

H. H. Gridale June 15, 02  
Exp. Farm.

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED  
FOUNDED 1886

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

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## EDITORIAL.

### Needs of the Toronto Live Stock Market.

The constantly-growing importance and expansion of the live-stock industry in Canada unquestionably requires improved market facilities at home and abroad. Commendable effort and progress is being made in providing the means of reaching and placing upon the British markets the live-stock products of the Dominion, but our home markets for the display and disposal of live animals and the preparation and distribution of dressed meats for the home and export trade have been sadly neglected, and are very far from being creditable to the country, and entirely inadequate to the requirements of the trade. This statement applies especially to the Province of Ontario, and to the market and trade at such an important center as Toronto, where the annual receipts of cattle have increased in the last ten years, according to the records of the Western Cattle Market of that city, from 103,371 in 1890 to 133,210 in 1900, of sheep from 54,051 to 118,474, and of hogs from 53,780 to 197,607, an increase on the whole of 238,089 head, or more than 112 per cent. That the ratio of increase in the next ten years will be vastly greater is unmistakably indicated by the growing conviction among farmers that stock-raising is by far a safer source of revenue than growing grain for sale, the crops of which are uncertain, and the prices as a rule too low to leave a fair margin of profit. The undoubted prospect of a rapid increase in the population by immigration, and the opening up and settlement of new farming districts, since Canada is becoming better known in Europe, and the assured growth of our towns and cities, will inevitably increase the demand for meat and other animal products, so that the present marketing facilities will soon be entirely insufficient. For the yarding, feeding, handling and disposal of the large and ever-increasing number of animals passing through the Toronto market, the present accommodation is very primitive and inadequate, the shanty-like buildings, now fast going to decay, having been put up by piecemeal as the constantly-growing requirements of the trade have demanded and with comparatively little apparent regard to systematic arrangement or convenience, of handling and displaying stock to advantage, while the facilities for the transaction of business between buyer and seller are such as would be more in keeping with the needs of the market of a third-class town than of a first-class city and center. The location of the present cramped and patched-up cattle market and stock-yards, which is well down in a thickly-settled portion of the city, renders practically impossible the securing of sufficient land in that section for a well-arranged system of yards, switches, abattoirs, offices, and suitable shipping facilities, such as the present trade requires and the inevitable expansion of trade will in the near future imperatively demand. In view of these facts, and while there are yet no vested rights of any considerable importance to be affected, it is surely the part of wisdom and foresight for the people of the city, as well as the dealers and the public, to favor any well-considered scheme of providing, without delay, for the establishment of stock-yards and a market commensurate with the needs of the trade, where banking and shipping facilities, abattoirs, packing houses, cold storage, comfortable offices and waiting rooms, hotel accommodation, stabling, and a sale pavilion for the disposal by auction or otherwise of pure-bred stock, factories for the working-up of the offal of the slaughter houses, and kindred enterprises, may be conducted on similar lines to those now so successfully established and satisfac-

torily operated in Chicago, Kansas City, Omaha and other cities in the United States.

That there are strong influences prompted by self-interest and other considerations opposed to the change indicated is conceded, and it need not be surprising if these make a fight against the inevitable, but the force of public opinion and the will of the dealers and stockmen should and must prevail, and there is nothing to be gained, but much to be lost, by delaying the reformation, which must come soon if Ontario is to hold its proud position as a stock-raising province and Toronto is to secure and maintain a market that will draw this trade and properly provide for its growth and expansion.

What is needed in order to gain this end is a strong and well manned and regulated organization, free from the influences of party or municipal politics; a systematic plan, with ample room for development, and a vigorous policy for the carrying out of the objects and aims of such an enterprise. The city council, under whose control the present market is conducted, has wisely declined to spend a large sum of money in the attempt to patch up the present premises, which, for sanitary and other reasons, are entirely unsuitable and which are properly described in the following extract from an editorial in the *Toronto World* of March 2nd, 1901:

"The present condition of the market almost beggars description. The business of the market is transacted in the center of what seems to be a big barnyard. Men and cattle are jumbled together in a most chaotic way. The accommodation for the cattle is bad enough, but that provided for the market officials, the drovers, bankers and others, is execrable. One bank clerk pays out \$20,000 a day in a room about 6x12 feet. It will accommodate two individuals at once. If a third enters the bank is crowded. The cattle dealers' offices are on each side of a narrow hall, for all the world like bedrooms in the attic of a cheap and nasty country hotel. When the weather is soft this hall and the offices become more offensive than the cattle pens. During the winter the men probably have the better of it, but for the balance of the year we would prefer to associate with the cattle in their pens rather than come in contact with the filth and odor of the business section of the market. Well on to ten million dollars' worth of business yearly is transacted on a dunghill. Toronto's cattle market is an abomination."

It is simply incredible that a progressive city like Toronto can long tolerate in its midst an institution of this description, which is not only a detriment to the city and its business interests, but a block in the way of the live-stock industry of Ontario.

For the purpose of the establishment of new stock-yards and the necessary plant for such other accompanying enterprises as we have indicated, a charter was granted by the Ontario Government in December last to a company bearing the corporate name of The Union Stock-yards Company, Limited, with an authorized capital of \$400,000, with its head office at Toronto and its stock-yards at Toronto Junction, where, it is said, the company has secured an option on one hundred acres of land lying between the G. T. R. and C. P. R. lines; that the company has procured a 30-year exclusive franchise from the municipality, which has been ratified by special act of the Legislature of Ontario, this franchise having been transferred to the company by the original holders, The Western Stock Market Company, and, among other valuable concessions, granting exemption from all general taxation to the company's lands and all the improvements and erections thereon for a period of 30 years. A by-law has also been passed, granting these exemptions to the plant and equipment of a beet-root sugar factory. With a beet-sugar factory

established convenient to the stock-yards, it is claimed that the pulp from the factory can be largely utilized in the feeding and fattening of cattle.

The ADVOCATE has no interest in this or any other company or scheme for the promotion of this object, and is concerned only for the furtherance of the live-stock industry of the country, which it rightly regards as paramount to all others in the Dominion, and which we have faith to believe is bound to grow into immense proportions in the near future. What is needed is prompt and vigorous action in providing, on a broad and comprehensive scale, for the development of the country's most important asset. The city is equally interested with the country in this enterprise, as the growth of the stock market and the establishment of factories in connection therewith means an increase of population and extended custom for business in many lines.

### Veterinary Education and Meat Inspection.

In a recent issue of the FARMER'S ADVOCATE attention was called to one of the amendments passed at the late session of the Canadian Parliament to the Animal Contagious Diseases Act, providing for the inspection and certifying of meatsold for human food, by a lawfully authorized health authority, as not being affected with any contagious or infectious disease. This is in line with the development of the dressed-meat trade, and if reasonably carried out it would be advantageous to the meat-buying public as well as the vendor. In the U. S. meat inspection is one of the most important branches of the civil service, coming under the jurisdiction of the Department of Agriculture. A stringent examination is demanded of all candidates, who, by the way, must be graduates of a three-year veterinary school. At the present time, in Canada, the difficulty would be to find enough competent inspectors (veterinarians) who could make, say, a microscopical examination of meat. As a people we cannot afford to have a branch of the public service created unless it is going to be well manned, and in the matter of meat inspection, we must, perforce, give some attention to the founts of veterinary learning in this country. Unfortunately for Canada and the agricultural profession, if the graduate wishes to practice in Manitoba or the best States of the country to the south of us, he must necessarily hie to a school with a three-year course, with the result that we find several of the American colleges giving the finishing touches, without which he is debarred from practice. To the young veterinary aspirant, Canada's reputation as an educational spot on the globe is dimmed by her veterinary colleges being run on the plan of dear old Doctor Dick (Edin), doubtless very useful fifteen or twenty years ago, but owing to the progress in such sciences as bacteriology, etc., utterly unfit for to-day. That many veterinarians whose professional education was obtained in British North America are successful is unquestioned. Their success is due to the inherent qualities of the men themselves. A conversation with the veterinary officer accompanying Lt.-Col. Dent verifies our contention. That gentleman, late President of the Royal College of Veterinary Surgeons, an institution demanding, by the way, a four-year college course from the candidate for licence to practice, was very much disappointed at learning of the low standards of veterinary education prevailing in Eastern Canada. The status of the profession must remain low and meat inspection cannot come in Canada under present conditions. The great republic to the south is striving hard for supremacy in the British food market, in which contest she is greatly assisted by a corps of well trained, scientific meat inspectors.

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Dr. J. A. Gilruth, the chief veterinary officer of New Zealand, recently visited Great Britain to engage inspectors of meat and dairy herds for that colony, where legislation in respect to meat inspection is equally as progressive as it is in social reform. New Zealand believes that it is just as important to look after the quality of food products as of alcoholic beverages. There every town of 2,000 people has a public abattoir, at which all slaughtering of animals for meat is done, and where all such are inspected, whether for home use or export. The public abattoir is bound to come, and thus do away with, in the towns at least, of that summer-time nuisance, the slaughter house. To entrust such a valuable and important branch of the public service as meat inspection to any but highly-trained men would be utterly folly. A possible way of improvement in veterinary instruction would be to add a course to the existing courses in the College of Agriculture at Guelph. The requirements for the veterinary degree should be just as high as for the degree in agriculture, namely, four years of study, and a certain standing in English. The live stock is there, the equipment for good work in microscopy and bacteriology, mycology and chemistry is also available. We submit that such a course would be a guarantee to the stockmen of the country that the graduates of such a course would be up-to-date, know something about disease in animals other than the horse, and be scientists in place of empirics. Another way out of the difficulty would be for those responsible for the present plan of veterinary education to bring it up to modern requirements, both as regards preliminary qualification of students, equipment of institution, staff and course of study. It is passing strange that the obvious necessities of the case have not ere this been discerned and steps taken to bring about the reform so urgently required, and for want of which the profession suffers.

## STOCK.

### The View of a Pork Packer.

BY W. J. FALCONER, GENERAL MANAGER, PALMERSTON PORK PACKING CO.

In every carload of bacon we send to the Old Country there is a difference of from 6 to 8 shillings per 112 pounds in the price of the best bacon in that carload and the poorest. We wish to offer you a few suggestions and hints, to reduce that loss to the lowest point.

In the first place, raise the right kind of hog. We prefer the Tamworth and the Yorkshire. We want a lengthy hog, with deep sides, small head, and narrow across the shoulders. A hog's head is worth say 2 cents per pound, and if more than an average proportion of the hog is head, packers can't very well pay you from 6 to 7 cents, live weight, for your hogs. But if you give us hogs with long, deep sides, small shoulders, and good long hams, you give us the ideal hog, and one we can make most money out of.

In the second place, great care should be taken in feeding hogs and caring for them. Hogs should be kept scrupulously clean and dry, and have plenty of exercise. They should be fed regularly, and not given too much at a time. Farmers should give their hogs a variety of foods, and should give them milk at least once every day. Shorts, peas, oats and barley are the best foods for finishing hogs on. A little corn mixed with the other grains will not hurt, but hogs must not be fed corn exclusively. Clover in summer and a few roots in winter are good to keep the hogs healthy. It is also a good plan to throw a fresh sod into a pen of say half a dozen hogs once or twice a week in winter, while many successful hog-raisers feed sulphur and charcoal occasionally all the year round.

Hogs should be marketed when they weigh from 160 to 200 pounds, and should not be fat. They should reach this weight when they are from 6 to 7 months old. No matter what the price is, farmers should sell their hogs when they are ripe, and should endeavor to market a batch of pigs every month in the year. By so doing farmers will get the high price as well as the low price, and will have a good average price for the year.

Another point we want to particularly emphasize is that farmers and drovers should on no account strike or poke a hog they are taking to market. Anybody with a switch can knock fifty dollars off the value of a carload of hogs in five minutes. Let us repeat, never hit a hog you are taking to market, but endeavor to handle them as quietly as possible. Don't get excited yourself, and on any account do not get your hogs excited, and do not run them.

If farmers will follow our advice in every particular they will assist us very materially in making our bacon as good as the Irish or Danish bacon, as well as put more money into their own pockets. Hogs have been a good price for the past year, and are likely to be just as high for the next. Yet if hogs went to 20 cents per pound there are lots of farmers who would reap no advantage from them, because they are not into hogs. If you are not raising hogs, start at once. Get three or four choice, nicely-shaped brood sows—never keep anything else—and they will make you more money than anything else on the farm.

Canada exported a little over half a million dollars worth of bacon in 1890, and about 12½ millions last year. Ten years ago this country imported bacon, and now it is one of our leading exports. Great Britain is ready to-day to take from us twice as much bacon as she is getting. All we have to do is to get the quality. Britain has the money, let us get the bacon.

### Food Rations for Bacon Pigs.

The production of the bacon hog has been a very profitable undertaking to the farmer of late, in spite of the fact that "soft pork" is sometimes a result of his work. Many people differ as to their methods of feeding. An Irish contemporary comes out as follows on the feeding of bacon hogs:

"When being finished for the market, bacon pigs should be fed principally upon crushed grain or meals of various kinds. As the finishing stage is being reached, the allowance of soft foods should be restricted and the proportion of grain gradually increased. A few potatoes may be given with advantage, but the quantity of these must not be so large as during the earlier stages of feeding. Of all single foods, perhaps that best adapted for bacon production is barley meal, though even better results may be obtained from a combination of this and other grains than by its free use by itself. A capital combination of grain foods for use where the best quality of bacon is aimed at consists of three parts barley meal, two parts crushed oats and two parts corn, with perhaps a pinch of pea or bean meal thrown in. Made into a mash either with water or separated milk, this mixture will be found a first-rate bacon-producing food. Though this makes an ideal ration, it does not follow that it is one that can always be most advantageously employed. Where the feeder grows potatoes and oats on his own farm, and is located within reasonable distance, he will find it very difficult to make as much money with any combination of purchased foods as he can realize by a judicious mixture of cooked potatoes, crushed oats and separated milk. Both as regards the quantity and quality of the bacon produced, our experience is that this combination is very difficult to improve upon."

### Vitality of Bots in Horses.

The opinion of those who still think that bots in the stomachs of horses can be killed by the administration of drugs will be rudely shaken by the disclosures made by Mr. J. A. Gilruth, M. R. C. V. S., chief veterinarian to the New Zealand Government, who in a recent address said:

"I have given the parasites solutions of corrosive sublimate, and kept them alive in it for days. I have kept bots alive in a saturated solution of corrosive sublimate for three days, and then they were lively. I thought a 50 per cent. solution of nitric acid would kill them immediately, but it took two hours, while in absolute alcohol they revelled."

Commenting on these disclosures, the well-known veterinary expert, Pately Bridge, writes in *Farm and Home*: "And still there are people who think that there is, or that they possess, a 'cure' in the shape of a dose of medicine that is not injurious to horses while fatal to the parasite. The absurdity is even more patent when we remember that not only do bots resist the strongest acids and alkalis, the most irrespirable and poisonous gases, the most potent mineral poisons, and empyreumatic oils when brought directly into contact with them, but that within the horse's body they are lodged in that part of the stomach to which medicine does not come—the insensitive left half—and have their mouths too deeply buried in the mucus for any drug that can safely be administered to affect them. When passing out of the body, after having detached themselves from the wall of the stomach, their passage may be accelerated, but under ordinary conditions they are not in the least affected by any remedy that would not be far more injurious to the host than to the parasite. The prevention of 'bots' is much more effective than their 'cure,' and the time is approaching when those owners of horses who desire their animals to be free from bots during the next winter and spring should take measures to prevent egg-laying and provide for egg-destruction."

### Hints on the Summer Care of Work Horses.

The various experiment stations have done comparatively nothing with the feeding of horses. The marked difference existing between the digestive apparatus of the horse and cow call for differences in feeding. The horse's stomach is small compared with that of the other domesticated animals, therefore smaller quantities of food must be offered, which should be concentrated. Bulky food is not as suitable for equines as for bovines. During the hot days, water should be offered frequently and in moderate quantities. That from deep wells is often ice cold, and should not be allowed *ad lib.* if the horse is sweating. If, however, the chill is off, little harm will result from allowing a horse all he will drink. *Water before feeding, always.* If the time allowed at noon is only an hour, don't seek to overload your horse's stomach with hay; leave the hay for the night feed. When resting for a few minutes in the field, and there is any breeze, turn the horses so that they will face it. After removing the harness at night, go over their bodies with a damp sponge; it will cool them quickly and remove the sweat and dirt incidental to field work. Collars must fit properly, or scalded shoulders, sore necks, choking, etc., will result, with the inevitable loss of valuable time. Be careful in the use of new hay, or you will notice a big increase in the urine of your horses, and a rapid loss of flesh, all symptoms of what is often termed diabetes. Horses with the forelock unclipped will be less liable to sunstroke. Clipping the forelock is a fashion which has gone from the city to the country, and is one that cannot be too severely condemned. Looking at it from the material standpoint alone, the removal of the forelock cannot be excused. A horse so mistreated deteriorates \$10 to \$15 on the big horse markets when intended for export. Sponging the eyes, nostrils and anus with cold water every night after the work is done will also be found to be beneficial, being refreshing to the horse. The Saturday night bran mash is just as important in summer as in winter, unless the horses are grassed every night. In very hot weather it might be advisable to take two hours at noon and work later at night; such a proceeding would be better for man and horseflesh. Regularity in watering and feeding are indispensable.

### To Stop a Horse Jumping.

Mr. A. L. Spink, Pontiac Co., Que., recommends for a breachy horse punching his ears near the tips and tying them almost tightly together with a piece of cord. He says he has never known it to fail to cure a jumper. Mr. F. W. Moore, of Perth Co., a successful horseman, does not think much of Mr. Spink's method, as he fears it would have the effect of spoiling the appearance of the horse in time. Mr. Moore's treatment is to tie the horse's head down, so that the top of it is no higher than his withers. He puts a strap around the horse's neck close to his head, and a surcingle around his body just back of his fore legs. He then passes a shank from the neck strap between the fore legs through the surcingle, and back outside of one fore leg nearly to head, where it is tied to the shank. By this means bad jumpers are restrained.

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**The Shorthorn Herdbook Standard.**

Much trouble and inconvenience is being experienced by enterprising importers of Shorthorn cattle owing to the adoption by the American and Canadian Shorthorn Breeders' Associations of a rule requiring that in order to be eligible to record in the herdbooks of these organizations animals must trace on the side of both sire and dam to recorded English Shorthorns whose ancestors in all their crosses trace to animals recorded or eligible to record in the first twenty volumes of the English Herdbook. This rule, as amended, was adopted by the American Association in 1889, and by the Dominion Association about the same time, in order to make the standards for North American records from that date uniform and interchangeable if need be. The object of the regulation was evidently to afford some protection in a commercial sense to American breeders, restricting the field for selection by shutting out of the record British-bred animals having in their pedigree crosses by sires born after 1873 (the date of publication of volume twenty), with not more than five crosses by registered bulls. The English Herdbook Association still admits to registry, under careful supervision, animals with that number of crosses, and the acknowledged success of the breed in the land of its origin is pretty good evidence that no serious mistake has been made in adhering to the rule.

The absurdity of the American ukase as a pretense for elevating the standard of quality is well illustrated by a reference to the fact that the champion bull at the Bath and West of England Show last month, whose portrait appeared in the last number of the ADVOCATE, is ineligible to registry in the American and Canadian Herdbooks, not because he is a five-cross bull, but because some ancestor, born, it may be, for aught we know, six months after the date of publication of volume twenty of the English Herdbook, had but five crosses of high-class registered bulls in his recorded pedigree, though there may have been several more back of that which could not be traced by name. John B. Booth, of Killyerby, one of the most intelligent and successful of English Shorthorn breeders, had so little veneration for length of pedigree that it is said he used to cut off the tail end of the lineage of his cattle, leaving only the crosses by bulls of his own breeding, and stating his conviction that four such crosses were of more value than twice as many of average individual and ancestral excellence. It is indisputable that in many cases the meanest Shorthorns can boast of a pedigree as long as the moral law, and it not infrequently is seen in leading English show-yards that the blue-blooded aristocrat with a long-tailed pedigree is downed by the plebeian beast tracing through five crosses of registered bulls to a foundation strong in Shorthorn blood and of vigorous individuality.

The restrictive rule in question is second cousin to that of the directors of the American Shorthorn Association imposing a tax of \$100 as a registration fee on animals imported after January 1st, 1901. Both are of too narrow gauge for the progressive spirit of the twentieth century. We believe a large majority of the breeders favor free trade in registered stock and would vote for wiping them both off the record, as well as some other hampering, vexatious and unnecessary restrictions for which the stockmen are not responsible. If the directors of the Associations interested cannot agree to go the whole length of accepting the British rule for British cattle, there should surely be no hesitancy in accepting the compromise which has been proposed, namely, to advance the date of closure to 1885, corresponding to Vol. 32 of the English Herdbook, and to make the rule automatic, advancing the date year by year, a modification which would involve no sacrifice of the original principle, if it is regarded as such. The idea is that English cattle coming on record for the first time in 1885 are quite as well entitled to registration in American records in 1901 as those first recorded in 1873 were entitled to registry on this continent in 1889, and that the mark should be moved up this year to 1885, next year to 1886, and so on from year to year as the volumes of the herdbook are published. It is an eminently sensible, reasonable and practicable proposition.

The published market reports of prevailing prices for beef and dairy cattle, mutton sheep and hogs, and for horses as well, constantly show the importance and advantage of improving the breed and the quality of stock in all these lines. The animals that bring the highest per pound or per head are almost invariably those that show improved breeding, and they sell readily at the higher figures, while often the inferior and ill-bred go begging for buyers at the lower prices, and they cost as much to raise as the better class. The remedy is to be found in the use of good pure-bred sires.

**Our Scottish Letter.**

Canada has been strongly in evidence during the past few days. The Hon. Sidney Fisher is here, accompanied by Professor Robertson, the cold-storage man, with Mr. Hodson, Live Stock Commissioner, and Mr. Grisdale, of the Ottawa Experimental Farm. They are one party, and their common aim is the advancement of Canadian agriculture, but each man has his own department and is striving to attain the common goal by a route peculiar to himself. Mr. Fisher and Mr. Robertson are busily occupied in bringing under the notice of produce merchants the character of Canadian produce, and they have made one notable convert at least. At a meeting of the Produce Exchange, under the presidency of Mr. Thomas Clement, after speeches by the two delegates, Mr. Nathaniel Dunlop, the head of the famous "Allan" line, acknowledged that he had been disposed to regard the theories of Canadian officials regarding the putting down of fresh produce in this country as visionary, but he had been so impressed with what Mr. Fisher and his colleague had said, that the Canadians might hereafter count on his firm as allies in whatever steps they took to land cheese, bacon, eggs, apples or other articles in Great Britain in a fresh condition. The meaning of this I take to be that the steamers coming to the Clyde from the St. Lawrence will be fitted up so as to ensure a continuance of the line of cold-storage accommodation from the center of production in Canada to the center of distribution in Scotland. I should say that from the standpoint of the interests of the Canadian farmer, the present visit of your Minister of Agriculture has unquestionably borne fruit. In my last letter I gave an account of Canada

and an amount of debate and discussion not commensurate to the advantage to be gained." For myself, I believe the sound, logical policy is the importation of no cattle, but of dead meat; and with the universal adoption of cold storage on board rail and steamship, I cannot see how Canada should not benefit quite as much under this system as it possibly could do by shipping stores. I believe Canadian farmers could feed their cattle prime fat as well as farmers in this country, and the adoption of this universal system of a dead-meat trade would tend in the direction of goodwill amongst the nations.

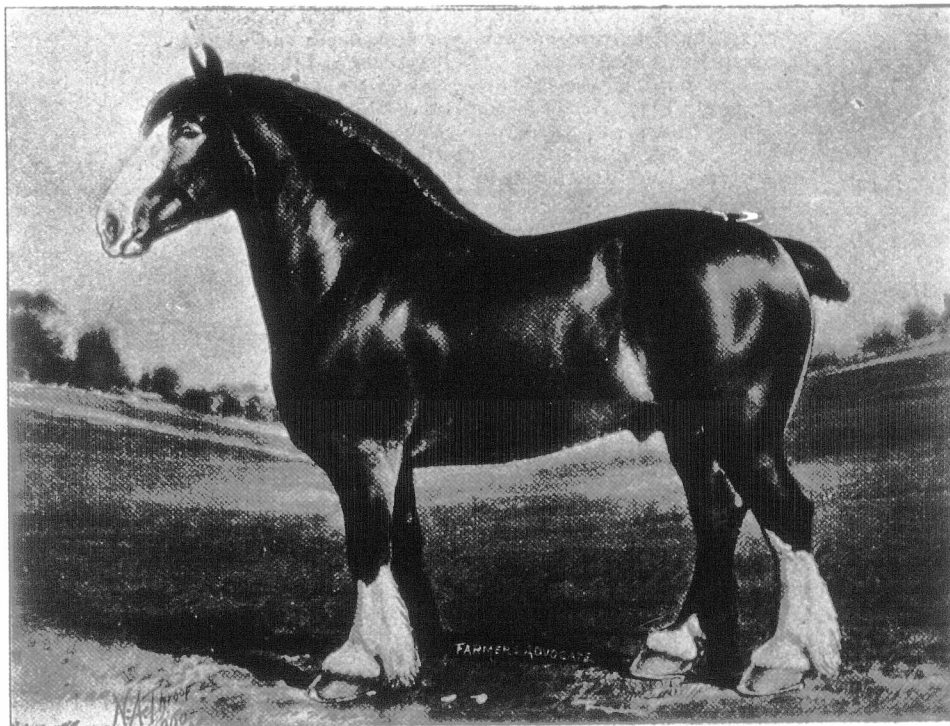
Messrs. Hodson and Grisdale have another job on hand. They are entrusted by Mr. Fisher with a mission to secure good milking Shorthorns qualified to register in the higher grade American Herdbook; Ayrshires with good milking records and robust constitutions; and Guernseys which will demonstrate their utility over Jerseys as general-purpose cattle. I expect they are finding their task a pretty stiff one so far as the Shorthorns are concerned. The kind of Shorthorn they are looking for is precisely the kind of animal which the American Herdbook is fitted to extinguish. The best milking Shorthorns in this country have generally been in the hands of dairy farmers on the Cumberland and Westmoreland dales and fells, who paid little or no attention to pedigree. Their stocks are no doubt quite as well bred as those having long-recorded pedigrees, but, unfortunately, their breeders and owners have not thought this matter of registration of sufficient moment, and for generations it has been neglected. Consequently, the best milking Shorthorns in this country are very largely to be found amongst the unregistered herds. Still, with perseverance, your Canadians will find sufficient of the kind they want, and the introduction of milking

blood may be coincident with the introduction of good breeding cows, producing a calf every year. I am afraid it is too true that an examination of the records will show that many of the best-bred cows in the leading herds have not been very regular breeders, and I take it to be a sound axiom that an uncertain breeder is pretty certain to be a poor milker, and vice versa. During the Bates craze Shorthorns were overbred on a milking line until constitution was bred out of them; during the past quarter of a century the pendulum has swung to the opposite extreme, and cattle have been bred so as to make them blocks of beef and nothing more. But blocks of beef are not wholly consistent with the milking type, and the happy medium here, as in all things else, is best.

From conversations with various visitors from your part of the world, I have gathered that disappointment has followed some of the importations of Ayrshires for which high prices were paid in this country. I can't say that this surprises me, because we are only recovering slowly from the evil effects of absurd fads in the show-ring, which, to a large extent, robbed the Ayrshire of its utility. These fads were due to the popularity of one or two animals owned by wealthy men and leaders of show-yard fashion in their time. Such fads die slowly, and mischief carried on during twenty years or more cannot be undone in a year. The growth of interest in milking records and the standard of quality in milk in respect of butter-fat has done a little to lead breeders to look at something else in the milk cow than a special form of vessel and teats of a particular set and shape. The mischief of our show system, however, is not only this vessel and teats craze, but the folly which accompanies it of putting the show cow dry at an abnormally early date, in order that the fancy formation of the vessel may not be destroyed by the cow fulfilling her own destiny of yielding milk for the use of man. I would be much in favor of passing a rule at all our shows, that no cow having once secured a champion prize should again be shown. This would relegate the good cows to the breeding byre, and instead of retarding it would develop their milking properties. There is an argument for the tight vessel, but it is an argument sometimes more honored in the breach than in the observance. I believe Mr. Hodson and Mr. Grisdale are not looking for the show Ayrshire, but for the Ayrshire dairy cow, and they are on the right track, and should find what they are looking for. There are any number of such Ayrshires in this country, but they are not known except to the man who has to live by the milk trade in one or other of its many forms. The cattle to be selected by our friends are for the Ottawa Experimental Farm, and in all likelihood they will run the gauntlet of a deal of adverse criticism.

"SCOTLAND YET."

The prospect of new and improved stock-yards and market facilities at prominent centers should prove an inducement to farmers to raise more good stock, improving the breed and feeding them so as to capture the best prices. The demand and the prices for the best quality are encouraging.



LAMINATED STEEL 8700.

Five-year-old Clydesdale stallion; winner of first prize at International Live Stock Exposition, Chicago, 1900.

PROPERTY OF ALEX. GALBRAITH, JANESVILLE, WISCONSIN.

in the Glasgow Exhibition. On Thursday afternoon, 20th June, this spacious building was the scene of a splendid reception by Mr. Fisher, at which the Principal of the University, representatives of the corporation, and the leading members of the produce trade in the city were present. Mr. Fisher gave a very fine address, and the result must be a renewed interest in all that concerns Canada amongst the dwellers in the home land. It is no exaggeration to say that Canada has given a totally different idea of the nearest of British colonies to that which formerly prevailed here, and the character of the audience which crowded the hall yesterday afternoon was such as will ensure that the Dominion be thoroughly well advertised. Mr. Fisher is not conducting an agitation in favor of opening our ports to the admission of Canadian cattle as stores, but he is taking every available opportunity of pressing home the fact that there is no contagious disease amongst your cattle, and that if they are to be shut out, it must be on purely economical grounds. If, in order to maintain our own breeds, it is necessary to shut out foreign stores, then, he argues, let us say so, and Canada will not dispute our title to settle our own domestic affairs. But in the name of Canadian agriculture, he very strongly objects to our including Canada in the universal embargo on the ground of disease. Canada, he tells us, has sent in nearly 800,000 cattle since the legislation of 1896 was enforced, and not one case of disease has been detected during that time, or in all that number.

There can be no doubt of the force of this reasoning, but I suspect the answer of those in authority will be something like this: "The present policy was determined on after great deliberation and an exhaustive enquiry; it has been crystallized in legislation, making the embargo on sea-borne cattle universal, and to differentiate between Canada and the rest of the world would entail fresh legislation,

### The Royal Show at Cardiff.

The annual show of the Royal Agricultural Society of England, held at Cardiff, Wales, June 26th to July 1st, proved a decided success in the number and quality of the entries of live stock, considering the distance of the location from the habitat of the leading breeds, and the attendance, judging from the returns of the turnstiles on the opening day, promised to be more than equal to expectations.

The total entries of live stock were 1,575, as compared with 1,957 last year at York, and 1,293 in 1872, the last time the show was held at Cardiff. The full report of some of the classes by our own representative not having reached us in time for this issue, we subjoin a brief summary of the principal awards from our English exchanges in those classes of most interest to the majority of our readers.

In Hackney stallions, Sir Walter Gilbey's three-year-old, Bonny Danegelt, foaled in 1898, won first in his class and the championship. The female championship went to H Livesey's Orange Blossom. The champion Shire stallion was W. & J. Thompson's three-year-old, Desford Combination, and the champion mare was Fred Crisp's Southgate Charm, shown with foal at foot. Herbert Webster's Baron's Crown, by Baron's Pride, was the first-prize Clydesdale stallion in the senior section, foaled in 1898. Lord Arthur Cecil came second with Baron Briton, a full brother to the Scotch champion, Cassabianca, also a son of Baron's Pride, and Messrs. A. & W. Montgomery were third with Baron Macadam. The winning two-year-old was Silver Cup, another of Baron's sons, shown by the Seaham Harbor Co., Ltd., and said to be perhaps the most valuable Collynie exhibited. Messrs. Montgomery were second with Montrave Dauntless, by Macgregor.

Shorthorn cattle were well represented. His Majesty the King won first in aged bull section with the roan three-year-old, Royal Duke, bred by Her late Majesty Queen Victoria, and sired by Prince Victor, and second with the four-year-old, Pride of Collynie, bred by Mr. Duthie, and sired by Pride of Morning. Mr. G. Harrison was third with Inspector, the bull portrayed in last number of the ADVOCATE. In two-year-old bulls, Mr. W. Bell's Baron Abbotsford, by Baron Alnwick, and out of the show cow, Lady Clara III., was placed first. Mr. P. L. Mills was second with Brilliant Star, by Star of Morning, and Mr. Harrison third with Gainford Rising Star, by Misty Morning. In a class of twenty yearling bulls, Mr. Harrison took the lead with the Collynie-bred Silver Bell, by Silver Plate; Mr. Dudding, the second place, with Victor, of Lord Lovat's breeding; and Mr. Bell third, with Baron's Pride, own brother to the first-prize two-year-old.

The male championship was awarded to His Majesty's Royal Duke, and his Pride of Collynie was the reserve number.

Captain Duncombe, Waresley Park, Hunts, had the first-prize cow in Warrior Queen, a home-bred roan by Liberator, and said to be of admirable shape, character and quality, enormous substance, and showing decided milking capabilities. Mr. Harrison was second with his bull, Known Welcome, by Champion Cup, and Mr. C. W. Brierley third with Autumn Queen.

The winning 3-year-old cows in milk were Mr. J. Deane Willis' White Heather, who was also female champion; Mr. A. Henderson's (M. P.) Ringdale Favorite 2nd, and Mr. H. Dudding's Fancy Belle 8th, in the order named. In a good ring of 2-year-olds, Mr. Dudding won first with Floradora (illustrated in our July 15th issue), and his Hawthorn Blossom 10th was reserve number and highly commended; the second prize going to Mr. Hosken's Wild Duchess 20th, and third to Mr. J. Coleman's Hawthorn Gem 3rd. In yearlings, Mr. Richard Stratton's Calico Belle was first, H. M. the King's Ruby second, and Mr. Hosken's Lady Blithfield 12th third.

The Hereford display is reported to have been an admirable one, the classes being well filled and the quality above par. The first prize in the senior bull section and the male championship went to Mr. E. Farr's Britisher, and the Earl of Coventry's Mercury was second. A strong class of 19 2-year-old bulls was headed by Mr. John Tudge's Albany, who was the reserve number for the championship. Mr. A. E. Hughes won 1st and 2nd for yearling bulls with Nelson and Lambton. The cow class was headed by Mr. Cleasby's Dainty 10th, and Mr. Tudge's Rustic Maid. Mr. R. Green had the first-prize 3-year-old cow in Waterweed, and Mr. D. Evans the second in Friend 2nd. Two-year-old heifers had in the lead Mr. Armitage's Delta, Mr. Green's Ladysmith being second, and the King's Sophia third. In the yearling section, Mr. R. Green was first with Prudentia and third with Maysie, Mr. Barneby's Mistletoe being placed second.

Aberdeen-Angus cattle made a very good showing. The championship of the breed was won by the first prize cow, Pride of Powrie 9th, shown by

Mr. T. Smith, and the reserve number for that honor was the first-prize 3-year-old bull, Elate, bred by Mr. Arthur Egginton, shown by Mr. J. J. Cridlin, Maisemore Park, Gloucestershire, got by Mailbag, and out of Elite. Mr. McLaren was second in this class, which included bulls calved in 1897-99, with the 2-year-old Ben Gloe, and Mr. Perrin third with Rosador, a bull bought for 100 guineas at Perth sale as a yearling, and winner of first at the Highland Show last year.

Galloways made a nice, though limited, showing, the first prize in the senior bull class going to Mr. R. Wilson's McDougall 4th of Tarbreoch, and second to Mr. R. Graham's Marmion 2nd. Mr. Graham had the first-prize cow in Maggie 9th of Tarbreoch.

### SHEEP.

The sheep exhibition at Cardiff will be long remembered as being one of uniform excellence and special merit, and it will also form a record for the number of distinct varieties that were included in its schedule.

The Oxford Downs were in full force and great merit; in fact, it is several years since a better entry of this breed has appeared at a Royal Show. Mr. J. T. Hobbs led the way in the old ram class with a sheep of high merit and quality. He was followed by one from Mr. J. Treadwell's flock, secured, we understand, by Mr. R. Miller, of Canada, a ram of great substance and scale, with grand flesh and high merit. The yearling rams found Mr. J. T. Hobbs at the top with his two grand rams that secured the same position at the Oxford Show, and lucky will be the breeder who gets the use of either of these. The third came from Mr. A. Brassey's very typical flock, whose well-known character and quality was fittingly represented by this fine ram, whose next companion in the award list was one that we thought much of, from Mr. H. W. Stilgoe's very fine flock. Mr. J. P. Reading's pen headed the ram lamb class, but preference might in this instance have been given to Mr. W. A. Treweeke's fine pen, which came in second. Mr. R. W. Hobbs had only the reserve number to secure from this class; there was no third, which this capital pen were fully worthy of. The yearling ewes were headed by Mr. A. Brassey's excellent pen, which are unapproachable in respect to wealth of flesh, depth and width of carcass and typical character. In the second and third prize pens there were some excellent ewes, which were of the greatest credit to Mr. R. W. Hobbs' flock, from whence they came. A selection of these will figure in your own shows, for Robert Miller, with his usual acumen, has taken them. Mr. J. C. Eady's pens, which were hardly up to the breeder's usual form, took the barren honors. Mr. W. A. Treweeke's grand pen of ewe lambs were correctly put in first, and these were followed by the pen from Mr. A. Brassey's flock, which were a bit lucky to secure precedence over Mr. H. W. Stilgoe's pen, that were of a most promising character.

The Shropshires did not have so large an entry as usual, but what they lacked in number they made up in respect of merit. The most notable feature was the uniform success of Mr. A. E. Mansell's grand flock, which ADVOCATE readers know will shortly be dispersed—a grand opportunity to secure some of the finest specimens of this noted breed, one that will not for many years occur again.

The old rams found Mr. A. E. Mansell's grand entry at its head, one of the best-fleshed rams this breed has produced. He has grand carriage, good legs and feet, with the best of head and skin. Next to him came another very notable ram, a sire, every inch of him, from Messrs. Evans' noted flock, Mr. J. Harding being reserve number. The yearling rams made a very noted class, and here again came Mr. Mansell's representative at the top, a ram of great character, rather on the small scale, but wide, even and typical to the full extent. Then a square, good-backed, wide-toined ram, with very typical head, from Mr. R. P. Cooper's flock, was selected, who in his turn was followed by Mr. B. Wall's Nottingham winner, who lost ground at this show mainly because he could not move as well as the leading ram. A notable class was that for pens of five yearling rams. Here the contest was notably keen, and the pen that won for Mr. R. P. Cooper's flock was one of rare type and character, with skins, heads and fleeces of the finest description. Following these came a real good mutton pen, with fine, typical character, from Mr. A. E. Mansell's grand old flock. Then came Messrs. Evans' pen of fine masculine rams, with plenty of scale and good character. Personally, this pen would have had preference over the Harrington Hall pen. Mr. T. Fenn's quintette secured the reserve number. Mr. A. G. Mansell's two entries in the ram lamb class were of the highest merit. They went first and third, the dividing pen being one from Mr. John Harding's excellent and well-bred flock, a trio that bid fair to make typical rams. In the yearling ewe class, Mr. P. A. Muntz's excellent pen at last got their just due, for they were put at the top of their class. Then followed a very evenly and well matched pen from Mr. R. P. Cooper's flock, which when under hand were found to be of high merit. Mr. W. F. Inge's pen came in for third honors. This pen were very typical of their breed, evenly matched, and good in their skins. As in the ram lamb class, so it was in that for ewe lambs, Mr. A. E. Mansell's pen being easily first. It was a pen of grand merit and most typical character and quality. Mr. W. Inge's pen, that were second, were a well-matched pen, but had the pen of Mr. J. Harding been a bit more compact they would have had to change places, but the want of finish rendered this impossible, and although the last-named pen lost as lambs, they will probably make the better ewes.

