D" is one of the most complete we have yet seen, and is a striking testimonial of the up-to-dateness of the Canadian Rubber Company. Catalogue "E" (60 pages with handsome embossed cover) comprises the principal lines of rubber and special hose manufactured. Much valuable information is given as to the care of hose, and many half-one illustrations are shown to illustrate the text. This particular catalogue is in keeping with the other high-grade trade catalogues of the Canadian Rubber Company. The complete series of handsome catalogues, issued by the pioneer Rubber Company of Canada, is concrete evidence of the progress made by the rubber industry in the Dominion. Any of the catalogues issued can be obtained from the sales branches of the company throughout Canada, or direct from the head office, Montreal.

GREAT AUCTION SALE
OF
Imported Clydesdale Fillies
at Hamilton, Ont., on
Wednesday, Aug. 23rd, 1905
Specially selected from leading Scottish Studs for breeding, size and quality.
50 REGISTERED CLYDESDALE FILLIES
From one to three years old. A number of them bred to first-class Stallions in Scotland. For catalogue and particulars address
W. D. FLATT, HAMILTON, ONT.

Bog Spavin
Lameness resembles bone spavin, but the bunion is in front of the true hock joint, a little to the inner side, and is soft and yielding, hardening sometimes as the case grows old.
Fleming's Spavin Cure (Liquid) is a special remedy for the soft and semi-solid bunion that makes horses lame—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It isn't a liniment to bathe the part, nor is it a simple blister. It is a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, cures the lameness, takes the bunion, leaves no scar. Money back if it ever fails. Write for Free Horse Book before ordering. It tells all about this remedy, and tells what to do for blemishes of the hard and bony kind.
FLEMING BROS., Chemists,
45 Front Street, West, Toronto, Can.

THORNCLIFFE STOCK FARM
CLYDESDALES
ROBERT DAVIES
Has two-year-olds, three-year-olds and aged mares for sale, in foal to "Right Forward," imp. Please write for prices. City address:
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CLAYFIELD STOCK FARM
Clydesdales, Shorthorns and Cotswolds
11 prizes won at World's Fair at St. Louis, 11 firsts, 5 champions. Will now offer my entire flock of rams and ewes at prices according to quality.
J. O. ROSS, Jarvis, Ont.
Clydesdales, Shorthorns and Cotswolds— Present offerings: 2 Clydesdale stallions, 1 and 2 years old, by MacQueen; one yearling bull by imp. sire; also some yearling rams. For price and particulars write to W. D. FLATT, Clarendon, Ont.

JOHN KENWARD,
Expert Auctioneer on Thoroughbred Live Stock.
Sales of registered stock scientifically conducted anywhere in Canada.
I am expert judge and auctioneer of all classes of live stock. Parties thinking of holding sales will save money and make money by employing the undersigned.
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PORTER'S GOLD & SILVER FAWN
St. Lambert Jersey Herd
I have a number of bulls, cows and heifers for sale. No better blood. No better cream-producers. No better lookers.
T. PORTER, Carleton West, Ont.

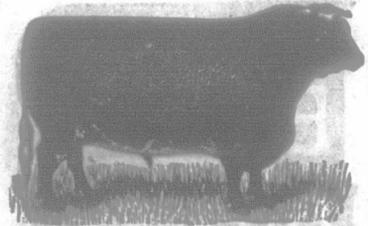
Advertise in the Advocate

U. S. CATALOGUE.—For information about the Improved United States cream separator, as well as some good general dairy pointers, address the Vermont Farm Machine Co., Bellows Falls, Vt., U. S. A., for a copy of their 1905 catalogue.

THE PEA BUG has had its day, as has every dog. Farmers are happy in the prospect of good crops of this profitable legume once more. The great labor-saving device for harvesting the pea crop, the Tolton pea harvester, is advertised in this paper by Tolton Bros., Guelph, Ont., who have made a great success of this attachment to the mower, which makes the harvesting of peas a process no longer dreaded, but rather one of the easiest operations in the grain harvest, and the cost is so little that no one having a field of peas can afford to be without it. Look up the advertisement, and write the firm at once for price and particulars. They will use you right in any dealings you have with them.

If the supply of breeding ewes were equal to the present demand, we would in a year's time have more sheep in the United States than they have rabbits in Australia. It is absolutely certain that at least the question of raising sheep in the corn belt would be put to the test. And it is none the less certain that many a farmer would have done with sheep for the remainder of his natural term of existence. The scarcity of breeding ewes is therefore a blessing in disguise.—[Shepherd's Bulletin.]

"The ram is half the flock" is a well-worn adage. It is only half true, really. Better and more truly say he is the whole flock. For a poor ram, in even a flock of good ewes, is a delusion and a snare and equivalent to poor seed in good soil. "Nothing comes of nothing," and it is equivalent to saying "like produces like," which is one of the truest rules of all breeders, and planters, and is never disappointing. And it is a double-edged proverb. It acts both ways, and for evil as for good. Thus it should be the leading principle of the breeder, and especially in regard to the health of the animal to be chosen, first of all, for this quality governs every other desirable point. Long, useful, productive life—this is a continuous and inherited gain—and the inheritance is repeated in the progeny. And while this law is here laid down, let it be well noted that the opposite is quite as true as the fact itself. So there are two things to be thought of, "choose the good," the best possible, and avoid, in spite of any possible inducements, refuse all other. Cheapness consists in this, for a poor thing is always dear.



Arthur Johnston
GREENWOOD, ONT.

Offers the following:
 5 imp. bulls, all registered in E. H. B.
 7 high-class home-bred bulls, all by imp. sires, and from imp. or pure Scotch cows.
 7 imp. cows and heifers.
 7 very fine heifers of our own breeding, by imp. sires, and mostly from imp. dams.

MAPLE SHADE

One Cruickshank Lavender bull, ready for service. A number of shearling Shropshire show rams.

JOHN DRYDEN & SON,
Brooklin, Ont.

Stations Brooklin, G. T. R.
Myrtle, C. P. R.

SCOTCH SHORTHORNS

9 heifers, yearlings.
 20 heifers, calves,
 4 bulls, yearlings.
 26 bulls, calves.

All out of imported sires and dams.

Prices easy. Catalogue.

John Clancy, H. CARGILL & SON,
on Manager, Cargill, Ont.

SCOTCH SHORTHORNS

Some extra good young show bulls, eight to ten months old, by Bapton Chancellor (imp.); also cows and heifers. New importation of choice bulls and heifers, due home August 26. All for sale. Write

H. J. DAVIS, Woodstock, Ont.
C.P.R. and G.T.R.

TROUT CREEK

SHORTHORNS

Bulls in service: Gold Cup (imp.), bred by W. Duthie, and Ardlethen Royal (imp.), a Marr Princess Royal

James Smith, W. D. FLATT,
Manager, Hamilton, Ont.

1864 - HILLHURST FARM - 1905
SHORTHORN CATTLE

Herd of thirty. Stock bull:
 Missie 13th, by Wm. of Orange
 Prince Horace, bred by W. S. Marr
 Butterfly 46th (Sittytan Butterfly)

JAS. A. COCHRANE, Compton, P. Q.

Shorthorns and Yorkshires—A few good Yorkshire pigs, either sex, from imp sire and dam. Also a few young Shorthorns, at reasonable prices.
 W. J. MITTON,
Mapleton Park Farm, Thamesville Sta., P. Q.

Lump Jaw

Save the animal—save your herd—cure every case of Lump Jaw. The disease is fatal in time, and it spreads. Only one way to cure it—use Fleming's Lump Jaw Cure
 No trouble—rub it on. No risk—your money back if it ever fails. Used for seven years by nearly all the big stockmen. Free illustrated book on Lump Jaw and other diseases and treatments of cattle and horses. Write for it today.
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WOMEN'S BALLOON SPRAY SYRINGE

Thoroughly cleanses vaginal folds. Strong back suction. Absolutely safe. Recommended by all doctors. Thousands in use. Drug store price, \$3.50; our price (mailed free) \$2.50. Plain sealed packages. Full directions for use. Send for bargain circulars of everything.
 THE SOVEREIGN SPECIALTY CO.,
 P.O. box 459, London, Ont.

Scotch Shorthorns

HOLLYMOUNT STOCK FARM

Young bulls and heifers from imported sires and dams for sale at reasonable prices.
 For particulars write to

W. J. THOMPSON, o Mitchell, Ont

ELM GROVE SHORTHORNS

We have for sale some good young cows and heifers, of the Fashion and Belle Forest families, in calf to Scottish Rex (imp.) or Village Earl (imp.), our present herd bull. For prices and particulars address
 W. G. SANDERS & SON,
 Box 1133, St. Thomas, Ont

MAPLE HILL STOCK FARM
SCOTCH SHORTHORNS

of the Brawith Bud, Cecelia, Mayflower, Fashion and Daisy families. Herd headed by the grandly-bred Lavender bull, Wanderer Star—48085—, by Wanderer's Last (imp.). Special offering: A few choice young bulls.
 WM. E. ELLIOTT & SONS,
 Box 496, Guelph, Ont.

R. & S. NICHOLSON
SCOTCH SHORTHORNS

Present offering: Seven young bulls of serviceable age; good ones. Prices right. For particulars write to above firm.
 Parkhill Sta. and Telegraph, SYLVAN, ONT

Shorthorns and Lincolns

12 young bulls, 6 heifers, and some young cows of choice breeding. Prices very reasonable.

W. H. TAYLOR & SON, Parkhill, Ont.

CHAS. RANKIN, WYEBRIDGE, ONT.

REPORTER AND BREEDER OF
SHORTHORN CATTLE and OXFORD DOWN SHEEP.
 Head headed by Pride of Scotland (imp.).
FOR SALE—Females and bulls, of all ages, from noted Scotch families.

Shorthorns, Lincolns and Berkshires

Young stock of either sex for sale. Reasonable. For particulars apply to
 W. H. Ford, Maple Shade Farm, Dutton, Ont.

SHORTHORNS

Choice young bulls for sale, ready for service
 For particulars write to
 JOHN ELDER, Hensall Sta. & P. O., Ont.

SHORTHORNS FOR SALE

Both male and female, different ages. Prices very reasonable. For particulars write to
 CHAS. E. PORTER,
 Tottenham Sta., G. T. R. Lloydtown, Ont.

Shorthorns, Leicesters and Berkshires—1 yearling bull, bull calves, heifers, all ages, for sale; also young Berkshires and Leicesters. For particulars address
 E. JEFFS & SON, Bond Head P. O., Bradford and Beeton Stas., G. T. R.

Mr. John A. Govenlock, Forest, Ont., writes: Our herd of Herefords are looking well. We have a very fine lot of young bulls and females this season, bred from our prizewinning bull, Imperial.

Electric power is now being applied to the currying of horses in Chicago and New York. To the ceiling of the stable are secured two small dynamos. From each long, flexible tubes depend, and attached to each of these is a small brush buzzing around in a dizzying whirl. All the men have to do is to keep moving the brushes about, and with the invasion of each new portion of the animal's anatomy, dirt and dust are sent flying from the hair of the horse. Both men and animal seemed to be enjoying the experiment immensely. The device commends itself to grooms because of its saving in time over the hand currying. Expert hostlers say, it takes about twenty minutes to clean a horse with the ordinary currycomb, and about four with the electric brush. Horsemen say the revolving brush is a great benefit to the solid work horse, in that it causes the blood to circulate properly, oftentimes making the old-timer feel like a colt. "Why," declared one stableman, "I've seen a cart horse shy at his own shadow after an electric currying. And this one here"—stroked the flank of a pretty little trotter—"why, after an electric currying and a good rub-down, iron hoops can't hold her."

There are only two methods that we know of to get rid of weeds. One is to keep more or less sheep upon the farm and use them as weed destroyers. Sheep will devour every kind of weed at some season of the year except thistles and cockleburrs. They draw the line on these two. Sheep use weeds as a vermifuge, and as almost every weed has some medicinal property of which the instinct of the sheep tells it to avail itself, they can be used to very good effect, not in utterly destroying, but in keeping down weeds on the farm.

There is another method which can be used in conjunction with sheep, and if used properly the weed will not be so much of a burden as it is now. That method is good farming. By good farming we mean keeping the land very rich, well cultivated when in grain, heavily seeded with grasses when not in grain until the stand of grass becomes so thick that weeds have no place. A witty Scotch preacher said, speaking of morals, "If you keep the bushel full of wheat, I defy the devil to get any chaff into it." If you keep land rich, well set in grass, well manured, weeds will give little trouble.

BILL NYE AS A DAIRYMAN.

When I was young and used to roam around over the country, gathering watermelons by the light of the moon, I used to think I could milk anybody's cow; but I don't think so now. I do not milk the cow unless the sign is right, and it hasn't been right for a good many years. The last cow I tried to milk was a common cow, born in obscurity—kind of self-made cow. I remember her brow was low, but she wore her tail high; and she was haughty, oh, so haughty! I made a commonplace remark to her, one that is used in the very best society; one that need not give offense. I said "So"—and she "Soed." Then I told her to "Hjst," and she "Histed." But I thought she overdid it. She put too much expression to it. Just then I heard something crash through the window of the barn and fall with a thud—sickening thud—on the outside.

The neighbors came to see what it was that caused the noise. They found that I had done it in getting through the window. I asked the neighbors if the barn was still standing. They said it was. Then I asked them if the cow was injured much. They said she seemed quite robust. Then I requested them to go in and calm the cow a little, and see if they could get my plug hat off her horns. I am buying all my milk now of a milkman. I select a gentle milkman, who will not kick, and I feel as though I can trust him. Then, if he feels as though he can trust me, it's all right.

Symptoms of Nerve Disorders

Which Foretell the Approach of Nervous Prostration, Paralysis and Locomotor Ataxia.

Twitching of the nerves and muscles, sensitiveness to light, sound and motion, jerking of the limbs, sleeplessness, headache and indigestion—such are some of the symptoms of exhausted nerves. Because there is no acute pain, people do not always realize the seriousness of nervous diseases. They do not think of the helplessness of body and mind, which is the result of neglecting such ailments. Because of its extraordinary control over diseases of the nerves, Dr. Chase's Nerve Food has come to be considered the one great treatment for disorders of this nature. Not only does it revitalize the wasted nerve cells, but actually forms firm flesh and tissue, builds up the system and sends new vigor and vitality to every organ of the body. Dr. Chase's Nerve Food, 50 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto.

GREENGILL HERD
of high-class

SHORTHORNS

The choice breeding bull (imp.) Lord Roseberry, a Broadhooks, now heads the herd. Our present offering consists of three extra good young bulls, ready for service, from imp. cows; also 40 females bred or with calves at foot, either imp. or home-bred, all of the purest Scotch breeding.

R. MITCHELL & SONS,
Nelson P. O., Ont.; Burlington Junction Sta.

AN OPPORTUNITY

We have decided to offer for sale our imported SHOW and BREEDING BULL, Prime Favorite, bred by W. S. Marr; one junior yearling bull, one senior yearling heifer, one junior yearling heifer, two senior heifer calves. All in good show form. Also 20 yearling Shropshire rams.