The Southdowns took a very prominent place, being largely represented; in fact, as fully as any breed. The noted old Goodwood flock, the Duke of Richmond's, was first with a ram of excellent fleece and character. He won the championship award. Following him came one of Mr. C. Adeane's, a ram of great substance and wealth of flesh, with very wide loin and deep twist and thighs. A similar ram from the same flock won the first place in the yearling ram class, where he was followed by a typical ram from the Earl of Cadogan's flock, whilst the Royal Stud at Sandringham secured third place for His Majesty the King with a most typical ram of first-class merit. A strong class of ram lambs found that practically unbeaten pen from Col. H. McCalmont's at the top, a grand pen of most excellent type. Next came a pen from the Pagham Harbor Co.'s flock, some, if not all, of which will be in your country ere long; a pen which, had they the age of the winners, would have been very difficult to get over. The third place was occupied

with a very typical and even pen from Mr. C. Adeane's. The yearling ewe awards were hardly correct, for preference should have been given to the Pagham Harbor Co.'s excellent pen, whose fine character and great scale ought to have secured their precedence over the pen from the Earl of Cadogan's flock, that were the winners. The Goodwood flock of the Duke of Richmond had third honors, and Mr. J. Coleman came in for reserve number. The ewe lambs had at their head a most typical and well-brought-out pen from Mr. C. Adeane's flock, which there was no question fully deserved their place. Though Mr. Colman's pen were of high merit, the former were better. The third place found Col. H. McCalmont's flock in it, and we rather think that Mr. T. Miles' pen might have taken this honor, for they were a grandly-fitted pen, of high merit all round.

The Hampshire Downs were, as a breed, most fully represented with sheep of very great merit, and the notable success of Mr. J. Flower was most gratifying to all who believe in high merit and good type. Mr. Flower led in the old ram class with a wide, good ram; in the shearling ram section with one of exceptional merit. This ram was made champion—the former was made reserve number. In the yearling lambs, Mr. J. Flower was also first, and in the yearling ewes, first and second, a record that any breeder would be proud of, for in each case his winning sheep were of notable merit. Mr. T. F. Buxton came in second in the old ram and ram lamb classes with fine masculine, typical sheep. The Earl of Carnarvon, with his champion pen of ewe lambs at the Royal Counties Show, again won first in the class and the female champion prize over that unbeaten pen of yearling ewes from Mr. J. Flower's flock. His Lordship also took second place in the yearling ram class with a grand ram of nice flesh and character. Mr. C. A. Scott-Murray's two grand pens of ewes came in for third, and Mr. A. Henderson won second for ewe lambs with a real typical pen.

The Suffolk breed was well to the fore in point of merit, but its number of entries was small. Mr. H. E. Smith went first for old ram, yearling rams and ewe lambs of capital merit and type. The Earl of Ellesmere took first and second in the ewe class with six grand ewes, good and firm in their flesh; second also for old rams and yearling rams, which were most typical of their breed. Mr. T. Goodchild's flock provided the first-prize pen of ewe lambs, and second-prize pen of ram lambs, which were a credit alike to their owner and his excellent flock.

Mr. L. C. Attrill and Mr. W. R. Flower were the winners in the small but good class of Dorset Horns.

Mr. J. E. Casswell's flock came out in strong force in the Lincoln breed, and he took, with a very grand ram, first in the old ram class and champion. Messrs. S. E. Dean & Sons were second in both the old ram and yearling ram class, with sheep of considerable merit, even and good fleeces, and nice tops. Messrs. Wright's flock came right ahead, for they took first in the yearling ram, yearling ewe, ram lamb and ewe lamb classes, with sheep of very high character and great merit. The pens of five rams were a very strong lot. Here the old Pointon flock of Mr. Tom Casswell went clean to the top. He was followed by a capital pen from Messrs. S. E. Dean's, who just managed to secure this place from Mr. Henry Dudding's notable pen of typical rams. This same exhibitor came in also second in the yearling ewe class, with Mr. Wright's second pen following him. Mr. J. Pears was also well represented. He was second in both the lamb classes, and Messrs. S. E. Dean were reserve number in the same.

Three competitors came out in the classes for Leicesters, and the high merit and typical character of the whole of their entries was very good indeed. Mr. G. Harrison won for the males, and Mr. E. J. Jordan for the females.

The Cotswold Classes were larger and better than usual, and Mr. W. T. Garne's noted old flock at Aldsworth clearly established its right of pre-eminence by winning throughout the whole of the first awards, whilst second for ram lambs and yearling ewes, as well as other honors, went his way. Mr. R. Swanwick and Mr. W. Houlton were also winners, and they, as well as the Garne flock, made an exhibition of great excellence, with fine type and character.

Border Leicesters made a fine entry in respect to merit, the winning flocks being those owned by Mr. John Twentyman, Right Hon. A. J. Balfour, Messrs. Nicholson and Thos. Winter.

Mr. C. File, in shall but excellent classes of Kent or Romney Marsh sheep, won throughout, Mr. W. Millen being reserve number for rams and second for yearling ewes. Wensleydales, Devon Longwools, Dartmoors, Exmoors, Cheviots, Blackfaced Mountain, Herdwicks, Welsh Mountain, Ryeland and Radnor, all of which had classes provided for them, each and all made a fine exhibition of their breeds, more or less extensive. But no matter the size of their entry, it was most noticeable that the average of the merit of the whole of these classes was very good all through, and it must be remembered that the inclusion of these not widely-known breeds added very greatly to the interest in the sheep section, for many of our people have hitherto had little or no opportunity to inspect many of these varieties, now for the first time included in the Royal schedule.

### SWINE.

The principal exhibitors of Large White or Yorkshire hogs were Messrs. P. L. Mills, Ruddington; D. R. Baybell, and Sir Gilbert Greenall, who won the champion gold medal for best of the breed with his first-prize boar in the class farrowed in 1899 or 1900, second prize going to Mr. Sanders Spencer, St. Ives. Mr. Daybell had the first-prize pen of three young boars, and Mr. Spencer second and third. In the sow class, Sir Gilbert Greenall won first with Sowerby Beauty, and Mr. Daybell second and third with Bottesford Perfection and Bottesford Model. The last-named exhibitor had the first-prize pen of three young sows, Mr. Mills second, Mr. Spencer third. In the Berkshire class, which made a strong showing, Mr. Edney Hayter won the breed championship with his first-prize boar in the class farrowed in 1899 or 1900, and the reserve number was Mr. R. W. Hudson's first-prize sow over a year old. Daresfield Hundress, Mr. J. Jefferson had the second-prize boar; Mr. Hudson the first-prize pen of three young boars, Mr. Fricker second; Mr. Benjfield the first-prize pen of three young sows, Mr. Fricker second. In Tamworths, Mr. R. Bbotson's sow, Knowle Red Mane 2nd, was first in her class, and champion of the breed, Mr. D. W. Phillips' Whiteacre Favorite 3rd being reserve number for that honor and second in the class. Mr. Bbotson had the first-prize boar in senior class (Knowle Welshman), and first-prize pen of three young sows, while Mr. Phillips won first for the pen of three young boars.

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**Horse Training and Education.**

To become a successful trainer a man must first educate himself by reading, experience, observation, etc. One thing sure is that a man must be able to control his own temper and use good judgment in all his operations. No set of cast-iron rules will do for all colts and horses: a man must study the beast that he has in hand, and cross him as seldom as possible, and in no case quarrel with him. There are many things that a man can compel a horse or a colt to do, and some things that he cannot. Then, we must confine ourselves to a narrow space at first, and not try to do too much at once. Horses are stronger than men, we all know. Then, we must use our wits in order to make a certain point, and keep working for that point with all coolness and firmness. A horse can think, but do not allow him to think for a moment at any time that he can at all resist you. The bringing up of a colt is nearly the whole of the training. If he is badly brought up he will need lots of training, and sometimes one bad lesson will almost ruin him and he may never become a really trustworthy horse. Just look for a moment at the "broncho" and "mustang." Do we find them to be affectionate and kind to man? I have heard men say that they are a bad breed and that they are all of an ugly disposition. I differ in my own opinion from such a saying. A colt of a broncho or mustang is just as tractable as our native horses, and far more so than many of the big slobbs that do not seem to hear half that is said to them by their driver. Never mind the "pony," but turn your attention to the western ranchman. What about his breeding, disposition and habits. Is everything all right? I do not intend to dwell long on this subject, but will say that he has not time to handle horses in a right way. When he wants to get a pony, it is first choke him down with a rope; he is castrated, branded, turned loose until sold, when he is again choked down and passed into new hands. His new owner pays a small price for him, and may never consider that he is worth much, because he is so ugly in his ways, but he is tough, that's all. All horses have a certain amount of brains and can be educated to do good service sooner or later. No man should use brute force in training horses or any other animals. Let us as trainers prove ourselves to be superior to the beast.

On every farm where horses and colts are to be trained it would be found very good to have a shed or well-fenced yard where the horse or colt may be turned loose and taught many good lessons. This yard should be about 24 ft. square. A man can stand in the center and use a whip or a pole, just as he chooses. The first lessons with the green colt should be a kind of introduction of the strangers, when the man and the beast may begin to find out who is who, and this is a very critical period, but no time for hurry and bustle, with cutting, slashing and noise. That would be a poor kind of an introduction, because the horse would consider that he had met either a fool, a lunatic or a beast lower than himself. In the first lessons never use the whip any further forward than the surcingle; by the light touches on the hinder part always, he will give you his head without fear, which is one big point in training a green colt. Let the trainer take his position in the center of yard, with whip in hand. After turning the horse loose, start him with the words, "Go on, sir," or the expression commonly used by the trainer for a start; keep him going for some time, then give him the word "whoa" once, and crowd him into the corner and compel him to stand there by holding out the whip to the right and the hand to the left. Repeat this a few times until he understands the word whoa. He will soon give you his head and your may put on the halter. If he tries to slip away from you, take the center and keep him going for a few minutes, repeating as before. By the use of this building or close yard you can teach him the word without making him sore in the mouth or any other part. The galling of the harness upon green colts is what makes lots of trouble in training. We should always give the colt something good to eat when he obeys in the least; also speak kindly and caress. As soon as he begins to be friendly with you, put on the harness and let him go; he may be a little nervous at first, but let him have his fling, he can do no harm. It would be well to leave him for an hour, then return, talk to him kindly and take off the harness. Do not give too long lessons at first, and do not give more than two lessons in a day. As soon as the colt is over his shyness, say about the third or fourth lesson, take in your hand a pole about eight feet long and one and a half inches thick, and use this pole quietly and gently all over and all under him until he has no fear of it at all; and as soon as that is accomplished he is ready for the shafts. Now, make a pair of long, strong shafts, and back them up to the wall and fasten; lead the colt up, step him in and give him the word "whoa," pick up the points of shafts and let him feel them. As soon as he

is acquainted with this treatment, get out the road cart and he is ready for some quiet road for a start. Let him go, and do not be rough on his mouth, using the words that he understands. When necessary, an old horse is a great help to a trainer. Just hitch him in and make a team with the colt, and you will not have much trouble. As a rule the old fellow will help you out if you get stuck, and he generally sets a good example. SANDY COLTS.

**Protect the Calves Against Heat and Flies.**

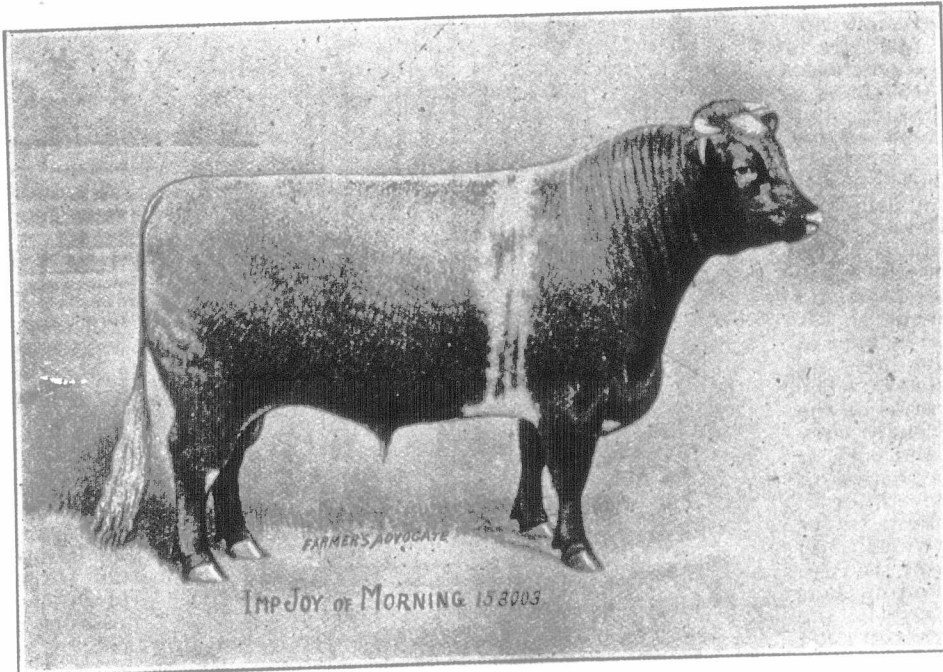
We have already had some hard weather on the calves that run outdoors all day long, with nothing but nature's protection against flies and the heat of the sun. Careful farmers who have tried both ways of keeping calves in summer are fully satisfied that indoor summering has great advantages over pasturing after the beginning of July, or as soon as the weather becomes hot, whether the pasture is good or bad. Calves over six weeks old benefit by a free run up till the warm weather arrives, but as soon as the time comes when the calves will be more comfortable in a cool, darkened stable, and fed on mown fodder, it will pay to take them in. An orchard or grove will afford protection from the sun for some time after an open field becomes too warm, but even here the flies have to be reckoned with, and will cause loss of flesh if allowed free course. We should be guided in this matter by the evident need of a change for the calves, so as to give them the greatest opportunity to grow and gain rapidly. Especially should calves that are intended for beef later in life be housed and well fed, because we want every pound of gain

**Tuberculin Test Discredited in New Brunswick.**

I think your article on the "Tuberculin Test," in the July 1st ADVOCATE, a very good one indeed. I may say, however, that the test here had about died out a natural death. It was started a few years ago by the Local Government, acting in conjunction with the Board of Health of the City of St. John. Certain regulations were passed, to which all parties supplying milk to the City of St. John must conform, among them being the tuberculin test. Two or three veterinarians were selected to do the work. Afterwards, many herds were troubled with abortion, and several were condemned and killed, but there never was a case of tuberculosis proven on post-mortem. Yet, after all this trouble and care to see that no cows having tuberculosis were used to supply milk to the citizens of St. John during the midsummer months, when the regular supply ran short, I have seen the manager of a certain company supplying milk come to the cheese and butter factory at Sussex and take away 400 to 500 pounds daily and send it in with the milk from the regular supply. Of course, there had never been a cow tested that was supplying milk to the cheese and butter factory, and still the people of St. John were boasting that they were getting such good and pure milk. But indignation among the dairymen became so great that at last they called a meeting to protest against the regulations imposed on them by the Board of Health and Local Government. Two members of the Government attended and assured the farmers and milkmen of their desire to do what was right, and so the regulations were held in abeyance for the time being, and matters have gone along smoothly ever since, and the yearly testing of cattle for tuberculosis has never been imposed. DAIRYMAN. King's Co., N. B.

**Shropshire Sheep at Shrewsbury.**

At no show in England during the whole year is there made so large or so good an entry of Shropshire sheep as we find at the annual show held at Shrewsbury. This year's show took place on the 19th and 20th of June, and the entry in these classes was fully as good as in former years. Mr. A. E. Mansell's conspicuous success found a fitting termination to a show-yard career of unexampled success. In the yearling ram class, one of no less than thirty-seven entries, Mr. A. Mansell went easily to the top with a ram of most superior merit and quality. Few indeed are there who would for a moment take exception to this grand ram, who afterwards won the Mansell Memorial Challenge Cup, an award which made him champion ram of the show; the reserve number for this honor, and second in the yearling ram class, was Dr. Wall's very first-class ram that was a grandson of Mansell's Diamond King. This ram was first at the Nottingham County Show; and he is of rare type, being compact, deep and square. Messrs. Evans came in for third honors with a very excellent ram of fine scale and character, whilst the fourth place was filled by a ram of nice type and quality from Mr. R. P. Cooper's flock; the reserve number going to Dr. Wall's second entry, a ram of very fine quality. Sixteen others came in for commendation by the judges, a fact that shows the high merit of the class as a whole. The older rams had an entry of ten. Here, again, the Harrington Hall flock of Mr. A. E. Mansell came out at the top with a ram of fine flesh and grand quarters, with very typical head, neck and shoulders. Messrs. Evans, who came in for second award, had a ram of fine masculine carriage, but hardly so good in respect to quality of flesh and wool. Third honors were accorded to Mr. R. P. Cooper. The class for pens of five rams had a notable entry, no less than twenty-three pens being present. Messrs. Evans' pen, placed second, were without much doubt the best, but the judges preferred the pen of Mr. W. F. Inge, and these secured the first prize, but they lacked uniformity of size and fleece, and were not masculine enough, points in which Messrs. Evans' pen certainly took precedence. Third honors went to Mr. R. P. Cooper's excellent pen, which were of very high merit. Another fourth-prize pen was one from Mr. T. Penn's; this pen was even more fortunate than even the first-prize pen, for there were several better pens shown, either of which should have been in the award list, notably those well-matched pens from the flocks of Messrs. A. E. Mansell and D. Buttar; whilst a very even and well-matched pen from that well-known flock of Mrs. M. Barrs came in for reserve number; twelve other pens being noticed in the award list. Eleven entries made up a full class of very excellent shearing ewes. Here Mr. W. F. Inge came in very deservedly first for a real good pen of five ewes; but the second pen, from Mr. P. A. Muntz's (M. P.) flock ran them very closely indeed. This pen, but for one weak ewe,



Two-year-old Shorthorn bull; bred by Mr. William Duthie, Aberdeenshire, Scotland. IMPORTED AND OWNED BY HON. M. H. COCHRANE, HILLHURST, QUEBEC.

their food has made; but it will also pay to protect the dairy calves, as it is well known that a stunted animal is less profitable than if it had grown continuously. If it has been kept thrifty its digestion will be stronger, and, therefore, have greater capacity for service. While housing during the day is advantageous, the calves should be turned out at night in a good grass or clover field. Young animals differ so much in size and food requirements, no set rule can be laid down as to the quantity to feed with safety. A hearty calf will, if given opportunity, gorge itself on milk to its own disadvantage, and with all foods judgment should be exercised in the quantities given. Rather than give the calf so much as to make it dull and sluggish, it is better to keep it eager for more at the end of a meal of chop or milk. There is, perhaps, no better or safer grain for calves than ground oats, bran and oil cake, although Kansas Agricultural Experiment Station strongly recommends whole corn for calves. A dairy calf requires less grain than a beef-bred one, as the latter cannot be injured by too rapid gains. A common mistake is made in overfeeding with milk, or giving it stale and cold, and many digestion troubles can be traced to these causes. Cleanliness about the feeding vessel is important, and many extensive stock-growers believe it pays to keep calves separate while drinking, and for half an hour or so afterwards to prevent sucking. Comfortable, dry quarters and good ventilation are as important in summer as in winter, so that regular and frequent cleaning of the pens, and fresh bedding, should not be neglected. To darken the stables, awnings over the windows, made of old sacking and held out a foot or more at the bottom, will exclude the sun and at the same time admit any breeze that may be blowing.

would have gone to the top. Mr. R. P. Cooper's pen of wide and deep-fleshed ewes had to be content with third place. In the ram lamb class, with seven entries, Mr. A. Mansell's pen of five went easily to the top. A grand lot of lambs they are. These took the champion prize as best pen of lambs in the yard, and will, doubtless, when sold at the dispersal sale on August 29th next, make prices that will be remembered for many years to come. Mr. J. Harding came in for second prize with a very taking pen. Mr. E. Nock's flock provided the third-prize winners, with Mr. R. P. Cooper's pen coming in for reserve number. There were eight entries in the ewe lamb class, and had the judges repeated the order of the ram lamb class and put Mr. Mansell first and Mr. J. Harvey second, there would have been little or no objection, but they did the reverse, and we cannot agree with them at all, the Mansell pen being unquestionably the better pen. Mr. W. F. Inge came in for reserve number. In the tenant farmers' classes, always a feature at these shows, Mr. J. S. Harding's flock went well ahead, its best pen being a grand lot of ram lambs, which secured, in addition to their class prize, the reserve number for champion pen of lambs in the yard. The executors of W. Nevett were, as usual, very successful in these classes. And lastly, but by no means least, Mr. Harry Williams went well ahead with some very excellent yearling rams.

### Weaning the Lambs.

The age at which lambs should be weaned depends a good deal on the amount and quality of forage the flockmaster has for them. If a field of fresh clover or other short, sweet pasture is available, or if a piece of early rape has been grown for them, with a pasture field beside it in which they can also run, they will be better for being weaned at about four months old. A regular supply of pure water and of salt is also a necessity if they are to do well. If the lambs were born late in spring, or there is no good fresh pasture on the farm which can be given over to them, it will be better to let them run with their dams a month or two longer until fresh feed is available. For ordinary purposes good clover and rape pastures will grow the lambs satisfactorily after weaning without any additional feeding; but if a part of them are to be pushed forward for show purposes or the ram lambs for sale for early service in breeding flocks, a light ration of oats and bran twice a day, given in troughs in the field, will force them on, giving increased strength and vigor. The ram lambs should be separated from the ewe lambs soon after weaning, or at least before the latter are in danger of coming in season, as quietness and contentment are essential to rapid growth and thrift. Later in the season the ram lambs should be kept in a pasture quite a distance away from the breeding flock of ewes, that they may feed quietly. The wethers may be kept with either the rams or the ewes, but if they are to be marketed early they should have a moderate ration of oats and corn or peas, and the ration will be improved if a portion of bran is added. For late lambs, and, indeed, for all during the late fall months, there is nothing better than a field of strong rape, and for these months on such succulent food they require no water and no grain, but will grow and fatten rapidly, finding their own supply of food right up to winter. In the absence of rape, the lambs will do very well on good second-crop clover or even on new seeds or first year's clover; but if only old pastures are available, they will be better for a little grain.

### Cost of Feeding Flies.

IT PAYS TO SPRAY CATTLE.

Last year a bunch of cattle known to the writer were about ready to ship at the beginning of July. The owner had plenty of pasture in the field and grain in the barn. They had done well up to this time on pasture alone, but the horn fly had not commenced to do its telling work. The steers were grain-fed for a month, in addition to grass and water *ad libitum*, and by August 1st they had gained little in weight, and looked considerably worse, instead of better, for their month's expensive keep. It so happened that the cattle could not be treated for the flies with any degree of convenience, and so the flies thrived and the cattle failed. We have no reason to believe this was the only herd that lost their owners money because of the flies, as it was the exception rather than the rule for herds to be sprayed. The abominable horn flies do not leave the cattle in peace at nights as do the flies that pester horses, but they continue their bloodthirsty work on into and through the night, robbing the animals of rest and their owners of returns for the feed consumed.

It is unfortunately true that when we go into the question of spraying or otherwise applying fly repellants to feeding or growing cattle, we are met with the difficulty of getting help to perform the work, but even much of this disadvantage would disappear if the work were done at with determination. It would not be an impossible nor yet a difficult task to construct a stall of rails, with a door in either end, in which the cattle could, one by one, be inclosed, treated, and driven through. If this were done even once a week it would be profitable, but twice a week would be better, and would not occupy much time in the evening, after tea. Unless cattle have cedar, spruce or other similar trees to rub through in the pasture, to drive off the horn flies, it will pay handsomely to afford them protection in some such way as we have indicated. It needs no

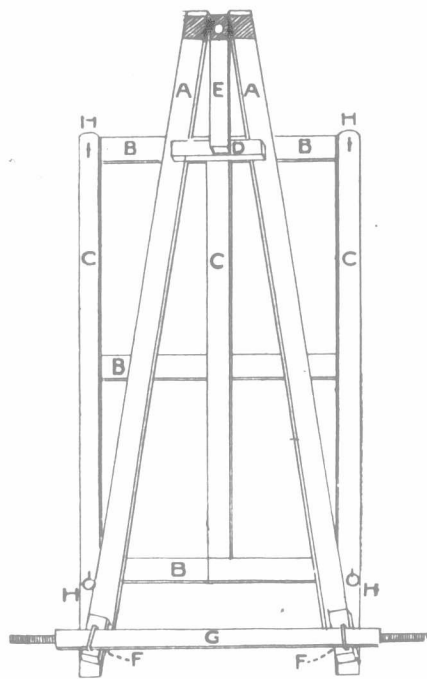
persuasion to convince every man that owns a milking cow that it is profitable to treat her for flies. The extra comfort in milking, the increased quantity of milk she will give, and of better quality, and the saving in loss of flesh, amounts to a very great deal as compared to the cost and effort of applying one or other of the many homemade and ready-made mixtures that are now known to keep off flies. It was a real pleasure to see the O. A. College herd of fine dairy cows comfortably standing or lying in the pasture chewing their cuds after having an application of a mixture made as follows: Fish, seal or tanner's oil, 1 gallon; crude carbolic acid, 4 ounces, and coal oil, 1 pint, all well mixed and rubbed on all parts except the udder. Two applications per week can be easily given at milking time, and will render the cows quite repulsive to all kinds of flies, bots, etc., but not at all objectionable to attendants or milkers. It is expedient to attend to this matter, which will prove both humane and profitable.

It would be interesting and profitable to learn from our readers what mixtures and methods of application they have found of service in protecting stock from flies, also their estimate of the profit gained from the treatment.

## FARM.

### Corn Rack for Silo Filling.

With this rack, all that is necessary to do to use it is to take the reach out of the ordinary farm wagon, place hind axle over back end of rack, with blocks  $1\frac{1}{2}$  ft. long between rack and axle, and secure with clasps made of  $\frac{3}{4}$  iron, nuts underneath. The front axle is placed over front end, and short reach placed in hole of ordinary reach. The front bolster is to be



CORN RACK.

A A,	18 feet long, 31 by 6 inches.
B B B,	5 " " 2 " 5 "
C C C,	12 " " 1 " 8 "
D,	2 " " 5 " 6 "
E,	34 " " 2 " 4 "
F,	14 " " 6 " 7 "
G,	hind axle.

taken off and king bolt put up through, with a washer under rack, and a flat key through above axle. This arrangement makes a steadier running rig than a knuckle joint on front. Upstarts are put in the rack at H H H H, with a board nailed across to keep fodder off wheels. The rack is carried by this plan about a foot from the ground.

Prescott Co., Ont. D. P. L. CAMPBELL.

### Changing the Composition of Corn.

One of the complaints made regarding the exclusive use of corn in swine-feeding is that by reason of its composition the tendency is to produce a carcass containing too large a proportion of fat to lean meat. The most profitable consumptive demand is now very strict on this point. The breed type of the animal and the general management and system of feeding pursued, both have probably an equal bearing on the character of the carcass, but so important is the question of foods regarded, that Prof. C. G. Hopkins, Chemist of the Illinois Experiment Station, some years ago began a series of investigations with the object of controlling the nature of the corn kernel so that it might contain a very high percentage of fat or very little fat, with a high percentage of protein or low protein content. He reports that he has had success beyond his expectation. Plans were made to carry on four separate experiments. It was manifest that if the percentages of protein and fat were increased, the percentage of carbohydrates would be decreased, and *vice versa*. A set of twenty-four ears of each kind of corn was selected and planted, being carefully tended to prevent cross fertilization. When the corn was harvested, ten ears were selected from each plant, and two rows of kernels were taken from each ear, and mixed, to form a composite sample to represent the good corn grown in each plot. In 1897 a high protein product was produced

of 11.10 per cent., while 10.55 per cent. was the average of the low protein plot. In 1899 the high protein plot reached an average protein content of 11.46 per cent., and the low protein contained 9.86 per cent. The nature of any improvement will, of course, depend on the use which is to be made of the crop produced. If corn is wanted for starch, sugar or alcohol, it is desirable that the grain contain a high percentage of carbohydrates. If the corn is to be used for feeding animals or for human food, a higher percentage of protein is required. It is necessary, in order to produce the highest grades of pork, to have corn of less oil than is found in the ordinary grain. The results to farmers, should Professor Hopkins succeed in producing corn of the desired quality, would be most important. That he will succeed is now believed to be an assured fact.

### Building a Round Stave Silo.

An experienced dairyman in a paper recently read before the Missouri Dairymen's Association, on silos and silo-building, winds up with the following, which is not far from right:

How to build and what to build of: In my experience I have seen all kind of shapes, sizes and material to date. I do not know of anything better than the common 2x4 of commerce. When you figure on size to build, first learn how many animals you wish to feed. A certain amount must be removed daily from the silo in order to have it at all times in the best condition. When surfaced off, that left on the immediate top will begin to deteriorate, on the same principle by which a can of fruit spoils after being opened.

A silo 14 feet in diameter, 20 feet high, will feed twenty cows; a 16-ft. one, thirty cows, and a 25-ft. one, sixty cows, with no loss. We will now suppose that you are ready to build the silo. The site is selected as near as possible to the mangers. The site is laid off with a board half as big as the intended silo. A pin in end of board driven in center of foundation and a peg in the other end to mark circle will lay foundation mark for foundation ditch. By moving pin in from the outside circle 18 inches, the inside line of the foundation is made. Then excavate to a depth of 18 or 20 inches. Then fill in with broken stone to level of ground. Then make cement thin enough to run freely between these stones and fill to level of ground. Then brick or stone can be used to carry foundation six or eight inches above level for sill. Have ten-inch boards cut in segments of the circle of inside diameter of foundation. Enough of this lumber should be cut for a sill of four thicknesses. Bed the first course in mortar. Break joints with the second layer, painting first course well with coal tar. Paint second course and nail in a few places with six or eight penny nails. Then lay third course and nail to other sections with ten-penny nails; fourth course same way. You are now ready to build the silo. Set up four 4x6 hardwood timbers at equal distances around the sill. Spike securely to sill. Then plumb and brace well. Do not have any braces inside of silo. Brace to the adjoining buildings as much as possible. For a scaffold timber use 2x4s same height as silo. Set one three or four feet from the 4x6 and nail a cross piece to 4x6 for each place where you wish a scaffold. On the 20-ft. silo this would be in two places. You will then have to set up a 2x4 midway between the two that are set at posts. So to lay scaffold plank around silo, begin by setting up 2x4s just as they come from lumber yard. No beveling necessary. Have one man at top of scaffold, one in middle, and a man at the bottom. Have 60 penny spikes ready, and as a 2x4 is set up, spike through its side into its adjoining mate in four or five places. If the lumber is quite dry, it is well to toenail to sill as well. Spiking the 2x4s together as above allows one to go right on and build silo without bothering with hoops until the silo is complete. Before putting up the silo, lay the 2x4s on a level place, close together, flat down. Then take an old broom or whitewash brush and paint with coal tar. Let them lie for a day or two, then turn over and paint same as before. Paint the edges in same way. In doing this you will have a silo that will last about as long as you will want one. The hoops can be one-half or five-eighths inch iron. Each hoop is in four sections. To reach through the 4x6 timbers, have threads cut six or eight inches on each end. Use cast-iron washers. To make doors: Go inside of silo and cut with saw on a bevel on inside of silo. Take pieces cut out and nail together with barrel staves. These doors will be held in place by the pressure of ensilage. Don't spend a cent on cement or other bottoms. Cement will not preserve the silage as well as the ground.

To fill: Use a corn binder and low-down wagons. Buy a cutter a size larger than you require. Get ample steam power. Then go ahead. Your silage will not cost you over forty cents per ton in labor, if you are good at planning and executing. The first fall we cut 400 tons at a cost of 33 cents per ton labor. If you have no silo, do not let another year pass before one is built on your farm. You will never regret it. If a cover is considered necessary, a cheap covering can be made of duck canvas stretched on four 2x10-in. plank, cut to meet in center of silo, with the narrow edge up and the other end nailed to the four posts, which should be a foot or two higher than the staves.

[NOTE.—We would not advise building a stave silo lower than 24 feet high, as the greater the height—the more weight of ensilage and the greater settling, leaving room for filling up again if there is

corn left filling. a more c one thi joints w satisfact our Que under th a valuab by a d ED. F. A

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With the raisin also brin the job. together, that doe draw the put the can be ra The ac it is a sat one man as the jo be frame It is r are invit not only of consi patent h long the among h The scyt now thi labor is f throughst will soon



corn left over more than can be gotten in at first filling. We would prefer 2x6 staves, and 16 feet is a more convenient and cheaper length. By cutting one third of the planks in two and breaking joints with a 16-ft. and 8-ft., the work is entirely satisfactory, as we have proven by experience. In our Questions and Answers Department this issue, under the heading, "Round Silo Pointers," we give a valuable new idea for silo door, suggested to us by a dairy farmer. It is worth looking up.—Ed. F. A.]

**Modern Barn Raising.**

BY JOHN D. M'GREGOR, HALTON CO., ONT.

In almost every department of agriculture great progress has been made in the last number of years, machinery and scientific methods taking the place of the old-time drudgery, but in the matter of barn-raising no progress has been made in the last quarter of a century until quite recently. While the first small frames that were built by the early settlers could be easily raised with the help of the neighbors, the immense structures that are springing up all over the country are a fruitful source of accidents, and the many accounts of death and disaster that the press of the country tell us of every year, set the more thoughtful farmers wondering, is there "no better way"? As I have never seen this matter discussed in an agricultural paper, I will try and describe the method introduced this year in Halton County, Ont.

A man has a raising outfit, and with his men and appliances travels from farm to farm, like a gang of threshers. The power is secured from a large derrick. This is erected on top of the foundation, and consists of three cedar poles about forty feet in length, and fastened together at the top. The bottom of the posts are spread in such a manner that the feet of two of them are about fourteen feet apart, while the other way they are perpendicular. The foot of the third post is about the same distance out. This leaves a perpendicular face, which is the front of the machine for working purposes. A long, heavy guy rope running opposite from the face is tied securely to keep the derrick from upsetting. The posts are secured by a strong frame at the bottom, and castors are provided for moving around the floor. A powerful block and tackle is used. The top block is fastened to the top of the derrick, and the bottom one to the timber that is to be raised. A single pulley is attached to the foot of one of the posts. The rope passes through this, and a span of horses supply the power.

In beginning to raise a bank barn, the end bent is put together on the ground, not on top of the foundation. It is put together with the feet of the posts away from the building, and the tie beam towards it. The derrick is set on top of the foundation, with the perpendicular face within, about a foot and a half from the end of the building. The tackle is secured to the tie beam of the bent, and the team is driven on. The bent is easily raised up, swings out clear of the stone wall, raised until the feet of the posts are clear of the wall plates; then a man takes hold of each post, and the horses are gently backed and the posts guided into their places. The bent is then properly stayed until the next bent is raised. The next bent will be put together on top of the foundation, with the feet of the posts away from the machine and the tie beam towards. The derrick is shifted round in position and the other bent raised. The girths are not put up until both bents are up, when a double block is put on the end of each girth, and they are easily and safely raised. In case the tenons of any of the girths should be a tight fit, instead of some artist dressing them down with an axe, as has been the custom in the old-time races, a double block is attached to the two posts and the timber is forced into position. The same system is followed until all the bents are raised.

When the plates are to be raised they are drawn alongside of the building, on the ground. The tackle is attached to the center of the plate, a guy rope is fastened to each end, and a man at each end stands on the ground and balances the plate. It is raised up clear of the posts, and the horses backed up, when it is easily guided into position. The purline plates are also raised from the ground clear over the outside plate, which is put into position first. The purlines are let rest on the top beams until the derrick is shifted into the center of the barn, when they are placed on their respective posts.

With regard to the cost of the job, the owner of the raising outfit brings all his outfit himself. He also brings four men, and charges twenty dollars for the job. The framer oversees the timber being put together. One man is required to drive the team that does the raising, another man and team to draw the timber, and about three or four men to put the timber together. With good luck a barn can be raised in a day.

The advantages of this method are many. First, it is a safe way. There is no noise or excitement; one man bosses the job. The timber is handled better, as the joints are not strained, and tighter joints can be framed, as the blocks will draw them together.

It is much cheaper, for as a rule from 100 to 150 are invited to a raising, and the supper is a matter not only of trouble to the ladies, but also a matter of considerable expense. We understand that a patent has been applied for, and believe that before long the agricultural implement agent will have among his regular stock, outfits for raising barns. The scythe, the cradle and broadcast sowing are now things of the past, the old system of statute labor is fast following, and the old howling, excited throngs that raced to get their plates into position first will soon be one of the institutions that "has been."

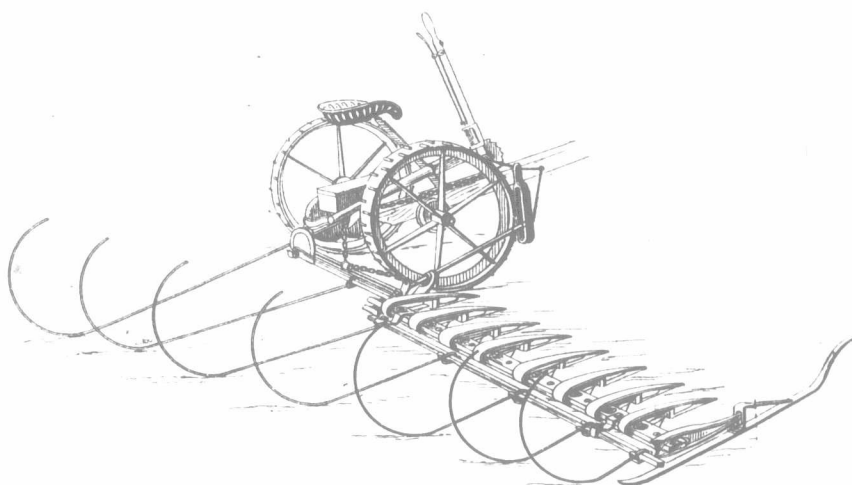
**New Pea Harvester Attachment.**

The attachment I have made to my pea harvester can be made to suit any ordinary width of cut. Mine is an old front-cut Toronto mower. The shortest tooth, or turned-up hook, should be not more than 18 inches long, and should be fastened as near the end of the bar as possible, or the peas will catch on the outside instead of starting to roll. The second tooth should be attached to the cutting bar about 9 inches from the first, and be about 10 inches longer. The teeth should gradually increase in length, and also in distance apart, the two longest being 18 inches apart. The first two are made of horse-rake teeth, and the rest of common round iron. It will be noticed by the illustration that the two longest teeth are fastened to the back of the mower proper instead of to the cutting bar. The longest tooth, if fastened high up on the mower, need not touch the ground till it comes to the crook, but it must be fastened so as not to swing in toward the others, as the peas have a tendency to pull it that way, and it should have a big crook. The distance between the longest tooth, fastened to the back of the mower, and the shortest one, attached to the cutting bar, should be about six feet, in order to allow plenty of room for the team to walk the next round. I have used this attachment for harvesting my peas for the last two seasons, and cannot see how anything can work nicer than does this.