W. G. PETTIT & SONS, Freeman, Ont.
Burlington Jct. Sta. Telephone in house.

R. A. & J. A. WATT

Salem P. O. Elora Station, C.P.R. and G.T.R. Telephone in house.
 Our herd of seventy-five head of Scotch-bred SHORTHORNS compares favorably with the best. Inspection and correspondence invited.

12 SHORTHORN BULLS

20 Cows and Heifers
 Good ones, Scotch-bred, at moderate prices. Catalogues on application.
 H. SMITH, Exeter, Huron Co., Ont.
 Station adjoins farm. Long-distance telephone in residence.

Belvoir Stock Farm

SHORTHORN BULLS, various ages; imported and home-bred, by imp. Gay Lothario, a Cruickshank Lavender.
 OLYDE STALLION, 2 years old; sire imp., dam a winner, grandam 1st Highland Show.

YORKSHIRES—Sows and boars, various ages; not akin. Three imp. boars and 6 imp. sows to select from, and their progeny. Prices right. Also honorable dealing.

RICHARD GIBSON, Delaware, Ont.

WM. D. DYER, COLUMBUS, ONT.
BREEDER OF
Shorthorns, Shropshires and Clydesdales

Correspondence solicited. Visitors welcome. Stations: Brooklin, G.T.R.; Myrtle, C. P. R.

THREE IMPORTED Shorthorn Bulls

Four imported cows in calf, home-bred cows, heifers and young bulls, all of straight Scotch families. Four imported Shropshire rams, eight imported ewes and any number of Shropshire and Cotswold ram and ewe lambs of the highest class, is what I can show you now, and all will be priced at moderate prices.

Robert Miller, Stouffville, Ont. Representative in America of Alfred Mansell & Co., Shrewsbury, England.

Shorthorns—Prince Banff (imp.)—45212—at head of herd. Young stock of either sex for sale. Visitors welcome.
 DAVID HILL, Staffa P. O., Ont.

By not inserting any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

I WILL CURE YOU FIRST THEN YOU PAY ME



Dr. S. GOLDBERG, The possessor of 14 Diplomas and certificates, who wants no money that he does not earn.

The physician who has not sufficient confidence in his ability to cure his patients first, and receive his pay afterwards, is not the man to inspire confidence in those who are in search of honest treatment.

My acceptance of a case for treatment is equivalent to a cure, because I never accept money for the value I have given the patient, but I expect to prove my worth and show positive and satisfactory results before I ask for the fee. So, should I fail to cure the case, the patient loses nothing, while when I cure him I have given what is worth much more than money—I have given him his health again. I am the very first specialist in the United States who has had sufficient confidence in his ability to say to the afflicted:

NOT ONE DOLLAR NEED BE PAID UNTIL CURED

There is no guess work, no experiment about my method. I am a known expert in my chosen specialties, and offer you the best and only the best treatment. When your life or your health is at stake, inferior treatment (which leaves after-effects worse than the disease itself), is dear at any price.

I Have 14 Diplomas and certificates from the various colleges and state boards of medical examiners which should be sufficient guarantees as to my standing and abilities. It makes no difference who has failed to cure you, it will be to your advantage to get my opinion of your case free of charge.

PHYSICAL DEBILITY

The Latest Method Treatment is a heaven-sent boon to nervous sufferers. There are scores and hundreds of persons suffering from severe nervous disorders resulting from overwork, hurry, worry, business and domestic cares, bereavements, dissipation, etc. To them life is one continual round of misery, while peace, comfort and happiness are impossible. They suffer from headache, loss of memory, mental depression, strange sensations, dullness, dizziness, restlessness, irritability, constant indescribable fear, foreboding, sleeplessness, weakness, trembling, heart palpitation, cold limbs, giter fatigue and exhaustion. In this class of cases almost immediate relief is afforded by my treatment. The use of narcotics and poisonous stupefying drugs is done away with, and permanent cures accomplished.

I Cure Nervous Debility, Varicocele, Stricture, Early Decay and Waste of Power, All Nervous, Chronic, Blood and Skin Diseases. X RAY EXAMINATION, ADVICE AND CONSULTATION FREE

HOME TREATMENT

If you are in or near the city you should apply for treatment in person, but if you live too far away, write me a full and unreserved history of your case. You will receive as careful, conscientious and painstaking attention as if you were in my office daily. As men in different parts of Canada and Mexico, as well as all over the United States, are being cured by my system of home treatment, I feel fully justified in claiming that it is the most perfect and successful system ever devised. All physicians coming to me for consultation over obstinate cases which they are occasionally called upon to treat will receive the usual courtesies of the profession. Medicines for Canadian patients shipped from Windsor, Ont., all duty and transportation charges prepaid.

DR. GOLDBERG, 208 Woodward Ave., Suite 435 Detroit, Mich.

Queenston Heights Shorthorns

Two bull calves, 6 and 3 months, by Derby (imp.) and from good milking dams. Bargains for quick sale. Also a few young cows and heifers. o

HUDSON USHER, Queenston, Ont.

A. EDWARD MEYER, Box 375, Sault Ste. Marie, Ont.

SCOTCH SHORTHORNS
a specialty. Herd bulls: Scottish Hero (imp.), a Shethin Rosemary; Lovely Prince, a Cruickshank Lovely. Correspondence solicited. Visitors welcome. Long-distance phone in house. o

Two Grand Scotch Bulls

One dark roan Missie, 11 months, by Aberdeen Hero. One light roan, 8 months, from imp. Marr Roan Lady cow and by imp. sire. Both bulls of choicest quality, at very reasonable prices. o

A. D. MCGUGAN, - Rodney, Ont.

BELMAR PARO SHORTHORNS

Bulls in service: Merryman, imp. (77263) =32075; Pride of Windsor, imp. (Vol. 50) =50071; Nonpareil Archer, imp. (31779) =45202. Our females have been carefully selected and are of the best Scotch breeding, many of them imported. Address correspondence to

PETER WHITE, JR., PEMBROKE, ONT.

FLETCHER SHORTHORNS

Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families. Among the really good sires which have been used are Spicy Robin 28559, winner of 3rd prize at Dominion Exhibition, Toronto, and Joy of Morning (imp.) 33070, winning 1st prize at same exhibition, 1904. Stock of either sires for sale. GEORGE D. FLETCHER, Binkham P.O., Ont. Erin shipping station, C. P. R. o

Shorthorn Bull—Provoost =37865—, 4 years old, in prime condition, sure and active; a grand stock bull. Will sell or exchange for another. RICHARD WILKIN, Springfield Stock Farm, o Harriston, Ont.

Ridgewood Stock Farm SCOTCH SHORTHORNS.

Present offerings: Elythesome Ruler =5236—, sire (imp.) Chief Ruler =45165—, dam (imp.) Missie 159th =34154—; young stock, either sex. R. C. ATTRILL, GODERICH, ONTARIO.

Breeder of Shorthorns, Shire and Hackney Horses.

SPRING VALLEY SHORTHORNS

Imp. Bapton Chancellor=40359—(78289) heads the herd. Imported and Canadian-bred stock of the leading Scotch families for sale at all times. Apply to EYLA BEOS, Ayr, Ont. o Ayr, C. P. R. Paris G. T. R.

Wm. Grainger & Son, Hawthorn Herd of DEEP-MILKING SHORTHORN HORSES. Aberdeen Hero (imp.) at head of herd. Two grand young bulls by Prince Misty =37864—. Also a few females. o Londeshore Sta. and P.O.

First-class Shorthorns—Young cows and heifers of fashionable breeding. Also Shropshire of different ages. Write for prices, etc., to T. J. T. OGLE, Bowmanville Sta., G. T. R. o Tyrone P. O.

J. A. Lattimer, Box 16, Woodstock, Ont.

High-class SCOTCH SHORTHORNS

Choice females for sale at all times. Inspection of our herd is invited. o

THOS. MERCER, Box Markdale, Ont.

Breeder and importer of CLYDESDALE HORSES, SHORTHORN CATTLE and YORKSHIRE PIGS.

Car lots a specialty. o

YOUNG SHORTHORNS

for sale, either sex, got by that grand Golden Drop show bull, Kinellar Stamp (imp.). Inquiries cheerfully answered. o

SOLOMON SWANTZ, Mayville P. O., Plum Grove Stock Farm, o Baden Sta.

ELMHEDGE SCOTCH SHORTHORNS

Stamford, Minas, Nonpareil, Crimson Flowers, Marr Floras and Lavinas. Our herd will stand comparison with any. We reserve nothing: 45 head of both sexes, all ages, for sale. o James Bowes, Strathairn P.O., Weaford Ont.

SCOTCH-TOPPED SHORTHORNS

Young stock of both sexes for sale; sired by Scottish Baron 40421 (imp.). o H. GOLDING & SONS, Thamesford, Ont. Stations, Thamesford C. P. R.; Ingersoll, G. T. R.

GOSSIP.

In an address before the meeting of the South Dakota Sheep-breeders recently, Mr. Frank Cronk said: "In buying your ram get one as nearly perfect as possible. Don't be afraid to spend a few dollars in finding him. When I started in the sheep business I wrote a noted Canadian breeder, describing the ram I would like to buy. He replied: 'If I had as good a ram as that I would use him myself.'"

Here is an explanation of the old horseshoe superstition: "St. Dunstan was a skilled farrier. One day while at work in his forge, the devil entered in disguise and requested Duncan to shoe his 'single hoof.' The saint, although he recognized his malign customer, acceded, but caused him so much pain during the operation that Satan begged him to desist. This St. Dunstan did, but only after he had made the evil one promise that neither he nor any of the lesser evil spirits, his servants, would ever molest the inmates of a house where the horseshoe was displayed."

Editor "Farmer's Advocate" writes:

Animals generally succumb to blackleg in two or three days, although they sometimes die within 8 to 10 hours. You will see from this that it depends upon the virulence of the disease in different localities, and it is practically impossible to give any definite information regarding the time in which the animal may be infected before any outward symptoms appear. As the germ travels very rapidly the symptoms generally develop within one to three days after infection. PASTEUR VACCINE CO. Chicago, Ill.

The World's Fair of this year, the Lewis and Clark Centennial Exposition, now in progress at Portland, Oregon, opened June 1st and to close Oct. 15th, celebrates the 100th anniversary of the exploration of the Oregon country by an expedition commanded by Captains Meriwether Lewis and William Clark, and planned by President Jefferson. The Oregon country, which comprised what are now the States of Oregon, Washington, Idaho, and parts of Montana and Wyoming, was the only acquisition of territory made by the United States by discovery. It celebrates the centennial of the peaceful acquisition of a wilderness that has yielded up its riches generously as a reward for the unceasing toil of the pioneer and the home-builder.

DAIRYING AT THE WESTERN FAIR. What London's Great Fair is Doing to Promote the Dairying Interests of Canada.

The great dairying interests of the Dominion of Canada have their headquarters in the district of which London is the center.

In Oxford, Perth, Middlesex and adjacent counties live the dairymen who have built up a world-wide reputation for Canadian butter and cheese.

These are the men who have also largely assisted in making the Western Fair one of Canada's great institutions. Starting thirty-eight years ago in a very unpretentious way, this exhibition has gone steadily forward, and is the acknowledged forerunner of the larger Canadian fall exhibitions.

Its cattle and dairy classes are always well filled, and the most up-to-date facilities for exhibiting cattle and dairy produce and supplies have been provided.

The cattle building is so arranged that visitors have the fullest opportunity of seeing and judging the individual animals and herds.

Last year a new dairy building was erected at a cost of more than \$10,000, and has been fitted with the latest refrigerating devices, so that butter and cheese can be shown in the very best form. In this building, during the fair, lectures will be given daily by Government experts.

The prize-list is a very generous one, and the specials exceed those of any previous year.

The secretary, Mr. John A. Nelles, will be pleased to furnish prize-lists, or to give any information desired, if you ask him

Sharples TUBULAR CREAM SEPARATORS

WHICH DO YOU WANT?

Tubular or Bucket Bowl?
Simple Bowl or Complicated?
Izzers or Hasbeens?
Wash Low Can or Head High Can?
Self Oiling or Oil Yourself?
Wash 3 Minutes or Wash Thirty?
All the Butter or Most All?
Best Butter or Medium Butter?

Tubulars are different, very different. Just one Tubular—the Sharples. All others make bucket bowls—can't make Tubulars because they are patented. Ask for catalog Q-193.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.
TORONTO, CAN. CHICAGO, ILL.

LAKEVIEW SHORTHORNS. Spicy King (imp.) at head of herd. Young bulls for sale reasonably. For prices, etc., apply to

THOS. ALLIN & BROS., OSHAWA, ONT.

Shorthorns—Choice young bulls for sale, ready for service. A few young cows safe in calf; also bull calves. o

Wm. E. HERRINGTON, Buxley P. O., Ont.

BYRONVILLE Scotch-Topped Shorthorns

Young stock of either sex by imp. sire at reasonable prices. For particulars write to

DONALD McQUEEN, Landerkin P. O., Mount Forest Sta. and Telegraph. o

WILLOW BANK STOCK FARM

Established 1838

Large and old-established herd of SHORTHORN HORSES. Good milking qualities. Splendid offering of either sex Scotch and Scotch-topped. o JAMES DOUGLAS, Gallop, Ont.

DON'T WAIT BE UP-TO-DATE

And buy some choice young Jerseys. Two bulls and a number of A No. 1 cows and heifers from great milkers. Also colic pups;

W. W. EVERITT, Dun-odin Park Farm, Box 552, Chatham, Ont. o

Brampton Jersey Herd

We have now for immediate sale ten Bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars, address

H. E. BULL'S SON, Phone 61, Brampton, Ont.

Neither Lea Ayrshires—Young stock of either sex, from deep-milking families, for sale. Two thoroughly-bred bulls at head of herd. Correspondence and inspection invited. o

T. D. McALLUM, Danville, Ont.

Burnside Ayrshires—One 2-year-old and two yearling bulls; also females of all ages, just imported June 1st, Scotch prizewinners; also a number of imp. and home-bred cows, due in Aug. and Sept. Order a good calf from heavy-milking dams. R. E. HESS, Burnside Farm, Howick, Que. o

Springhill Farm Ayrshires

FOR SALE: One young bull fit for service; also a few bull calves and females, all ages. o

Robt. Hunter & Sons, Maxville, Ont. Maxville, C. A. R., and Apple Hill, C. P. R.

SUNNYSIDE AYRSHIRES

Are now offering Leader of Meadow Bank, the Pan-American winner, and three young bulls, from 1 year to 2 mos. old; also cows and heifers, all ages. Prices right. Address

JOHN W. LUSKAN, Allan's Corners, Que. o

HIGH-CLASS AYRSHIRE CATTLE

For Sale: Both sexes; bulls and heifer calves from 2 to 8 months old; cows and heifers all ages. Famous prizewinners bred from this herd, including Tom Brown and White Floss, sweetstake prizewinners at Chicago. DAVID BERNING & SON, "Glanhurst," o Williamstown, Ont.