I admit that the buncher is a good invention, but in my judgment this side-delivery attachment is away ahead of it, for with the buncher it requires a man to follow, and the team has to be driven slowly in order that he may keep up, whereas with this attachment the team can walk up promptly, and thus do a good day's work. It also leaves the peas in smaller, looser bunches (not in a continuous swath), that dry out quickly. I have a blacksmith shop on my farm, in which I do my own work. I have not heard of anyone manufacturing this contrivance for sale, nor do I believe it is patented.

Bruce Co., Ont.

J. K. LIVINGSTON.



SIDE-DELIVERY ATTACHMENT TO PEA HARVESTER.

**The Utility and Economy of Wind as a Farm Power.**

The progressive farmer must have power of some kind. If he does not have a silo, there are corn-stalks to be cut, there are roots to be pulped, and, in a large majority of cases, water to be pumped for the stock. We had a horse power for nearly 20 years, but we did not pump water or pulp roots with it; and it is very hard work on horses grinding grain. In winter the horses were often feeling very frisky, and by hitching them on to the horse power in that condition they frequently overworked themselves.

A year ago we got a 13-foot power windmill, and, with the exception of perhaps two or not more than three perfectly calm days, it has pulped all the roots, and we have not pumped one pail of water for the stock since it was put up. I think there was only one occasion that for a few hours the gearing was frozen up by an ice storm. The horse power would often get drifted up with snow, and sometimes the track was so slippery that the horses had to be sharp shod before they could do anything; and, again, in a blizzard a man could scarcely stand on the horse power to drive. Now, with the windmill, we let the lever go, and we are ready for business in the stormiest day that blows. From my experience, I reckon that our mill, in a good strong wind, is equal to five horses on the horse power. We do all our cutting, grinding, pulping, pumping, sawing wood, etc.

It is said that you must make hay while the sun shines. So you must use your power mill when the wind blows, and keep a good stock of cut feed and chop on hand. When one of the many days that are so stormy that a man can scarcely go out of doors comes, then you can be as busy as bees getting feed cut and grain ground. Our grinder is a perfect regulator, and never stops or gets choked, no matter how the wind vacillates.

I estimate that it is worth the cost of the outfit to have the roots pulped and the water pumped. We had an old cylinder, and threshed seven or eight loads of oats that were left over from the day's threshing, and on one occasion on which I was scarce of help I hitched on to the fanning mill and chaffed up a pile of oats that we had threshed with the cylinder, and it worked splendidly, but it is only

occasionally that we have a wind steady enough to drive the fanning mill successfully. The grindstone can also be run by windmill power.

A pumping mill will cost from \$60 to \$80, and will do nothing more than pump. Our power outfit, grinder, saw, mast, belting, etc., cost about \$200, and does all sorts of work. The outlay will vary with the size of mill, extent of piping, etc. So I think it is much the cheaper in the long run.

To many people it would seem an untruth, but it is a fact all the same, that the wind power is very easy on machinery. We have cut feed without fastening the cutting box to the floor.

There are differences in the position of farm buildings. We believe that in some situations, owing to the lay of the surrounding country, the wind is not so powerful as in other situations where the surroundings are different.

Oxford Co., Ont.

DAVID LAWRENCE.

**Cultivating the Corn Crop.**

For a month after the middle of May the chief corn-growing districts of Canada had reasons for feeling discouraged at the prospects of a good crop, because of the excessively cool and moist condition of the climate, but from the middle of June forward the corn weather has been ideal, until a good crop is now assured to those who do their share in promoting its welfare. It is not many years since it was generally conceded that when the weeds were destroyed the hoes and cultivators could be laid aside for the season, but it has now become pretty generally recognized, especially by reading and investigating farmers, that there are virtues in cultivation apart from killing weeds, viz.: conservation of moisture and aeration of the soil. Concerning the conserving of moisture by cultivation there is no room for dispute. Experiments have proved that cultivation has saved as much as three tons of water per acre per day over ground not cultivated, which saving was directly due to less evaporation from the cultivated soil. From this time on until the crop is too big to get through with a horse and

cultivator, frequent cultivations will do good; especially should this be done after every shower, because the rainfall prepares the soil in the best possible manner for the evaporation of moisture, by leaving the surface soil filled with small pores, which act as water conductors between the lower soil and the atmosphere. Writing on this point, Prof. James Atkinson, Iowa Agricultural Experiment Station, says: "Just as soon as the free water that enters the soil by force of gravitation is arrested by the capillary forces in the soil it immediately begins to rise toward the surface by virtue of the same force which arrested its downward course. It there-

fore follows that the breaking up of these surface pores will check this flow of water into the atmosphere, hence the wisdom of making free use of the cultivator after heavy rains."

But there is cultivation and cultivation, and there is a possibility of doing harm even by cultivation at proper intervals, if it amounts to root pruning by the implement running too deeply in the soil. As a matter of fact, while the corn roots permeate the soil deeply and in all directions, it is the roots that grow near the surface that do most in feeding the plant, for the reason that it is there that warmth and air prepares the food in liberal quantity. In a dry season it is especially injurious to a crop to destroy part of its root system, and we have good reason to believe that to deprive a growing plant of any of its roots is injurious. It is, therefore, as important to cultivate correctly as to cultivate at all, and, according to the most reliable authorities, from 1½ to 2½ inches is the best depth at which to stir the ground. It is also important to leave the surface smooth and level after each cultivation, as the rougher the soil the more surface there is exposed to the drying action of the sun. To give the cornfield a chance to return a full yield, not only should all weeds be destroyed, but cultivation should be sufficiently frequent to maintain a surface mulch of from 1 to 2 inches, and this can be accomplished by cultivation once a week in dry weather, and as soon after each shower as the ground will work well.

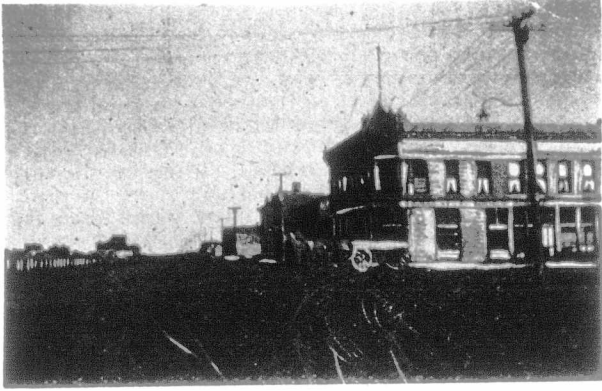
The crop prospects for Canada, on the whole, may be said to indicate yields above the average. Fall wheat in some districts of Ontario has suffered severely from Hessian fly and other causes, and in those sections will be not more than half a crop, while in other sections it promises a full crop. Hay, oats and other spring grain, as well as roots and corn, in Ontario and the Eastern Provinces, are all that could reasonably be desired, while the prospects for all crops in Manitoba and the Northwest are of the most encouraging description. The rainfall having been almost more than sufficient, and the weather having, as a rule, kept warm, vegetation has been exceedingly rapid, and the prospect for heavy yields was probably never better. The same we believe, may be said of the Pacific Province.

### Lethbridge, the Irrigation Town of Southern Alberta.

THE CENTER OF A DISTRICT WITH LARGE INDUSTRIAL POSSIBILITIES.

BY J. M'CAIG.

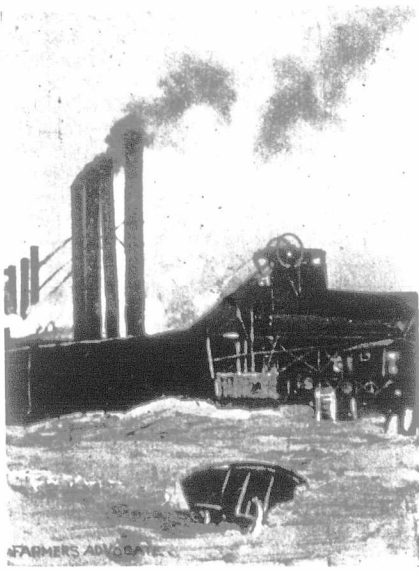
An easterner can have no adequate idea of what is meant by saying that the center of the Dominion is swinging westward, unless he takes it in with his own eyes. A written account, however, if justly and accurately presented, may encourage interest and stimulate the spirit of investigation. Governments look for foreign population, because, if such population is thrifty and ambitious, its coming in is a straight industrial and potential gain. It may be judged from the past history of the FARMER'S ADVOCATE that it would just as gladly disseminate common knowledge of the different parts of the



A BLOCK IN THE IRRIGATION TOWN.

country to its own citizens, that they may gain by it, as it would work to fill the country with a non-descript and in some cases doubtful class of settlers. The orange cover of the ADVOCATE is drawn from a good many post-office boxes in the great West, where it promises to play as useful a part in agricultural development as it already has in the older Provinces. It is quite to be expected that the phenomenal development of Southern Alberta should come in for its share of notice.

Owing to Lethbridge being the terminal point as well as headquarters of the most ambitious irrigation scheme in the country, it has tacitly and naturally taken on the name of the "Irrigation Town." This seems entirely suitable and right, both on account of the initiative of the town in evolving the scheme, and on account of the effect that settlement on the canal is likely to have in the making of the town. Irrigation is something of a pioneer enterprise in Canada, and demands considerable hope and confidence on the part of its promoters until its value and possibilities are learned from experience. The original outlay is large, and necessitates some waiting for returns, especially when it is a new scheme and is in a new country besides. The rapidity of settlement depends on the measure of success



MAIN SHAFT OF COAL MINE.

of the first settlers on the canal. The scheme has been energetically pursued on one side, and the success promises to be large, and so far it would be hard to find anyone who is sorry he came. It is a somewhat strange coincidence that the first year that the water has become available for irrigation purposes—i. e., this spring—that the rainfall should, contrary to the experience of other years, have proved amply sufficient for the nourishing of the crops, and the middle of June shows fine crops of fall wheat in the Magrath district, 20 miles south of Lethbridge, shot out in head, of fine height, and wonderfully sturdy. The condition of the crop shows the character of the land. The having of the water will make an absolute insurance of good crops. Vegetables of all kinds, but commonest of all, potatoes, show a strong and healthy growth, and fine strawberries are being produced.

This introduction of mixed farming into the district is of the highest importance. The chief drawback to many Western towns is the high price of

ordinary and necessary foodstuffs. The consequence is, that little in the shape of manufacturing has any place in the Northwest plain district at all. A brewery or a flour mill will thrive, but we can get our shoes and clothing, even with very high freights, cheaper than we could possibly make them, owing to the cost of labor, which has to subsist on very expensive imported foods. The rise of a farming community in the immediate neighborhood of Lethbridge is going to make possible the employment of labor in all classes of enterprise. A beet-sugar factory will probably be the first important concern arising from the new cultivation, and, of course, closely connected with it.

The town, on the other hand, which has for years been an important one, is peculiarly fitted to give substantial and complementary aid for the advantages it derives from the new agriculture. It overlies beds of unlimited extent of a semi-bituminous coal of the greatest use for both steaming and domestic purposes. The mines have a possible output of 1,000 tons a day, which limit of capacity is not uncommon during the season of sharp demand. The Canadian Pacific Railway consume half the output; the other half goes as far east as Winnipeg, as far west as Nelson and other British Columbia towns, as far south as Great Falls, Montana, and to many intermediate points within these limits. The importance of the mines to the agricultural and ranching population now rapidly coming in cannot be overestimated. A treeless plain is at first sight uninviting to an eastern man, but this is an advantage when, in addition to the absence of toil in clearing, a first-class fuel at a low price can be had as substitute for wood. Coal can be had at the mines for about \$3 a ton.

The market for farm produce promises to be as little limited to Lethbridge itself as the market for its coal is limited to the Lethbridge district. It is well known that British Columbia is essentially a mining and lumbering Province, with rather important fishing interests besides. The agricultural interests are relatively small, and are more or less patchy. The hay and cattle and sheep of the Territories are in sharp demand over the ridge in the Kootenay country, and other farm produce will be added when it is produced in sufficient quantity to constitute a surplus over local needs. There is an immediate prospect of traffic to the South, as well as the West, assuming large proportions. The narrow-gauge line of the Alberta Railway & Coal Company, running from Lethbridge to Great Falls, will in all probability be widened to standard gauge within the year.

Lethbridge is already a substantial town, that is being steadily modernized by the building of substantial business blocks and commodious residences, and seems to offer a satisfactory field for the laborer and the capitalist alike. Its neighborhood opens a field for the agriculturist, on either a large or a small scale. Under the irrigation system, the conception of successful work seems to favor the little farm well tilled; in other words, it favors intensive rather than extensive culture. The forcing system, which is possible under irrigation, demands frequent cultivation as a suitable interpayment to ensure the best results.

Added to the agricultural and industrial and commercial interests that seem to be so distinctly and pre-eminently concentrated in and about Lethbridge, are the ranching interests. The present spring has seen the introduction of "dogies" from Manitoba and Ontario in thousands. One man alone unloaded 4,000 picked yearling steers at the Lethbridge stock-yards during the early part of June, put them through the "squeeze," leaving his mark on them with the iron, and started for the Milk River ridge, which lies south of Lethbridge, near the Montana boundary. There are any number of smaller operators, all of whom look to selling the stuff at \$40 a head in two years, which is laid down to them at \$20, or below that figure. Sheep interests are scarcely less important, though the grazing of sheep is limited to prescribed areas. A bunch of 2,000 head is only a beginning; five thousand is a fair property. If a man favors horses, there is no less room for him than for the cattle and sheep men. In fact, horses can rustle free from attention better than either sheep or cattle. The range horses, owing to the dry feeding on prairie hay for the greater part of the year, and owing to constant exercise and the general indifference to hard conditions that their method of rearing begets, are perhaps the best-constituted and toughest horses in the world. During the month of June, Col. Dent bought them in hundreds, for British remounts, at \$80 and \$100 a head. Few of them ever bore harness, and some owned no master ten days before the period of sale. The process of "busting the broncho" is interesting, but that is another story. The profits are large at these prices for the cost of feed and the trouble of rearing. The ranching interests hinge principally on the climate, the salubrious and kindly character of which is not less appreciated by the men and women of the country than by the beasts.

It is sufficient inducement for Ontario men to come and see when each day brings enthusiastic delegations to the Territories from all parts of the United States, most of whom are satisfied to come to some part of the Territories and dispose of their interests on the other side of the line. The face of the prairie is bare to the sight of the easterner at first, and the life of the westerner seems to lack some of the frills that belong to the east, but the country has a potentiality and latent productiveness that offer the brightest possible field and opportu-

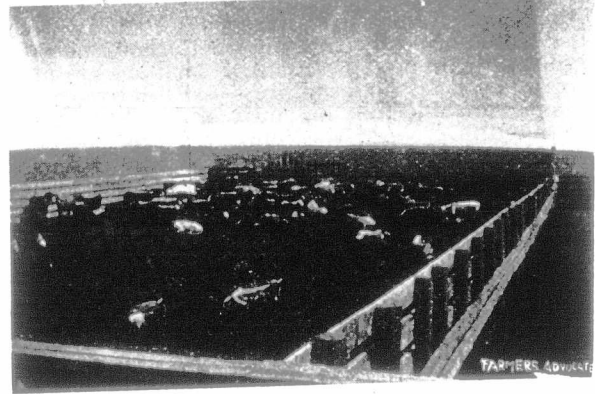
ity for the ambitious colonist. The pioneer days of the country are already past, as far as pioneering means experimenting, but there are still considerable opportunities to get control of cheap natural resources, capable of being made to yield larger returns for the capital and labor invested in them.

## DAIRY.

### Variations in Richness of Milk.

BREEDING FOR QUALITY.

In the recent milking and buttermaking trials at the Bath and West of England Show, in which only Jerseys and Shorthorns competed, we find from the report a wide variation in the fat content

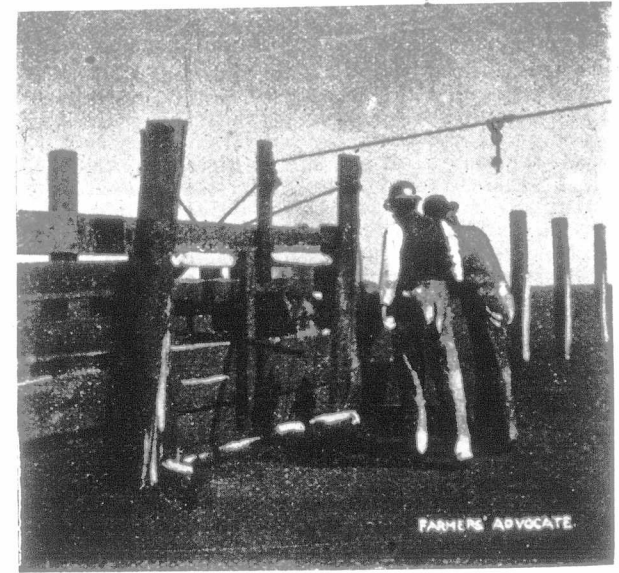


DOGIES IN LETHBRIDGE STOCK-YARDS.

of the milk of cows of the same breed. The *Farmers' Gazette*, commenting on this feature, says:

Twelve of the Jerseys produced more than 2 pounds of butter in the day, while three animals produced more than 2 pounds 10 ounces. Only two of the Shorthorns exceeded 2 pounds of butter, but, on the other hand, three of the six Shorthorns exceeded 69 pounds of milk, while only one Jersey approached that quantity, giving 52 pounds. Among the whole, only seven Jerseys exceeded 40 pounds of milk, but the quality of the milk much more than made up the deficient quantity. It may be remarked that the average quantity of milk required to make a pound of butter in the case of the Jerseys was 17½ pounds, the richest milkers giving 1 pound of butter to between 14 and 15 pounds. In three cases more than 23 pounds of milk were required, for all Jerseys are not rich milkers; but where, as in Dr. Watney's case, the animals had been bred by selection, the milk was large in quantity and wonderfully rich in quality.

Now, just as all Jerseys are not, as we have shown, the richest milkers, so all Shorthorns are not poor milkers. Five of the six cows gave milk which was excessively poor. In one case, indeed (this animal producing the largest quantity), it re-



IN THE SQUEEZE.

quired 41 pounds of milk to make a pound of butter, or more than 4 gallons; yet a cow from the same herd, giving 69½ pounds, required only 20½ pounds to make 1 pound of butter. Another Shorthorn, however, gave 4½ gallons of milk, which was as rich as the milk of the average Jersey in the small-breed class—so rich that a pound of butter was produced from every 18½ pounds of this milk. We have seen in the past that Jersey breeders, by selecting the richest and deepest milkers, have been enabled to achieve great distinction in these competitions. Surely it should be as possible for the Shorthorn breeders, by the aid of such cows as that mentioned—her name was Naughty Nancy—to do equally good work. She produced 2 pounds 7½ ounces of butter, or more than any of the Jerseys, with three exceptions.

Nor is this cow alone. There are many of such animals obtainable; they appear from time to time in competitions like that in question, and if mated with bulls which are similarly bred, there can be

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no question whatever as to the result which might be obtained. We feel that this question is really one of high importance to Shorthorn breeders. Hence we once more urge upon the importance of taking a line such as that suggested by the action of breeders of Jersey cattle.

**Important Meeting of Jersey Breeders.**

No more fitting place nor opportune time could be had for a gathering of Jersey breeders than at Dentonia, the stock and dairy farm of Mr. W. E. H. Massey, East Toronto, in June. Everything and everybody were at their best. The day (June 15) could not have been improved on—one of those clear, bright, sunshiny days, not a cloud in the sky, and the air as delightful as could be.



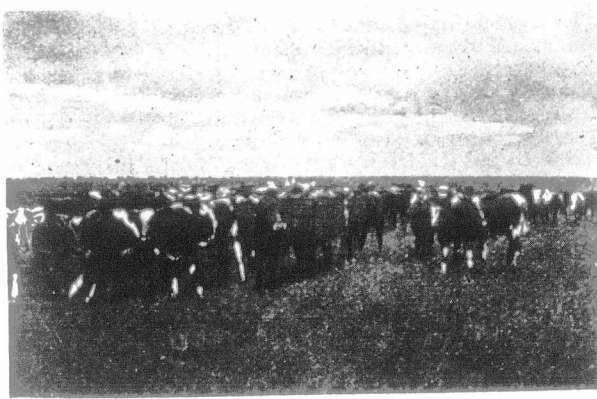
THROUGH THE SQUEEZE.

About forty breeders had taken advantage of Mr. Massey's kind invitation. Many new faces were seen at this, the inaugural meeting of the Canadian Jersey Cattle Club. Expressions of sorrow were heard on every hand at the absence of the esteemed president, Capt. Wm. Rolph, owing to illness.

The forenoon was spent in strolling along the fish ponds, and in visiting the poultry houses and pasture fields. As an evidence of kind treatment to the cattle by the herdsman, any of the cows could be handled by as many as half a dozen strangers at once without her showing any annoyance or being in the least disturbed. One of the cows in particular climbed the steep hill to meet the visitors, getting into a favorable position so as to show her elegant form to the best advantage, and evidently enjoyed the flattering remarks of her many admirers. She then followed us over the field, one way remarking that there must be a calf in the party. "Oh, no!" says another, "just a failing of her sex." However, her apparent vanity was quite excusable.

Dinner was served on the spacious lawn by Caterer Webb, and to say that all did justice to the elaborate spread is drawing it mild.

Mr. Massey was unanimously voted to the chair in the absence of the President and Vice-President. The chief business was the adoption of the new constitution, and placing the Dominion Charter of Incorporation on the table. Three hundred copies of the constitution were ordered to be printed and sent to members. It was also decided to write the



ON THE WAY TO MILK RIVER RIDGE.

directors of the Provincial Dairy and Fat Stock Show to give a prize for the greatest net profit in the production of butter-fat.

Mr. V. C. Fuller, the father of the Club, was present, and addressed the breeders on several matters of interest, urging Canadians to send a large representation to the Pan-American Exposition.

The meeting adjourned, after a vote of thanks to Mr. Massey for his unbounded hospitality, to inspect the meek-eyed beauties in the barns and scrutinize them more closely. The cattle presented a very healthy appearance, and it is very plainly seen by the young things coming up and the heifers in milk that the herd is improving. We were all loath to leave the interesting surroundings, but, as a large number had to catch the evening trains, the party broke up at 4.30, voting this one of the most successful outings of the Club. It was decided to hold the next meeting in December in Toronto.

**How to Make Good Butter.**

Many of our Canadian women make excellent butter. It is true that very few women acknowledge that they cannot make good butter, but it is also true that some very inferior butter, made by women, is offered for sale. Perhaps a few words of advice to those young, inexperienced housekeepers who are lamenting because they cannot sell their butter may prove acceptable.

**KEEP GOOD COWS.**

In the first place you should have good cows. I think Jerseys are the best, as their milk is very rich. The cows should be well cared for and treated with kindness. They should be curried sometimes. Never set the dog on them or frighten them. Although kind treatment may not improve the quality of the butter, it will certainly increase the quantity. See that your cows are healthy, and that they are fed on good, wholesome food. Give them salt regularly. Although some buttermakers feed turnips, and think it doesn't injure the butter, my opinion is they are better without them. If they are fed, they should be given to the cows as soon as they are milked, for if fed at any other time the milk will taste turnipy. Never give the cows any decaying vegetables, or any musty grain or fodder. Plenty of clean water, good hay, mangels, cracked grain, corn meal or bran in winter will make the cows milk well and produce good butter, if the buttermaker understands the business.

**MILKING, STRAINING AND SETTING.**

The milkers should wash their hands clean, and brush the cows' udders well before commencing to milk. As milk readily absorbs any bad odors, it should be kept covered in a cool place. Strain through a wire strain first, and then through three thicknesses of book muslin or cheese cloth. We set the milk in creamers. We have a box let into the ground near the house, into which we pour cold water, and then stand the creamers in. The water is changed every day, and in hot weather should be changed twice daily. We let the milk stand twenty-four hours, and keep the cream in a large crock tightly covered, stirring it every time fresh cream is added. I think it would pay every farmer to buy a small hand separator. Just here let me remark, if you want to make good butter, your milk pails, strainers, cream crocks and churn must be kept scrupulously clean. This is very important. A little carelessness in this matter will spoil the flavor of your butter.

**RIPENING OF THE CREAM.**

The cream must be ripened. It should be churned as soon as it is ripe. It has then a smooth, velvety appearance, and an agreeable acid taste.

**CHURNING.**

A barrel churn is, I think, the best kind to use. Stir the cream well, taste and smell it to see that it is properly ripened. In winter we warm it by setting the crock on the stove, stirring all the time until the temperature rises to 60 degrees. Then we pour the cream into the churn which has been scalded and cooled. We use coloring in winter, but in summer our butter is just right without it. The churn should be not more than half full, and should be churned steadily until the butter is broken. The butter should come in about thirty minutes. You all know when the butter is broken—you hear the familiar swish in the churn. You look in and see the minute specks of butter. Now stop churning and pour in some cold water and a handful of salt. This helps the butter to separate from the buttermilk. Now start the churn again until the butter shows about the size of wheat grains, then draw off the buttermilk. Do not use water which is warmer than the butter. Add as much water as there was cream, and revolve the churn quickly for ten revolutions, then draw off water. Now allow the butter to drain for a few minutes.

**SALTING.**

If you are going to pack down the butter and keep it until the fall, it will require one ounce of salt per pound of butter. If you are going to print it for present use, or to take to market, three-quarters of an ounce will be sufficient. Always weigh your butter and salt, or you may make mistakes if you don't. Distribute the salt as evenly as possible through the butter, and work well, for if you don't your butter will be streaky. When the salt is properly dissolved, the butter becomes close in body, and when cut shows no signs of pin holes. If you intend to keep the butter until you can obtain a higher price for it, pack it down solidly in a tub or crock. Then spread a clean white piece of cotton over it, cover with salt, and put away in a cool dairy or cellar.

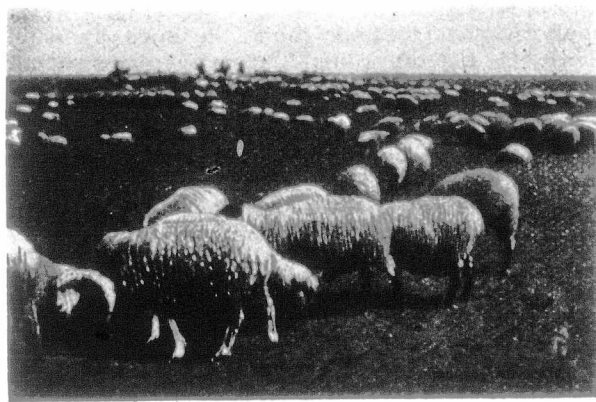
**MARKETING.**

If you intend taking your butter to the market, you must be careful to have it looking nice and attractive. Be sure and keep it firm (you can do so by using ice) for if it gets soft it will not look nice. Make it up into quarter and half-pound prints, so

that your customers can have their choice. Place it in your butter basket as you print it, and see that there is not a single spot or speck on one of the prints. Cover the basket with snow-white towels or napkins, and set it away in a cool place.

**CLEANING UP.**

Now, my good women, your butter is all ready for market, but your work is not all done yet. Wash and scald your butter worker, cream crock, ladle, prints and pan. Empty your buttermilk and wash the churn well in three waters. Scald and stand it out in the open air for an hour or so. Put away all the utensils clean, in their proper places, so they will be all ready for the next time you churn. Now you can go to bed with a clear conscience, knowing that reposing underneath your snow-white towels lies your beautiful gilt-edged butter, so smooth, firm and sparkling that it will at once attract the atten-



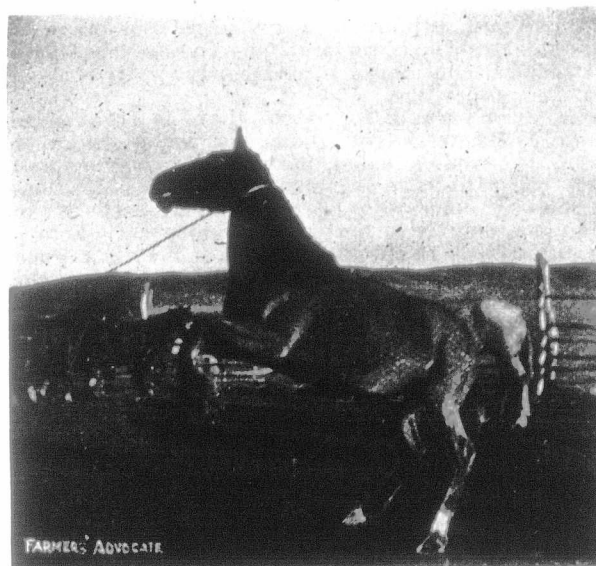
NOONING ON THE PRAIRIE.

tion of the fastidious city lady who goes around tasting, smelling and trying to find fault with the butter offered for sale. But just a few words of private advice now. Don't be in too much of a hurry in the morning about making your toilet before you start for the city. Remember, the town or city folk look at you, as well as at your butter, and the scrupulously-clean, neatly-attired woman will often sell her butter at once, while her neighbor who isn't so particular about her personal appearance (though her butter may be clean) has to stand in the market nearly all day before she sells it. By following the foregoing rules, I think you will find that your butter will be of first-class quality. You will have the satisfaction of knowing that you are offering for sale a good, honest article, and after a customer buys from you, you will not be ashamed to look him or her in the face when you meet them again.

A. R.

**Selection of Calves for the Dairy.**

Dairy farmers as a body do not pay as much attention as the subject deserves to the selection of the cows kept by them for breeding purposes. A



ROPED FOR THE FIRST TIME.

point should always be made of retaining for use in the dairy only such cows as are known to be good milkers, and the calves from these should always be selected and kept in preference to those produced by animals with less satisfactory records at the pail. And this should be done even though the appearance of the calves from the latter may be better than those obtained from the deep-milking dams. The bull, as is well known, exercises an important influence upon the milking qualities of the stock got by him, and most experienced dairy farmers make it a rule to see that the bull by which their calves are got comes of a good milking strain. Important as is the influence of the bull, however, that of the cow is just equally so, and for this reason every care should be taken to see that the heifer calves retained for subsequent use in the dairy are not only got by bulls of a good milking strain, but that they are the progeny of cows who have distinguished themselves at the pail.—Farmers' Gazette.

**Location of the Dairy Stable.**

BY HERBERT SHEARER.

The proper location for a dairy stable is one of the most important considerations in the construction of the most important adjunct to the dairy business. To be able to start right it is necessary to consider the subject from different standpoints. Fresh air and a plentiful supply of pure water, good drainage, protection from cold winds, plenty of sunshine and convenience in regard to feeding arrangements are the essential features to be considered.

Fresh air and drainage may be provided by selecting an elevation. Protection from cold winds is secured by planting a tree belt along the northern exposures, but it is not always easy to combine with a location of this nature the proper water supply, which is a very essential feature. Generally speaking, the elevation also assists in providing a water supply, as the pumping should be done by wind power. A rise of ground naturally gives an uninterrupted wind approach, that the derrick may be high enough to catch the wind above the tree wind-break. In no case should the water supply be poor, limited or inconvenient.

In addition to the tree belt, a high-board fence should enclose a breathing space; this fence should be well constructed, and the joints between the boards battened tight. If, in addition to this, a shed roof is provided opening to the south, winter yard conditions will be about as good as they can be made, provided, of course, that the ground is supplied with proper drainage. The filthy, miry condition of so many barnyards is sufficient excuse for laying so much stress on the importance of this feature. The abomination that is permitted to exist year after year in connection with farm barns and stables is little short of criminal. Ideas in this respect, however, are fast changing. Domestic animals are recognized as possessing certain inalienable natural rights that owners are bound to respect. The old-fashioned notion that any kind of an old shed planted in any sort of a mud hole, in any haphazard location, is good enough for cattle has given way. This is particularly true in the older States of the East and middle West, as well as throughout the dairy sections of Canada.

Boards of health and State boards of agriculture have inaugurated a system of inspection that has exerted a salutary influence, especially in milk-shipping districts. Humane considerations have had a good deal to do in bettering conditions in this respect, but mercenary interests and the general health of humanity have combined to bring the subject home to many interested people in a very forceful manner. The fact is now recognized that it pays to take good, intelligent care of domestic animals, which is simply producing at all times natural favorable conditions, which are always the most economical in the end. Dairy cows return dividends the ratio of which increases in direct proportion to the care and intelligent consideration bestowed upon them.

So little attention is now being paid to pasture that the fences and long lanes leading from the stable to the fields, which were formerly such an all-important adjunct to a well-regulated farm, do not enter into the consideration. In many localities pasturing is considered too expensive in these days of keen competition.

North of parallel forty-two, there is an average of only six weeks of good pasturage. Summer droughts, sandwiched in between late spring and early fall rains, are responsible for this condition. A runway consisting of about one-fourth of an acre per cow is a better and more satisfactory arrangement. It should be enclosed with a good movable fence, and shifted occasionally for the benefit of the land; this, however, is largely a matter of personal opinion as well as convenience. A permanent pasture that has never felt the plow offers advantages that no artificial production can equal. Where a running stream of good water exists within a reasonable distance of the stable, the question of a pasture run will settle itself. On the great majority of farms artificial water supply must be depended on—a condition that should be met by a never-failing well with a windmill sufficiently powerful to carry the water not only to the stable, but to the pasture lot. A drinking trough should be placed in a shady spot and water conducted to it through pipes placed underground, sufficiently deep to be cool in summer and beyond the reach of the frost in winter.

Too much stress cannot be placed on the importance of plenty of pure water provided conveniently for dairy cows. Fever conditions, which affect the condition of the milk, are too often produced by cows going too far to water.

Tainted milk, or the fevered condition of the cow that leads to tainted milk, is produced in this way; too often it is aggravated by the presence of a dog when the udders are so full as to render every step painful.

Silage crops are so thoroughly distributed over the farm that the location of the stable makes very little difference in the work of filling the silo, though easy grades and a good hard track will materially assist the aggregate amount of forage hauled with a given number of loads.

Mr. Frank A. Converse, Manager of the Agricultural Department of the Pan-American Exposition, is illustrating many of these essentials to modern dairying on the grounds.

**Week's Work in Pan-American Dairy.**

CONDENSED REPORT FOR THE WEEK ENDING JULY 2ND.

BREED.	Milk.	Amt. of Butter	Value at 25c.	Cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
<b>Ayrshires.</b>					
Kirsty Wallace	242.8	10.57	\$ 2.04	\$1.15	\$1.49
Lady Flora	363.6	11.16	2.79	1.18	1.61
Alice 2nd	238.3	12.15	3.04	1.15	1.89
Betsy 1st	287.0	12.49	3.12	1.15	1.97
Pearl of Woodside	273.1	12.21	3.05	1.15	1.90
Total	1324.8	58.58	14.64	5.78	8.86
<b>Jerseys.</b>					
Gipsy	232.6	12.72	3.18	1.22	1.96
Primrose	193.1	12.71	3.18	1.08	2.10
Queen May	219.7	12.40	3.10	1.01	2.09
Rexina	226.6	9.59	2.40	1.07	1.33
Mossy	232.9	12.33	3.08	1.17	1.91
Total	1104.9	59.75	14.94	5.55	9.39
<b>Shorthorns.</b>					
14th Princess of Thule	246.2	11.29	2.82	1.26	1.56
Daisy D.	263.0	10.01	2.50	1.26	1.24
Miss Molly 24556	281.2	11.53	2.90	1.26	1.64
Queen Bess 21786	283.6	11.68	2.92	1.26	1.66
Rose 3rd 113205	378.6	11.14	2.79	1.26	1.53
Total	1356.6	55.70	13.93	6.30	7.63
<b>Guernseys.</b>					
Vega	206.0	10.66	2.67	1.02	1.65
Cassiopeia	254.8	12.14	3.04	1.21	1.83
Mary Marshall	247.2	15.27	3.82	1.20	2.62
Madora Fern	200.6	10.38	2.59	1.03	1.56
Procris	232.7	12.04	3.01	1.19	1.82
Total	1141.3	60.49	15.13	5.65	9.48
<b>Holsteins.</b>					
Meg	286.8	10.97	2.74	1.14	1.60
Tidy	291.5	10.63	2.66	1.14	1.52
Inka Mercedes	300.4	11.31	2.83	1.08	1.75
Hulda	316.6	11.73	2.93	1.14	1.79
Beauty	316.9	12.30	3.07	1.14	1.93
Total	1512.2	56.94	14.23	5.64	8.59
<b>French-Canadians.</b>					
Liena Flory	230.8	10.99	2.75	1.00	1.75
Denise	235.8	10.68	2.67	1.00	1.67
Luna	320.5	9.47	2.37	1.00	1.37
La Bouchette	173.8	7.26	1.81	.92	.89
Houen	219.2	11.86	2.97	1.00	1.97
Total	1080.1	50.26	12.57	4.92	7.65

REPORT OF THE MODEL DAIRY AT THE PAN-AMERICAN EXPOSITION, GIVING TOTALS OF EACH HERD COMPLETE FROM THE COMMENCEMENT OF THE TEST, MAY 1ST, UP TO AND INCLUDING THE WEEK ENDING JULY 2ND.

BREED.	Milk.	Amt. of Butter	Value at 25c.	Total cost of Feed.	Profit.
	lbs.	lbs.	per lb.		
Holstein	1512.2	56.94	\$14.23	\$5.64	\$8.59
Shorthorn	1356.6	55.70	13.93	6.30	7.63
French-Canadian	1080.1	50.26	12.57	4.92	7.65
Guernseys	1141.3	60.49	15.13	5.65	9.48
Ayrshires	1324.8	58.58	14.64	5.78	8.86
Polled Jerseys	394.3	48.34	12.09	3.96	8.13
Jerseys	1104.9	59.75	14.94	5.55	9.39
Dutch Belted	1132.9	44.36	11.10	5.83	5.27
Red Polls	1207.2	56.35	14.09	5.33	8.76
Brown Swiss	1338.9	56.94	14.24	6.21	8.03

**The Dairy Cows at Buffalo.**

FROM OUR OWN CORRESPONDENT.

The ninth week of the Pan-American has been a trying one for the dairy herd. The extreme heat and want of proper ventilation, coupled with the erratic supply of silage of poor quality, has caused a drop in the milk flow which will not be regained. These cows which have been long accustomed to a liberal supply of silage and have acquired a strong liking for it have felt the need of it most, with a consequent heavy falling off in milk.

The Ayrshires are the heaviest losers over the previous week's record, having lost 154 lbs. for the week, with no increase in milk fat, and are, in consequence, set back to third place for net profit.

The Jerseys and Guernseys have both gained in milk fat, and the Guernseys have lost the least in milk of any of the breeds (excepting the Polled Jerseys), and have taken first place again. The Jerseys made a splendid effort to capture first place, but lost it by only ten cents.

The Holsteins have been heavy losers in milk, with no increase in milk fat, four cows having lost 140 lbs. in milk. Meg, the O. A. C. Holstein, pulled up from her sickness of the previous week and increased her previous week's record by 54 lbs., which saved the Holsteins from being the heaviest losers in the barn.

Green clover has been liberally fed in place of silage, but the herdsmen have no faith in it to take the full place of silage, and the results since commencing to feed it seem to justify their opinions.

The clover, however, gives the butter more color than could possibly be given it by any preserved food.

The color has been one of the points which the butter has lacked all through the test with all the breeds, except the Guernseys, theirs scoring perfect in color. Most people are surprised at the lack of color in the Jersey butter, which is but little better than that of any of the other breeds.

The replacing of silage with clover has not tended to diminish the fat content of the milk, but, on the contrary, has increased the average test of the whole herd from 3.77 to 3.9% during the past week.

There is a full supply of silage now in sight again, which, with cooler weather, will give the cows a chance to regain their losses. We have some interesting individual tests arising from physical disturbances of the system, mostly from cows in heat. In most cases the milk flow drops to about half and the fat content drops in about the same proportion, and then the test will as suddenly go up again above normal.