Springbrook Ayrshires

are heavy milkers and high testers. For sale: Three bulls, 9 months old; 2 bull calves, dropped in January last; also females of all ages. o

W. F. STEPHEN, Huntingdon, Que. P. O. box 191. o

MAPLE CREST DAIRY AND STOCK FARM

Breeders of Clydesdale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times. o

R. REID & CO., Elmensburg, Ont. Farm adjacent Central Experimental Farm.

Ayrshire Bulls for Sale—One 2-year-old, one 1-year-old, one 10 months old. All bred from long-teated, deep milking stock. Also Shropshire sheep, Berkshire pigs, B. Oringtons and B. P. Rocks. Address: o

A. R. YUIILL, Carleton Place, Ont.

MAPLE PARK FARM HOLSTEINS

The great show cow, Aggie Tenson, twice winner at Toronto (due Aug. 20th), for sale. Price, \$50. Great bargain. o

S. MAUKLIN, Prop., Streetsville, Ont.



**MILBURN'S
HEART AND NERVE
PILLS**

Have Restored Thousands of Canadian Women to Health and Strength.

There is no need for so many women to suffer pain and weakness, nervousness, sleeplessness, anemia, faint and dizzy spells and the numerous troubles which render the life of woman a round of sickness and suffering.

Young girls budding into womanhood, who suffer with pains and headaches, and whose faces is pale and the blood watery, will find Milburn's Heart and Nerve Pills help them greatly during this period.

Women at the change of life, who are nervous, subject to hot flashes, feeling of pins and needles, palpitation of the heart, etc., are tired over the trying time of their life by the use of this wonderful remedy.

It has a wonderful effect on a woman's system, makes pains and aches vanish, brings color to the pale cheek and sparkle to the eye.

They build up the system, renew lost vitality, improve the appetite, make rich, red blood and dispel that weak, tired, listless, no-ambition feeling.

50c. per box, or 3 for \$1.50
ALL DEALERS.

The T. Milburn Co., Limited, Toronto, Ont.

**Hay Fever
and Asthma**

Cured to Stay Cured

Attacks stopped permanently. Cause removed. Breathing organs and nervous system restored. Symptoms never return. No medicine needed afterwards. 21 years of success treating Asthma and Hay Fever. \$3.00 per bottle. Book \$1.00 Free. Very interesting. Write P. HAROLD HAYES, Buffalo, N.Y.

We want you to remember that

HOLSTEIN COWS

owned by me (formerly at Brookbank Stock Farm, Currie's) won all sorts of honors in milk tests at Toronto, Ottawa and Guelph (5 years), and among many other prizes in the show-ring, including sweepstakes at Toronto and Pan-American in competition with the best in the world. Our herd is always improving. We have now 6 cows whose official test average 22.4 lbs. butter in 7 days, 10 cows whose official test average 20.4 lbs. butter in 7 days, 15 3 yrs. and up whose official test average 19.0 lbs. butter in 7 days, 10 (3 and 4 yrs.) whose official test average 17 lbs. butter in 7 days, 10 heifers (average age 26 mos.) whose official test average 11 lbs. butter in 7 days. That is our idea of a dairy herd, and the kind of stock I handle. A few good young bulls, 1 to 18 mos., for sale.

GEO. RICH,
Annandale Stock Farm, Tilsonburg, Ont.

Lyndale Holsteins

Over 50 head to choose from. A number of young cows and heifers for sale. Six young bulls from 8 to 11 months old.

BROWN BROS., Lyn, Ont.

WOODBINE HOLSTEINS

Herd headed by Sir Mechthilde Poesh, absolutely the best official-backed sire in Canada. Dam Ianthe Jewel Mechthilde, 25.8 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Aaltje Poesh 4th, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale.

Ayr, C. P. R. A. Kennedy, Ayr, Ont.
Paris, G. T. R.

Holstein Bulls—MAPLE GROVE still has a few richly-bred Bulls of serviceable ages, which are offered at prices that nobody can afford to use a scrub. For particulars address, H. Bollert, Cassel, Ont. o

in the Advocate

GOSSIP.

This suggestion to owners of cribbing or wind-sucking horses appeared in the Live-stock World: Nail a rough sheep-skin about eight inches wide the length of the manger, with the rough, woolly side out, and sprinkle it thoroughly with cayenne pepper, renewing it occasionally. It wouldn't cost much to try anyway.

Parties thinking of the new Province of Alberta as a field for securing cheap farming land of the best quality should look up the advertisement in this paper by the Edmonton Board of Trade. A letter or post card to the secretary will bring information that may be helpful to the enquirer. The prospects for farming in that district are bright with promise, and thousands of Eastern men are doing well there.

Volume II. of the South Devon Flock-book has, through the courtesy of the secretary and editor, been received at this office. It is a substantial and handsomely-bound volume of 155 pages, containing pedigrees of rams numbering from 906 to 1,072, and a register of flocks with their history, numbering from 1 to 182, also the constitution and by-laws of the Society, and a list of its members, numbering over 200, showing that the breed is a popular one in Great Britain, while demand for them for export to the colonies is steadily increasing. The address of the Secretary of the Association is Mr. W. W. Chapman, Room 4, Mowbray House, Norfolk Street, Strand, London, England.

That there is a steady demand for wool is shown in the cabled announcement from London about wool sales, in which it is stated that wool reshipped from Boston was sold at an advance, which indicates that wool is needed by the manufacturers very much just now, especially by the English manufacturers who are now making a large amount of blankets and woollen clothing for the Japanese for use in Manchuria. "It is a sort of distribution," said Senator Power, of Montana. "These people shipped the wool to Boston in anticipation of selling it, and then as the London market opened and the demand became evident reshipped it to England at a good profit. It is a sort of a distribution of wool supply that means wool is in no little demand."

CLYDESDALES AT THE HIGHLAND.

The display of Clydesdales at the Highland and Agricultural Society's Show at Glasgow, the first week in July, has seldom been equalled. In a large class of aged horses, Mr. W. S. Park was first with Royal Chattan, who was also awarded the male championship; Mr. Wm. Dunlop's Baron of Buchlyvie was second; Mr. Geo. Alston's Revalanto was third, and Messrs. Montgomery's Acme, fourth. In three-year-old stallions, Mr. Kilpatrick's Perpetual Motion, by Hiawatha, was first; Montgomery's Silver Crest, by Acme, was second, and Mr. Wm. Clark's Dunure, by Sylvander, was third; the fourth and fifth were sons of Hiawatha. In two-year-olds, Messrs. Montgomery's Baron Fyvie, the champion of the Royal, was first. Mr. Wm. Clark's Dunnydeer, a son of Sir Hugo, was second, and Allandale, by the same sire, was third. In yearling colts, a son of Baron's Pride was first; a son of Baronson was second, and the third was by Baron of Brichlyvie. In the brood mare class, Jas. Boyd's Topsy Pride, by Baron's Pride, led, followed by Mr. S. Mitchell's Royal Ruby as second, and Mr. J. E. Kerr's Chester Princess as third. In three-year-old fillies, Mr. Jas. Gray's Lady Madge, by Balmedie Queen's Guard, was an outstanding winner; next came Mr. Robt. Chapman's Winsome Baroness, by Baron's Pride, and Sir J. Gilmour's Montrave Rosalind was third. The two-year-old class was led by Mr. Wm. Park's Rosadora by Marmion, who was also female champion; Mr. J. E. Kerr's Veronique, by Montrave Ronald, was a strong second, and the third was Mr. Stephen Mitchell's 250-guinea purchase, Beatrice, by Baron's Pride. In the yearling class, two daughters of Baron's Pride stood first and second, and the third was by Royal Baron, the fourth by Baron's Pride, and the fifth by Baron of Buchlyvie.

BERKSHIRES

Imported and Canadian-bred

H. M. VANDERLIP, Cainsville

on T. H. & B. and B. & G. division of Grand Trunk. Telephone and Telegraph, Cainsville, Ont.

HILLOREST HERD OF ENGLISH BERKSHIRES
JOHN LAHMER, VINE P. O.