The Guernsey cow, Medora Fern, dropped in her milk flow on July 2nd from no apparent cause, and the milk tested 2.8%; the second and third milkings after that tested 5% and 6%, respectively, while her weekly composite test was 4.4% for the previous week.

One of the Jersey cows in heat dropped in her fat content to 1.5%, while her normal test was 3.9% for the week. The general health of the cows for the past two weeks has been good.

July 8th, 1901.

**Dried Blood for Young Calves.**

For two years the Kansas Experiment Station has used dried blood in connection with its experiments in feeding calves. In March, 1899, one of their cows gave birth to a calf weighing eighty-six pounds. This calf was allowed to suck for several weeks, to assist in reducing the inflammation in the dam's udder. On account of poor quality and quantity of milk, the calf did very poorly, and to save its life it became necessary to remove him from his dam. With the ordinary treatment accorded the calves, he grew worse and worse, and when seventy-nine days old weighed only ninety pounds, or four pounds heavier than at birth. He was given castor oil, laudanum, fresh eggs, calf meal, and, as a last resort, dried blood. With the blood the calf commenced to improve, and in a short time was gaining at the rate of nearly fourteen pounds per week, and not infrequently as high as seventeen to eighteen pounds per week. When a year old he weighed five hundred and seventy-eight pounds—a pretty good record for a calf that gained only four pounds for the first seventy-nine days of its existence. The dried blood consumed during parts of three months amounted to seven and one-half pounds.

In October, 1900, a heifer belonging to the Agricultural College dropped her first calf. The calf was small and sickly, and for the first few weeks did very poorly, as is shown by the fact that on December 1 it weighed two pounds less than on November 1. For a few weeks its life was in a very critical condition, but when induced to eat a little dried blood with its milk it began to improve, and has been making fair gains ever since.

Dried blood is not only good for a weak calf, but is an excellent remedy for any calf subject to scours. The Kansas Experiment Station has just purchased twenty young calves. Frequently these calves arrive at the Station badly affected with scours; a little dried blood always brings about a cure. Recently a test was made with five calves that happened to be scouring at the same time. With two of these dried blood was fed after reducing the regular feed of milk. With the other three the dried blood was fed without changing the supply of milk. In the former case the calves recovered from the scours after two feeds; in the latter after three feeds. With the seventy head of young calves under experiment at the Kansas Station during the past year, there has not been a single case of scours that dried blood has failed to check.

In feeding dried blood, a teaspoonful at a feed is plenty. This should be continued until the scours disappear. In case of a weak calf, the allowance may be gradually increased to a tablespoonful at a feed. To prevent the dried blood from settling to the bottom of the pail, where the calf will be unable to get it, it may be stirred in the milk while the calf is drinking, or the milk and blood may be fed immediately after being thoroughly mixed. Since dried blood is such a cheap and effective remedy, it will pay anyone who raises young calves by hand to have a little available whenever a calf shows signs of disorders in its digestive tract. It can be obtained from any of the large packers, at about 2 cents per pound. When ordering, state that the blood is wanted for feeding purposes.

Kansas Expt. Sta., June 4, 1901. D. H. OTIS.

**The Wisdom of Treating Cows Kindly.**

Mr. J. A. James, a successful Middlesex Co. (Ont.) dairyman, referred in an address to the patrons and pupils of Western Ontario Dairy School, to the importance of affording milking cows comfort at all times. He said:

"Animals will not give adequate returns for the food consumed unless they receive kind treatment. This is particularly noticeable with cows. In the month of June, for instance, when on pasture and giving a large quantity of milk, if brought from the field hurriedly by a dog or a person on horseback, and milked while they are excited, the average result will be about half the usual quantity of milk. Some of the most nervous cows (and they are the best) will give only one-fourth, and according to experiments it is found that the percentage of butter-fat in the milk given is reduced. Any farmer who will abuse his cows, or allow them to be abused, had better go out of the business. He cannot expect to get returns for his food consumed."

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be seen artificia ing are work i done i the wo other g obtain shrubs Nowad coming dries grade (Fig. 1)

GARDEN AND ORCHARD.

Beautifying the Rural Home.

Every one who has travelled in the more settled parts of Canada must have been impressed with the appearance of comfort and thrift to be seen in the farm homes on every hand. Almost without exception there is about them an air of peace and plenty. In the older lands it is different. Mrs. Hemansings

to take the most perfect natural form, while they are so grouped as to give the greatest variety of natural beauty."

In the artificial system one knows just what to expect, a circle here, a tree there, a flower bed yonder, everything trim and stiff, whereas in the natural system fresh surprises meet one at every turn, and the general effect is more restful and pleasing.

We give (in Figs. II. and III.) illustrations of the two systems in grading, also in (Figs. IV. and V.) tree-planting. The planting of trees in straight rows

quote at this point one sentence of special interest to us as farmers: "There is no place so susceptible of ornamentation as the average farm, and possibly no place where so little is done to improve the beauty of the surroundings." He suggests that on the farm fruit trees be planted for ornament, many kinds being fine shade trees, and specially beautiful when covered with bloom or loaded with fruit.

In addition to the few things we have thought worthy of special mention as above, and which are treated fully in the book, a great deal of information is given on varieties of trees, shrubs, hedge plants,

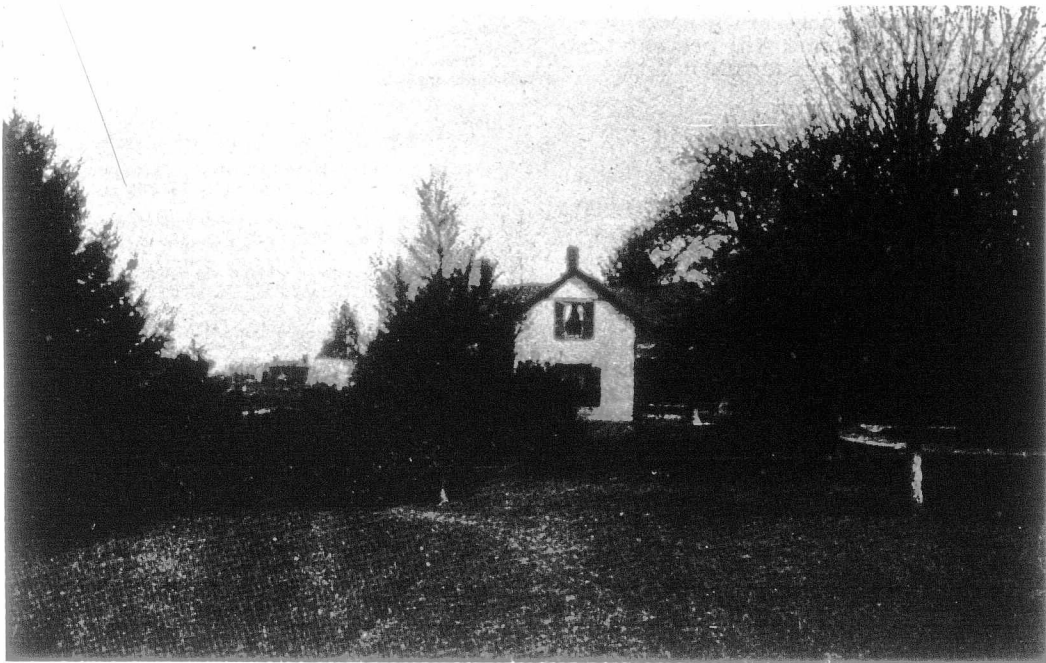


FIG. I.—A COTTAGE HOME.

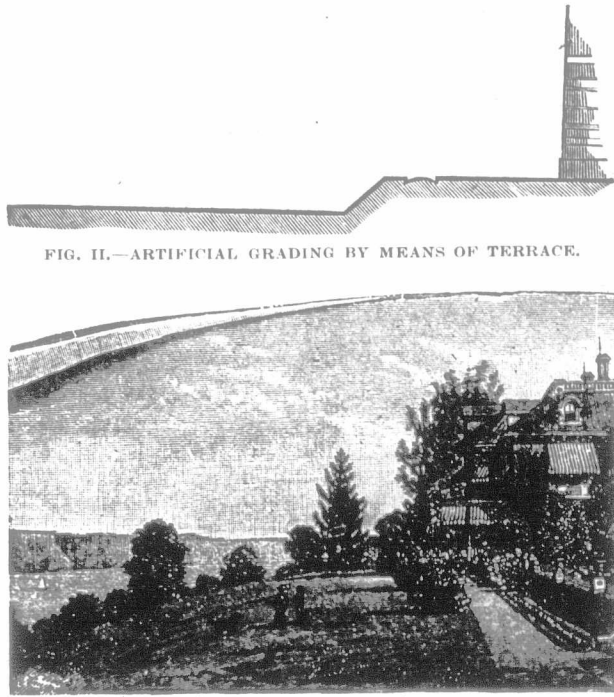


FIG. III.—GRADING, NATURAL SYSTEM, BY GRACEFUL SLOPE.

of "The stately homes of England, how beautiful they stand," but does not tell us that for every stately home there are a score little better than hovels. Among the farmers of our favored land there is a more even distribution of wealth than can perhaps be found anywhere else. Not only are the farm homes substantial and comfortable, but in nearly every case there has been some attempt to ornament and beautify. Trees have been planted, flowers cultivated, and other little touches added. Much more than an attempt has been made in many instances. Trees have been planted, yes, profusely; fine fences put up, an extensive lawn laid out and kept trimmed, and so on. There is, however, so little general knowledge of how to lay out a place for the best effect, that the results, even where much labor and thought have been expended, are often very unsatisfactory. The most common mistake in the planting of trees about a house has been in planting too thickly, and more especially right in front. How many fine places are thus completely shut out and shut in. This accentuates the feeling of isolation felt by dwellers on the farm. The shutting out the sunlight and fresh air, as well as views of the world outside, is a positive menace to health.

A book has lately come into our hands which is intended to give the information so much needed on the whole subject of beautifying the home. It is written by Professor Maynard, of the Agricultural College, Massachusetts, and entitled "Landscape Gardening as Applied to Home Decoration." It is published by John Wiley & Sons, New York.\*

Landscape gardening has to do with the laying out of grounds about the house and outbuildings, the making of lawns, location of walks and drives, planting of trees, shrubs, etc.; position of flower beds; everything, in fact, which pertains to the appearance of a home and to the views—landscapes—to

(Fig. IV.), except for avenues, is discouraged. They should be in masses, groups, or standing singly, as in Fig. V. Planting should be done so as to allow of as many pleasing views as possible, while shutting out unpleasing ones. We give an illustration of trees and shrubs planted along many radiating lines (Fig. VI.), so as to afford vistas in many directions. Groups of trees of similar characteristics should generally be avoided. More pleasing results are obtained by associating trees of different form, colors and sizes, which should be arranged in a natural and artistic manner. Generally speaking, the tallest trees should be in the center of a group, or in the

and climbing shrubs, their characteristics, how and when to plant, prune, enrich, etc.; also on herbaceous plants, ferns, ornamental grasses, etc. One chapter treats of insects injurious to ornamentals, and how to combat them. Another is devoted to the home fruit garden, with diagram.

The author differs from other authorities on some points, and we have no idea that he has said the last word on the subject, but his book is one that we could wish were in every Canadian farmer's library, as it not only gives valuable information, but would stimulate thought and increase interest in a subject to which little heed is given. A chief reason of the half-hearted way in which so many farmers go about the fixing up of their places for beauty is that they do not know just how it should be done, and they know they don't. If they knew just what was the correct thing to do they would bestir themselves with more energy. More knowledge and interest in this subject would result not only in more beautiful homes and more pleasure in them, but would also add to the actual cash value of farms. "I would consider," said a man looking at and admiring the trees ornamenting a farm home, "those trees, if they were mine, worth \$1,000." They had cost, counting everything, probably not \$50.

\*NOTE.—The price of the volume is \$1.50. Copies may be ordered through the FARMER'S ADVOCATE.]

Exterminating Noxious Weeds.

The best and only method I have ever tried to exterminate noxious weeds (including morning-glories, cockleburrs, quack grass, thistles, etc.) is to never let them seed. This can be done by going through the corn soon after harvest and pulling up all weeds and burrs that the cultivators failed to get. If the above methods are employed, two or three years is all the time required to rid the most foul farms of those troublesome pests, provided the farmer is ever on the alert, not allowing any of



FIG. IV.—TREES PLANTED IN STIFF ROWS.

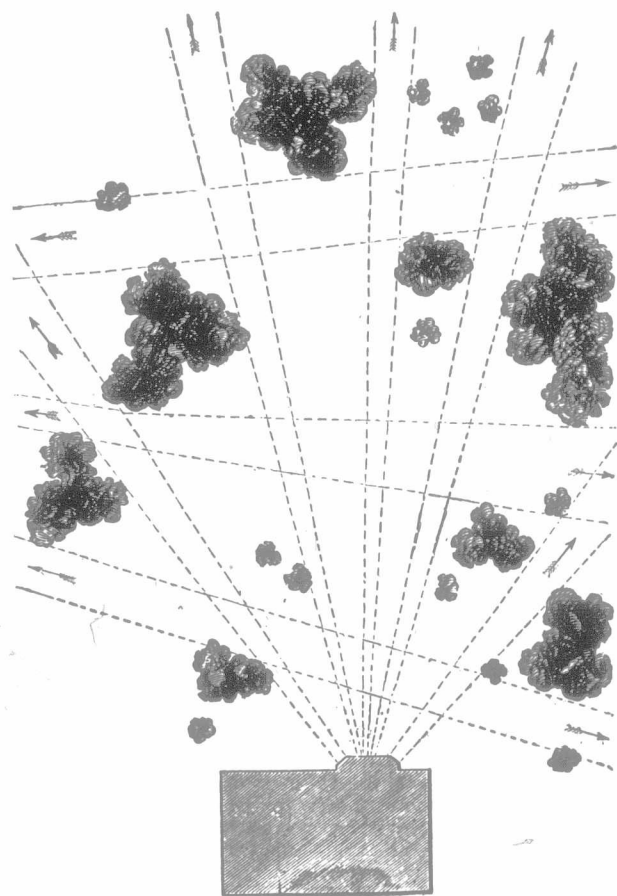


FIG. VI.—TREES GROUPED ON LAWN, AFFORDING VISTAS IN MANY DIRECTIONS.



FIG. V.—TREES IN GROUPS, NATURAL SYSTEM.

be seen from it. In the book mentioned above, the artificial and natural systems of landscape gardening are contrasted. "In earlier times much of the work in landscape or ornamental gardening was done in the artificial or geometrical system, where the work was largely laid out in squares, circles and other geometrical figures. Changes in grade were obtained by steep terraces (Fig. II.), and trees and shrubs trained to regular and often grotesque forms. Nowadays the natural system is more and more coming into use. By this system the walks and drives are laid out in graceful curves, the changes in grade made by gentle slopes and rounded surfaces (Fig. III.), and the trees and shrubs are encouraged

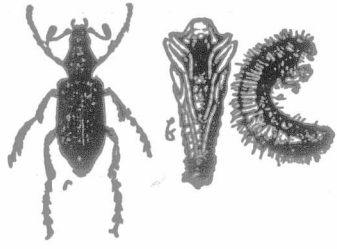
background. The author sums up his ideas on tree-planting by saying that "the aim should be to obtain shelter from cold winds, to secure as much sunlight as possible, and preserve the most beautiful views."

He takes up his whole subject in relation: 1st, to new homes; and 2nd, to homes already established. His book is written for those who cannot afford to get the costly advice of a professional landscape gardener, and to such he gives great encouragement to observe, study and plan, as their interest and delight in their home surroundings will thereby be increased, and the results obtained by amateurs are often equal to those reached by professionals. We

those pests to grow or seed along fencerows or other waste places on the farm. It is often the case that the waste places on the farm are allowed to mature a crop of all kinds of foul weeds sufficient to seed the entire farm from year to year, regardless of all care taken to keep the cultivated fields clear of them. I know it takes lots of nerve and pluck to cut weeds and burrs with the sweat dripping from the brow, but it is by the sweat of the face that we are to earn our bread, and as two or more stalks of grain will grow on the space of ground required to mature one good healthy cocklebur, we should work with a will and determination to get rid of them.—Iowa Homestead.

### A New Peach Pest.

The other day I called on Mr. Gordon Ball to ascertain the nature and extent of the injuries done by the "new peach pest." The cause of the injuries to the peaches at Mr. Ball's is the rose beetle or rose chafer (*Macrodactylus subspinosus*), a yellowish beetle, about half an inch in length, with long, slender legs of a pale red color. Fully one third of the peaches in one of Mr. Ball's orchards are destroyed. Large open wounds are made on the sides of the undeveloped peaches, which soon fall or begin to rot. Ten of these rose chafers were counted on a single peach. Fortunately, these pests are local, and, so far as can be ascertained, are confined to one or two orchards. Their usual food-plants are roses and grapes, but occasionally they



ROSE CHAFER (*Macrodactylus subspinosus*).—A, larva; b, pupa; c, beetle (slightly magnified).

overrun orchards and destroy most of the crop before action can be taken. When observed in time, they can be prevented from doing serious injury by jarring them into funnel-shaped cans or sheets in early morning, while they are drowsy, or by the timely use of Paris green. Trees which have been whitewashed often escape. The eggs are laid in July, an inch below the surface of the ground, and the larvae or grubs feed on the roots of plants, chiefly grasses, until the cold weather sets in. In spring the pupa is formed, and the adult emerges in June. W. LOCHHEAD.  
Ontario Agricultural College.

### Fighting Garden Insects.

One of the greatest boons to gardening would be the discovery of efficient methods and remedies, easily to be procured and of easy application, for the destruction of insects. This, however, is a difficult matter to accomplish. The cabbage worms are abundant and destructive. I have warred against them with tobacco water, saltpetre, alcohol, etc., in various combinations, but finally settled upon an emulsion of kerosene and soap-suds as the remedy, all things considered, the most satisfactory. Dissolve  $\frac{1}{2}$  pound of hard soap in  $\frac{1}{2}$  gallon of water by boiling, then remove from the fire, add 1 gallon of coal oil, and stir vigorously five to ten minutes, or until it becomes thick and creamy. This is the stock solution, and must be diluted to 15 or 20 times its bulk of water before using. For rose bushes use 20 to 25 times water to 1 of the stock solution. It should be applied as a fine spray. This mixture destroys all worms that become thoroughly wet with it, and does not injure the plant. The kerosene is the insecticide, the object of the soap being but to weaken it. There is one caution to be given. If repeated applications of the mixture are made upon the same plants, the more tender varieties will be injured or destroyed. The growing cabbage furnishes so many hiding places for worms that one cannot hope to destroy them all with one application, however thoroughly it may be made. The perfect remedy should destroy the worms wherever it touches them, and should not injure good growing plants in the least under any number of applications.

Readers, do you know that if you like you can have early and late cabbage all from the same plant. I set out my plants very early. They have nice heads by the middle of July. Then I use all the cabbage I like on the table. I cut the heads off and leave the roots in the ground. In a few weeks there are a great many tiny heads started from the old root. I then cut them all off but one, and by fall I have another lovely head from the one root. A person often wishes to use half a head, and then if you lay the other half away it will not keep well these hot days, so take a newspaper and cover it well up. When you are ready to use it, it will be fresh and nice.

During the strawberry season I notice that a decaying strawberry has a great attraction for the wireworm. I frequently find as many as twenty of these worms beneath a single overripe or decaying berry. This suggested the thought to me that it might be possible to entrap the wireworm by placing some sweet substance about plants that are troubled by it. I placed small lumps of a mixture of molasses, wheat flour and Paris green about plants in the flower garden, which from the early spring have been the favorite haunts of these pests. I use one part Paris green mixed with 200 parts of gypsum or land plaster to kill the potato beetle. Great care is, however, required to secure a thorough admixture of the two substances where so small a portion of the poison is used. In this dilution Paris green is said to lose its danger to the human family.

I have also found a remedy to destroy the squash borer. Give them a solution of sulphate of iron about the roots. Mine are the Hubbard variety. All my vines have been infested by borers. At the time the application was made they were nearly dead. I split the stem lengthwise to the center, and

picked out the borer with a pair of tweezers. I then poured a solution of copperas about the roots of the plants, sprinkling it upon a circle about four feet in diameter, taking care to allow none to touch the leaves. In the plants I have found no borers since the application was made. The vines quickly assumed a dark green color, and are growing vigorously. The portion used was one-quarter of a pound of copperas dissolved in a gallon of water, and a gallon of the solution was used for each plant.

Last year I tried an experiment on my row of radishes. I watered them with saltpetre water made of one-half pound to one gallon of water. The worms never touched them after the water was applied. Saltpetre water is not injurious to vegetable life, but it is always death to animals. A couple of gallons of it poured around the roots of a peach tree affected with leaf curl will prevent the leaves from curling. FARMER'S WIFE.

### Canadian Fruit versus the World.

No parts of the world can excel all the southern part of Ontario, portions of Quebec and a considerable portion of Nova Scotia for the successful production of the apple, which must always, among the fruits, hold foremost place in the estimation of mankind. If carried too far north it dwindles to a crab; if too far south it becomes spongy and insipid.

It is no fault of our Australian cousins that their apples are hardly even second class. I visited the Horticultural Gardens of Melbourne, where there were no less than 650 varieties of apples growing. Everything that can be done by a most enterprising people to secure success, the Australians have done, but they have not succeeded and cannot.

Why? Because the apple, to reach its best in crispness and in flavor, must have frost, and on the ordinary level, Australia has neither frost nor snow.

A fellow-voyager from Samoa to New Zealand told me he had 100 acres of apples about thirty miles from Sydney. I think he said the altitude of his farm was about 2,000 feet, where he had nine inches of frost. He said he would be willing to give a considerable amount of money if he could get a foot of frost. He admitted that with all his efforts his apples were not up to his ideal, and the reason was too little frost. Fifteen or eighteen inches would be better still. Beyond that there is danger of too much.

There are regions of Canada where apples are successfully produced where the winter might sometimes at least carry the frost deeper than eighteen inches, but the snow comes as a protection, and this when melting before the warm April sun becomes an invigorating stimulant to the roots.

While Southern Ontario, embracing now nearly two and a half millions of people, is not surpassed as an apple-producing region, only a small portion of this big province can successfully produce the peach. The regions round about Chatham, Kingsville and Leamington, at the south-western extremity of Lake Erie, are good peach country, but that part of the Niagara Peninsula extending from Hamilton to the Niagara River leads the van in peach-producing conditions, particularly that part of the peninsula lying between Lake Ontario and the range of hills from one to two miles in the rear.

At Grimsby these hills reach their highest altitude. Because of these hills the blustering westerly winds cannot affect the orchards as they could do on the veldt or broad open plain. The north winds, which would bring the cold, are tempered by the waters of the lake, and do not therefore injure the tender peach as they would do if not so modified.

There is frost enough to give this delicate fruit all the crispness and flavor desired, and yet not enough frost to injure the tree or the buds.

Where the elements of nature are so evenly and equitably adjusted as to produce in the very highest perfection this luscious and nutritious and beautiful fruit, they must, as a matter of course, favor the successful growth of all northern fruits—strawberries, red and black raspberries, blackberries, currants, cherries, plums, pears, quinces, and especially the grape. Of the latter a large variety is grown.

While the Niagara, a white grape, and some of the Rogers purple grapes, can be produced to perfection, the large blue Concord leads them all. There is no accounting for taste, and every man to his taste. Some may relish a sweet grape; very few relish a sour grape. The Concord is a pleasant compromise, as a general-purpose grape, for a table relish or for jelly, jam or bottling.

This grape can be made to yield in the Grimsby region all the way from two to five tons to the acre, and nowhere else can it be brought to a higher degree of perfection.

I have visited the orange groves of Southern California and along the Parametta River in New South Wales, I have visited the groves and eaten the mangoes and tiger pears and breadfruit and pai-pais and dates and coconuts of the Sandwich Islands, and have gathered and eaten from the cherry, plum and fig trees of Tasmania, and have ridden for many miles through the olive orchards of Southern Italy, and have seen and eaten fruits of which our northern people do not know, but I have never visited any part of the world which surpasses, and very few which can compare for floral display, beautiful scenery, wealth of horticultural production, especially of the useful and marketable fruits, or healthfulness of climate, with the region known as the Niagara Peninsula. DR. D. V. LUCAS.

Wentworth Co., Ont.

### POULTRY.

#### Maud Muller.

(Revised version.)

Maud Muller on a summer's day,  
Set a hen in a brand-new way.

(Maud, you see, was a city girl,  
Trying the rural life a whirl.)

She covered a box with tinsel gay,  
Lined it snugly with new-mown hay,

Filled it nicely with eggs, and then  
Started to look for a likely hen—

Out of the flock selected one;  
And then she thought that her work was done.

It would have been; but this stubborn hen  
Stood up and cackled "Ka-doot!" and then

Maud Muller came, and in hurt surprise  
Looked coldly into the creature's eyes.

Then tied its legs to the box. "You bet,"  
Said she, "I know how to make you set."

But still it stood, and worse and worse,  
Shrieked forth its wrongs to the universe.

Kicked over the box with its tinsel gay,  
And ignominiously flapped away!

Then a bad boy, over the barnyard fence,  
Tee-heed, "Say, Maud, there's a difference

"Tween hens, you know, and it is that,  
One says 'Ka-doot!' and one 'Ka-dat!'"

Then Maud recalled that the ugly brute  
She tried to set had said "Ka-doot!"

And ever since that historic day,  
She blushes in an embarrassed way.

To think of the hobble she made once when  
She tried to set a gentleman hen!

—Toronto Star.

### The Possibilities with Poultry.

A PROFITABLE INDUSTRY FOR WOMEN—SUMMER CARE OF THE LAYERS—A TWENTY-FIVE ACRE POULTRY FARM IN VIEW.

Poultry-keeping pays better than any other money-making occupation that comes within reach of women on the farm. There are many women in this country who are supporting themselves from poultry-keeping. What one has done, more can do if they will. There is no reason why they cannot make it a pleasant and profitable pursuit. Just as many fowls can be kept as the owners can find time to care for well. I believe it is the best way to start with a few and then increase the number as you understand them better, and I would recommend the keeping of only one breed.

When poultry-raising is to be made one of the principals for making money, the fowls should have a good and suitable house for their accommodation; it should be dry and free from any dampness. Damp houses and yards, or runs, are responsible for a goodly share of the ills that affect chicken flesh. The chief points to be aimed at in their construction are plenty of room, warmth, light, and good ventilation. If you have had no experience with the different breeds before making a choice from among the many, you should decide what branch of poultry-raising will pay best in your locality, whether you shall make a specialty of eggs, chickens or dressed poultry, or whether go in for all the profits possible from eggs, chickens, and fowls. In making this decision, you will be governed by the market in your locality and the help at your command. This point settled, the selection of a breed will be an easy matter. Where the average price of eggs is 15 cents a dozen, you can profitably keep fowls for eggs alone, if you get some of the best non-sitting breeds. Where the price goes much below the one I have named, you should not depend upon eggs alone for your profit. You should get some of the larger breeds, hatch the chickens early, so as to have pullets of suitable age for fall and winter layers, sell the surplus, and one half or two thirds of the old fowls should be disposed of each year. I had a flock of good Plymouth Rocks a few years ago, but not having a good market at or near home for the early chicks, I sold out, and now keep only the Leg-horns for eggs alone.

It is an easy matter to care for laying hens in summer. A clean, well-ventilated roosting place, free range, a place where they can scratch and dust themselves in dry earth, plenty of fresh water or milk and a good supply of food is all that they require to keep them in good laying condition. In the morning, a good feed is composed of scraps from the kitchen table, wet with boiling water and thickened with wheat bran; at night, a little corn or wheat, always wheat in the summer. I dispute the statement that more eggs can be obtained from fowls confined in yards than from those having free range. I am obliged to yard part of my fowls, and think I know how to take care of them, but I get more eggs from those with free range in summer. The proper way in this latitude is to keep your fowls confined six months in the year, from November till April. My plan is to give them good, warm, comfortable, roomy quarters, perfectly dry during the winter months, and keep them there. In the summer, their house should always be cool. Plant trees around it, and train vines up over the windows. Take the lower sashes out and put wire poultry net in their place. This will let in the cooler air from outside; this will do much towards filling your egg basket. When spring comes and the new grass

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begins to start, the fowl longs for freedom, and will do much better with unlimited range than when confined to small yards. In the egg-hatching season, when I want all the eggs I can get, I let my best breeding stock have unlimited range in the day time and securely house them at night, and feed night and morning, and I am sure of almost as many eggs each day as I have hens. The eggs notably increase in size and in fertility, and stand long journeys by express much better after the fowls get out. Sow a small patch of lettuce, and give a head or two to your fowls each day; they are very fond of it. The clippings from a lawn mower rapidly disappear before my hens. They should have meat twice a week if they are shut up. Let them out a while before night; they will not do much harm, if any, in the short time before dark.

If you would succeed with fowls you must be with them and watch and work. I would like to have a farm of about 50 acres, and have chickens enough to consume all the grain grown on it. I am sure some of the farmers would be very much surprised at the profits obtained from a 50-acre poultry farm. Some day I expect to have a 25-acre one. Men are generally so determined to keep the old scrub hens, even if they have good thoroughbred cattle, sheep, and pigs. It is difficult to make them see that they will bring in just as much profit from the money invested as if they had bought a cow. Yes, put that same amount into some good breed of poultry, and it will, I am sure, give you more profit in the end. Farmers' wives and daughters, get your husbands, sons or brothers to help you to improve your henhouses and get some new stock, and try to make some money to help bear your own expenses or for pin-money. FARMER'S WIFE.  
Norfolk Co., Ont.

**The Ideal Table Bird.**

Often our attention is called to the poultry on the farms of this country, the remark very often being made, "Are they not beautifully marked?" The fancier gives a great deal of attention to the markings as evidence of breed purity. The farmer, however, should look further and try to remove the stigma that the ideal table fowl has yet to be produced. At present, perhaps the nearest approach to it is obtained by crossing Dorking hens with Indian Game cocks, and of late years some of the French breeds have, by judicious cultivation and improvement, been made to produce cockerels capable of creditably acquitting themselves in competition with the best table birds on the market. The ideal table bird is a rapid grower and one which, on arrival at a marketable age, possesses not only a massive appearance, but carries such a wealth of flesh as to weigh proportionately. Such a bird must be long and deep in the body and carry a great wealth of flesh on the breast and thighs. It is in this particular that great length of body is needed, because unless a bird is long, it is impossible for it to carry the same amount of flesh as would otherwise be the case. The depth and weight of flesh upon the breast is chiefly determined by the length of the bird's keel. Great depth of body is therefore a point of great importance in a table bird, because shallow-bodied birds are, as a rule, furnished with shallow keels, and, as a consequence, possess relatively small breast muscles. The bird possessing the above characteristics will not be far from the mark. The Plymouth Rock and Wyandotte make fine table birds if properly selected.

**Cost of Eggs in Summer.**

To the Editor FARMER'S ADVOCATE:

SIR,—Please find enclosed statements of the cost of egg-production for the first two months of the test. We expect to run the test until August 22nd, or perhaps September. The idea is mainly to find the exact cost of producing eggs during the summer months. September, as a rule, is not an extra good month for egg-production, owing mainly to the hens moulting.

The hens are usually fed four times daily; whole grain in the litter or straw, in the morning; meat or bone at noon, three or four times per week; other days no noon feed is given. Mash at four in the afternoon, composed of equal parts of bran, shorts and ground oats, moistened with skim milk; just before dark a little whole grain is given. During the first month, cracked wheat and pin-head oatmeal were used for the morning feed, for the reason that at that season of the year we want excessive exercise in order to reduce the large amount of fat that is generally found upon hens that have been forced for winter laying. These very small grains, when scattered in deep straw, require considerable work to get them out, and thus we avoid apoplexy, which is quite common, especially with Rock hens, during the spring.

April 22nd to May 22. Andalusians—13 hens, 1 cock:	
Mixed cracked grain—14.3 lbs., at \$1.33 per cwt.	25.99 cts.
Green bone—13.75 lbs., at \$1.00 per cwt.	13.75 "
Mash—35 lbs., at 90c. per cwt.	31.05 "
Wheat—24 lbs., at \$1.33 per cwt., or 68c. per bushel.	27.19 "
Milk—35 lbs., at 10c. per cwt.	3.5 "
Total	101.48 cts.
Eggs laid, 20 1/2 dozen; cost per dozen, 4.9 cts.	
April 22nd to May 22nd. Rocks—13 hens, 1 cock:	
Mixed feed—17.687 lbs., at \$1.33 per cwt.	23.576 cts.
Bone—12.687 lbs., at \$1.00 per cwt.	12.687 "
Mash—32.375 lbs., at 95c. per cwt.	29.137 "
Wheat—21.875 lbs., at \$1.13 per cwt.	27.79 "
Milk—32 lbs., at 15c. per cwt.	3.33 "
Total	100.52 cts.
Eggs laid, 16 dozen; cost per dozen, 6.28 cts.	
Nearly all Rocks were broody during last week.	

May 22nd to June 22nd. Barred Rocks:	
Oats—2 lbs. 8 ozs., at \$1.00 per cwt.	2.8 cts.
Bone—2 lbs., at \$1.00 per cwt.	11. "
Mash—40 lbs., at 90c. per cwt.	36. "
Milk—40 lbs., at 10c. per cwt.	4. "
Wheat—34 lbs. 13 ozs., at \$1.13 per cwt.	39.58 "
Total	93.38 cts.
Eggs laid, 13 dozen and 10 eggs; cost per dozen, 6.82 cts.	

May 22nd to June 22nd. Andalusians:	
Milk—40 lbs., at 10c. per cwt.	4. cts.
Oats—3 lbs., at \$1.00 per cwt.	3. "
Wheat—35 lbs. 7 ozs., at \$1.13 per cwt.	40.15 "
Mash—40 lbs., at 90c. per cwt.	36. "
Bone—11 lbs. 6 ozs., at \$1.00 per cwt.	11.37 "
Total	94.52 cts.
Eggs laid, 18 dozen and 2; cost per dozen, 5.21 cts.	

W. R. GRAHAM, Manager.  
Poultry Dept., O. A. C.

**ENTOMOLOGY**

**The Sheep Nostril Fly.**

During the last few years complaints have come from different quarters in Canada of loss of sheep through what is sometimes termed Gadfly. This is a troublesome pest in England, causing quite heavy losses annually in large flocks. The noted entomologist, Miss E. A. Ormerod, of England, devotes a chapter to this pest in her recent report on injurious insects and common farm pests. The fly is known to entomologists by the name of oestrus ovis, and measures from two-fifths to half an inch in length. Its method of attack is to deposit its larva or maggot on or just within the opening of the sheep's nostrils. From this point the maggot begins to at once make its way upwards on the inside of the nostril by means of special hooks and spines with which it is furnished. At this stage of its growth the maggot is but a very tiny creature, only about one-twelfth of an inch in length. After starting on its journey inside the sheep's nostril, the maggot progresses upwards by fixing its hooks in the mucous membrane until it reaches the furthest chambers or recesses of the nose. There it attaches itself to the flesh and goes on feeding upon nutrition abstracted from its host until it has reached maturity. When they arrive at this stage the maggots loosen their hold on the lining membrane and drop to the ground, but sometimes they are expelled by being sneezed out. After the maggot escapes from the nostril and falls to the ground, it bores down into the earth for an inch or two, and there changes to a chrysalis of a dark brown color, within which the fly develops, and from which it emerges in due course. As a rule, attacks of this nostril fly are not productive of serious consequences. Sometimes there is a good deal of trouble, amounting in severe cases to difficulty in breathing, from stoppages occasioned by presence of the maggots or inflammation of the mucous membrane, but excepting (as above mentioned) where there are many maggots, the attack does not appear to be often fatal, and when the cause of the trouble has been got rid of in natural course the sheep recovers. The presence of the nostril fly in a flock may be known by the sheep holding their noses close to the ground, shaking their heads and striking the ground violently with their fore feet. At times, when the fly is about, the animals will gather together with their heads in the center and their noses down to the ground or buried in dust or sand, if there is any. Occasionally, too, one sheep will be seen going off at a gallop as if to escape from an enemy. One special sign of the presence of the maggot in an advanced stage of the attack is a catarrhal discharge from the nose, which is stated to be at first clear and serous, then thick and mucous. Frequently there is sneezing and snorting; from time to time the animals stagger and are seized with vertigo, but do not turn in a circle.

Where maggot presence is found only on one side of the nose, the operation of trephining is sometimes performed with the object of curing the animal. An opening is made with an instrument called a trephine into the frontal sinus (one of the passages to which the maggots can creep from the lower part of the nostrils), and through this opening some of the maggots may be observable, and may be picked out with forceps. To kill others, benzine diluted with water has been used. But the operation is tedious, requires some skill, and should only be performed by a veterinary surgeon, while the ultimate results are not such as to make the operation what can be generally advised. For available and serviceable treatment, a practical means of prevention consists in smearing the noses with a mixture of equal parts of tar and grease, or of tar and fish oil, or of tar and whale oil. The better way is to apply the preparation directly by a brush. Some recommend smearing the salt and grain troughs from which the animals feed with the mixture, expecting the sheep while feeding to get more or less on the nose. This method is not thorough enough, although to some extent useful. The following ointment is recommended as a good dressing for preventing the flies from laying their eggs in the nostrils of the sheep:

Beeswax.....	1 lb.
Linseed oil.....	1 pint
Carbolic acid.....	4 ozs.

In order to prepare this ointment, mix the wax and oil together, adding 2 ozs. resin to give body, then as it is cooling stir in the carbolic acid. This dressing should be rubbed over the face and nose once in two or three days during July and August, which is the time of year that the fly is about and deposits its eggs.

**VETERINARY.**

**Anthrax and Blackleg.**

One of the relics showing bacteriological development is the use of the term, symptomatic anthrax. Such a term, like many others misapplied in the dawn of scientific research, is unfortunate in its use, and would be better abandoned altogether. The germ name of the casual agent of blackleg is *bacillus sarcophysematos bovis*. Blackleg-infested carcasses are harmless to man; anthrax are dangerous.

Harold Sorby, of the Pasteur Institute, Chicago, has the following to say regarding the two diseases:

"Prior to the discovery in 1880 by Pasteur of a vaccine virus which would protect stock against anthrax, this disease and that known as blackleg were believed to be one and the same complaint. The fact, however, that anthrax vaccine virus in no case conferred immunity against blackleg led to scientific investigation, which demonstrated beyond a doubt that anthrax and blackleg were distinct and separate diseases. It was but a few months following Pasteur's discovery of anthrax vaccine that three eminent French scientists, Arloing, Cornevin, and Thomas, working conjointly, discovered the vaccine now so universally known as Pasteur blackleg vaccine, which affords almost perfect immunity against blackleg. The Pasteur method of live-stock vaccination and the original French vaccines were introduced into North America in the fall of 1895, since which date the practice of preventive vaccination has steadily gained popularity, the success of the same being unquestioned. But inasmuch as vaccination with Pasteur anthrax vaccine only protects against anthrax, and the vaccination with Pasteur blackleg vaccine only protects against blackleg, it is a matter of great importance for the stock-raiser to know whether anthrax or blackleg is the disease affecting his stock. The physical symptoms of anthrax and blackleg are in some respects similar, so mistakes in certain cases might occur, and the vaccine for one disease be employed to prevent attacks from the other, and the consequent lack of beneficial results might cause the stockman to lose confidence in preventive vaccination, and result in further losses at some future time. There are certain differences between these diseases which are plainly marked, a brief statement of which will probably be of interest to stock-owners. From the fact that the general symptoms of anthrax and blackleg are perhaps common to each disease, and also occur in the case of other diseases, it is not necessary to make note of all the ante-mortem symptoms, but only to call particular attention to such symptoms as are characteristic of each complaint, briefly stating the character of each disease, but laying particular stress on the post-mortem appearances, as it is on these that the chief reliance must be placed. Anthrax, also known as charbon, carbuncular fever and braxy, is one of the most dangerous and infectious diseases of animals, due to the invasion of the tissues by a spore-bearing micro-organism, termed the bacillus of anthrax. Almost all forms of animal life are susceptible to anthrax; it occurs in nearly all parts of the world, and is responsible for large losses among cattle, horses, mules, sheep and goats. Blackleg, also called symptomatic anthrax and quarter evil, is also due to germ infection; the germ of blackleg, however, is entirely different in form and character to the anthrax bacillus. The disease also is strictly an affection of cattle, usually attacking calves or young cattle under eighteen months of age. In rare instances, sheep and goats have been known to contract blackleg; other species of animals, however, such as horses and mules, are not susceptible to blackleg infection. In anthrax, when swellings occur they do not contain pus, nor do they crepitate (have a crackling sound) on passing the hand over them. In blackleg, swellings or tumors are always present; these may be situated either in the fore or hind quarter. They are insensitive to the touch and always crepitate on passing the hand over them. In anthrax, the discharges from the natural openings are streaked with blood. This is not the case in blackleg.

"Post-mortem of Anthrax Carcass.—On cutting through the skin, liquid, bloody effusions will be noticeable. The blood is black in color, does not clot or coagulate and remains black on exposure to the air. The linings of the chest and abdominal cavities are dotted with red spots, these being particularly noticeable on the capsules of the kidneys, liver and heart. The muscle tissue readily separates, that of the heart is soft and flabby. The heart is filled with black liquid blood, as also are the large veins leading from it. The most marked changes are noted in the spleen. This organ is swollen from three to five times its normal size, the capsule covering it is loosened and distended with blood, the pulp is soft, semi-liquid in character and dark red in color. The lungs are congested and filled with a watery serum. The carcass becomes cold very slowly.

"Post-mortem of Blackleg Carcass.—The skin covering the swellings is mortified; on cutting into the tumor the tissue immediately under the skin is saturated with blood and serum, and swollen by foul-smelling gases, which give the tissues a frothy appearance. The muscles of the affected part are black or dirty brown, streaked with yellow bands of fibrous tissue. They break easily and crepitate on being cut into. By pressing the tissues, turbid

blood mixed with bad-smelling gas oozes out. The blood coagulates, and outside of the parts affected by the tumor the muscles appear normal. The spleen is not affected, appearing to be in normal condition.

**Marked Differences.**—1. In anthrax the spleen is always enlarged and its contents disintegrated. In blackleg the spleen is not affected in any manner. 2. In anthrax the blood is black, tarry and liquid, does not coagulate or change its color on being exposed to the air. In blackleg, the blood, excepting in the vicinity of the tumor, is normal in color, coagulates and oxidizes (turns red) on exposure to the air. 3. In anthrax, the swellings, when they do occur, do not crepitate or crackle on pressure. In blackleg swellings, this symptom is invariably present. 4. Then, again, anthrax, when it occurs, is seldom confined to one species of animal, but generally attacks horses, mules, cattle, sheep and goats, indiscriminately. Blackleg is usually confined to young cattle, never affects horses or mules, and very rarely sheep and goats.

[Never in any case should a post-mortem be held on an anthrax victim. The risk to the operator is too great.—Ed. F. A.]

### Treatment of Wounds.

Who is not familiar with the barb-wire cut, and the heroic treatment which followed, lime, salt, turpentine, and other non-essentials being frequently used?

The great secret of success in dealing with wounds in horses or other farm animals is to keep the exposed portions of the flesh as clean as possible and well protected from dust particles in the air. This, with the addition of an antiseptic dressing to check the development of any germs which may gain access to the flesh, will be found to be all that is necessary to ensure satisfactory healing of the part. It is owing to the admission of dirt, or the failure to remove dirt, where foreign matter gains an entrance at the time the wound is created, that so much trouble and delay occur in the healing of cuts, bruises or other injuries. With the object of preventing the access of the germs referred to, there is nothing better than a layer of cotton wool soaked in a weak solution of carbolic acid or some other standard antiseptic.

An excellent dry dressing is composed of boracic acid, three parts, and iodoform, one part.

### QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the Farmer's Advocate are answered in this department free.

2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest or which appear to be asked out of mere curiosity.

3rd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

### Veterinary.

#### PROBABLY NAVICULAR DISEASE.

I have a horse ten years old, lame at times for six months. Thought it was a blind splint, and blistered for the same. Has callous from getting over halter-shank on large cord on back of leg. Foot is slightly contracted. I have now a blister around the top of his foot. Shoulders seem about the same in fulness. Is always in good flesh. At times he will travel four or five miles seemingly all right, and then, if he stands a little, seems very sore when starting again. Is very lame when working on soft ground. What treatment would you advise?  
W. E. F.  
Norfolk Co., Ont.

[All symptoms given, except going very lame on soft ground, indicate navicular disease (coffin-joint lameness). In these cases the lameness is, for the first few months or longer, irregular; he wears the toe of his shoe more than the heel; lameness decreases on exercise, to again appear when rested; the foot becomes smaller than its fellow (contracted), due to the internal heat or inflammation; after a time he begins to point the foot when standing, and later on will go lame all the time. Going lame on soft ground indicates elbow or shoulder lameness; still, I think your horse's trouble is in the foot. You are adopting the best treatment, viz., blistering around the coronet. Give him a long rest and blister the coronet well about every three weeks. When you put him to work, have him shod with a bar shoe, and keep the foot soft by poulticing or standing in a soaking tub, and do as little road work with him as possible. A well-established case of navicular disease cannot be cured, but if treated as above before change of structure has resulted, a cure will result. Give him as long a rest as possible.  
J. H. REED, V. S.]

#### WARTS ON A BULL.

I have a Shorthorn bull, and his neck and head are covered with warts from the size of a pea to the size of a walnut. All have come on him this spring. How can they be taken off? Would I have to treat every one, or only the largest ones?  
Welland Co., Ont.

[See FARMER'S ADVOCATE for March 15th, 1901, page 196, and April 1st, 1901, page 230.]

### JOINT ILL OR NAVEL ILL IN COLT.

I have a draft colt, foaled June 16th. Came strong and well, and is apparently in good health now, but navel does not heal. A yellowish-tinted liquid drops from it. Also one knee is badly swollen and tender to the touch; have bathed it with buttermilk. I have given the mare and colt each a dose of buchu leaves. The mare had distemper in April, but is in nice condition now; out to grass nearly every day.  
York Co., Ont.

CHAS. S. CHAPPELL.

[Your colt has joint ill, and treatment is of little use. The disease is caused by a microbe gaining the circulation by entering at the navel opening. Gaining the circulation, it is carried through the system, and having an affinity for the joints, it locates there, and causes swelling and tenderness, often leading to the opinion that the mare has trodden on the limb. Other joints will, in all probability, soon suffer; the articular cartilage will become destroyed, and the bones can be heard grating together upon manipulation; pus of a dark, dirty nature will probably be formed; the foal will be unable to rise, and probably refuse to suck if held up, and will soon die from exhaustion. If, by great attention, the animal's life be saved, he will, in most cases, be a permanent cripple. Preventive measures should always be observed. Readers of the FARMER'S ADVOCATE have seen advice by me on this point in the issue for May 15th, 1900. A solution of corrosive sublimate 1 part, water 500 parts, should be kept on hand, and the navel opening dressed with it four or five times daily, until the opening heals. This prevents the entrance of the germ. All that can be done for your colt is to dress the opening with the above solution. Bathe the affected parts well and often with warm water. If abscesses form, open and treat as an ordinary abscess, with, say, carbolic acid 1 part, water 50 parts. Give the colt, three times daily, in a little of the dam's milk, 10 grs. iodide of potassium, and give the dam 2 drs. of the same in damp food three times daily. Nurse the colt well, help up if necessary, and you may save him.  
J. H. REED, V. S.]

### CHRONIC DIARRHEA IN CALF.

I have a January calf (steer) that has always been troubled with diarrhea, but not so bad as since it has been put out on grass. The other calves were fed skimmed milk and a little chopped oats, same as this one, but have had no trouble with them. I got some medicine from the veterinary, but it did no good, and I have used scorched flour and boiled milk cold, but to no use either. The calf has been taken off of the grass and fed hay for the last week.  
Kent Co., Ont.

J. T.

[The treatment you have adopted would, in ordinary cases, have effected a cure, as there is no doubt the medicine you got from the veterinarian was what should be used in such cases. There is some constitutional cause for the persistent diarrhea. If the cause be tubercular, a cure will not result; if simply a weakness of the digestive glands, it will be different. I would recommend the following treatment: Keep in out of the sun, but keep in a box stall in well-ventilated stable, as good ventilation, with some exercise, is necessary. He will take considerable exercise in a nice box stall. Be careful to give him milk of good quality, and add to the milk about one-sixth part lime-water. If you have not sufficient milk to allay the thirst, give him some water also containing the lime-water. He is naturally thirsty when suffering from diarrhea, and should be allowed sufficient liquid to satisfy him, given often and in small quantities. Give dry food, of good quality, in reasonable quantities. You can arrest the trouble temporarily by giving 3 drams of laudanum, 3 drams of prepared chalk and 2 drams of catechu in a pint of water, as a drench, three times daily. If, after being arrested and the calf fed as indicated, the diarrhea should recur without apparent cause, I would recommend his destruction.  
J. H. REED, V. S.]

NOTE.—We might add to Dr. Reed's advice that at Kansas Experiment Station, dried blood, given in milk, has been found to stop scouring in calves and cause them to thrive. A teaspoonful at a feed, until a cure is effected, is recommended. Elsewhere in this issue further reference to the dried-blood treatment is made.—ED. F. A.]

### Miscellaneous.

#### TRANSFER OF SHORTHORN.

A sold a Shorthorn bull to B; B sold him to C. Can C register from him without having him transferred? He is registered in A's name. If not, how would it be done?  
York Co., Ont.

SUBSCRIBER.

[Rule 7 of the Dominion Shorthorn Herdbook, 1898 Vol., reads: "No pedigree shall be recorded in future in the Dominion Shorthorn Herdbook by an owner not being the breeder of the animal, unless the transfer from the breeder or former owner is properly filled out and signed, and received at the office of the Dominion Shorthorn Herdbook." From the above, we take it that the animal must be transferred from A to B and from B to C, through the office of the Dominion Shorthorn Breeders' Association, Toronto. Subscriber must apply to Henry Wade, Registrar, Parliament Buildings, Toronto, for blank transfer forms, which, according to the rule quoted, must be signed by A and B, and returned to Mr. Wade for registration.]

### ROUND SILO POINTERS.

I am building a stave silo (spherical). Is it necessary to cement the bottom, as it is of stiff clay? I am putting on 3-in. iron hoops (round); how near each other should they be?  
E. C. BLIGH.

King's Co., N. S.

[Stiff clay in the bottom of a stave silo answers as well as cement, provided it is not in a wet location. We prefer, however, to set the silo up on a stone or cement foundation, a few inches above ground; then cement around the bottoms of the planks, inside and out. This preserves the ends of the planks longer from decay. The distance between the bands would depend somewhat on the diameter of the silo. On a 15-foot silo, 25 or more feet high, the bottom hoop should be not over four inches from the foundation, the second about 22 inches from the first, and the third 30 inches higher. The space between the hoops may gradually increase to 4½ feet at the top. A good idea—new to us—in round-silo construction was brought to our notice by Mr. Chas. Dyer, Middlesex Co., Ont., who has a silo 34 feet high and 20 feet in diameter. The new point has reference to the upright timbers through which the hoops pass. These are of hardwood, 4x4 inches. Two of these stand two feet apart, are held together by iron rods the same distance apart as the silo hoops and answer the purpose of a doorway or entrance to the silo from top to bottom. There is a groove one inch deep cut on the inside face of these, into which inch boards are set, one above another, while the silo is being filled, and removed as it is being emptied. This frame, or doorway, is the first part of the silo built, and is set up first, where the door of the silo is to be. The two other upright timbers are set up and stayed and two or more of the hoops put in before setting up any of the planks. The hoops that surround the silo do not cross the doorway, as it is stayed with cross-rods of its own. Each hoop is in three parts and is drawn tight by nuts at the two uprights away from the door. This plan has been found to answer well, as it seems to stiffen the silo, and it gives a continuous door from top to bottom. In our judgment, a silo 20 feet in diameter and 34 feet high is too large for the ordinary farmer. Where one requires as much silage as such a silo would hold, it would be better to have two silos, one not more than 10 feet in diameter. This should be fed out last, so that any silage left over when the cattle are turned out to grass could be used in summer, if need be, without loss.]

### A BOND—PROVING A CLAIM.

1. Supposing A gives B a bond promising the payment of a specified sum of money annually; if this sum or any part of it is not paid, can the heirs of B, after his death, demand of A the sum due on bond up to the date of B's death? 2. Who should have possession of bond after B's decease? 3. Can A prove that he paid this sum in any way but by producing a receipt from B? 4. One person lends a sum of money to another, but does not receive a note or other writing as security for it. If the borrower dies, will the lender have a lawful claim for the amount lent against the borrower's estate?  
York Co., Ont.

READER.

[1. B's personal representative—that is to say, his executor or administrator—can. 2. Such representative. 3. Yes. 4. Yes. He might, however, find it difficult to substantiate his claim by legal proof, as in an action by or against the heirs, representatives or assigns of a deceased person an opposite or interested party to such action cannot legally obtain a decision therein on his own evidence in respect of any matter occurring before the death of the deceased unless such evidence is corroborated by some other material evidence.]

### PERCHERONS WANTED.

Are there any breeders and importers of Percheron horses in Canada? Would there be any duty on a pure-bred stallion coming to Canada from the United States?  
Carleton Co.

R. S.

[We are not informed as to whether there are any breeders of this class of horses in Canada. If there are, they might do well to advertise. A stallion registered in the American Percheron Record (of which S. D. Thompson, Chicago, is secretary), coming from the United States to Canada will be admitted free of duty.]

### OF INTEREST TO BEEKEEPERS.

Please publish all the information you can regarding the prospects of the honey crop. Our bees were badly injured by the cold, wet weather of May, and in no shape to take advantage of the clover flow. We will probably have half a crop in East Huron and Perth Counties.  
Wellington Co., Ont.

CHAS. MITCHELL.

[In our Farm Gossip department, this issue, we publish a letter from one beekeeper, in reply to our request for information in July 1st issue. If beekeepers over the country will send us word about the condition of their bees and the honey prospects, the information will be mutually helpful.]

### TEMPERATURE FOR SEPARATING MILK.

What is the right temperature of milk for separation?  
York Co., Ont.

J. G. WIDEMAN.

[As a rule satisfactory separation is accomplished by separating the milk soon after it comes from the cow. The higher the temperature the more rapidly and completely does the separation take place, but the high temperature is claimed to injure the grain and texture of the butter. From 78 to 98 degrees will be found to give good results with the modern centrifugal machine.]



SHOWS AND SHOWING.

Fall Fairs.

CANADA.	
Western Manitoba, Brandon	July 23-26
Winnipeg Industrial	July 29-Aug. 2
Stanstead, Que.	Aug. 21-22
Dundas County, Morrisburg, Ont.	Aug. 27-29
Industrial Fair, Toronto	Aug. 26-Sept. 7
Eastern, Sherbrooke, Que.	Aug. 31-Sept. 7
Western Fair, London, Ont.	Sept. 5-14
Kingston, Kingston	Sept. 9-13
Brome Corner, Que.	Sept. 12-13
Bowmanville Fair	Sept. 14-21
Nova Scotia, Halifax, N. S.	Sept. 14-21
Central Canada, Ottawa, Ont.	Sept. 17-19
Seagow Agricultural Society, Pt. Perry, Ont.	Sept. 17-19
South Lanark, Perth, Ont.	Sept. 17-19
Strathroy Fair, Strathroy, Ont.	Sept. 17-19
East Elgin, Aylmer, Ont.	Sept. 17-19
South Grenville, Prescott, Ont.	Sept. 17-19
Guelph Central, Guelph, Ont.	Sept. 17-19
Northern, Walkerton, Ont.	Sept. 18-19
North York, Newmarket, Ont.	Sept. 18-19
Russell County, Metcalfe, Ont.	Sept. 21-25
Wellesley Fair, Wellesley, Ont.	Sept. 21-25
North Lanark, Almonte, Ont.	Sept. 21-26
Prescott, Vankleek Hill, Ont.	Sept. 21-26
Peterborough Central, Peterborough, Ont.	Sept. 21-26
Prince Edward County, Picton, Ont.	Sept. 25-26
Great Northern, Collingwood, Ont.	Sept. 21-27
North Brant, Paris, Ont.	Sept. 26-27
South Renfrew, Renfrew, Ont.	Sept. 26-27
Central Wellington, Fergus, Ont.	Sept. 26-28
Whitby	Sept. 26-28
Carlton, Richmond, Ont.	Sept. 30-Oct. 2
Great North-western, Goderich, Ont.	Oct. 1-2
Huntley, Carp, Ont.	Oct. 1-2
N. R. of Oxford, Woodstock, Ont.	Oct. 1-2
Stayner	Oct. 1-2
North Grey, Owen Sound, Ont.	Oct. 2-4
East York, Markham, Ont.	Oct. 2-4
North Renfrew, Beachburg, Ont.	Oct. 3-4
S. Oxford, Otterville	Oct. 4-5
World's Fair, Rockton, Ont.	Oct. 8-9
Peninsular, Chatham, Ont.	Oct. 8-10
Caledonia, Caledonia, Ont.	Oct. 10-11
Georgina and North Gwillimbury	Oct. 10-11
Woodbridge, Woodbridge, Ont.	Oct. 16-17
Norfolk Union, Simcoe, Ont.	Oct. 15-17

UNITED STATES.

Ohio State, Columbus	Aug. 26-Sept. 7
N. Y. State, Syracuse	Sept. 9-11
Chicago International	Nov. 30-Dec. 7
Buffalo (Pan-American)—Dogs	Aug. 27-30; swine, Aug. 26-Sept. 7; cattle, Sept. 9-21; sheep, Sept. 23-Oct. 3; horses, Oct. 7-19; poultry and pet stock, Oct. 21-30.

Toronto Exhibition.

The prize lists for Toronto Exhibition, which will be held from August 26th to September 7th, have just been distributed, and can be had on application to H. J. Hill, Secretary-Manager, 82 King St., east, Toronto, who will also supply entry forms. Entries, which must be accompanied by the very small fee charged, close with Mr. Hill as follows:

For live stock, dairy products, ladies' work, fine arts, honey, and all classes of manufactures—Saturday, August 3rd.  
Grain, field roots, and horticultural products—Saturday, August 10th.

Poultry—Wednesday, August 14th.  
Dogs—Saturday, August 17th.  
The prize list shows an increase in the amount of premiums to be distributed and some desirable rearrangement in the classes, of which there are 127. Altogether, \$25,000 is given for live stock and dairy products. It is a generous sum, exceeding that given at any other annual fair on this continent. Many visitors will assuredly be present from the States and a large Pan-American fair the week following Toronto. Thus, breeders and farmers have several extra inducements to enter at the great exposition in the capital of the Province this year. A feature of the fair, it might be mentioned, will be a demonstration in the cultivation of the sugar beet, by Prof. Shuttleworth, of Guelph. Altogether, it is apparent that the Toronto executive have risen to the requirements of this first year in the century, and propose to make their twenty-third annual exhibition as attractive as possible for the agricultural as well as for the general visitor.

Western Fair, London.

Notwithstanding the many alterations and improvements in buildings and grounds made the last three years, at a cost of thousands of dollars, which hardly left room for anything more to be done, the desire to make everything as perfect as possible for the first Western Fair of the 20th century has led to a complete renovation and painting of buildings, thereby adding much to the attractiveness and general appearance of the already beautiful Queen's Park fair grounds. All conveniences have been improved, and exhibitors will be pleased to know of such additions and alterations in the prize list as are calculated to give the greatest amount of satisfaction to the exhibitors. The new entry forms, introduced for the first time two years ago, will again be used. They are time-savers, and are popular with all who have occasion to use them. Interest is commencing early this year. Numerous applications for space are already in. A big influx of American visitors is expected to see the great live-stock and agricultural exhibition of Canada, which will open September 5th and continue to the 14th. The special features will be new and novel, and will include a full troupe of performing elephants. Enlarged purses will ensure good speeding events. It is safe to predict that the Western Fair of 1901 will excel all predecessors. As is usual at this time, prize lists are being sent out by the thousands to all parts. They can be had on application to the Secretary, Mr. J. A. Nelles, London, who will furnish all information.

MARKETS.

FARM GOSSIP.

Honey Crop in Huron.

In response to your request for information concerning honey crop, I may say that clover has yielded a little over half a crop of honey, the flow having been cut short by drought. Bass-wood bloom is just about opening, and trees have lots of blossoms, but there are not a great many basswoods in this section. Prospects are for a little over half the usual honey crop.  
S. SMILLIE.  
Huron Co.

U. S. Bureau of Forestry.

The increasing recognition of the importance of forest preservation and tree cultivation in the United States is shown by the fact that on July 1st the Division of Forestry was created a Bureau, with Mr. Geo. Pinchot as chief. In 1895 the appropriation for this work was less than \$20,000, in 1900 it was \$55,000, and in 1901, \$185,000. A systematic effort is now in progress to preserve and develop the forest wealth of the Republic.

Progress of the Palmerston Packing House.

To the Editor FARMER'S ADVOCATE:

SIR,—I would be obliged for space in your valuable farm paper to briefly describe a visit which myself and a number of farmers from Huron, Perth and Wellington Counties paid, on June 28th, to the town of Palmerston, Ont., to see the great pork-curing business in full blast. All who attended were both pleased and amazed to see the thorough, business-like manner in which the work is conducted. The building, yards, siding and machinery are of the most modern and substantial pattern and are capable of turning out pork, dressed and cured, with a speed and perfection second to none in this country. The company also manufacture their own electric light, and have their own ice machine, which keeps the curing rooms and other parts of the building almost at freezing point in the heat of summer. We were shown through the entire building by the obliging bookkeeper, Mr. Burns, who explained the working of almost every part of the business, and showed us that nothing is allowed to go to waste, even the blood, hair, etc., being carefully saved and turned into money.  
In the afternoon, the annual meeting of the shareholders was held in the large town hall, which was well filled by an intelligent class of farmers, who are mostly stockholders in the company. Last year's business was well reviewed and explained by the able manager, Mr. W. J. Falconer, who showed very plainly that the establishment was well conducted, and that over half a million dollars' worth of cured bacon and other pork products had been turned out. This is very creditable to a farmers' company which has been in existence for only about two years. The company are also to be congratulated on the fact that they have not only held their ground in the face of determined opposition by powerful and wealthy corporations, but have also paid off considerable debt and more than doubled their capital stock during the last twelve months, results accomplished by an able staff of directors and their assistant, Mr. McLean, of Wallace Township, whose business for the last year has been to take stock for the company. After officers for the ensuing year were elected, the manager, Mr. Falconer, explained to the farmers the necessity of standing shoulder to shoulder and doubling the amount of stock held at present, so that in years to come the farmers of this locality may have a profitable industry, built on a solid financial basis, able to stand and pay a good dividend, whether hogs are high or low in price. By the large attendance present, it would seem that the farmers of this section are getting awakened to the need of co-operative effort in hog-raising and pork-curing in order to withstand monopoly and obtain the prices which their produce ought to command. I would like to see the FARMER'S ADVOCATE, of which I have been a reader for many years, lay more fully before the farmers of Canada the benefits to be derived by co-operative effort in the hog raising and curing industry.  
Huron Co., Ont., Canada. Mc.

Oxford Co., Ont.

The cold, wet weather in the early part of the season has made a good deal more work in the root field. Our mangels and beets and corn did not grow so fast on account of the backwardness of the season, but the weeds grew just as well, if not better; our mangels and corn are now looking very well, and may be a very fair crop yet. The very hot days since the 1st of July have been favorable to the corn and to the killing of weeds where the hoe and cultivator were kept going. A 12- or 15-acre field would almost require a man, horse and cultivator going continuously at this season. Our potatoes are doing very well, but the hot weather has been very much in favor of the potato bugs hatching, and I think there will be a good demand for Paris green. The pastures, which have been luxuriant, are now beginning to get cropped off, and are becoming a little dry, and we are feeding our cows a little oats and peas, which was sown for them. The flies are also beginning to get in their work and hinder the cows in their business quite a little. Our fall wheat, which I have been a reader for many years, enough of back, and it is doubtful if it will be worth much. Will some one tell us if the Hessian fly will do its evil work on fall rye? Perhaps we might sow that grain instead of wheat this fall.

The price of cheese has receded a little, and our last sale only brought nine cents. Hogs still bring seven cents live weight, and pay remarkably well at that figure. Our young cattle are doing well, but some that we have been fattening on the grass are not doing as well as we would like. Mr. VanDeman, keep up the display until new apples come in. Mr. VanDeman, the judge in horticulture, compliments Ontario very highly upon the display of strawberry exhibit now on exhibition, and regards it as a result of appointing fruit-men to office. Mr. Bunting is putting up samples of strawberries in formalin in order to preserve them for the rest of the season. Horticultural societies or individuals wishing to make fruit exhibits under their own names, and secure a medal and diploma, should at once correspond with Mr. W. H. Bunting, Canadian Fruit Court, Horticultural Building, Buffalo, N. Y.

King's Co., N. S.

Trees blossomed fairly well, but the apple crop will be light. Cankerworm and tent caterpillar are destroying a good many orchards. Good prospect for plums. Grass scarcely average. Grain looking well. Quite an area of corn is planted for silage. It came up well, but is growing slowly, owing to cold and damp weather. Young trees are making rapid growth. I have several thousand root grafts set this spring which have grown from 5 to 9 inches; ornamental trees, from 20 to 28 inches.  
June 27, 1901.  
E. C. BLIGH.

Farm Labor Situation in Kansas.

It is reported in a reliable American paper that so great was the need felt in Kansas, near Burlington, for harvest help that twenty armed farmers deliberately held up a train of immigrants bound westward, and after thoroughly frightening them into submission, captured the lot by offering them \$3.50 per day and full rations to work faithfully in the harvest field. This was a daring and novel method of hiring men, but it worked, and it serves to show that Canadian farmers are not the only ones that need more help than they have got, and also that even desperate means may be used to advantage in securing assistance.

Wabigoon, Ont.

Mr. A. E. Annis, Superintendent of the Ontario Government Pioneer Farm at Dryden, in the Rainy River District, informs the Department of Agriculture of excellent crop prospects on the farm. The grain crops are better than ever before, and are growing rapidly. This in connection with the fact that there was a long spring drought, which was only broken by rain on June 7th, shows how rapidly vegetation grows in that region. Mr. Annis expected to start hay on July 2nd, the timothy being an average crop and the clover specially fine.

Toronto Markets.

Trade at the Western Cattle Market is very disorganized—the hot weather of the past week, the dull markets in the Old Country, the absence of outside buyers, all combined to make the trade drag. Export cattle dull, but steady. Feeders scarce and lower. Sheep 10c. lower. Hogs advanced 25c. per cwt., and steady. Milk cows reached \$54. Lambs lower.

Export Cattle.—Choice lots of export cattle sold from \$5.00 to \$5.25 per cwt., while all others are quoted as being worth from \$4.65 to \$4.80. The receipts not very large, and all sold before noon. One load of export cattle, average 1,320 lbs., sold for \$5.30. Messrs. Dunn Bros. purchased four loads of export cattle, 1,315 lbs. average, at \$5.20 per cwt.

Butchers' Cattle.—There was a scarcity of good butchers' cattle. Market firmer. Good picked loads of best smooth cattle sold at \$4.40 to \$4.60. The break in the spell of hot weather is one cause of the increased activity. Mr. James Harris bought about 60 butchers' cattle, from \$3.25 to \$4.60 per cwt.

Bulls.—Heavy export bulls sold to a good demand at from \$4.00 to \$4.25 per cwt. Light export bulls sold at from \$3.00 to \$3.75 per cwt.

Feeders.—A few short-keep steers of good quality, weighing from 1,200 lbs. up, sold readily at \$4.70. This is a decline of 5c. in two weeks; see our schedule prices. These cattle would have been bought for export a month ago. Good steers, half fat, sold at \$4.50 per cwt. Light steers and those of poor quality sold at \$4.40. Steers weighing 900 lbs. to 1,000 lbs. each sold at \$3.50 to \$4.00 per cwt. Holders are waiting for improvement to take place in this branch of the cattle trade.

Stockers.—There were only a few on offer. Yearling steers, weighing 500 lbs. to 800 lbs. each, sold at \$3.00 to \$3.50 for choice. Off colors, inferior quality, sold down to \$2.50 per cwt.

Sheep.—Deliveries heavy. Prices easy, at \$3.50 to \$3.60 for ewes and \$2.50 to \$3.00 for bucks. We may expect heavy runs of sheep from now on. Prices declined to-day; the market closed steady.

Lambs.—Supply good. Prices easy, at \$2.50 to \$4.00 per head.

Calves.—About 70 on offer, at prices ranging from \$2 to \$8 for very choice veals.

Milk Cows.—One very fine springer (weighing about 1,600 lbs., sold for \$54. Twenty cows and springers sold from \$30 to \$54 per head. A very large grade Durham cow (weighed before calving, 1,960 lbs.) sold by Mr. Lou Jones for \$60. A good Jersey sold for \$50.

Hogs.—This market is again on the upward turn; the price advanced to \$7.25 per cwt. Best select bacon hogs, singers, not below 160 lbs., not above 200 lbs., live weight, off car, not fed or watered, sold at \$7.25 per cwt. Thick fat and light fat, \$6.75 per cwt. Unculled car lots sold at \$7.00 per cwt. Sows sold at \$3.50 to \$4.00 per cwt. Stores wanted, at \$4.50; stags, \$2.

Dressed Hogs.—Very few on offer; advanced in sympathy with live hogs; now quoted at \$9.00 to \$9.75 per cwt. Mr. W. Harris, Jun., bought all on offer at these prices.

	Extreme comparative prices to-day.	2 weeks ago.	Same date last year.
Export cattle	\$ 5 25	\$ 5 15	\$ 5 50
Butchers' cattle	4 60	4 75	4 65
Bulls	4 25	4 25	4 65
Feeders	4 70	4 75	4 50
Stockers	3 25	3 25	4 25
Sheep	3 70	3 70	4 25
Hogs	7 25	7 00	6 50
Milk cows, per head	51 00	51 00	45 00
Lambs, per head	4 00	4 25	5 25

PRODUCE MARKETS.

Wheat.—Receipts of grain on street market were 200 bushels. One load of spring wheat sold at 67c. per bushel; one load of goose at 61c. per bushel.

Oats.—Advanced; 100 bushels sold at 38c. per bushel.

Hay.—New hay sold at \$8 to \$9 per ton. Twenty loads of hay at \$10 to \$11.50; one load of choice, \$13 per ton. Baled hay, in car lots, \$10 per ton on track.

Barley.—One load of barley sold at 44c. per bushel.

Peas.—Two loads of peas sold at 66c. per bushel.

Bran.—City mills sell bran at \$12.50 per ton, and shorts at \$11.50 per ton.

Hides.—No. 1 green, per lb., 7c.; No. 1 green steers, per lb., 8c.; No. 1 cured, per lb., 7c.; calfskins, per lb., 10c., sheepskins, each, 90c.; pelts, each, 20c.; lambskins, each, 35c.; wool, fleece, per lb., 11c.; wool, unwashed, per lb., 9c.

Butter.—The offerings of dairy produce not up to the average in quality. The best quality, in tubs and crocks, quoted at 16c. per lb. The market for creamery is steady and unchanged, at 20c. to 21c. per lb.

Eggs.—No change in prices. Offerings are large; market active on all choice stock. Fresh new-laid eggs bring 11c. to 12c. per dozen.

Poultry.—There is a good demand for choice spring chickens. The supply does not reach the present demand. Spring chickens, 60c. to 80c. per pair; turkeys, 10c. to 12c. per lb.; ducks, 80c. to \$1.00 per pair for choice.

Canadian Cattle Wanted by British Feeders.

At a recent meeting of the Norfolk (Eng.) Chamber of Agriculture, the following resolution with reference to the importation of Canadian store cattle was carried, after discussion, with one dissentient:—"The Norfolk Chamber of Agriculture protests against the continued exclusion of Canadian store cattle from Great Britain as most unjust to the grazing interest, and prays the Government to remove the restrictions at an early date and to allow these animals to be landed for fattening by British farmers. In the opinion of the Norfolk Chamber of Agriculture, Canadian stores are among the most healthy cattle ever fattened in Norfolk, and in view of the complete immunity from all serious contagious diseases of the flocks and herds of Canada, there is no reason for their continued exclusion from this country." The resolution was ordered to be forwarded to the High Commissioner for Canada, the Colonial Secretary, the President of the Board of Agriculture, the Central Chamber, and the local members of Parliament.

Chicago Markets.

Chicago, July 11.—Cattle.—Receipts, 8,500, including 600 Texans. Generally slow. Good to prime steers, \$5.10 to \$6.25; poor to medium, \$3.90 to \$5; stockers and feeders, \$2.25 to \$4.40; cows and heifers, \$2.50 to \$5; canners, \$2 to \$3.40; bulls, \$2.40 to \$4.25; calves, \$1 to \$6.50; Texas steers, \$3.50 to \$5.20; bulls, \$2.50 to \$3.10.

Hogs.—Receipts to-day, 18,000; to-morrow, 15,000; left over, 2,150; active; 5c. to 10c. higher, closing strong. Mixed and butchers', \$5.75 to \$6.25; good to choice heavy, \$5.25 to \$6.50; rough heavy, \$5.80 to \$5.90; light, \$5.80 to \$6.10; bulk of sales, \$6 to \$6.12.

Montreal Markets.

Montreal, July 11.—The receipts of live stock at the East End Abattoir this morning were 500 head of cattle, 100 calves, 150 sheep, 100 lambs. The demand was good and prices were steady.

Cattle.—Choice sold at from 4c. to 5c. per lb.; good sold at from 1c. to 1 1/2c. per lb.; lower grade from 2c. to 3c. per lb. Calves were sold from \$2 to \$8 each.

Sheep brought from 3c. to 3 1/2c. per lb.

Lambs were sold from 3c. to 1c. per lb.

Hogs brought from 6c. to 7c. per lb.



### Another Letter from Mollie.

MY DEAR FRIENDS,—

I think amongst my previous jottings I have said but little of what is, after all, a most important factor in the enjoyment of any visit to England, namely, the large-heartedness of the hospitality extended to Fan and myself. While it is very possible to have a delightful time in the dear old land without having even a letter of introduction, yet it is rendered doubly delightful when a welcome awaits one, and in our case we have had many welcomes; sometimes from a relative or friend in a quiet little home with only one handmaiden to keep its machinery going, at other times in large houses, with beautiful grounds, and a large staff of servants, gardeners, coachman, footmen, etc., to minister to one's pleasure. Were we uplifted, think you? Not a bit of it. We were just Mollie and Fan, ready to enter into the spirit of everything and to take and be thankful for all the good things which came our way. The welcome was the main thing, and that came as heartily from cottage as from hall or manor house. Of course, we had our little jokes between ourselves, and the joke was not always on our side either. For instance, on one occasion when, as we often do, we talked to the 'bus-driver, asking him "how many deer were in the park?" and "how many hours did his horses work?"—for, like all the London omnibus horses, his were rolling in fat—he remarked that "all the Americans liked this drive," in such insinuating tones that Fanny at once informed him we were "not Yankees," to which he replied, eyeing her with a glance which suggested a lingering doubt of her veracity: "No, miss? I took yer for them, sure. You speak (h)uncommon *loike* 'em!" What a hard hit, and just when we thought we were getting "so English, you know," and never under any circumstances speaking of such a thing as a buggy (a word of direful import in England's metropolis); we "take the tram," we "book our tickets," we "change our gowns," we "put on a bodice (never a waist)," and go in for English afternoon teas as if we had been accustomed to such substantial extras all our lives. The average Englishman, especially if he be idle, is not content, as is the average Canadian, with three good meals a day, and as Fan and I, being, so to speak, in Rome, have determined to do as the Romans do, you may be prepared to find us, on our return to Canada, not only wiser (or, so we hope), but plumper women. Mind and body both have had the fullest of opportunities for imbibing nourishment suitable for each. We have cause for congratulating ourselves upon the time selected for our English trip. We have seen England clothed in all her spring attire. First, the early wild flowers, the fields and hedgerows carpeted with violets, primroses, cowslips, bluebells, daisies and buttercups; the fruit trees, first in glorious blossom, then their full fruition; fruits, ripe and luscious; enormous strawberries and cherries, beautiful alike to eye and palate; all plentiful and of reasonable price in due season. We have seen parks and gardens alike in fullest perfection, clumps of rhododendrons in every variety of shade. Some of our most delightful days have been spent in visiting these, notably Kew, with its wealth of floral and tropical beauty under those glass "mansions"—one cannot call them houses, for their extent and capacity have to be seen to be believed. Perhaps we enjoyed even more than Kew itself the view at the top of Richmond Hill, overlooking the Thames, a place which, it has been said, has inspired more poets than any other place in the world. Richmond is full of historic memories, and now whilst the nation's heart mourns for its honored sovereign, so many of whose young days were spent there, it is almost a sacred spot. Our drive extended from Richmond to Bushy Park, with its deep and wide avenue of horse-chestnut trees, a sight which Londoners flock out in thousands to see every year, and which visitors from other lands never miss if they can possibly avoid it.

My letter will arrive probably just as the ADVOCATE is going into the printer's hands, and he may not be able to make room for all I want to say, so the rest must keep for next time. The "rest" will tell you of our visit to the Post Office and to the Crystal Palace, where we had the pride and happiness of listening to the plaudits from the lips and hands of many thousands when the voice of our own Canadian songstress, Albani, rang out under its wondrous dome. Do you think that Fan or I cared one jot that folks should divine by our tongue that we hailed from across the broad Atlantic? Albani was Canadian-born, and we were proud to be recognized as her countrywomen, even were it not true, as it really is now, that to be known in England as a Canadian is a hallmark of itself and a certificate of honorable mention, go where one may. ADIEU.

MOLLIE.