Now is the time to book your orders for young pigs for May and June delivery. A few good young boars on hand.

Maple Glen Holsteins—Select bull calves from producing dams now for sale. Herd now includes one of the best females ever imported from Holland, a cow bred to Canary Mercedes' Son, and one to Mercedes Julip Pietertje Paul. Secure the best. O. C. J. GILROY & SON, Glen Snel, Ont.

IMPERIAL STOCK FARM HOLSTEINS.
For Sale: Four bull calves, 6 months old, whose sire's three nearest dams average 21.70 lbs. of butter in 7 days. Also young bulls by the sire of first-prize herd at London.
W. H. SIMMONS, New Durham, Ont.

BARREN COW CURE
makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from
L. F. SMILEY, Morrisburg, Ont.

High-class Registered Holsteins. Young stock of either sex for sale. Prices reasonable. Apply to:
THOS. CARLAW & SON,
Campbellford Stn. o Warkworth P. O.

Hilton Stock Farm Holsteins, Cotswolds and Tamworths.
Present offering: One young bull. A few young boars. One good one fit for service. At very reasonable prices if taken soon. For particulars write to
R. O. MORROW, Hilton P. O., Brighton Tel. & Stn.

DORSET HORN SHEEP and SCOTCH SHORTHORNS

The latter representing the Nonparall, Miss Ramsden, Missie and Gloster families exclusively, and the former comprising more Royal winners and more St. Louis prizewinners than any other flock in the world. Stock for sale always on hand.

John A. McGillivray, North Toronto, Ont.

FAIRVIEW SHROPSHIRE
Have retired from showing at fall fairs. 2 years and over show ewes ONLY now offered. For 23 years won more firsts than all competitors. At St. Louis won more than any three flocks. At last International won 9 of 14 firsts offered. Including champion ram and reserve to same. All making the greatest winnings on record. Have now the best breeding stock ever offered. Who want good ones to strengthen their flocks?
JOHN CAMPBELL,
Fairview Farm, o Woodville, Ontario

"BROAD LEA OXFORDS"

Present offerings are: Ram and ewe lambs out of imported ram. One imported three-year-old ram, which has proved to be an excellent sire, and which I have used myself for the last two seasons. Also a few choice Yorkshire pigs of good bacon type.

W. H. ARKELL, Teeswater, Ont.
R. R. Stns.—Mildmay, G. T. R.; Teeswater, C. P. R.

Farnham Oxford Downs

We are offering 70 ranch rams, 30 flock headers, some of them imported, being St. Louis winners. Also 60 yearling ewes and 50 ram and ewe lambs.

HENRY ARKELL & SON,
Arkell, Ont.

WOOL

E. T. CARTER & CO., Toronto.

Oxford Down Sheep, Shorthorn Cattle Yorkshire Hogs.

Present offering: Lambs of either sex. For prices, etc., write to JOHN COUSINS & SONS, Buena Vista Farm, o Harrison, Ont.

We are Importing Shropshires

If you want any sheep brought out, write us. LLOYD-JONES BROS., Burford, Ont.

Shropshires—Try me for Shropshires this season. Highest honors awarded at Winter Fair, Guelph, 1904, on live and dressed sheep.
o ABRAHAM RUDELL, Hespeler P. O., Ont.

DORSETS and YORKSHIRES

Can supply stock of various ages of both sexes, at reasonable prices, quality considered.
E. DYMENT, Copetown, Ont.
Gilead's Spring Farm, o Wentworth Co.

GLENBURN HERD OF YORKSHIRES

winners of gold medal three years in succession, offers for sale until New Year's a number of fine young sows and boars, from 3 to 4 months old, at \$12 each.

DAVID BARR, JR., Box 3, Renfrew P. O.

LARGE ENGLISH YORKSHIRES



Pigs of the most approved type, of both sexes, all ages, for sale at all times. We have more imported animals in our herd than all other breeders in the large shows this year than all other breeders combined. We won every first but one and all Silver medals and Bacon prizes at Toronto and London and at St. Louis we furnished all the first-prize hogs in the breeding classes except two; also supplied both champions and grand champions. Prices reasonable.
D. C. PLATT & SON
MILLGROVE, ONT.

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.

LARGE ENGLISH BERKSHIRES

A number of nice young sows, bred to my imported boars. Also a few boars ready for service. Have some nice things 3, 4 and 5 months old, of both sexes. My herd won all the champion prizes at Dominion Exhibition in 1904.
WILLIAM WILSON, Box 191, Brampton, Ont.

Present Offering

A few choice BERKSHIRE SOWS due for farrow first part of September; also some excellent YORKSHIRE BOARS and SOWS two to four months old. Our stock are of the highest standard, and have given our customers the utmost satisfaction. We take stock back if not satisfactory, paying all express charges. We can supply you something good. Write o S. D. CRANDALL & SONS, Cherry Valley, Ont.

ENGLISH BERKSHIRES.

See Cross the Duchess of Devonshire's Berkshire Herd. Winners of 103 awards in 1904, including champion against all breeds in carcass competition, London Fat Stock Show. The breeding sows are sired by the champion boar, Baron Kitchener 408. Folegate Denny, Folegate Dame, Folegate Dawn—winners in England, Canada and United States—were exported from this herd. For prices and particulars apply to: o Compton Estate Office, Eastbourne, or to F. A. Walling, 7 Cavendish Cottages, Eastbourne, Sussex, England.

For Sale—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigree and safe delivery guaranteed. Address: o E. D. GEORGE, Putnam, Ont.

Owing to unforeseen circumstances, I have been unable to supply customers for some time. Write me if you want any. For sale, cheap, pure-bred Berkshire boar, registered. F. S. YERRELL, Eshton Farm, Cookshire, Que.

YORKSHIRES

for sale, all ages, from imported prizewinning stock, of both sexes. Pairs not akin. o GEO. W. SMITH, Haysville P. O., Ont.

TAMWORTHS & HOLSTEINS

I have for quick sale a choice lot of spring pigs from prizewinning sows, a few sows bred and ready to breed, and my stock hog Elmdale Ned 2508. Also two cows and a choice lot of bull calves from one to eight months old.

BERTRAM HOSKIN,
Grafton Stn., G. T. R. The Gully P. O.

TAMWORTHS

2 fine boars fit for service; also a choice lot of both sexes from 2 to 4 months old, of good breeding stock. Prices reasonable.
Glenaltn Farm, Jas. Dickson, Orono, Ont.

NEWCASTLE HERD OF Tamworth Swine and Shorthorn Cattle

We have for quick sale some 80 head of Tamworths, consisting of boars ready for service, young sows bred and ready to breed. A whole lot of beauties, from 6 weeks to 3 and 4 months old, both sexes. Pairs not akin. These are nearly all the direct get of Obiwill's Choice, our sweepstakes boar at Toronto for several years. Also a beautiful red Shorthorn bull calf, ready for service. Several calves of both sexes, and a number of heifers about ready to breed, and others well forward in calf. All at moderate prices. Daily mail at our door. All correspondence answered promptly. Write for what you want—we can generally supply you.
COLWILL BROS., NEWCASTLE, ONT.

QUESTIONS AND ANSWERS.
Miscellaneous.

GERMINATION OF MUSTARD SEED.

Will wild mustard seed germinate the same season it ripens if the ground is stirred up shallow and fine?

Ans.—In some experiments by the North Dakota Station to test the germinating conditions of various weed seeds, many kinds were sown October 17th, 1899, and of these, wild mustard seed was practically the only kind that germinated the same year it was grown.

DAMAGE TO COLT.

A and B's farms abut. Both have barbed wire fence. A has bush next the line; B has crop. B felled a tree last winter. It fell on B's part of fence into A's bush. B cut the wire to make the tree into timber, after which he sold his farm to C, but did not notify C that the fence was down. A's year-old colt got through, and C's dog chased it in the wire. The veterinary has been attending it now for two months. Who is to pay the damage?