### Woman.

"Woman, blest partner of our joys and woes."—*Sand.*  
 "Blessing and blest where'er she goes."—*Cowper.*  
 "Eager to hope, but not less firm to bear."—*Byron.*  
 "O, born to soothe the distress and lighten care;  
 Profound as sorrow, and as justice dear."—*Savage.*  
 "Yet suffering vice compels her tear."—*Crabbe.*  
 "Meekly to bear with wrong, and cheer decay."—*Hemans.*  
 "And wipe the mourner's bitter tear away."—*Grahame.*  
 "O, woman, woman, thou art formed to bless."—*J. Bird.*  
 "For woman is all truth and steadfastness."—*Chaucer.*  
 "Holy, divine, good, amiable, or sweet."—*Milton.*  
 "Each softest, truest virtue there should meet."—*Johnson.*  
 "Women were made to give our eyes delight."—*Young.*  
 "So fond and true, so beautiful and bright."—*Patterson.*  
 "Ye watchful sprite that made e'en man your care."—*T. Brown.*  
 "You are not free because you're more than fair."—*Etheridge.*  
 "Oh, man, how sublime—from heaven his birth."—*Bulwer.*  
 "And you of man were made—man but of earth."—*Randolph.*  
 "Gay smiles to comfort; April showers to move."—*T. Parnell.*  
 "The important business of your life is love."—*Littleton.*  
 "Here woman reigns; the mother, daughter, wife."—*Montgomery.*

### The Table Set for Two.

The sunshine falls on the window-sill  
 And the day looks in at the open door,  
 The kettle sings, and the dear old wife  
 Goes back and forth o'er the kitchen floor,  
 With plate and platter, and fork and spoon,  
 As every day she is wont to do,  
 And she lays them with a quiet grace  
 On the homely table set for two.  
 Oh, the bread is like the sea's white spray,  
 And the cloth is clean as mountain snows;  
 From the pantry shelf to the kitchen stove  
 The dear old wife on her errands goes;  
 The morning-glories over the porch  
 All in riotous tangle run,  
 The cat lies curled asleep on a chair,  
 The old dog blinks at the noonday sun.  
 But the dear old wife is sad to-day,  
 And the morning hours have seemed so long,  
 For her thoughts are of the long ago,  
 When the old house rang with mirth and song;  
 When the red-cheeked boys and merry girls  
 Came trooping in through the open door;  
 Some wander now 'neath an alien sky,  
 And some will come back no more—no more.  
 There are empty chairs against the wall,  
 And the wide old rooms are strangely still;  
 The day is sad though the sunshine falls  
 Like sifted gold on the window-sill,  
 And the dear old wife in her quiet way  
 Does the homely task she is wont to do;  
 But the tears fall fast as she sadly thinks  
 Of the lonesome table set for two.  
 —From *Good Housekeeping.*

### Friends.

Not he that counts my errors,  
 Not he that holds me back  
 With doubting words to show me  
 Wherein and how I lack,  
 Not he that sees my failings,  
 And, seeing them, is free  
 To take my measure by them—  
 He's not the friend for me.  
 But he that learns my virtues,  
 Who takes me at my best;  
 Who notes my greatest failings  
 And overlooks the rest;  
 Who, after I have striven  
 And have not failed, is free  
 With words of commendation—  
 He is the friend for me.  
 He that forever warns me  
 Of dangers in my way,  
 Who doubts my strength to meet them  
 And ever bids me stay,  
 May truly seek to shield me,  
 May wish me well, but he  
 Whose faith is inspiration—  
 He is the friend for me.  
 —Chicago News.

### A Little Girl's Wish.

"Mayn't I be a boy?" said our Mary,  
 The tears in her great eyes of blue,  
 "I'm only a wee little lassie,  
 There's nothing a woman can do."  
 "'Tis so, I heard Cousin John say so,  
 He's home from a great college, too;  
 He said so, just now, in the parlor,  
 'There's nothing a woman can do.'"  
 "My wee little lassie, my darling,  
 Said I, putting back her soft hair,  
 "I want you, my dear little maiden,  
 To smooth away all mother's care."  
 "Is there nothing you can do, my darling?  
 What was that 'pa' said last night?  
 'My own little sunbeam has been here  
 I know, for the room is so bright.'"  
 "And there is a secret, my Mary,  
 Perhaps you may learn it some day—  
 The hand that is willing and loving  
 Will do the most work on the way."  
 "And the work that is sweetest and dearest,  
 The work that so many ne'er do,  
 The great work of making folks happy  
 Can be done by a lassie like you!"

### The Child Musician.

He had played for his lordship's levee,  
 He had played for her ladyship's whim—  
 Till the poor little head grew heavy  
 And the poor little brain would swim.  
 And the face grew peaked and eerie,  
 And the large eyes strange and bright—  
 And they said "too late"—"He is weary—  
 He shall rest for at least to-night."  
 But at dawn when the birds were waking,  
 As they watched in the silent room,  
 With the sound of a strained chord breaking  
 A something snapped in the gloom.  
 'Twas a string of his violoncello  
 And they heard him stir in his bed.  
 "Make room for a tired little fellow,  
 Kind God," was the last he said.  
 —Austin Dobson.

### Good Health.

#### DISINFECTING A SICK ROOM.

Personally, I am a strong advocate of the treatment of all infectious diseases in public institutions. In my own household, I am thankful to say, we have hitherto escaped anything of the sort, but were any members of my family to be attacked with a contagious fever, or similar trouble, I should not hesitate to have them removed to a hospital or infirmary. From personal inspection I know the comforts of such places; the skilful nursing and constant attention so difficult to supply, under ordinary circumstances, in a private house; and the excellent medical attendance which is supplied. Of course, a monetary return should be made by those who can afford it—I am not advocating charitable attentions to those who are in a position to pay for doctor and nurse; but in the case of infectious diseases of a severe type, I think nursing the patient at home in an ordinary middle-class house is a mistake.

Others, however, may not agree with me. They prefer to have their invalid under their own roof; and in such cases, when all danger is past and the stage of convalescence fairly entered upon, here comes the question of disinfecting the sick chamber. In large towns it is better to entrust the work to the sanitary officials, who, having all the requisite apparatus at their command, do it quickly, thoroughly, and at trivial cost. In the country, however, such skilled aid is not always procurable, and under such circumstances the disinfecting must be done on a more rough-and-ready principle. The best and simplest plan is to burn such articles as flock mattresses, old blankets, etc. Such bedding as it is desired to keep should be soaked in a weak solution of chloride of lime for a few hours, then dried in the sun; then baked in an oven not hot enough to burn or scorch them, and then washed in the usual way. Next paste strips of paper over the side and sashes of the windows. Close the register of the grate. Put an old tea tray or a sheet of iron in the middle of the room, or it place a tin with some live coals, on the coals sprinkle powdered sulphur—one pound to each 1,000 cubic feet of space contained in the room; shut the door, and leave the room tightly closed up for twenty-four hours. Then air it thoroughly for a week before allowing it to be occupied again. The fumes of sulphur will not hurt any fabric, but they sadly discolor any metal. So steel fittings to the grate, door handles, brass fittings, etc., should first of all be coated with a thick paste of whiting and water. This will protect them from the fumes, and when the room is thoroughly disinfected can be easily wiped off with a cloth dipped in water, after which the metal can be polished in the usual way.

### Fat and its Evolution.

The study of fat formation is interesting. Fat under ordinary circumstances is not formed in our bodies from the fat we eat. Excess of fat, along with want of exercise and full fare otherwise, may assist the growth of corpulence, but the ordinary man, taking no such excess, forms fat out of food which is not fat. The food which is the great fattening agent is starchy food, and, of course, with starchy foods we include sugars. All such foods containing much starch (which, by the way, is changed into sugar in our bodies) are fattening. Bread, potatoes, rice, tapioca and the like come under this latter category. We see how fat the Strasburg geese become when cooped up in boxes; they are crammed with maize and other starchy matters. Their livers become masses of fat, and are used to make the famous "pâté de foie gras." Bees make wax from sugar. Pigs grow fat on starchy diet, and the cow makes the fat of her milk out of food that is itself non-fatty in nature.

Our liver is the seat of the fat-producing powers, and doubtless much of the fat of our bodies is formed through the agency of this organ. We can understand how in all fat-reducing dietaries the starches and sugars are prohibited. Fat is not necessarily cut off; indeed, in our system a good deal of fat is allowed on the theory that it serves, when oxidized or chemically burnt in the body, to reduce the excess which otherwise might accumulate. It is also said that the drinking of much fluid serves to increase corpulence. Whether this be true or not, it is certain that all beer and malt liquors at large are hurtful to the obese man. Any wines containing sugar are prohibited. Wines are not necessary for the corpulent person at all, but if they are taken they must be of the "brut" or sugar-free order.

### Sage and Spice.

"I must go and write my club paper on 'Colonial Customs,'" said Minerva.  
 "And I must go and cook the cutlets," said Dorothea.

Then Apollo Epicurus, their guest, who had wavered long between the two sisters, joyously followed the dainty Dorothea into the kitchen, and clumsily but affectionately tied on her apron.  
 No cards.

Let not thy right-hand neighbor hear thee speak slightly of thy left-hand one, nor thy left-hand neighbor hear thee speak slightly of thy right-hand one, lest, when thy right-hand neighbor meet thy left-hand neighbor, both shall hasten to talk of thee and thy offence, and much three-cornered confusion result thereby.

**The Educative Value of Amusements.**

Amongst the many good things bequeathed to us by the last two or three decades of the wonderful century so lately ours, but now passed away from us forever, is a clearer enlightenment upon the subject of the ethical value of amusements in the formation of character, a fuller and more distinct recognition of the absolute necessity for the development of all the faculties alike in the training of the human being. The danger now is rather that the pendulum may swing too far the other way, and the young of the rising generation may expect too much fun and frolic at a time when their grandparents had none at all. Let us hope that if some mistakes are made in the meantime, yet a happy medium will be found and the dear young folks of to-day may become the better, the brighter, the more truly cultured men and women of the future because what has been so aptly called the gospel of relaxation has been preached and practised in their time. To return to the dreary dogmas of the past would be a terrible injustice to the present generation as well as to generations yet to come. Let us, then, accept the present conditions with thankfulness, using our privileges, but not abusing them, realizing that whilst diversion has its undoubted value in the upbringing of our children, it is not the main object of their existence—"the brodered hem of the robe, but not the robe itself." It gives one a cold shiver to think of what it must be to those amongst us old enough to recall the memory of the dwarfing, cramping effect of the limitations which surrounded their childhood, when the small daughters of the family were told that "little girls were to be seen but not heard"; when they had to get hold of a rare little bit of fun by stratagem, as it were; when the slightest indulgence of natural high spirits was termed "tomboyish"; when, in the eyes of their nurses, to soil their pinafores was almost a deadly sin, but that to make their courtesies gracefully and to behave prettily was "the whole duty of man." In fact, when to seem good was to be good. If the outside bearing was calm and quiescent, it mattered not how wild a tempest of rebellion raged within, few realizing that the tendency of such training was to turn the more timid little mortals into arrant hypocrites, afraid, even while longing, to dare the penalty of one wild open outbreak to relieve the craving for the dear delight denied them of what, probably, was but very harmless fun, after all. But old things pass away, and, happily, better conditions prevail to-day. Games, such as cricket, football, tennis and golf, are recognized now as invaluable for the young, and even the middle-aged are not ashamed to take a share in them. "They bring their votaries into the open air, bracing their nerves, tending to make them active in body, agile and supple of limb, keen of sight, enduring, patient, good-tempered, unselfish and public-spirited. The healthy emulation they engender is invaluable, and its good effect is apparent in every walk of life." Speaking in this connection, Sir John Lubbock claims that "games are no loss of time, that they are of considerable importance in the developing of the body and in keeping a man in good spirits for his daily work. They teach him how to give way in trifles, to play fairly and to push no advantage to extremity. They give moral as well as physical health, daring and endurance, self command and good humor, qualities not to be found in books and which cannot be learned by rote." Many of the best and most useful lessons are those which boys learn upon the playground. It was the Duke of Wellington who said that the battle of Waterloo was won on the playing fields of Eton; only, adds Sir John Lubbock, "let games be the recreation and not the business of life."

Thus we see that the high standard of honesty learnt in games of skill may be one of the best lessons for the lad to carry with him into whatever career may await his manhood.

In the culture of the mind, as well as in the culture of our fields, soil and seed have to be taken into consideration if there is to be full fruition and adequate return for the care and labor bestowed.

Child nature has been always the same. The children of the old days had the same instincts as

those of to-day; then, as now, they as much needed play to strengthen their limbs, to awaken their faculties, to educate and develop their powers, to prepare them for what destiny might have in store for them. All young things need play as the flowers need sunshine, and they equally look for companionship and sympathy in their play. The baby girl is not happy unless someone will play "peep bo" with her, and she toddles off into an unsteady run, that she may be caught and lovingly brought back again. And so with the kitten which tangles up your ball of worsted, and the big overgrown puppy which, apparently ownerless, haunts the lakeside or seashore, and gives you no rest until you have thrown into the water the stick or stone he is so playfully eager to fetch. Mother Nature never makes a mistake, and, all unknown to the young things themselves, she is superintending and guiding them in the course of self-education and development upon which they have entered at her own inspiration. Play is their work, whilst work is their play; and it is this principle which is the keynote to the kindergarten system, which has brought about such a

**"The Towing Path."**

Roberts, the eminent Scotch painter, was the son of a shoemaker in Edinburgh. His first ideas of painting were taken from the pictures on the outside of the caravans of travelling shows, which had such a fascination for him that he would follow them for miles. On his return home, dirty and tired from his long walk, he would draw these pictures on the whitewashed wall of the kitchen with the end of a burnt stick, that his mother might have some idea of the wonderful animals he had seen.

It happened one day that a customer, coming in, noticed the drawings, and seeing in them signs of genius, persuaded the father to apprentice him to a house painter, much against his wishes, as he had intended him to follow his own trade.

When the five years of young Roberts' apprenticeship had passed, he left Edinburgh and went to Perth, where he divided his time between house painting and screen-painting, his first work there being the decoration of the walls of the dancing academy, for which he elected to be paid in lessons in the Terpsichorean art.

Five years later he became scene painter at the Theater Royal, Edinburgh. When he had saved enough money for the purpose, he visited Normandy, where he painted Rouen Cathedral, for which he was paid eighty guineas. From that time his success was assured. He visited Spain, and brought back with him several sketches, which he worked up at home, the best of which was "The Interior of the Cathedral at Seville."

He was the first British artist who undertook a voyage up the Nile, where he made a collection of sketches, which, on returning to England, took him ten years to elaborate. In 1841 he was elected member of the Royal Academy.

The last years of his life were spent in painting a series of views of the Thames near London, one of which, "The Towing Path," appears in this issue. This series was not complete when he died, an unfinished view of St. Paul's being found turned upside down on the easel, where he had left it when he went out for his usual morning walk. He was seized with a fit of apoplexy, and died that same evening.

It is said that he painted two of his pictures in two hours each! No wonder that the number of his works is so surprising. He finished 279 paintings, but his drawings seem to have been too many to be counted. Those found in his studio after his death occupied a six days' sale, and brought over £17,000.

**His Time Had Come.**

"Is there a man in all this audience," fiercely exclaimed a female lecturer, "that has ever done anything to lighten the burden resting on his wife's shoulders? What do you know of woman's work?"

"Is there a man here," she continued, folding her arms, and looking over her audience with superb scorn, "that has ever got up in the morning, leaving his tired, worn-out wife to enjoy her slumbers, gone quietly down stairs, made the fire, cooked his own breakfast, sewed the missing buttons on the children's clothes, darned the family stockings, scoured

the pots and kettles, cleaned and filled the lamps, swept the kitchen, and done all this, if necessary, day after day, uncomplainingly? If there is such a man in this audience, let him rise up! I should like to see him!"

And in the rear of the hall a mild-looking man in spectacles, in obedience to the summons, timidly arose. He was the husband of the eloquent speaker. It was the first time he had ever had a chance to assert himself.

"And what, my dear little boy," asked a minister, strictly in accordance with precedent, "and what do you intend to be when you grow up?"

"A farmer, sir."

"Very good, indeed; to supply the nations with natural food—most good. And you?" turning to the second.

"Please, sir, a schoolmaster."

"Even better; filling the minds of the rising generation with mental food. Yes, even better. And you?" turning to the third.

"A preacher, sir."

"The best of all, my dear little boy, the best of all, for filling the soul with spiritual food is far worthier either than filling the mind or the body. And what bids you become a minister?"

"We always have chicken when you come, sir."



"THE TOWING PATH."

revolution of ideas upon the whole subject, and with it a glorious emancipation for the children of to-day from the cast-iron rules which fettered and circumscribed so many of the children of the past.

Truly, "all work and no play makes Jack a dull boy," and no one will deny the application of those words of wisdom to his sister Jill likewise. But neither Jack nor Jill should become so absorbed in their amusements that they neglect the obvious duties of their home lives or risk by carelessness in study the glorious opportunities for the future for which their school life is a preparation.

To sum up, let us say that if we eliminate gambling from our games, cruelty from our sports; if we see that nothing that pleases us shall be at the cost of a pang to others; if we choose such games for our young folks and amusements for ourselves as may bring out the nobler rather than the baser qualities which may be our natural heritage, we may assuredly and unhesitatingly assign to amusement no insignificant place, and fearlessly preach the gospel of relaxation to every creature. H. A. B.

## Ingle Nook Chats.

MY DEAR GUESTS,—

Pretty hot, isn't it? Certainly there is no cause for complaint of a cool reception, as King Sol has been doing his utmost to warm Mother Earth, and has succeeded admirably. When the thermometer registers 102° in the shade, one does not feel inclined for much exertion, either bodily or mental; perhaps the great heat partially accounts for the decrease in the number of competitors in our recent contest, or it may be the berry-picking and weeding season is accountable for it. There are still some new friends calling with a cheery word, and No. XI. has been fairly well patronized.

In last Chat I spoke of the opinion so often entertained by city people, that country folks never have an idea beyond their work. When this statement was made to me I took exception to it, and suggested the possibility—no, the probability—of country people being endowed with as large a share of coveted "gray matter" as are the denizens of the city. In this I was upheld by the boy of the house, who said: "That's all right, mother, the boy who captured the gold medal in our school was from the country." That this is a common instance I have frequently heard teachers affirm; they say that country pupils are usually better students and more faithful workers. Perhaps the busy life they have lived has given them a better idea of the value of time, and if this be an outcome of country life it is worth striving for. "Plain living" does not necessarily preclude "high thinking." Our environments and employments may be lowly, but our minds are free to soar to any desired height, and in the present days of cheap printing we may at will commune with all the master minds of past and present. Apropos of this subject, I announce

## CONTEST XIII.

"Country versus City Life." We offer three prizes for the best essays on the above subject, to be divided into three classes, viz.: Class I., over eighteen years old; II., fourteen and under eighteen; III., under fourteen. Essays to reach Pakenham by September 5th. Competition open to all, without restriction. Address as given below, leave envelope open, mark "printer's copy," and one cent will carry it. Plenty of time yet for sending in Memory Gems for Contest XII. See June 15th issue for particulars.

E. B.—I am glad you liked your prize. I have not the choice, but I know that every care is taken to send none but good ones. Thank you for the recipe. I tested it and found it as represented—very nice indeed. June 15th ADVOCATE gives some good ones of a similar nature. I will send a recipe for lemon cream which may be of use to you and others of our guests.

M. C. B. and H. S. S. are two puzzle-lovers whom our recent contest has induced to visit us. We have not forgotten that that art has many warm friends, and hope to give them an occasional nut to crack. We used to have puzzles from Lottie B., long ago. Any friend of yours, M. C.? Our guests number over two hundred and fifty, but I have given up trying to keep a list of them. Thank you both for kind remarks and good wishes; I reciprocate. Why not try the Memory Gems?

Mildred, "Trifle," and R. B. F., all Maritime guests, are very welcome to our Nook, as are also our Ontario friends, Effie, Nettie, Edna, "Golden-rod," and Alvin. I hope you will all come soon again and often.

S. Elsie Richardson writes:—"I take pleasure in writing to thank you for the beautiful prize, 'Scott's Poetical Works,' which I received this week," etc.

Will "Nancy," Ilderton, kindly send full address, that she may get her prize?

All our prizewinners are equally pleased. A merry vacation to you all. If you cannot go from home for holidays, bring some of your friends there, which is nearly as good. That's what usually constitutes the summer amusement of—

THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

## Two Chariots.

This is the chariot known as Fate and these are the horses three. They are known as Greed, Ambition and Strife, and the wind is not more free. They are coursing the vast arena of life and their goal is Destiny.

And who is it rides so swift away. Oh, who may the driver be? Stern shows his face through the clouds of dust—look and your eyes will see. The form of a daring rider there, and his name is Enmity.

Now, these are the horses, black as night, and the driver fierce is he; They feel the pitiless lash of pride, as onward they swiftly flee—For he seeks the glittering goal beyond, the goal that is Destiny.

But look! where another chariot goes and drawn by horses three; Their driver he drives with a gentle hand, and Love his name shall be, For two horses he drives are Faith and Hope, and the third is Charity.

White as the foam that wets their lips are Love's swift horses three; They, too, are rounding the course of life toward the goal that is Destiny. But they trample no roses under their feet, and none from their pathway flee.

Where Enmity's chariot wheels have been a burning track shall be, While Love looks back with a lingering smile that all who will may see; For Enmity rides with a fierce desire, but Love shall the victor be.

—Town and Country.

"Do you like the Greek poets?" asked Miss Theodora Thuddington of Brown, who is not in the least literary.

"Yes; better than any of the modern poets."

"For what reason?"

"Principally because they are all dead."

## THE QUIET HOUR.

## The Value of Common Things.

"Let's oftener talk of noble deeds,  
And rarer of the bad ones,  
And sing about our happy days,  
And not about the sad ones.  
We were not made to fret and sigh,  
And when grief sleeps to wake it;  
Bright happiness is standing by—  
This life is what we make it."

Let's find the sunny side of men,  
Or be believers in it;  
A light there is in every soul  
That takes the pains to win it.  
Oh, this should be a happy world  
To all who may partake it;  
The fault's our own if it is not—  
This life is what we make it."

An aged French priest once dreamed that he was dead and the angels said to him, "How did you like the beautiful world you have left?" He then realized that he had been all his life preaching about heaven, and had seen almost nothing of this world. Old as he was, he started off to travel, determined to see something of its beauties before he died. We often miss the gladness and brightness of every day, because we are so eagerly looking out for some far-away happiness—in this world or the next.

"A man's best things are nearest him,  
Lie close about his feet."

We all know how tiring restless people are. They are never satisfied unless something is "going on." Especially in this hot weather, such people are a nuisance to themselves and their unfortunate friends. They are continually "on the go," and don't give anyone any peace. They certainly haven't learned the secret of extracting honey from every passing flower; the only honey they care to have is always in another field. We have so many pleasures, if we only learn to appreciate them. A summer in a hot, dusty city would open our eyes to the value of the pure, flower-scented air, the quiet restfulness and happiness of our country life. I saw in the paper yesterday that some famous jewels had been sold by auction for many thousands of dollars. Such things are very valuable, we say. Why? Because they are scarce? But the really valuable things are not scarce. A poor woman was delighted with her first glimpse of the sea, because, as she said, "it is grand to see something of which there is enough for everybody." Those poor creatures who gasped for air in the Black Hole of Calcutta, slowly suffocating for want of that rich blessing of which there is plenty for everybody, understood that fresh air was worth unspeakably more than diamonds or pearls. Anyone who has suffered the terrible agony of protracted thirst, knows that water is a priceless treasure. Can gold buy health or love or happiness?

"The world is good in its own poor way,  
There is rest by night and high spirits by day;  
Yet the world is not happy as the world might be—  
Why is it? Why is it? O, answer me!  
What lackest thou, world? for God made thee of old.  
Why—thy faith hath gone out and thy love grown cold.  
Thou art not happy as thou mightest be,  
For the want of Christ's simplicity.  
It is love that thou lackest, thou poor old world!  
Who shall make thy love hot for thee, frozen old world?  
Thou art not happy as thou mightest be,  
For the love of dear Jesus is little in thee."

He who is "anointed with the oil of gladness" is one who loves righteousness and hates wickedness. If we are not making an earnest and continued effort after holiness, we are sure to miss the beauty that might fill our life. Each temptation is a ringing call to arms, an opportunity of winning a victory. Each sorrow is God's gift, a cord of love to draw us nearer to Him. In the little everyday pleasures we can look up and catch our Father's smile. Those who make the most of their everyday pleasures always bring down more and more blessings on their heads. They are good conductors and attract the sunshine.

"I heard an old farmer talk one day,  
Telling his listeners how,  
In the wide, new country far away,  
The rainfall follows the plow."

"As fast as they break it up, you see,  
And turn the heart to the sun,  
As they open the furrows deep and free,  
And the tillage is begun—"

"The earth grows mellow, and more and more  
It holds and sends to the sky  
A moisture it never had before,  
When its face was hard and dry."

"And so, wherever the plowshares run,  
The clouds run overhead;  
And the soil that works and lets in the sun,  
With water is always fed."

"I wonder if that old farmer knew  
The half of his simple word,  
Or guessed the message that heavenly true  
Within it was hidden and heard."

"It fell on my ear by chance that day,  
But the gladness lingers now,  
To think it is always God's dear way,  
That the rainfall follows the plow."

HOPE.

## Recipes.

## LEMON CREAM.

Beat well together the yolks of four eggs and two tablespoonfuls of white sugar; add the juice of two lemons and some of the grated rind; cook these in a double boiler for about 15 minutes. Beat the whites of the eggs and two tablespoonfuls of sugar very light, add to the yellow mixture and cook for a minute longer. Pour into a mould, set on ice and serve cold with cream; whipped cream is delicious to serve with any such dessert.

THE HOSTESS (for E. B.).

## THE CHILDREN'S CORNER.

## Prize Competition.

The winners in the competition which ended June 30th are:

Class I.—Flossie M. Underhill, Melita, Man. (aged 14).

Class II.—Roy Harris, Caledonia, Ont. (aged 13).

Class III.—Mabel Morrison, Arthur, Ont. (aged 9).

Those deserving honorable mention are: Class I.—Mabel Ida Graham, Mary B. Smith and W. D. Harris; Class II.—Edna Smith; Class III.—Rhoda Bettles.

Most of the papers sent in were far below the average, which was disappointing, as the subject was an easy one. I have been forced to shorten the essays a little, as our space is limited. Look out for another competition in our next.

## PRIZE ESSAY—CLASS I.

## Autobiography of a Collie Dog.

"My first recollections are when I was a little fat black puppy, with brown eyes that sparkled like diamonds. One thing I lacked and that was a long tail. I was sometimes called 'Bobby' for my short tail.

"One day a crowd of noisy children called to get a pup. A good-natured boy picked me out and put me into the wagon. I soon grew very fond of my master and would follow him wherever he went. He took a lot of interest in me and taught me tricks, such as to jump, speak, roll over, and when a piece of bread was placed on my nose, my master counted. When he said 'three,' I would toss up my head and catch the bread. I also learned to climb a ladder, and hide-and-go-seek. My master would put me in a bedroom and partly shut the door. Then he and his sister would hide. His mother would call me and tell me to hunt them up. I would run from one room to another until I found them; then I would bark and make a great racket.

"In the daytime, when my master and his sister went to school, I got very lonesome. I soon learned to know when four o'clock came, and would watch for them. When they came in sight I would run and nearly knock them down. I was so glad to see them.

"My master built a ladder and put a platform on top. He fixed it over the Jackson creek and sent me up. When a stick was thrown into the water, I would jump seven feet in after it. The water went over my head, but I liked it. I was also taught to sit on a chair with a cap on, and glasses for my eyes. Then a stick was put in my mouth for a pipe.

"One day a man came and took the picture of our wheat field. I sat in the rig with my master, looking very important. I was quite pleased with my photo. Some time after, a sad thing happened—another dog was brought to my home. I was told he was a thoroughbred English pointer, with a great long pedigree, but I thought he was very ugly. I was very jealous of Rock (for that was his name), for he always was petted a lot.

"At last I was parted from my master, in the fall of 1900. He went to Winnipeg for a week. Word was sent that he might be back in a month, but maybe not until spring. I missed him very much and would sit and cry so dolefully that my mistress would come and play with me. One day she held my paw to write him a letter. One winter day, Rock and I got fighting in the house. We fought very hard, and it was hard to get us out of the house. My head was swollen badly and my feet also. He got over his bruises quickly, for he was young and tough, but I was getting old.

"At Easter time my master came home. When they turned in at the gate he whistled for me. I knew the whistle, and ran as hard as I could, and barked and jumped and made the awfullest racket.

"Rock came home one day all covered with blood. Someone had shot him. He was carried to the stable and washed with warm water. Next day he was lame and his eye was badly hurt. His leg soon got better, but he will be blind in one eye for the rest of his days.

"My master went away again, so I ran away. When he came home he found me attending a gun-club practice, and, oh! how glad I was to see him. I am now contented, and will not run away any more."

FLOSSIE M. UNDERHILL.

Your story is very good, Flossie, and I certainly think your hero was an interesting animal. I have no room to-day for the other prize essays. I see that my name was attached to a little story given in our Corner a short time ago, called "What Would You Do?" I must explain that it was not original, and my name was accidentally affixed.

COUSIN DOROTHY.

## Pictures on the Wall.

A bright young woman, with an inventive turn of mind, has devised some charming bits of wall decoration for her country home. A careful selection of the magazine reproductions of famous paintings has been her inspiration, and from these she has chosen well-known classical subjects, including a couple of Madonnas, Mona Lisa, the Laocoon, the Venuses, a Rosa Bonheur, and so on. These she has mounted on grayish-blue blotting paper, sometimes one alone, sometimes in groups of three, the paper making a mat of that indescribable tint which seems to bring out the picture without infringing on its rights of stage center. Inexpensive gilt frames have been the finishing touch, and with almost no outlay at all she has produced something which is pleasing to the eye and gives the room that last touch which unpictured walls will never have.

The unpictured picture, although pardonable in a studio or college-girl's room, does not appeal to the careful housekeeper, to whom, as to Amiel, "the unfinished is nothing." On the other hand, the really fine work of reproduction now in vogue is too tempting to throw away or relegate to the scrap-books.

### Canning and Preserving Time.

The realization by the young woman of to-day that the various branches of housework require the use of the brains, making such work scientific, will do much to remove the chafing at the home life and the longing for the counter, the factory or the desk. In the canning of fruit, success depends on a knowledge of chemistry and fungi, a statement which will be found to be backed up by the assertions of America's greatest woman authority on domestic science, Mrs. Rorer:

The term canning refers to vegetables and fruits sterilized and hermetically sealed in tin cans, glass jars or bottles. The word preserving refers to fruits put in a thick syrup made from sugar and water, and kept in ordinary tumblers or jars.

Fruits are much more easily canned than vegetables. There are constantly floating about us in the air a great variety of wild yeast plants, together with the bacteria. If a single plant or the bud of a plant alights in a favorable place, as on the under side of the lid or at the edge of the jar before the lid is fastened down, it is quite sufficient to cause fermentation in a can of corn or peas or in any materials containing sugar. The generic name of the yeast plant is *saccharomyces*, which really means a plant living on sugar or needing sugar for its proper development. For this reason, fruits canned with sugar are much more liable to fermentation than those simply canned in water.

#### ALL PRESERVING POWDERS ARE INJURIOUS.

To be successful with both fruits and vegetables, surgical or absolute cleanliness must be observed. This does not mean simply washing and wiping the cans; it means to have them absolutely sterile, sufficiently heated to kill anything that may fall into or upon them from the air. To be still more explicit: If the vegetables have been cooked in the jars, and you have neglected to adjust the rubbers previous to cooking, and you put on the rubbers after taking the jars from the boiler or sterilizer, there may be, perhaps, millions of microscopic plants on one rubber; and in a few days the whole can will be filled with fermentation. Washing or wiping the rubber would in no way prevent it; it must be heated sufficiently to kill any germs that are fastened to it. New rubbers are necessary each year.

Another word of caution will, perhaps, be wise. All preserving powders, no matter under what name they are sold, are more or less injurious to digestion. Common sense teaches that a material that will prevent the life of a plant, or kill a plant, and prevent all fermentation, will naturally also prevent perfect digestion. These preparations are not wholesome. Better do without canned vegetables in the winter than to risk one's health.

#### FRUITS AND VEGETABLES MUST BE FRESH.

The process of canning different fruits varies but little. Select perfectly sound and fresh fruits, and they may be canned with or without sugar. Sugar takes no part whatever in their preservation, and frequently causes fermentation. All fruits should be lightly cooked, that they may retain their natural flavor. It is wise to fill the jars to overflowing. As the liquid cools, it will condense, leaving a space at the top of the jar.

Wash the jars, rubbers and tops; adjust the rubbers on the jars. Throw the tops into cold water, and bring slowly to boiling point, and allow them to stand in this boiling water until you are ready to use them. They must be thoroughly covered with water. Twirl the jars also in boiling water. Be sure that you plunge the whole jar down, filling it entirely, or it will crack. Look over the fruit very carefully, wash, put into the jars, adjust the rubbers, stand the jars in a wash-boiler, the bottom of which has been protected with a rack or strips of wood. Surround the jars partly with cold water, put on the lids loosely, but do not fasten them down. Cover the boiler, and bring to boiling point. Boil the small fruits ten minutes after they begin to boil. You may now fill two jars from a third, to allow for the condensation.

#### KEEP PRESERVES AND JELLIES IN A DARK PLACE.

Lift the jars one at a time and fasten the tops. Wipe each jar off immediately and stand it in a cool place over night. Next morning, if you have screw tops, give each one an extra turn; if not, they will be sufficiently fastened. Wipe them off and put them in a cool, dark closet for keeping. It is a question whether or not light affects fruits. Personal experience has proven to me that it does not make much difference whether fruit is kept in the light or the dark. I have kept quantities of fruit in the sunlight all summer, and have had them in perfect condition next year. I have, however, noticed that the flavor is not so true after they have been standing in the sun. For this reason I recommend the dark.

Large fruits, such as peaches and pears, should be packed in the jars, the jars filled with cold water, the rubbers adjusted, the jars placed in the boiler with the same amount of water as before, and the lids placed loosely on top, the boiler covered, and the cooking continued for 15 minutes after the water has reached the boiling point.

#### WHERE SUGAR IS USED IN CANNING.

Where sugar is used at the time of canning, and the materials are cooked in a porcelain-lined kettle, the following rules should be closely observed: The jars must be washed, plunged into scalding water and rolled around quickly; the lids put into cold water, brought to boiling point and kept there; the

rubbers adjusted; the jars filled one at a time and fastened. Each jar should be placed, to prevent breakage, on a folded damp towel in a plate or pie dish. A wide-mouthed funnel will facilitate matters very much. The jars should be filled to overflowing, and the tops fastened down. There is no advantage whatever in having a press of any sort in the top of the jar. It is not necessary that the fruit should be under the liquor. Fruits that will mould outside of the liquor in a jar are not sterile, are unwholesome, and have been carelessly canned.

#### CURRENTS AND RASPBERRIES.

To each full quart of large red raspberries allow half a pint of currant juice and half a pound of sugar. Put the berries into a porcelain-lined kettle—a layer of berries and a layer of sugar; pour over the currant juice. Bring the fruit slowly to boiling point, skim, and fill into the cans.

#### PLUMS.

The following recipe will answer for Gages and all sorts of plums. Where sugar is used, allow half a pound to every pound of plums. Wash the plums; stick them carefully with a large pin, to prevent the skin from cracking; weigh. Put a layer of sugar and a layer of plums into a porcelain-lined kettle, having not more than four layers of plums. Let them stand for an hour or two on the table, then put them over a moderate fire; bring very slowly to boiling point, skim, and fill into the jars as directed.

There is always a great deal of surplus juice in canning plums and small fruits, and this may be put aside to boil down for jelly.

#### CANNING OF VEGETABLES.

All vegetables are better when cooked in the jars; in fact, I doubt if anyone can cook corn or peas in a kettle and put them into jars and have them keep. See that the jars are washed thoroughly, the rubbers adjusted, the lids put into cold water and brought to boiling point. Corn must be freshly gathered, cut from the cob as soon as possible, packed into the jars, the rubbers adjusted, the tops put on loosely. Stand the jars in a wash boiler, the bottom of which has been protected with a rack or strips of wood. Surround them partly with cold water, cover the boiler, bring to boiling point, and boil continuously for four hours. Lift one jar at a time, and fasten on the top at once.

#### PEAS.

Select very young peas, before the starch is developed. Shell them, pack them in the jars, fill the jars with cold water, adjust the rubbers, put on the tops loosely; surround them with cold water, bring to boiling point, and boil for three hours after they begin to boil.

Young Lima beans, string beans, beets, small turnips and carrots may be canned in precisely the same way, allowing three hours for the young Lima beans, and an hour and a half for each of the other vegetables.

#### ASPARAGUS.

Wash the asparagus, throw it into boiling water, and boil rapidly for ten minutes. Put it into the jars heads up. Fill the jars with cold water, adjust the rubbers, and cook for one hour and a half. Fasten as directed in the directions for canning fruit.

#### TO CAN TOMATOES WHOLE FOR SALAD.

Select plump, small, round tomatoes. Scald them by putting them into a wire basket and plunging them down once or twice in boiling water. Remove the skins and put the tomatoes into the jars. Add a teaspoonful of salt; fill the jars with cold water; adjust the rubbers; put the jars in the boiler as directed in preceding recipes; boil for ten minutes after they reach the boiling point.

Tomatoes, being acid, should be peeled, stewed in a porcelain-lined kettle, and filled into the jars through a wide-mouthed funnel, as directed for fruits. Tomatoes are the most easily kept of all vegetables.

#### TO PRESERVE PEACHES.

pare them and remove the stones. Throw the peaches into cold water, to prevent discoloration. When you have sufficient to cover the bottom of a porcelain lined kettle, weigh, and to each pound allow two-thirds of a pound of sugar. Put the sugar into the kettle; on top of it the peaches. Stand over a slow fire until they reach the boiling point, then cook gently until they are transparent. Lift them carefully and put them into tumblers or jars. Boil down the syrup, cover over, and seal.

All fruits may be preserved in the same fashion, using from half a pound to one pound of sugar, according to the fruit.

#### HOW FRUIT JELLIES ARE MADE.

Many fruit juices do not contain sufficient pectose to easily form jelly. In fact, there are only a very few fruits that will make jelly without the use of sugar. There is no reason, however, why jellies should always be made a pound of sugar to a pound of fruit. Quinces and currants, as well as the ordinary crab-apple, cranberry and green grapes, are much better where only half a pound of sugar is allowed to a pint of juice. Blackberries just a little underripe make jelly quickly and easily, allowing half a pint of sugar to each pint of juice. Small fruits, as blackberries, raspberries and currants, may simply be mashed and drained over night. Measure the syrup, bring to boiling point; skim, add the sugar, and boil rapidly until it jellies. This will sometimes take twenty minutes, at other times only a few minutes. There is no "royal road" to jelly-making, and the housewife must learn to test for the jelling point. After the mixture has boiled for

five minutes, take a teaspoonful out and put it into a saucer; stand it to cool; and if, when you scrape it up from the saucer, it sort of wrinkles and forms a jelly, it is ready to put into tumblers. It will sometimes harden and drop as you hold the spoon in the air. When it drops with a short spring it is jelly. If you boil it beyond that point it will "rope" or spin a threadlike syrup, and never again will go back to the jelling point. When jelly is syrupy it has been boiled too long.

#### APPLE JELLY.

Quarter and core the apples. Do not pare them. Put them into a porcelain-lined kettle; cover with cold water, and bring to boiling point; turn into a jelly-bag, and drain over night. Next morning measure the juice, allowing three-quarters of a pound of sugar to each pint of apple juice. Boil the juice for about ten minutes; add the sugar; boil for ten minutes longer; skim and pour into jelly-glasses.

After tumblers have been filled with jelly, cover them over with an ordinary piece of glass. This will prevent the dust in the air from settling on the jelly. Next morning, after the jelly has cooled, cover the tumblers with tissue paper or ordinary tops, and put at once into a closet. If the jelly seems too thin, cover it with glass and stand it in the sun for a day or two until it thickens.—*Ladies' Home Journal*.

### In the Afternoon.

Many a woman, especially if she lives in the country, gets out of the habit of changing her dress afternoons. She feels that it is a great undertaking and she guesses "there won't anybody come," and if she does get caught, why, she can apologize. So she keeps on the dress she has worn all the morning—and sometimes it is none too clean or whole—and then settles down to her afternoon work.

Now, in her sub-consciousness there is a feeling of degradation, although she may have become so accustomed to it that she is not really aware of it. Her state of mind is, also, distinctly unsocial, for she hopes that callers will not come, and if they do, her greeting is so mixed with apologies for "the way I look," that they cannot help feeling that they are not wholly welcome.