Ans.—It does not appear that A is in a position to recover damages by action against either B or C.

SUCCESSION DUTY.

1. What amount must a person be worth before the Government can take a percentage, and what per cent.?

2. Can he not will it to family to prevent Government from claiming it, supposing he is worth more than amount they state?

Ans.—1. Ten thousand dollars, and the percentage is graded from 5 down. 2. No; that is to say, the legacies to members of his family may be exempt from succession duty, but if not within the exemptions provided by statute the payment of the duties cannot be evaded as suggested.

DAMP CELLAR.

We have a cemented cellar bottom, and to all appearance it ought to be dry, but it is entirely the opposite. We close it up in the day time and open it up at night, and still the cellar just drips with moisture. We had a furnace put in last fall, and both cold-air and hot-air pipes are covered with moisture a great part of time. We are afraid the pipes will soon rust out.

Ans.—Without knowing the circumstances fully, we can only venture an opinion. We incline to think the drainage must be bad, and that the moisture soaks through the walls and floor, saturating the air in the cellar. Some years ago, the writer was troubled with excessive dampness in a gravel-bottomed cellar. Cementing the floor in this case largely overcame the difficulty. It must be remembered that dampness will penetrate even a cement floor, and still more readily a stone wall, especially if poorly constructed, and careful pointing will not make such a wall impervious. Care in the disposal of surface water so as to keep it away from the house, and thorough foundation drainage, are the only remedies we can suggest. We assume that "Subscriber" has a drain away from his cellar.

GOOD AGRICULTURAL COUNTIES.

1. How do the western counties of the Province of Ontario compare with the eastern from an agricultural standpoint?

2. What difference, if any, as to climate, rainfall, etc.?

3. Are the farmers in the western counties, as a rule, more prosperous than those in the eastern part of the Province?

4. Which counties in Western Ontario are generally recognized as best for grain and stock-raising.

Ans.—1. The western counties of Ontario certainly compare favorably with those in the east. In nearly every county you will find farmers who call theirs the "garden of Canada."

2. In the extreme east, there is probably a heavier snowfall. As to rainfall, you could ascertain that by writing Mr. R. F. Stupart, meteorological office, Toronto, Ont.

3. We would not like to say which are the more prosperous. In either case, it depends largely upon the intelligence and industry with which their operations are conducted.

4. Such counties as Huron, Oxford, Middlesex, Perth, Lambton, Kent, Elgin, Wellington, Waterloo, Peel and Norfolk all rank high for general agriculture, but there are sections in others which would probably not take second place to those mentioned.

2 Tons in 1 Hour with 1 Good Horse
4 Strokes to 1 Revolution Automatic Feed and Hopper
Horse Power and Belt Power Combined, at Price of One,
Twice the Capacity of other Balers at half the price, is
Four to One which Equals Our
"Big 4"



We also make Hand Feed Presses 2 1/2 Strokes to 1 Revolution; Saw Mills; Shingle Mills; Planers; Edgers; Lath Mills; Corn Mills; Water Wheels, etc. Write for Catalogue.
DeLoach Mill Manufacturing Co., Box 1487 Atlanta, Ga.

U. S. Cream Separators
Which hold World's Record for Close Skimming.
A very short use of these cheap "job-lot" machines proves it costs so much to keep them "going" during their short life that they're not "cheap"—even as a gift—(not to mention their poor results.) Time has conclusively proven that U. S. Separators
ARE LEAST EXPENSIVE
because the cost to maintain them is so small in comparison with their long and unequalled service.

FOUR DU LAC, Wis., September 23, 1904.
"To whom it may concern:—I have used one of your U. S. Separators for the past twelve years and it has given the very best satisfaction. I have paid 75 cents for extras since getting the machine. I cannot recommend the U. S. too highly.—J. BALSON."
Our handsome Dairy Separator catalogue tells all about the splendid construction that makes possible such testimony as this. Get it now, it's free, and you'll find it interesting, we know.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.
408 Prompt Deliveries, from 18 Distributing Warehouses throughout United States and Canada

PAINTING METAL ROOF.
A Hastings County subscriber has asked us how often metal shingles require painting and the cost of same. The inquiry was in reference to the metal roofing which he had seen advertised in our columns at \$2.55 per square. His question was referred to the Pedlar Metal Roofing Co., of Oshawa, Ont., from whose reply we quote: "In the case of the steel shingle at \$2.55 per square, the roof would necessarily have to be kept painted. This is a small trouble and expense, as one gallon of red oxide paint will cover a surface of 800 square feet of metal, and needs this coat only once in every six or eight years." The red oxide paint can be purchased in gallon tins for about \$1.25, somewhat lower prices for larger quantities.

RAPE FOR WINTER FEED.
Is there any such thing as cutting rape and curing it for winter feed? If so, when should it be cut, and how cured? Rape was sown about 24th of May, and is 18 inches high.
J. S. Durham Co., Ont.

Ans.—Rape is not suitable for curing as dry feed, but Wm. Rennie, in "Successful Farming," speaks of keeping rape for early winter feeding by cutting about November 20th with an ordinary scythe, forking into heaps and carting daily to the stable as required. When frozen, he adds, leave it in the stable to thaw. This method of handling would apply to crop sown the last of June or first of July. Yours having been sown so early, the best thing you can do with any unused surplus is to plow it under.

If the pig troughs or watering tank leaks rub some cement into the cracks. Cement makes good corking, and they say the time is coming when the whole tank will be made of it.

Free to Weak Men



IF YOU are weak I want to help you. I want to show you the way to future happiness, and I offer you free my beautiful book, illustrated with photographs of fully developed men, showing how many begin to break down as a result of overwork and dissipation, and how they recover the vigorous fire of youth in a few weeks' application of electricity. This book contains a lot of information which explains many points you want to know.

It is written in plain language, and the illustrations are of the highest type of art, showing the best developed specimens of manly strength. No man who feels any doubt as to his physical powers should be without this book. I send it closely sealed, without marks, free, if you will send the coupon below.

DR. McLAUGHLIN'S ELECTRIC BELT

pears glowing, exhilarating vitality into you while you sleep; it rejuvenates, animates sluggish circulation, stimulates the brain to activity, and fills the body with life and ambition and endurance. In one day's use it will make you feel as if born anew. It furnishes the motive power that runs through your body and quickly banishes pain.

No matter what ails you, there is a cure for you in Nature's remedy—Electricity. The greatest cures on record have been performed by this famous Belt, and it is recognized to-day as the greatest remedial agent known to mankind. It cures every form of weakness, restores the fire and vigor of youth, cures all forms of Nervous Diseases, Kidney and Bladder Troubles, Rheumatism, Sciatica, Varicocele, Lumbago, Backache, and many other complaints, after every other known system of medical treatment has failed.

READ WHAT THE CURED SAY:

"I am very much pleased with your Belt, and think it is a grand remedy. I feel well in every way and shall always recommend it."—CHRISTOPHER WILLIAMS, Cranbrook, B.C.

"The Belt I purchased from you in 1901 has given me lasting benefits, and I have never felt better in all my life than I have since wearing your Belt."—HENRY HOFFMAN, Berlin, Ont.

I HAVE AN ELECTRIC BELT THAT DOES CURE, and I am offering it to you in such a way that you take no chances whatever. Give me your name and address, with a statement of your case, and I will at once arrange a Belt suitable for your case, and

WEAR IT UNTIL CURED AND PAY ME WHEN THE WORK IS DONE.