On the other hand, take the woman who has formed the habit of dressing, afternoons. As soon as the dinner dishes are done she spends perhaps fifteen or twenty minutes in washing her face, neck and ears, combing her hair and changing her dress. She may not have anything elaborate or very nice to put on. It may be a shirt-waist and dark skirt, or even nothing more than a freshly-laundered wrapper. Then she settles down to her work. She has a feeling of cleanliness, and knows she looks tidy. She knows that whatever comes she need not apologize, and she looks forward with pleasure to the possible caller. Moreover, she knows that when her children and her husband come home from school and work, they will be aware of her pleasing appearance, even if they do not say anything about it. There may be times during the stress of house-cleaning, perhaps, when she may be excused for not changing her dress; but such days are rare, and even if she be a busy housekeeper, there will be very few in the whole year. NONA RUSS.

### The Short Skirt.

No one thing will so lighten the labors of a house-worker as a proper dress that will allow the free use of arms and feet. When one has once become accustomed to the short length of skirt used for a wheel, and no longer, then it is indeed thralldom to put on the clinging petticoats and trailing garments that may add grace, but health never!

When one is obliged to go up and down stairs frequently, the skirt should be short enough so that no thought of it will impede the progress; that no matter how full the hands, there will be no stumbling or necessary effort to keep the skirt out of the way in ascending. In sweeping, or doing work where it is necessary to run out of doors to garbage pail or to hang out articles upon the clothes line, there should be no necessity for raising the skirt to keep it from dirt or dampness.

Many women are tremendously foolish about the short skirt. They exclaim that their weight makes them look ugly, and that they need the extra inches of cloth to add grace and beauty to their appearance.

The truth is that such women do not look very well in anything, and that if they are obliged to work, or walk about in shops or travel in electric cars, they do look much better in the abbreviated skirt than in untidy and useless lengths of cloth that hamper and impede their movements and bring to the home as fine an assortment of bacteria as may be abroad in the land.

Moreover, the so-called "rainy-day skirt" should be short enough to keep dry, and not flop around the feet and ankles, making them wetter than they would be with a long skirt properly raised.

Four inches from the ground is none too short for street wear, and a little shorter than that is better for those who are agile and slender and do not object to showing sensible, tidy shoes that are a part of a costume in which a woman may work or play with ease and comfort.

MYRA DRAKE MOORE.

An old Fifeshire worthy, very seldom out of jail, while donning the familiar prison garb one day was accosted by the Governor thus: "I doubt, old chap, these will not fit you very well." "Oh," retorted the worthy, "they'll dae bra'ly; I'll no likely be gaun faur frae the doors."

## GOSSIP.

It may seem a little early to buy rams for next fall's service, but one great advantage of buying early is the choice of selection thus afforded. Before fall many carloads will doubtless be shipped out of the country, and among them many good ones that should head flocks at home. Mr. Abram Rudell, Hespeler, Ont., offers a fine lot of Shropshire rams of various ages, also ewe lambs. See his advertisement in this issue.

Mr. John Campbell, Woodville, Ont., writes: "The Fairview Shropshires are in unusually fine bloom this season. The introduction of another highly-bred Mansell ram last fall has given results second only to the use of Newton Lord in the flock. All being well, representatives of the flock will be seen at Toronto, London, and the Pan-American, where intending purchasers would do well to inspect and compare before purchasing their flock-heads. As a ram is half the flock, surely it is well to be careful in making a good selection, and money is well spent when a good sire of the right lines of breeding is secured." See Fairview's new advertisement in this issue.

## NOTICES.

**Canadian Goods for India.**—The Ontario Wind Engine and Pump Company are in receipt of an enquiry for their well-known "Canadian Airmotors" from the Imperial Government of Central India. Outfits are required for pumping water from a lake at Mount Abu, and the fact that Canadian goods are being sought after from such distant quarters of the globe speaks volumes for the future export trade of Canada. This Company boasts that the sun never sets on their "Airmotor," and undoubtedly this is true, as their goods are distributed in all quarters of the earth, and a large increase of foreign trade is expected as a result of the exhibition at Glasgow.

**Toronto's Big Exposition.**—The prize list for Toronto's great annual Exposition and Industrial Fair, which this year will be held from August 26th to Sept. 7th, has come to hand. It is printed in yellow, shaded with green, and presents a very handsome appearance. Upwards of \$35,000 will be distributed in premiums, and \$30,000 will be spent in features and special attractions. The live-stock classes have been rearranged in some instances, and the premiums increased in others. A class for French-Canadian cattle has been added. Copies of the prize list and all information desired can be had on addressing H. J. Hill, 82 King St. East, Toronto. Special efforts are being made to increase the excellence of the exhibition this year on account of the close proximity of the Pan-American.

**Fly Remover.**—Cows will stand quieter when being milked, they will give more milk by a considerable quantity, they will not fail in flesh, if thoroughly sprayed with Rippley's Reliable Fly Remover. This preparation, when applied to horses with Rippley's Compressed Air Sprayers, that cost but a trifle and apply the spray in foglike fineness, adds greatly to the comfort of both horses and drivers. It costs only about half a cent per head per day for horses and cattle, and very little trouble to apply it. See advertisement in this issue.

## Great Success of a Canadian Invention.

We refer to Thom's Patent Blower Elevator feed and chaff cutters. These machines entered the United States market against a duty of 45%, a machine that was sold to the Canadian farmer at \$100 costing the American farmer \$150. We are informed that these machines were put in test against the most powerful cutters made in the United States, costing from \$250 to \$300 each, and it was found by actual test that the Canadian machine was so far in advance that there was simply no comparison. One firm bought up all Mr. Thom's patents for the United States, and other United States firms are racking their brains to produce something to equal our Canadian Blower Elevator machines. This machine made its first appearance as a successful silo-filler in 1894. There were at that time very few who could see in the machine the merits that the inventors claimed for it, but nothing "succeeds" like "success," and now the claims have been more than realized and the Blower Elevator machine crowned with "success," and the "chain carriers" will very soon fall out as one of the back numbers. This class of machine has been subjected to many misrepresentation. First, as regards power required. It has been claimed that nothing short of a threshing engine would give sufficient power. Looking over Thom's list of testimonials, we notice the names of some of our well-known farmers testifying to having filled their silos, using a "two-horse tread power."

Thom's Implement Works:  
I am pleased to inform you that the No. 10 Blower I purchased from you has given me perfect satisfaction. I ran it with a two-horse tread power, and although the corn was in bad shape the machine did the work up fine. I am glad that I did not get a carrier machine. I have seen both kinds working, and yours is far in advance. You will have a big sale for your machines as soon as they are known.

Yours truly, J. G. SNETSINGER, ex-M.P.,  
Moulinette, Ont., Stormont Co.

Then, another objection is raised, that this style of machine requires to be run at a very high rate of speed (900 to 1,200 revolutions). This is met by testimony of other equally reliable farmers that claim to have cut and elevated at the rate of twenty tons per hour with machine run at 550 revolutions per minute, so that such objections are not well grounded. We congratulate the inventor on his well-merited success and on the sale of his U. S. patents.

**Used Caustic Balsam for 15 Years.**  
West Chester, Pa., Dec. 9, 1900.  
For fifteen years I have been using your GOMBAULT'S CAUSTIC BALSAM with splendid results.  
M. C. COTTON.

IT PAYS TO ADVERTISE IN THE  
**FARMER'S ADVOCATE.**

## GOSSIP.

Mr. Frank E. McNutt, Des Moines, Iowa, a student of the International Correspondence Schools, Scranton, Pa., has been nominated for county surveyor, on the Republican ticket.

August 29th is the date of the dispersion sale of Mr. A. E. Mansell's famous flock of Shropshire sheep, as announced in the advertisement, which all interested will do well to look up and send for the catalogue. It is an opportunity to secure high-class stock from winning blood such as is seldom offered.

Col Dent, the British remount officer, secured 130 head of suitable horses at Calgary, N.-W. T., in two days, paying \$80 per head for infantry mounts and \$100 for cavalry and artillery purposes, which was about \$20 per head higher than such horses have been hitherto selling for in the locality, but out of which some expense for halters, shoeing, etc., would come.

The dispersal sale (announced in our advertising columns to take place Sept. 4th) of the old and excellent Biscathorpe flock of Lincoln sheep, bred by the Kirkham family for over a century, is an event of special interest to all breeders of Lincolns or those who purpose taking up that popular and useful breed. See the advertisement and send for catalogue.

Among the prominent visitors at the International Correspondence Schools, Scranton, Pa., recently, were Edwin J. Houston, of the Thomson-Houston Electric Co., of Philadelphia; W. R. Bridgman, of the Lake Forest University, and T. A. Carroll, special agent of the U. S. Department of Labor. These gentlemen made a thorough inspection of the schools, and expressed themselves in the highest terms of praise regarding the institution and its system of instruction by mail.

Capt. T. E. Robson, Ilderton, Ont., has recently purchased from Mr. Arthur Johnston, Greenwood, Ont., the roan bull, Great Archer, calved Sept., 1900, by Prince of Archers, bred by Duthie, dam Morning Sunshine, bred by Duthie, sired by Pride of Morning, a smooth, straight youngster of fine character and quality.

## A JAPANESE VISITOR.

Dr. Toshi Suzuki, Mining Geologist of the Government Imperial Steel Works, Japan, was a recent and interested visitor to the International Correspondence Schools, Scranton, Pa. Dr. Suzuki is an educated Japanese gentleman, who has been visiting in the interests of the Mining Department of the Imperial Steel Works at Tokio, several European countries, and the United States. He returns to Japan with a fund of valuable practical information which will be used in the development and working of the mines under his control.

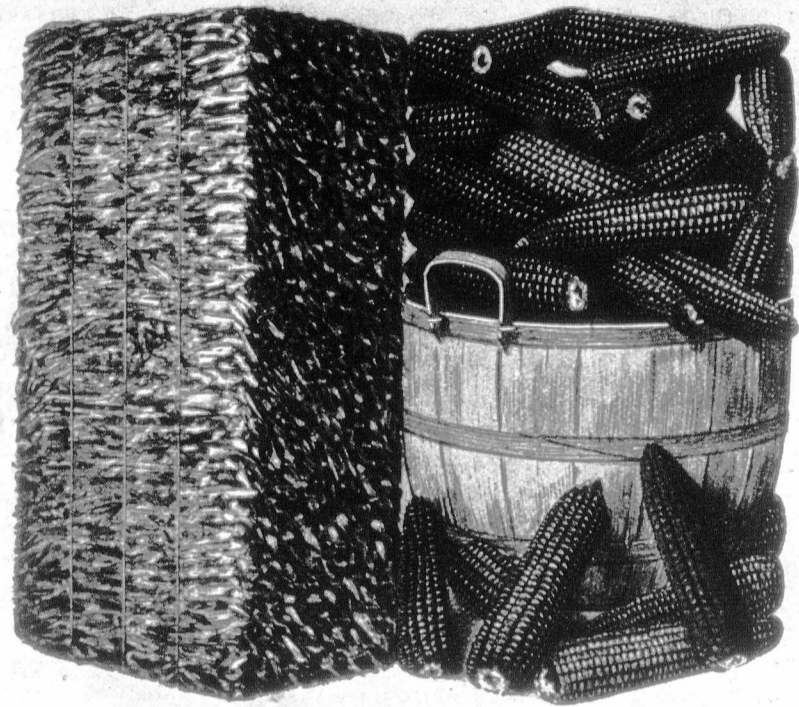
**WANDERER'S LAST FOR CAPT. ROBSON'S HERD.**  
Mr. W. D. Flatt, Hamilton, has announced the sale, to Capt. T. E. Robson, M. P. P., Ilderton, Ont., of the imported bull, Wanderer's Last, to head his Spring Grove herd of Shorthorns. This bull, now about 15 months old, was bred by Mr. W. S. Marr, Uppermill, Aberdeenshire; is the last of the get of the grand old Cruickshank bull, Wanderer; is one of the best young bulls ever brought to Canada, as he was selected for service in Mr. Flatt's noted Jersey cow herd, and as Mr. Flatt is now in Great Britain making negotiations for another importation, it is supposed he has found another to suit him, or he would not have parted with Wanderer's Last, who is one of the most approved type, low-set, thick-fleshed, smooth, and having all the indications of a strong and vigorous constitution.

## LEE FARM JERSEYS.

Mr. E. Phelps Ball, "Lee Farm," Rock Island, Que., who advertises Jersey cattle in this paper, writes of his herd: "The 'Lee Farm' herd has been in existence for the past twenty-five years. Cattle from the herd have been sold to go to all parts of Canada and the United States, and some of the noted Jersey cows have been bred here. This offering is made because we will not have stable room for this coming winter. As we have not offered any for sale for the past two years, the best are here, and will be sold at reasonable prices. For the past few years we have bred from the best St. Lambert bulls that could be had, and I am sure that the heifers will suit those who require a well-bred Jersey. The older heifers are due to calve during the fall months. They are of good size and a handsome lot. I am positive that I could fill a car that would please the purchaser."

R. Mitchell & Son, Greengill Stock Farm, Nelson, Ont., write: "Our Shorthorn sales since February are as follows: To S. G. Ethridge & Son, Popejoy, Iowa, the Imp. heifer, Marietta 3rd, a worthy representative of the favorite Miss Ramsden breeding; to S. Cook, Nortonville, Ont., the good breeding cow, Nelson Beauty, and bull calf; to A. McKnight, Radford, Que., the yearling bull, Saxon's Heir, full brother to Dreyfus, which was for some time in ex-Premier Greenway's herd at Crystal City, Man; to M. W. Cloughly, Webbwood, Ont., one bull calf by our Imp. Prince William; to A. Chrystal, Marshall, Mich., three beautiful Scotch heifers, Ury Girl 4th, Rosa Fame 2nd, and Blythesome Girl 3rd, of the families their names indicate, out of Imp. dams and sired by the grand Nonpareil bull, Imp. Royal Member; to W. C. Osius, Hillsdale, Mich., the big thick cow, Rena, and handsome heifer calf at foot by Prince William; to Harvey Wilson, Flint, Mich., four yearling bulls, big, lusty fellows, by our late stock bull, Elvira's Saxon; to T. E. Adams, Columbia City, Indiana, the young cow, Lila May, and a very growthy bull calf by Prince William, also a beautiful heifer calf of the popular Bracelet tribe, that should develop to something extra nice; to F. Martindale & Son, York, Ont., the grand yearling Imp. bull, Mariner, of the famous Mayflower tribe. He is growing to be a big, thick, blocky fellow, of a very showy character. Like his sire, Prince of Archers, who is half-brother to the champion, Marengo, and to Brave Archer. Mariner's dam is one of the most valuable young cows we own, her sire being Beau Ideal, which was three times first at Inverurie, also a winner at the Highland Society's Show. Our herd bulls, Imp. Red Velvet and Prince William, have developed into grand individuals, of superior finish, and we are getting some very choice calves from them, but could sell one just now; also would sell the promising Imp. bull, Major Alpine, 11 months old. His dam can be seen here, a beautiful cow that has been a prizewinner in Scotland for the past four years.

Double the value of your corn crop.  
Here is your stover! Here is your corn!



The McCORMICK CORN BINDER and the McCORMICK CORN HUSKER and SHREDDER double the value of your corn crop. Write for beautifully illustrated book entitled "King Corn".

P. W. STANHOPE, MANAGER, TORONTO.

## THE BIG FOUR.

GREAT PREMIUM PICTURE OFFER.

For obtaining new subscribers to the "Farmer's Advocate" at \$1.00 per year.

**"Canada's Ideal"**—Admitted by judges, breeders and artists to be the most magnificent engraving of high-class modern Shorthorns ever issued in any country. 24 x 36 inches. Twelve animals.

**"Canada's Pride"**—Nine celebrated draft horses.

**"Canada's Glory"**—Eleven celebrated light horses.

**"Canada's Columbian Victors"**—13 celebrated Ayrshire cattle.

Your choice of any one of the above for ONE new subscriber, or all four beautiful pictures for only three new subscribers.

## Bagster's NEW Comprehensive Teacher's Bible,

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

## HOW TO OBTAIN IT—

Would retail at from \$3 to \$4. We will send (carefully packed, post prepaid) this Bible to anyone sending us the names of TWO NEW SUBSCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums right away. In every case cash must accompany the new names.

The Wm. Weld Co., Ltd., London, Ont.

**GOSSIP.**

Mr. F. S. Peer, Mt. Morris, N. Y., landed his 15th importation of Jerseys, Guernseys, Ayrshires, sheep, etc., at New York, June 24th, all in the very best of condition. The 25 head of Jerseys are for various prominent breeders in the United States and Canada, and include 12 females and 3 bulls by Flying Fox, out of some of the best cows on the island.

In a bull-judging competition at the Shropshire and West Midland Show, at Shrewsbury last month, open to farmers' sons under 25 years of age, Mr. Robert Miller, Stouffville, Ont., was the judge of the work of the 20 competitors. This is in line with the work instituted in Ontario last year at leading shows by the offer of prizes by the Massey-Harris Co. for judging by farmers' sons.

Breeders of Cotswold sheep needing new blood will do well to note the advertisement of the estate of the late Mr. Robert Garne, North-leach, Gloucestershire, England, offering for sale, privately, in lots to suit purchasers, the entire Aldsworth flock of breeding ewes. This is one of the oldest and best flocks of the breed in England, having won probably more prizes at the Royal Show than any other in existence. The Aldsworth Cotswolds have been noted for strength and vigor of constitution, and an infusion of this blood in Canadian flocks at this time should do great good.

Messrs Wm. Grainger & Son, Lonsdale, Ont., write: "We have had a very good year with our Shorthorns. We have sold to each of the following parties one bull: C. Royall, Brussels, Ont.; Eligo Ball, Auburn, Ont.; M. Sprung, Auburn, Ont.; W. Scott, Belgrave, Ont.; Wm. Ivers, Duncannon, Ont.; Kathy Bros., Auburn, Ont.; T. L. Pardo, Cedar Springs, Ont.; and our old stock bull, Beau Ideal, we sold to E. Watson, Blyth, Ont.; to H. Waggener, Auburn, Ont.; two heifers; and to James Cowan, Seaford, Ont., one heifer. They were all good ones. We are having our first crop of calves from our present stock bull, Golden Eagle, and they are coming all right. We think they are the best lot of calves we ever had. We wish the ADVOCATE every success."

Dun Edin Park Stock Farm, near Chatham, Ont., is the well-appointed home of W. W. Everitt, breeder of high-class Jerseys. Some of the most perfect specimens of that favorite dairy breed can be seen on the farm. They are straight St. Lambert bred, large, handsome cows, with perfectly formed udders, a herd of which Mr. Everitt is justly proud. The stock bull is a large, even fellow, solid color, and his stock proves he is the right bull in the right place. He is registered under the name of Handsome Rioter 45633. His sire, Liliun's Rioter, was a noted prizewinner, he having carried off no less than seven first prizes and four sweepstakes, and as head of a herd, four firsts, at leading Canadian shows. Handsome Rioter's dam, Hugo Beauty 2nd, was sired by the noted champion bull, Canada Sir George, a bull that has to his credit no less than 14 first prizes, including three sweepstakes. Her dam, Hugo Beauty, was also twice a prizewinner at Toronto. Very prominent among the many nice dams in this herd is Charity of Glen Rouge, sired by the famous 100 Per Cent., dam Cheerful of St. Lambert 2nd, a cow with a record of 22 lbs. 2 ozs. of butter in seven days. Charity of Glen Rouge traces directly back to the illustrious Stoke Pogis. Another real good one is the cow, Nell of Maple City, by Perfect Combination, dam Charity of Glen Rouge. She is an extra large cow, showing that great depth and large, even udder so essential in heavy milkers. A very pretty 3-year-old is Cheerful Charity, out of Charity of Glen Rouge, and sired by Handsome Rioter. Isabel of Glen Allan is another cow that is making fame, she having produced over 400 lbs. of butter in one milking season. She is sired by Gray Dandy, dam Queen of Glen Allan. St. Lambert's Twilight, by Jay St. Lambert, dam Brulinta, is a very persistent milker. At present, on ordinary pasture, without any extras, she is averaging 35 lbs. of milk per day. The youngsters are very even lot, already promising great milk-producing qualities, by their conformation and udder indications. The young bull calves are nice ones, and give promise of developing into top-notchers.

A short distance south of Northwood, Ont., Lewisville Station on the G. T. R., is the home of Mr. Mac Campbell, an enterprising and successful breeder of Shorthorns, Berkshires, and Leicester sheep. Mr. Campbell's herd of Shorthorns is made up of some really nice animals, the major part of them being descendants of the famous old stock bull, Imp. Indian Chief. One of Mr. Campbell's earlier dams was Trixy 2051, sired by Imp. Patriot, dam Scotch Lassie, sired by that world-renowned bull, Hesperus 51409, perhaps the best-bred Braughill bull ever imported. He was afterwards taken back to Scotland by a prominent breeder, as bulls of his stamp were exceedingly scarce even on that side of the water. This cow was Countess, Cruickshank-bred. Her offspring are all that can be desired, and sell at sight. Lady Strathallan of Botany 25769, by Roan Prince 14438, dam Lady Bell of Kent, by Crown Prince of Strathallan is an ideal both in form and breeding. The yearlings are sired by Famous Chief, a son of Indian Chief, and are a grand lot, showing the true characteristics of the present-day Shorthorn. The present sire is Arthur Bright 29885, sired by Sir Arthur Ingram 3rd, dam Duchess of Ridgetown 3rd, by Bothwell Chief. He is all bull from the ground up, and the youngsters show that Mr. Campbell has made no mistake in choosing him as his stock bull. The old sire in use on this herd was the grand stock bull, Invincible 3rd, imp.

The Berkshires to be seen on this farm are of the up-to-date kind. A beautiful lengthy sow is Lady Mac 5767, sired by the famous prizewinner and stock bear, Prince Imperial 4124, dam Dairymaid 4350, by Iron Duke. The young ones are of the true bacon type, being long, deep, and very uniform in make-up. The present stock bear is Oliver Cromwell 5820, by Prince of Perth, dam Dairymaid. He is an exceedingly lengthy fellow, of great substance and symmetry. In Leicesters are some good ones also. In fact, Mr. Campbell has an eye for the beautiful, and makes it a point to keep no culls. Consequently, everything is worth looking at. The stock ram, Sir Wilfred 3rd, by Sir Wilfred, dam Cheswick, is a beauty from the feet to the ears, and has the credit of carrying off the coveted red ribbon at Toronto as a lamb, in 1899. Katie B 829, by Billie 517, dam Flora G 396, is one of the ewes that it is an honor to own. Another just-as-good is Lillie M 867, by Billie, dam Daisy M.



**Cured Of Piles.**

Mrs. Hinkley, Indianapolis, writes:—"The doctor said it must be an operation, costing \$800, and little chance to survive. I chose Pyramid Pile Cure, and one 50 cent box made me sound and well." All druggists sell it. It never fails to cure any form of piles. Try it. Book on piles, cause and cure, free by mail. Pyramid Drug Co., Marshall, Mich.—Adv. om

WANTED, a married man and his wife to take charge of a dairy farm; also two single men to work on same. Apply to JOHN D. DUNCAN, 66 DRUMMOND ST., MONTREAL. om

**Lake View Farm for Sale**  
200 ACRES.

Lot 11, con. 1, Hope Tp., Co. Durham; half mile west of Port Hope. Soil good clay loam; well watered by two living streams. New brick house—11 rooms, kitchen and woodshed attached; also six-room cottage. Good barns and stables, and 10 acres full-bearing orchard. For further particulars apply to

**GEO. HILL & SON,**  
LAKE VIEW. PORT HOPE, ONT.

**Buttermaker Wanted**

o Immediately. Must be competent. Address: Annandale Farm, Tilsonburg, Ont

WANTED EXPERIENCED WORKING FOREMAN of cattle department for large farm. Require full particulars as to age, nationality, habits and experience. Address: "JERSEY," Farmer's Advocate, London, Ont. om

THE  
**COLUMBIA**  
AIR  
CHURN

Leads the world, and is recognized by butter experts and dairymen as the best. Perfectly granular butter produced from sweet or ripe milk or cream in from five to seven minutes, removing all taints or foul odors. The churning is not accomplished by old-time friction or agitation, but by air scientifically applied to the cream. A practical and scientific improvement in churns. A perfect and practical butter separator and milk aerator. Tested at the O. A. College, giving highly satisfactory results. For full particulars, write—

**Columbia Air Churn Company,**  
Confederation Building,  
TORONTO, ONT.

**British Columbia.**

Anyone thinking of farming in British Columbia should write for descriptive pamphlet of farms for sale in the Lower Fraser Valley—the garden spot of the Province.

We have compiled the largest and most complete list of farms, orchards, cattle-grazing and garden lands, and fishermen's allotments, in the Province. It has been very carefully selected, and we have a personal knowledge of every property described. Prices range from \$3.00 per acre to \$250.00 per acre, and in extent from 1 acre to 1,000 acres.

In the Lower Fraser Valley, and on the coast lands around Vancouver, we rarely have more than a month of frost and snow at outside, and the thermometer has only sunk to zero twice in ten years.

WRITE  
**HOPE, GRAVELEY & CO.,**  
536 Hastings St. VANCOUVER, B. C.

**NOTICES.**

**Wonderful Cutting.**—An instance of extraordinary work with a binder was recorded in Australia recently. Massey-Harris Co., Ltd., at Toronto, have been forwarded a photo by one of their patrons in Australia, showing one of their light binders at work in what is there called hay (green oats), six feet six inches high. Not only did the machine cut and tie excellently in this heavy crop (five tons to the acre), but the picture shows the machine opening her own road in the crop, the horses being almost completely lost to view.

The proud possessor of the machine adds at the foot of the picture: "I have cut over 600 tons of hay this season with the one Massey-Harris binder. This is her fourth year, and we estimate she has cut over 1,000 acres."—Adv. om

**To Buttermakers.**—A man who can make good butter, and wants a position, should apply to Mr. E. D. Tillson, Tilsonburg, at once. Mr. Tillson has a well-equipped model creamery, and has complete control of the milk supply, which is produced at home, from "Annandale" herd of big producers.

**Stock Food.**—International Stock Food is credited by G. W. Shultz, Worthington, Minn., with having cured a horse of mange. He says it cured the mange, improved his general looks, and he seems to be an entirely different animal. Mr. Shultz then commenced giving the food to his Jerseys, and their improvement in general condition and milk-giving was simply marvellous.

**For Flies on Stock.**—There is no longer reasonable excuse for neglecting to protect stock, especially milking cows, from flies, because satisfactory preparations can be easily secured and applied. It is a fact that flies, especially horn flies, cost farmers a tremendous amount of money annually, thus rendering summer as objectionable with flies as winter with cold, when the stock has to be housed and fed by hand. Cows unprotected from flies in summer do as poorly as those allowed to live around the straw stack in winter. It is not a difficult matter to apply "Shoo Fly" as often as is necessary, and it is sold cheap, in convenient form, by Wm. Rennie, Toronto.

**A Good Ontario Farm.**—Ontario farmers in comfortable circumstances, when they return from the Northwest or any other country, new or old, invariably say that there is no place like Ontario to farm in if one owns his land. Some other countries may have greater advantages for quick money-making if the right farm and all other desirable conditions are secured, but where there is one of them there are many not so favorable. A good farm in Ontario is a most desirable property for financial, social and climatic advantages. Such a property is offered for sale in this issue by Messrs. Geo. Hill & Son, Port Hope, Ont. See advertisement of "Lake View" farm of 200 acres, in this issue.

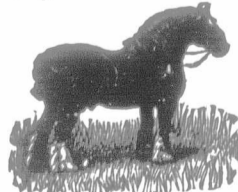
**Thresh Your Own Grain.**—The Columbia Thresher, built by the Belle City Manufacturing Company, of Racine, Wis., is one of the most popular machines among farmers in all sections of the country. It is a small thresher of large capacity, and guaranteed to thresh, clean and separate all grain as satisfactorily as the large machines. It can be run by any kind of power—horse, tread, steam or gas engine—and is light and portable. It requires but few men, and the parts are so constructed as not to easily get out of order, and is built of best materials. All parties interested should write to the makers for their large and handsome catalogue fully describing this machine, as well as their full line of other farming implements. It is sent free to any address.

**Newton's Cure.**—It is unfortunately true that horseflesh is subject to many trying ailments, and it is a great blessing to both the owner and the unfortunate sufferer that many of the most trying complaints can be cured, or much relieved, rendering an otherwise comparatively useless animal a sound and comfortable beast to work. A remedy that there is considerable talk about among horsemen is Newton's Heave, Cough and Distemper Cure, made at Toledo, Ohio, and handled by Lyman Bros. & Co., Toronto. Geo. W. Curtis, Lindsay, Ont., writes concerning it: "I have used Newton's remedy for coughs and colds with excellent results. My brother has a mare that had the heaves so bad she was almost useless, and she was cured as soon as a colt by Newton's remedy." It is specific for stomach troubles, and also for coughs.

**Horseless Mower.**—Deering Harvester Company is favoring the farmers of Canada with a unique exhibition machine, which consists of nothing more nor less than its automobile mower. This is the ordinary ideal mower equipped with roller and ball bearings, and also equipped with a six-horse-power gasoline engine. The machine responded to every requirement in the most satisfactory manner. The grass was cut and delivered to the entire satisfaction of the most exacting farmer. The operator controlled the machine at the corners, backed it, and operated the different parts with even greater facility than could be done with horses. One of the machines was exhibited at the Paris Exposition, and exhibitions were given in the vicinity of Paris during the continuance of the Exposition. Canadian farmers have an opportunity to see one of these up-to-date machines right at their own doors, inasmuch as the Deering Harvester Company has paid a nice compliment to its thousands of customers in the Province of Ontario by affording them an opportunity to see their favorite machine under such pleasing circumstances. On June 27th this automobile mower cut a piece of timothy on the farm of John Breakey, lot 25, concession 1, York Township, in the presence of a couple of hundred farmers from the surrounding territory, and every one was much pleased with the work of the machine.

**Clydesdales and Shorthorns.**

**Young stallions, bulls, and heifers.**  
Herd headed by Best Yet—14371—and Mint-horn—24081—, bulls bred by Hon. John Dryden and H. Cargill & Son. PRICES ON APPLICATION.  
**D. McBeth,**  
Oak Lake, Manitoba



**HORSEMEN!—THE ONLY GENUINE IS**

**GOMBAULT'S CAUSTIC BALSAM.**

None genuine without the signature of  
*The Lawrence-Williams Co*  
Sole Importers & Proprietors for the } CLEVELAND, O.  
U.S. & CANADA.

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

**KEMP'S**

**INSTANTANEOUS Sheep Dipping Fluid** kills ticks, lice and all parasites or insect life on sheep, hogs, horses, and cattle; destroys mange on dogs.

The best dip in the market. Thorough, permanent, effectual. Cheapest and best disinfectant for surgical and medical purposes, barns and outhouses. Used in the proportion of 1 to 100.

**ONLY RELIABLE CATTLE FLY KILLER.**

If your druggist does not keep it, we will express a half-gallon tin (prepaid) to any address in Manitoba, B. C., or the Territories, for \$1.25. Elsewhere in the Dominion, \$1.00.

**W. W. STEPHEN & CO.,**  
MEAFORD, ONT.,  
AGENTS FOR THE DOMINION.

**Clydesdales--Hackneys.**



**QUEEN.**  
A Few Choice Yearlings of Either Breed can be spared.

**D. & O. SORBY,**  
GUELPH, ONT.

**BEAVER LINE.**

ROYAL MAIL STEAMERS.

Regular Weekly Service between Montreal and Liverpool.

From Liverpool, Tuesday.	Steamer.	From Montreal, Friday.
July 2.....	Lake Megantic.....	July 19
July 9.....	Lake Superior.....	July 26
July 16.....	Lake Ontario.....	Aug. 2
July 23.....	Wassau.....	Aug. 9
July 30.....	Lake Champlain.....	Aug. 16
Aug. 6.....	Lake Megantic.....	Aug. 23
Aug. 13.....	Lake Superior.....	Aug. 30
Aug. 20.....	Lake Simcoe.....	Sept. 6
Aug. 27.....	"Lake Superior" and "Wassau" carry second-cabin and steerage passengers only.	

First Cabin—Single, \$52.50 and upwards; Round Trip, \$100.00 and upwards. Second cabin—Single, \$35.00; Round Trip, \$66.98 and \$68.88, according to steamer, location, and number of persons in room. Steerage Rates—To Liverpool, London, Londonderry, Glasgow, Belfast, and Queenstown, \$24.50 and \$25.50. Apply to any agent of the line, or to

**ELDER, DEMPSTER & CO.,**  
6 St. Sacramento St., Montreal.

Agents in London, Ontario: E. De la Hooke, F. B. Clarke, and W. Fulton.



**Guaranteed**  
**Newton's Heave, Cough, Distemper and Indigestion CURE.**  
A veterinary specific for WIND, THROAT & STOMACH TROUBLES. Strongly recommended. \$1.00 per can. Dealers or direct.  
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**Newton Horse Remedy Co. (D), Toledo, O.**  
Trade supplied by Lyman Bros. & Co., Toronto.

**4 Imp. Clydesdale Stallions**

From such well-known sires as Sir Everard (5353), Prince Roberts 7135, Prince Alexander 8899.

**2 Imp. Shorthorn Bulls.**  
4 Bulls Imp. in Dams.  
2 Canadian bred Bulls.

**21 Imp. Cows and Heifers.**  
7 Canadian-bred Cows and Heifers.  
**GEO. ISAAC & BROS., BOMANTON, ONT.**  
COBOURG STATION, G. T. R.

**Wm. Brash, Ashburn, Ont.,**

BREKDER OF  
om  
**CLYDESDALE HORSES and SHORTHORN CATTLE.**

# Our Farmer's Library

A RECENT bulletin prepared by Prof. J. B. Reynolds, of the Ontario Agricultural College, gives a list of meritorious books on Agriculture, Live Stock, Dairying, and Fruit Growing, from which we have made a selection and added a few others. How to obtain, see below :

### SOIL AND CROP.

- THE FERTILITY OF THE LAND.—*Roberts*. 372 pages. \$1.25.
- A BOOK ON SILAGE.—*Woll*. 185 pages. \$1.00.
- SOILS AND CROPS.—*Morrow & Hunt*. \$1.00.
- FORAGE CROPS.—*Thos. Shaw*. \$1.00.
- SOILING, ENSILAGE, AND BARN CONSTRUCTION.—*F. S. Peer*. 247 pages. \$1.00.

### LIVE STOCK.

- VETERINARY ELEMENTS.—*A. G. Hopkins, B. Agr., D. V. M.* \$1.50. A practical book for stockmen and agricultural students.
- THE STUDY OF BREEDS (CATTLE, SHEEP, AND SWINE).—*Prof. Shaw*. 400 pages; 60 engravings. \$1.50.
- HORSE BREEDING.—*Sanders*. 422 pages. \$1.50.
- LIGHT HORSES—BREEDS AND MANAGEMENT. 226 pages. \$1.00.
- HEAVY HORSES—BREEDS AND MANAGEMENT. 219 pages. \$1.00.
- CATTLE—BREEDS AND MANAGEMENT. 270 pages. \$1.00.
- SHEEP—BREEDS AND MANAGEMENT. 232 pages. \$1.00.
- CATTLE BREEDING.—*Warfield*. 386 pages. \$2.00.
- THE DOMESTIC SHEEP.—*Stewart*. 371 pages. \$1.75.
- THE SHEEP.—*Rushworth*. 496 pages. \$1.50.
- PIGS—BREEDS AND MANAGEMENT.—*Sanders Spencer*. 175 pages. \$1.00.
- FEEDS AND FEEDING.—*Henry*. 600 pages. \$2.00.

Vinton Series.

### GENERAL AGRICULTURE.

- AGRICULTURE.—*C. C. James*. 200 pages. 30 cents.
- FIRST PRINCIPLES OF AGRICULTURE.—*Foorhees*. 207 pages. \$1.00.
- AGRICULTURE.—*Storer*. 1,875 pages, in three volumes. \$6.00.
- CHEMISTRY OF THE FARM.—*Warrington*. 183 pages. 90 cents.
- FARMYARD MANURE.—*Aikman*. 65 pages. 50 cents.
- IRRIGATION AND DRAINAGE.—*King*. 502 pages. \$1.50.
- IRRIGATION FOR THE FARM GARDEN AND ORCHARD.—*Henry Stewart*. \$1.00.
- SUCCESSFUL FARMING.—*Rennie*. 300 pages. \$1.50, postpaid.

### DAIRYING.

- AMERICAN DAIRYING.—*H. B. Gurler*. 252 pages. \$1.00.
- THE BOOK OF THE DAIRY.—*Fleischmann*. 330 pages. \$2.75.
- MILK AND ITS PRODUCTS.—*Wing*. 230 pages. \$1.00.
- TESTING MILK AND ITS PRODUCTS.—*Farrington & Woll*. 255 pages. \$1.00.
- DAIRYING FOR PROFIT.—*Mrs. E. M. Jones*. 50 cents.

### POULTRY.

- ARTIFICIAL INCUBATING AND BROODING.—*Cypher*. 146 pages. 50 cents.
- PRACTICAL POULTRY-KEEPER.—*Wright*. \$2.00.
- AMERICAN STANDARD OF PERFECTION.—*Pierce*. 278 pages. \$1.00.

### APIARY.

- THE HONEYBEE.—*Langstroth*. 521 pages. \$1.50.

### FRUIT, FLOWERS, AND VEGETABLES.

- VEGETABLE GARDENING.—*Green*. 224 pages. \$1.25.
- FLOWERS AND HOW TO GROW THEM.—*Rerford*. 175 pages. 50 cents.
- THE PRINCIPLES OF FRUIT-GROWING.—*Bailey*. 514 pages. \$1.25.
- BUSH FRUITS.—*Card*. 537 pages. \$1.50.
- HORTICULTURIST'S RULE BOOK.—*Bailey*. 312 pages. 75 cents.
- SPRAYING OF PLANTS.—*Lodeman*. 389 pages. \$1.00.
- THE NURSERY BOOK.—*Bailey*. 365 pages; 152 illustrations. \$1.00.
- AMATEUR FRUIT-GROWING.—*Samuel B. Green*. 5x7 inches; 134 pages, with numerous fly leaves for notes; bound in cloth, and illustrated. 50 cents.

### PLANT AND ANIMAL LIFE

- THE STORY OF THE PLANTS.—*Grant Allen*. 213 pages. 40 cents.
- THE STUDY OF ANIMAL LIFE.—*J. A. Thomson*. 375 pages. \$1.75.
- INSECTS INJURIOUS TO FRUITS.—*Saunders*. 436 pages. \$2.00.

### MISCELLANEOUS.

- THE HOME PHYSICIAN AND CYCLOPEDIA OF MEDICINE.—By seven eminent physicians, aided by specialists. 1,300 pages; illustrated. Cloth, \$4.75; leather, \$5.75.
- LANDSCAPE GARDENING.—*S. T. Maynard*. 338 pages. \$1.50.

## HOW TO OBTAIN THESE BOOKS :

We will furnish present subscribers any of the above books for cash or as premiums for obtaining new yearly subscribers to the FARMER'S ADVOCATE at \$1.00 each, according to the following scale :

Books valued at from	\$0.30 to \$0.65,	for 1 new subscriber.
"	.90 to 1.25,	for 2 "
"	1.50 to 1.75,	for 3 "
"	2.00 to 2.50,	for 4 "
"	2.75	for 5 "
"	6.00	for 12 "

We can furnish any of the above books at the regular retail price, which is given opposite the title of the book. By a careful study of the above list, any farmer can choose a select list of books suited to his needs, and for a small outlay in cash, or effort in obtaining new subscribers for the ADVOCATE, secure the nucleus of a useful library.

Cash to accompany names in every case. Subscriptions credited a year in advance from date received.

The WILLIAM WELD CO., Ltd., LONDON, ONT.