FREE BOOK.
Write me to-day for my beautifully illustrated book, with cut showing how my Belt is applied, and lots of good reading for men who want to be "The Noblest Work of God," A MAN. Enclose this coupon and I will send this book, sealed, free.

DR. M. S. McLAUGHLIN, 130 Yonge Street, Toronto, Can.
Dear Sir—Please forward me one of your Books, as advertised.

Name

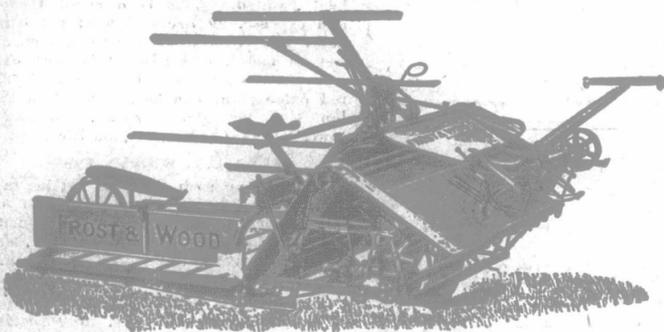
Address

Office hours—9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

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

FROST & WOOD BINDER FACTS

When considering the purchase of a New Binder, the intelligent farmer of to-day wants to have before him Reasons and Facts. The Reasons we give you in our Catalogue "F" are Facts, which have been demonstrated time and again by our customers.



FROST & WOOD NO. 3 BINDER

There are many good points about the No. 3 which lack of space prevents us from describing. If you send for our catalogue, you will find them all contained therein. Here is one:

The Automatic Force Feed Principle—The Third Roller on the Upper Elevator deflects the straw as it comes up, and causes the Lower Rollers to get a firmer hold on the straw. This principle allows of a greater amount of grain to go to the packers, and sends it there in a better shape for tying.

Write now for our Catalogue "F."

The Frost & Wood Company
LIMITED

Head Office
and Works:
Smith's Falls, Ont.

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SAFE-LOCK SHINGLES

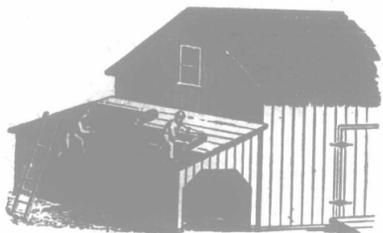
make a perfect roofing for HOUSES, BARNs, STORES, etc. Weather-proof, ornamental, lasting in quality, protect from fire and lightning.

If people would realize the danger in using wooden shingles, and making fire-traps of their buildings, they would use exclusively Galvanized "SAFE-LOCK" Shingles. They are easily applied; add to the handsome appearance of any building; keep rainwater clean, as no dust adheres to them; should easily last fifty years, without any painting or attention, as they have no parts to get out of repair, and interlock each other on all four sides.

They protect from lightning, and give their owners a contented mind, which makes up for the difference in first cost as compared with wooden shingles. In the long run they are the cheapest roofing sold.

Send us rafter length and width, for estimate, and we will make you an interesting proposition. Catalogues mailed free and samples sent by express, you paying the express charges, which will be allowed on first purchase.

The Metal Shingle and Siding Co., Limited
Preston, Ontario
Manufacturers of all kinds of Metal Roofing, Corrugated Sheets, Siding, Ceilings, Ventilators, Tanks, Stanchions, Watering Bowls, etc.



Mica Roofing

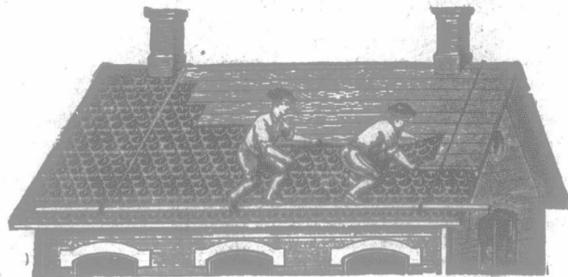
For steep or flat roofs, water-proof, fireproof, easily laid, cheaper than other roofing. Send stamp for sample and mention this paper.

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At \$2.00 and \$2.55 per 100 Square Feet



Painted red on both sides. Most durable and economical covering for Roofing or Siding for Residences, House, Barns, Elevators, Stores, Churches, Poultry Houses, Crib, etc. Easier to lay and will last longer than any other covering. Cheaper than wood shingles or slate. No experience necessary. A hammer and snips are the only tools required. It is semi-hardened high-grade steel. Brick or Stone Siding at \$2.00 per 100 Square Feet. Pedlar's Patent Steel Shingles at \$2.55 per 100 Square Feet. Also Corrugated Iron, Painted or Galvanized, in sheets 96 inches long. Beaded and Embossed Ceilings. Crimped Roofing. 2 000 designs of Roofing, Siding and Ceilings in all grades. Thousands of buildings through the Dominion covered with our Sheet Metal Goods, making them

FIRE, WATER AND LIGHTNING PROOF.

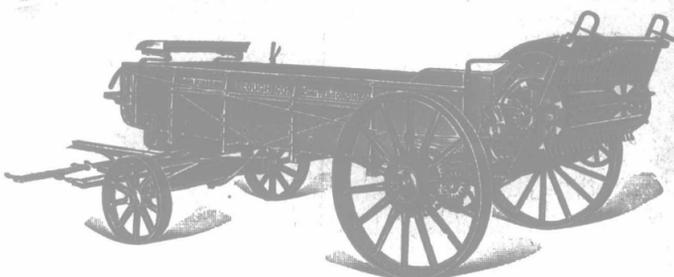
Send in your order for as many squares (10x10 feet) as you require to cover your new or old building. The very best roofing for this climate. We can supply Hare Trough, all sizes, Corrugated or Plain Round, Conductor Pipes, elbows, Elbows, Spikes, Tubes.

All goods shipped day after order is received. We are the largest concern of the kind under the British flag. Established 1861. Capital invested \$150,000.00.

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Write Your Nearest Office.

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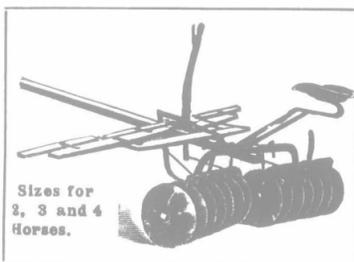
Saves time, labor and manure—therefore saves you money.

Spreads all kinds of manure and commercial fertilizer, and does it WELL. Write for prices and see our catalogue before buying.

Complete satisfaction guaranteed, or no sale.

THE WILKINSON PLOUGH CO., Limited, - Toronto, Canada.

THE BISSELL DISK HARROW



Sizes for 2, 3 and 4 Horses.

embodies SIMPLICITY, combined with great strength and efficiency. These are features followed through the entire construction of the BISSELL DISK HARROW. The FRAME locks to the gangs, or sections, with a simple part turn, and can be put together or detached in an instant.

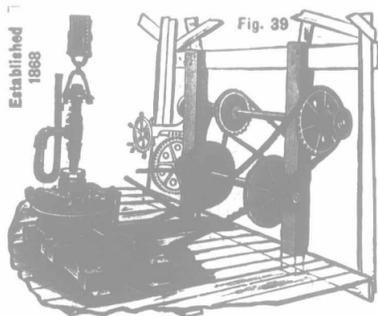
The team hitch is well back near their work.

Two, Three or Four horses can be used.

Clod Cleaner Bars between the plates keep out all sods or trash, while chisel-shaped Blades clean the cutting edges. These are only some of the features of the BISSELL DISK. Simple, strong, good. Specially adapted for preparing root ground and for summer-fallow work.

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T. E. BISSELL, MANUFACTURER, ELORA, ONTARIO.
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Established 1868

Fig. 39

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Any Diameter, Any Depth, for Water, Oil, Coal or Mineral Prospecting.

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