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WE have succeeded in procuring from one of the most reliable jewelers in Canada a complete list of Gents' and Ladies' Watches of sufficient variety to suit every one, and have no hesitation in recommending them to our readers as premiums worthy of an effort to secure. These are not by any means trashy goods, but first-class in every particular, and we assure you that you will be pleased with whatever of the above premiums you may obtain. Let us hear from you at an early date with a good list of new subscribers accompanied by the cash, and take your choice.

### Gents' Watches.

	New Subscribers.
No. 1. Yankee Nickel Watch.....	2
No. 2. Trump Nickel Watch.....	4
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No. 6. 7 Jeweled Gent's Elgin in Gun Metal Case.....	11
No. 7. 7 Jeweled Gent's Elgin in Sterling Silver Case.....	14
No. 8. 7 Jeweled Gent's Elgin in 20-year Filled Case.....	18
No. 9. 7 Jeweled Gent's Elgin in 25-year Filled Case.....	21
No. 10. 15 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	15
No. 11. 15 Jeweled Gent's Elgin in Gun Metal Case.....	15
No. 12. 15 Jeweled Gent's Elgin in Sterling Silver Case.....	18
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No. 15. Gun Metal Swiss Chatelaine.....	4
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No. 17. Nickel American O. F., large size.....	5
No. 18. Gun Metal American O. F., large size.....	5
No. 19. Nickel, small size.....	9
No. 20. Gun Metal, small size.....	10
No. 21. Sterling Silver, small size....	10
No. 22. 7 Jeweled Elgin in 20-year Filled Hunting Case....	20
No. 23. 7 Jeweled Elgin in 25-year Filled Hunting Case....	22
No. 24. 15 Jeweled Elgin in 20-year Filled Hunting Case....	23
No. 25. 15 Jeweled Elgin in 25-year Filled Hunting Case....	25

### Description of Watches.

The accompanying cuts fairly well represent all the Ladies' and Gents' Watches, and a description of each as numbered is as follows :

No. 1. American Nickel Key-wind Boy's Watch that is absolutely guaranteed to keep good time and give satisfaction.

No. 2. Gent's Nickel American O. F. Watch; stem wind, and push-in stem and turn to set hands. This is a very strong, reliable Watch.

No. 3. Same as No. 2, excepting that it has Gun Metal case instead of Nickel case.

No. 4. Is a smaller-sized Gent's Watch, has sterling silver case, O. F. Screw Back and Bezel; stem wind, and push-in stem and turn to set hands. This is the lowest-priced and most reliable Boy's or small Gent's Silver Watch that is on the market.

No. 5. Is fitted with 7-Jeweled Nickel, first-quality Elgin movement. The case is a 3-oz. O. F. Nickel case; stem wind and set; screw back and bezel case.

No. 6. Same movement in Gun Metal or Black Steel screw back and bezel case.

No. 7. Same movement with Sterling Silver O. F. screw back and bezel case.

No. 8. Same movement in 20-year guaranteed Gold Filled O. F. screw back and bezel case.

No. 9. Same movement in 25-year guaranteed Gold Filled O. F. screw back and bezel case.

Nos. 10, 11, 12, 13 and 14 are fitted in the same style of cases as Nos. 5, 6, 7, 8 and 9; the difference is in the movement, and the movement is 15-Jeweled Nickel, first-quality Elgin movement.

No. 15. Is a small-sized Swiss O. F. Gun Metal Chatelaine Watch.

No. 16. Is the same, only with Sterling Silver case, which can be had nicely engraved.

Nos. 17 and 18 are a good-quality American Watch, O. F. stem wind, and push-in stem and turn to set hands. These are a little larger than the usual Ladies' Watches, and are smaller than the usual Boys' Watches, though can be used for either Boys, Girls or Young Ladies.

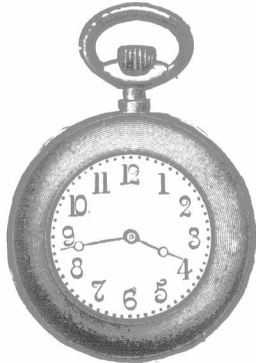
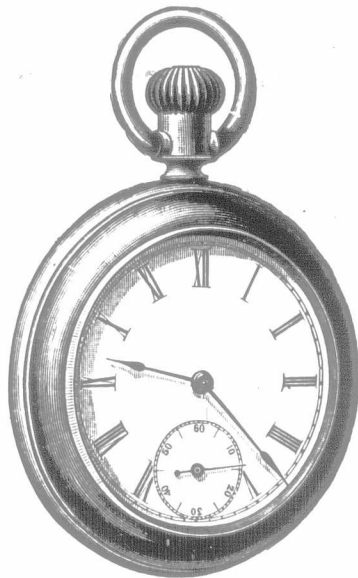
Nos. 19, 20 and 21 are small sized; in fact, are the exact size of cut. These are American Watches, O. F. stem wind, and push-in stem and turn to set hands, and are first-class timekeepers. Will give perfect satisfaction.

If a nice leather wrist case is desired with these watches, send two extra subscribers.

Nos. 22, 23, 24 and 25 are similar to the accompanying cut. These are regular Ladies' Hunting Watches. Nos. 22 and 24 are fitted in 20-year guaranteed Gold Filled cases, nicely ornamented, or to be had in plain or plain engine turned, and the same applies to Nos. 23 and 25, excepting that they are fitted in 25-year guaranteed Gold Filled cases, and 14k Gold Filled; 22 and 23 are fitted with 7-Jeweled Nickel, first-quality Elgin movements. Nos. 24 and 25 are fitted with 15-Jeweled Nickel, first-quality Elgin movements.

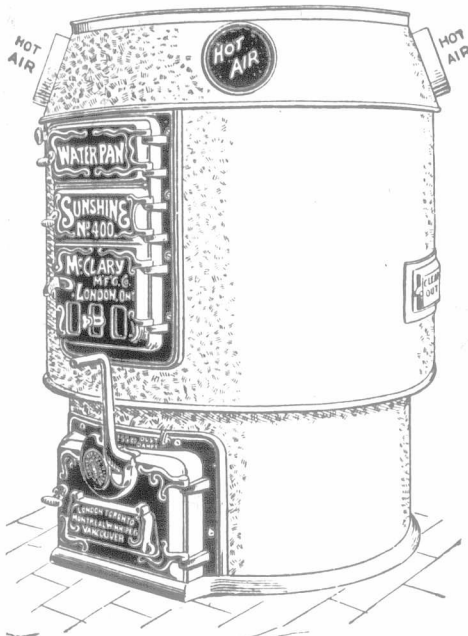
When making your choice of Watch as premium, be sure to mention its number as given in premium list, also whether Lady's or Gent's.

THE WILLIAM WELD CO., LTD., LONDON, ONT.





# A FURNACE FOR A FARM.



The "SUNSHINE" Furnace was specially made to meet the requirements of a farm home.

Burns coal or wood.

Large feed-doors will admit rough blocks of wood.

Parts which come in contact with fire made extra heavy.

Made in three sizes.

Will retain fire longer than any other furnace made.

Prices and full information from our local agent or nearest house.

**THE McCLARY MFG. CO'Y.**

London, Toronto, Montreal, Winnipeg, Vancouver; St. John, N. B.

# SHOO-FLY

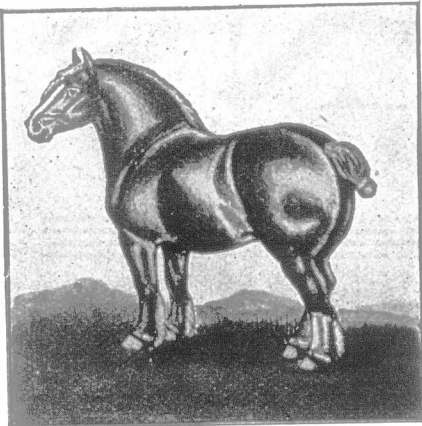
**KEEPS FLIES OFF ANIMALS.**

FOR PROTECTING CATTLE, HORSES, DOGS, ETC.,

FROM FLIES OF ALL KINDS, GNATS, MOSQUITOES, FLEAS AND OTHER INSECTS.

SOLD IN CANS (QUART, 25c.; GALLON, 60c.) BY LEADING MERCHANTS.

PURCHASER PAYS EXPRESS CHARGES. **WM. RENNIE, TORONTO.** DIRECTIONS ON ALL CANS.



LATELY IMPORTED A FRESH LOT OF

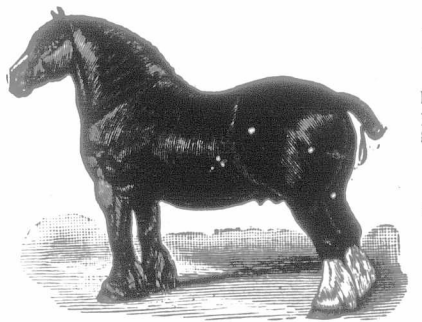
## Clydesdale Stallions,

Comprising sons and grandsons of many of the most noted Scotch showyard winners and sires, all in the pink of condition without surplus flesh, and personally selected to meet the best Canadian markets, having, without exception, the best of bone, hair, feet, and action, coupled with true Clyde character. I will make further importations as the times demand. Inspection invited. Prices consistent with quality.

**ROBERT GRAHAM,**  
Ringwood P. O., Ont.

Stouffville Station, G. T. R., and telegraph office.

## CLYDESDALE STALLIONS ALL SOLD.



MR. DALGETY

sailed on July 10th for the home-land to bring out another large importation. Expects to arrive in Canada early in September with a grand lot.

Anyone having first-class heavy draft or high-class carriage horses may find a purchaser by writing

**DALGETY BROS.,**  
London, Ontario.

**WM. SMITH, COLUMBUS, ONT.,**

IMPORTER AND BREEDER OF

**Clydesdale Horses & Shorthorn Cattle**

**W. G. HOWDEN, COLUMBUS, ONT.,**

BREEDER OF

**CLYDESDALE HORSES, SHORTHORN CATTLE**

**L. BURNETT, GREENBANK, ONT.**

BREEDER OF

**Clydesdale horses, Shorthorn cattle, and Shropshire sheep.**

Four bulls from 12 to 14 mos. old, bred from imp. Cruickshank blood, for immediate sale.

**Clydesdales and Ayrshires**

Imported and home-bred. Also Dorset Horned sheep, and the leading varieties of poultry.

**ROBERT NESS & SONS, Howick, Que.**

### FOR SALE.

**CLYDESDALE** stallions, mares and fillies, representing the best blood in Scotland—Prince of Wales, Darnly, Macgregor and Lord Lyon—including the great sweepstakes winner, The Marquis (1182), a grandson of Prince of Wales and Macgregor; also the first-prize 3-year-old at Ottawa this season.

**THOS. GOOD,**  
Richmond P. O., Ont.  
R. R. Station, Stittsville, C.P.R.

### GOSSIP.

Among the Canadian stock-breeders now in Great Britain attending the leading shows, and presumably making selections of stock for importation, are Messrs. W. D. Flatt, Hamilton; H. Cargill, M. P., Cargill; Arthur Johnston, Greenwood; Robert Miller, Stouffville; and Stephen Nicholson, Sylvan. This list probably does not include all the breeders who have gone over the water for the same purpose, but these are those that have come within our ken.

Dr. Jas. Fraser, F. R. C. V. S., the veterinary officer accompanying Lt.-Col. Dent on his purchasing tour of army remounts, is a Canadian, from near Woodstock. The Doctor was very greatly impressed with the strides made by Canadian agriculture in the last twenty years, and states that the farmhouses and buildings, together with the general appearance of the farms, compare very favorably with the best British farms.

**ALEX LOVE'S SHORTHORNS, LINCOLNS, AND BERKSHIRES.**

The breeding of pure-bred stock, whether it be horses, cattle, sheep or pigs, at the present time is a vocation that is at once agreeable and profitable. Perhaps never in the history of this country has the demand for pure-bred animals of all classes been more active nor the prices more generally satisfactory. These and other reasons are every year inducing farmers to launch out into the pure-bred arena. A little capital, combined with good judgment in the selection of the dams and sires, ensures success. A few years ago Mr. Alex. Love, Eagle P. O., Ont. (Bismarck station on the Michigan Central Railway), purchased a few choicely-bred Shorthorn cattle from the late John I. Hobson, of Guelph. To-day can be seen on the farm some really excellent specimens of Shorthorn perfection. Miss Joan, sired by 20th Duke of Sylvan, by Imp. Warrior, is a cow of superior quality, a large, massive, evenly-proportioned animal, that has proven herself capable of producing prize-winners. Cleopatra 2nd, sired by Imp. Reporter, dam Cleopatra 1st, imported, is a beautiful red cow of great quality and straight Scotch breeding, and has abundantly proven her worth as a dam. The cow Vacuna 42nd, by the Cruickshank-bred bull Cavalier, of the celebrated prizewinning Matchless family, and he a prizewinner of more than local fame, dam Vacuna 20th, by Imp. Warrior, is a splendid specimen of the present-day ideal, and is now suckling a grand young roan bull calf by Imp. Chief of Stars. A number of the young ones in this herd are sired by Scottish Chief, by Scottish Pride, imported. The present stock bull is Royal Arthur, by Royal Standard, dam Vacuna 31st, by Norsman. This nicely-balanced and grandly-bred young bull has the honor of five of the nearest sires in his pedigree being first-prize winners at leading shows.

In Lincoln sheep, Mr. Love has some 18 breeding ewes, descended directly from imported stock. These are very large, nicely-proportioned and well-covered animals. The sires that have been used were all imported or from imported stock. This year's crop of lambs are an exceptionally nice lot, showing at this early age the well-known Lincoln characteristics.

In Berkshire pigs, Mr. Love is showing something positively as good as the best, being extra long, deep-sided, just the kind that is in such demand, and the active sales is the best testimony that Mr. Love's Berks. are the right kind. Prominent among the dams is the sow, Prudence 55th, sired by Victor 12th 4566, dam Gazelle 3155, by Lord Ross. She is an ideal bacon type. Another very nice dam is Bridal Robe 6288, sired by British Flag, imported, dam Prudence. The present stock boar is one of the grandest specimens of Berkshire hogs to be found in the country. He is exceptionally lengthy, of great depth, straight as an arrow, and on the best kind of legs. His stock are as near right as any to be found.

### Agents Wanted

for the New Pictorial Stock Doctor and Live Stock Cyclopaedia, revised to 1901 with the assistance of the Professors of the Ontario Agricultural College, Guelph. The finest illustrated, cheapest and best book of its kind ever published. Large wages to agents. A full-page announcement of this book appeared in the Advocate of the issue of June 1st. Particulars mailed free. Address **WORLD PUBLISHING CO., Guelph, Ont.**

### FOR SALE:

**Clydesdales and Shorthorns.**

Young stallions and fillies bred from imported sires and dams. Also a choice bunch of Shorthorns, of both sexes and all ages, including a few extra choice young red and roan heifers and bulls.

**JOHN BRIGHT,**  
Myrtle, Ontario.

**STAY AT HOTEL LELAND**

The Leading Hotel of the West.

ALL MODERN CONVENIENCES, RATES, \$2 to \$4 PER DAY. OM-BUS MEETS ALL TRAINS.

**W. D. DOUGLAS, Prop.,** Winnipeg, Man.

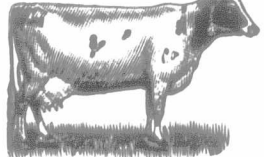
**CENTRE WELLINGTON SHORTHORNS**

Herd consists of Scotch and Scotch-topped females, with Lord Stanley 4th = 22678 = at the head. Stock all ages for sale. Farm adjoins the town.

Box 66. **H. B. WEBSTER, Fergus, Ont.**

### FOR SALE:

Three Guernsey bulls, 5, 9, 18 mos. old, sired by Mashier (imp.). Six Ayrshire bulls, 1 year and under, sired by Matchless. Shropshire lambs, sired by Canadian Flag-staff (imported direct). Address—



**ISALEIGH GRANGE FARM,**  
J. N. GREENSHIELDS, Prop. Danville, Que.

## You Can Cure It.

### A New Cure for Catarrh, in Tablet Form.

The old-time treatment for catarrh was in the form of douches or sprays. Later on, internal remedies were given with great success; but, being in liquid or powdered form, were inconvenient, and were open to the same objection to all liquid remedies—that is, that they lose whatever medicinal power they may have had on exposure to the air.

The tablet is the ideal form in which to administer medication, but until recently no successful catarrh tablet had ever been attempted.

At this writing, however, a most excellent and palatable remedy for catarrh has been placed before the public and sold by druggists, called Stuart's Catarrh Tablets, composed of the most recent discoveries in medicines for the cure of catarrh, and results from their use have been highly gratifying.

Stuart's Catarrh Tablets contain principally highly-concentrated antiseptics, which kill the catarrh germs in the blood and mucous membranes, and in this respect are strictly scientific and modern, as it has been known for some years past by the ablest physicians that the most successful catarrh treatment was by inhaling or spraying antiseptics.

The use of inhalers, douches and sprays, however, is a nuisance and inconvenience, and, moreover, can in no wise compare with the same remedies given in tablet form, either in efficacy or convenience.



A clerk in a prominent insurance office in Pittsburg relates his experience with Stuart's Catarrh Tablets, in a few words, but to the point. He says: "Catarrh has been almost constantly with me for eight years; in this climate it seems impossible to get rid of it. I awoke every morning stuffed up, and for the first half-hour it was cough, gag, expectorate and sneeze before I could square myself for my day's work; no appetite, and a foul breath which annoyed me exceedingly."

"I used Stuart's Catarrh Tablets for two months, and found them not only pleasant to take, but they did the business, and I can sincerely recommend them to all catarrh sufferers."

Druggists sell Stuart's Catarrh Tablets at 50 cents for full-sized package. They can be carried in the vest pocket and used at any time and as often as necessary. Guaranteed free from cocaine, mercury or any mineral poison; absolutely safe—Advt. om

### LAIDLAW'S CONCENTRATED TOBACCO POWDER



## Sheep Dip.

Contains correct proportion of sulphur, all mixed and ready for bath. For thirty years Laidlaw's Tobacco Powder Dip has had steadily increasing sale. Many hundred millions of sheep have been dipped with it. Non-poisonous; no injury possible to sheep or wool. For full particulars and prices, write—

**ROBERT MARR,**  
WALKERTON, ONT.

**W. R. Bowman,** Mt. Forest, Ont.

OFFERS FOR SALE  
3 Polled Angus bulls (choice ones); 1 Shorthorn bull, 11 mos.; Yorkshire pigs, 6 weeks, at \$6.00; Plymouth Rock eggs, 5 settings for \$2.



## 90 HEAD

High-quality, Early-maturing

## Herefords

Prizewinners. Young bulls, cows, heifers.

The blood of "Corrector," "Eureka," "Ancient Briton," and "Rupert," on an "Anxiety" foundation. Send for illustrated catalogue.

**H. D. SMITH, COMPTON, QUE.**

PLEASE MENTION FARMER'S ADVOCATE.

# TROUT CREEK HERD OF SHORTHORNS.

Since our Chicago sale we have imported sixty-two head, including some Royal winners; they were pronounced in Scotland superior to past importations. We try to import the best, believing that this is one of the ways to assist in improving the breed on this side of the water. Being thoroughly convinced, also, that a bull of the right sort is even more than half the herd, we have decided to keep the following choice ones:

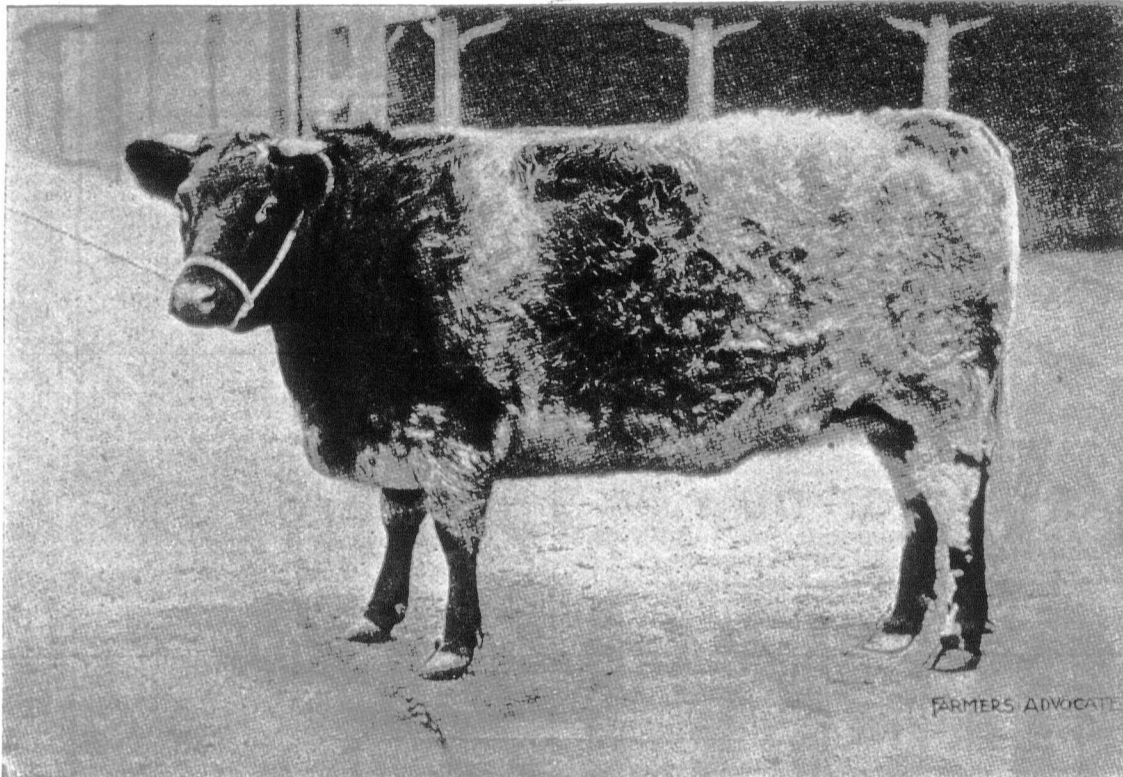
### Imp. Lord Banff,

Bred by A. Watson; of the Campbell Bessie family.

### Imp. Consul,

Bred by J. D. Fletcher; of the Campbell Claret family. Consul was awarded first at Edinburgh, first and champion at Provincial Union, first and champion at Creiff, and second at the Highland. His sire, Watchword, bred by Wm. Duthie, was first at the Highland in 1895 and 1896, and got by Scottish Archer. Watchfire, by Watchword, was first at the Highland, 1897. Consul is the highest-priced bull imported to Canada.

Hamilton is a city of over 50,000 inhabitants, located on main line of Grand Trunk Railway, between Chicago and Buffalo; also connected by Canadian Pacific Railway and Michigan Central Railway—branch lines.



CICELY.

Bred by Her late Majesty the Queen; undefeated in her class and many times champion; imported by W. D. Flatt.

### Imp. Silver Mist,

Bred by Wm. Duthie; of the famous Missie family. He had many friends for first choice at Messrs. Marr and Duthie's sale. Mr. Beck, representing the Prince of Wales, made next to last bid.

### Imp. Wanderer's Last,

Bred by W. S. Marr; also of the Missie family. Is the last calf got by that renowned Cruickshank bull, Wanderer. Mr. Marr considers this youngster very promising.

We keep in our herd a choice lot of both imported and Canadian cattle, of both sexes, from which to make selections. Personal inspection invited. Parties desiring to see the herd will be met on arrival of trains at Hamilton if notice is given. Visitors always welcome.

We have at present for sale the red yearling bull, Singapore, by Golden Star, 1st and champion at Royal Northern last year. We have also a good Canadian-bred bull for sale, fit for service.

**W. D. FLATT, 378 HESS ST. SOUTH, HAMILTON, ONT.**

JAS. SMITH, MANAGER.

## SHORTHORNS

SCOTCH IMPORTED.

Young imported cows with calves at foot for sale. A number of the calves are imported in dam.

Some of the families represented in the herd are as follows:

160  
Head

AUGUSTAS	ROSEBUDS	MEDORAS
CLARAS	BRAWITH BUDS	MINAS
NECTARS	LANCASTERS	VILLAGE MAIDS
GOLDIES	MAYFLOWERS	BEAUTYS
JENNY LINDS	AMARANTHS	MISS RAMSDENS
VICTORIAS	BUTTERFLYS	FLORAS
MATILDAS	CLIPPERS	RAGLANS
BESSIES	EMMAS	LUSTRES
CROCUSSES	BROADHOOKS	GEMS OF THE VALE

160  
Head

Herd headed by the Imported Bulls, **GOLDEN DROP VICTOR** and **PRINCE BOSQUET**.

IF INTERESTED, COME AND SEE US, OR WRITE

**H. CARGILL & SON,**

CATALOGUE FREE.

CARGILL, ONTARIO, CANADA.



We beg to call your attention to a new and indispensable article in

**Barclay's Patent Attachment**

FOR THE CURR OF **BALKING AND KICKING HORSES.**

Will control any vice known to a horse. Invaluable for breaking in colts. Can be adjusted in two minutes, and used with any harness, vehicle or implement. Sent, charges paid, to any part of Canada, with full directions for use, on receipt of price, \$5. Reliable representatives wanted. For further information, address

**THE BARCLAY MFG. CO., Brougham, Ont.**

**6 imp. Bulls, 14 months to 2 years.**  
**20 imp. Heifers, 2 and 3 years old.**  
 Safe in calf.  
**2 Home-bred Bulls, 12 and 16 months old.**  
**10 Home-bred Heifers, Scotch topped.**  
**25 Choice Yearling Ewes, from imp. Ram.**

Our imp. cattle are representatives of the following Scotch families: Clarets, Claras, Beautys, Marr Roan Ladys, Urys, Orange Blossoms, Secrets, Matildas, Miss Ramsdens, Jilts, Floras, Annes, Lady Fragrants, and others.

Burlington Junction, G.T.R., is our station. Telegraph and telephone office within half a mile of the farm.

Catalogues on application.

**W. G. PETTIT & SON, Freeman P. O., Ontario.**

**J. & W. B. Watt, SALEM, ONT.,** BREEDERS OF (Post and Telegraph Office.)

Clydesdale horses, Scotch Shorthorn cattle, Leicester and Oxford sheep, Berkshire pigs.

Our **SHORTHORN** herd was founded over 30 years ago, and contains such tribes as the Village Buds, Matchless, Missies, Mildreds, Stamfords and English Lady, upon which we have employed such bulls as *Barnpton Hero* 324, *Young Abbotsburn* 6236, *Challenge* 2933, *Perfection* 9100, *Lord Lansdowne* (imp.) 2712, *Clan Stuart* 14381, *Canada* 19536, *Sittyton Chief* 17060, *Royal Sailor* (imp.) 18959, *Royal George* 28513, *Clipper King* 16293 and *Judge* 23419, all of which have been first-prize winners wherever shown. *Royal Victor* 34681 and *Royal Wonder* 34682, by *Royal Sailor* (imp.), and out of English Lady and Mildred dams, now head the herd, assisted by *Roan Cloud* 31317, by *Lord Gloster* 26995, and out of *Melody* 21992, a descendant of the Buckingham family. We are now offering young bulls, cows and heifers for sale, of Scotch type.

Farm 2 miles from Elora Station, G. T. R. and C. P. R., 15 miles north of Guelph.

**Queenston Cement**

The demand for our cement in 1900 justified us in adding largely to the capacity of our cement works. The indications are that this year's business will be still greater. We start the new century with an equipment which for the manufacture of natural rock cement is not excelled in America.

We shall be glad to assist you in making plans for new farm buildings or for remodelling old ones. Our experience should be of value to you. It will pay you to investigate our system of ventilation.

Write us for prices or for estimate of cost of any kind of concrete work.

**Isaac Usher, Proprietor,**  
 QUEENSTON, ONT.

**HILLHURST SHORTHORNS**

THREE COLLYNIE-BRED BULLS IN SERVICE:

**Scottish Hero, Joy of Morning, Scottish Beau,**  
 By Scottish Archer. By Pride of Morning. By Silver Plate.

The herd comprises straight Scotch, Cumberland, Gloucestershire, and Canadian strains; bred to produce the best and most economical MEAT and MILK MAKERS.

**Shropshire and Hampshire Down Sheep.**

**M. H. COCHRANE, COMPTON CO., P. Q.,**  
 G.T.R., 117 MILES EAST OF MONTREAL. HILLHURST STATION.

**Rapids Farm Ayrshires.**

REINFORCED BY A RECENT IMPORTATION of 20 cows, 2 bulls, and a number of calves, selected from noted Scotch herds, and including the male and female champions at leading Scottish shows this year. Representatives of this herd won the first herd prize at the exhibitions at—

Toronto, London, and Ottawa, in 1900.

Come and see or write for prices.

Young Bulls and Heifers for Sale, bred from High-class Imported Stock.

**Robert Hunter, Manager**

for W. W. Ogilvie Co., Lachine Rapids, Quebec.

**Stock Barn of Mr. John D. Ferguson,**  
 in the township of Yarmouth. Basement walls and floors built almost entirely with

**THOROLD CEMENT**



Stock barn of Mr. John D. Ferguson, in the township of Yarmouth. Dimensions of the building, 80 x 48 feet; foundations of concrete, 2 1/2 feet deep. Floors and root cellar all of Thorold Cement.

ESTATE OF JOHN BATTLE: ST. THOMAS, APRIL 18TH, 1901.  
 Dear Sirs,—Having used a large amount of your cement during the last five years in the County of Elgin, I can truthfully say that the farmers have not the slightest fault to find with it, and they say they would not use any other as long as they can procure yours for the money.  
 EDWARD GROVES.

**THE ESTATE OF JOHN BATTLE, THOROLD, ONT.**

**The National Cream Separator,**



**Cream Separator,**

MANUFACTURED BY  
**THE Raymond Mfg. Co. of Guelph, Can.**

ALSO MAKERS OF THE CELEBRATED  
**"Raymond Sewing Machine."**

REPORT FROM WATERLOO COUNTY.

TO THE RAYMOND MFG. CO., GUELPH, ONT.:

GENTLEMEN,—I wish to make a statement that should be of some encouragement to your firm just at this time when your Shops is investing a large amount of capital in shops and machinery for the purpose of manufacturing the "National" Cream Separators. I bought a "National" in December, 1898, and received some practical instructions at the O. A. College, Guelph, in the way of making good butter and putting it in neat form for market. The first year I had nine cows and sold \$45.00 worth of butter from each cow, besides keeping the house in butter and having the skim milk fresh, sweet and warm for the calves. In 1900 I received higher prices for the butter, and made \$52.00 per cow from 12 cows, or a total of \$624.75. I market my butter in Toronto and Woodstock, and can find ready sale for more than I can make. Although I am a farmer, I have sold 93 "National" Cream Separators since I got my own, two years ago. The "National" is profitable to a farmer, whether he makes the butter at home or sends the cream to the creamery. I use a Babcock tester, and find the "National" cannot be beat at close skimming. Wishing you success, and hoping you will be able to supply your agents with machines as fast as we need them, I am,  
 Respectfully yours,  
 TAVISTOCK, MARCH 20, 1901. CHAS. I. ZEHR.

"NATIONAL" NO. 1 HAND POWER.  
 Capacity, 330 to 370 lbs per hour.

**THE Creamery Supply Co.**

General Agents for Ontario. GUELPH, ONT.

**Please Mention the Farmer's Advocate.**

**For Sale** Two choicely-bred **SHORTHORN BULLS**, 12 and 18 months; also cows and heifers, with calves at foot and bred again to imported Red Duke = 36084 = (77585). 54 head to select from. **DAVID MILNE & SON**, Ethel, Ont.

**SHORTHORNS**: We are offering for sale 8 bulls, from 8 months to 3 years old, by Mungo 2nd and Scottish Bard. Also a few cows bred to Baron's Heir.

**ROBT. GLEN**, Owen Sound, Ontario.

**For Sale**: 3 Shorthorn bulls of first-class breeding, sired by such noted bulls as Scotland's Fame (imp.) and Bold Britain, bred by John Isaac, Markham. Also some choice cows and heifers. **F. A. GARDNER**, Britannia, Ont. PERL COUNTY.

**Shorthorns and Leicesters.** Herd Established 1855. A number of young bulls, cows and heifers for sale. Herd headed by imported Christopher 28859, and Duncan Stanley = 16364 =. Grand milking cows in herd. Also a number of Leicesters of both sexes, from imported foundation.

**JAMES DOUGLAS**, CALEDONIA, ONT.

**Shorthorns FOR SALE:** 8 Yearling and two-year-old Shorthorn heifers, in calf to imp. bull.

**G. A. BRODIE**, Betheda, Ont. om

**R. Mitchell & Son**, Burlington Jct. Station, Nelson, Ontario.

Large herd of Scotch and Scotch-topped Shorthorns of the most popular Aberdeenshire tribes, including 4 imp. bulls, 12 imp. cows and heifers. Also a number of home-bred yearling and two-year-old heifers, and 7 good, thrifty home-bred bulls, from twelve to fifteen months old. Write for catalogue.

**Live Stock Labels** Send for circular and price list. **R. W. James**, Bowmanville, Ont.

**RIG. CASTRATION.** Dr. J. Wilson, V. S., Wingham, Ont., Specialist in the castration of ridgelings. Terms and testimonials on application.

**SHORTHORNS.** For Sale.—Bulls: Two 1 year old and one 8 months. A few heifers of choice breeding and superior quality. **AMOS SMITH**, Trowbridge P. O., Listowel Stn. om

**SHORTHORN BULLS AND HEIFERS** Choice quality and best Scotch breeding. Imported and home bred, Imported Knuckle Duster (72793) and Imp. Royal Prince head the herd, which has furnished the Provincial Fat Stock Show champion three out of the last five years. Catalogues on application.

**H. SMITH, HAY, ONT.** Exeter Station on G. T. R., half a mile from farm. om

**NEWCASTLE HERD OF Shorthorns and Tamworths.** One choice 2-year-old heifer. About a dozen boars, ranging from 2 to 4 months old; also a few nice young sows—all from Toronto prize stock. Be sure to write for prices. **COLWILL BROS.**, Newcastle, Ont.

**ARTHUR JOHNSTON** Greenwood, Ontario, Canada. **HIGH-CLASS SCOTCH SHORTHORNS** (First Importation Made in 1874.)

(My recent importation of 30 head has just arrived home from quarantine. Herd now numbers over 120 head.)

**OFFERS FOR SALE** 40 Imported Cows and Heifers, 40 Home-bred Cows and Heifers, 11 Imported Bulls and Bull Calves, 13 Home-bred Bulls and Bull Calves.

Railway stations—Pickering, on main line of Grand Trunk Railway, 22 miles east of Toronto, and Claremont, 23 miles east of Toronto, on the C. P. Railway. Catalogues on application.

**Glover Leaf Lodge** HERD OF Shorthorns A number of choice young bulls, heifers and cows, excellent milking strains. Correspondence invited. **R. CORLEY**, Belgrave P. O., Ont., and G. T. R.; Wingham, C.P.R. om

**MILK FEVER IN COWS.** Symptoms, cause, and treatment by the Schmidt system explained by **DR. WILLIAM MOLE**, M. R. C. V. S., Price 25c. 443 Bathurst St., Toronto.

**ASHTON FRONT VIEW STOCK FARM.** Six Shorthorn Bulls for sale, from 8 to 15 months old; all of choice breeding. Also Cotswolds of all ages for sale at all times. Visitors welcome. **A. J. WATSON**, Castlederg, Ont. C. P. R. Station and Telegraph Office, Bolton; or G. T. R., Falgrave.

**SHORTHORNS FOR SALE** Young stock of both sexes, reds and roans. **JOHN R. HARVIE**, ORILLIA, ONT.

**JAS. DORRANCE**, SEAFORTH, ONTARIO, BREEDER OF Shorthorn Cattle and Berkshire Pigs Young stock always for sale.

**T. DOUGLAS & SONS**, STRATHROY, ONT., BREEDERS OF SCOTCH SHORTHORNS.

100 HEAD TO SELECT FROM. Offer for sale 8 young bulls, and cows and heifers of all ages, of the most approved breeding, bred to (imp.) Diamond Jubilee = 28861 =, at head of herd. Farm one mile north of town. om

**SPRINGFIELD FARM** HERD OF Shorthorns, Oxfords, AND Berkshires. Young bulls and heifers on hand. Also a few choice Berkshires. **CHAS. RANKIN**, Wyebridge, Ont. SIMCOE CO. om

**SHORTHORN CATTLE AND LINCOLN SHEEP.** Imp. Prime Minister at head of herd. 7 good, young bulls for sale—good ones. Also a few females. Stud rams all imported from H. Dudding, Esq.; the same blood as the 1000-guinea ram.

**J. T. GIBSON**, DENFIELD, ONT.

**SPRING GROVE STOCK FARM** Shorthorn cattle and Lincoln sheep. Herd prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by the Marr Missie bull, Imp. Wanderer's Last, last of the get of the great sire, Wanderer, of the Cruickshank Brawith Bud tribe. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply om **T. E. ROBSON**, ILBERTON, ONT.

**SPRINGBANK FARM.** Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale. **JAS. TOLTON**, WALKERTON, ONT.

**SHORTHORNS.** 6 choice young heifers, 4 imported cows. Also 16-months-old home-bred bull. **A. P. ALTON & SON**, Burlington Junction Station. Appleby P. O.

**High-class Shorthorns and Yorkshire Pigs.** Just now three 10-month bulls, got by imp. Sirius 15281, great big massive fellows with lots of flesh and quality—away above the average. Also a few superior young cows in calf, and 5 or 6 heifers. We are booking orders now for the spring trade. Can ship some in six weeks. om **JAS. McARTHUR**, GOBLE'S ONT. Goble's Station, G. T. R., 10 miles east of Woodstock, 2 miles from farm. Visitors met. om

**JOHN DRYDEN**, BROOKLIN, ONTARIO, BREEDER OF CRUICKSHANK SHORTHORNS AND CHOICE SHROPSHIRE SHEEP. Fifty superior yearling rams ready for August delivery.

**YOUNG SHORTHORNS FOR SALE** Our present offering includes several choice young bulls fit for service, sired by "Scotland Vet," and out of Warfare (imp.) dams; also bull calves, from Blue Ribbon (imp.), and out of Royal George cows. Inspection and correspondence solicited. **A. & D. BROWN**, M. O. RAILWAY. IONA, ONTARIO.

**SHORTHORNS (imported)** 3 BULLS: 1 two-year-old, 2 one-year-olds. A few cows and heifers. **THOS. RUSSELL**, EXETER P. O.

**J. R. McCallum**, Iona Station, Ont. Offers young SHORTHORN BULLS and HEIFERS, of choice breeding, at reasonable prices. Iona Stn. on M.C.R., half a mile from farm.

PLEASE MENTION FARMER'S ADVOCATE.

**GOSSIP.** Mr. W. W. Hubbard, editor of the *Co-operative Farmer*, of New Brunswick, retires from that position on August 1st, and will be succeeded by Mr. M. H. Parlow, the well-known breeder of Ayrshire cattle and other pure-bred stock.

Mr. Henry Arkell, Arkell, recently shipped a carload of registered Oxford Down yearlings to McCaig, Moore and Carroll, of Walsh, Assiniboia. He also sent out a show lot to A. Wood, Souris, Manitoba.

The fine herd of Berkshires kept at the Agricultural College farm, Cirencester, England, by Mr. Russell Swanwick, was dispersed by auction last month. Some good prices were realized, 24 boars making an average of \$37.50, and 36 sows an average of over \$50 each, the sow, Sallie 966th, selling for \$189. Another sow, with a litter of four pigs, brought \$136.50. These highest prices were paid by Mr. E. J. Morant, Boldre, Lymington, Hampshire, who was the largest purchaser at the sale.

**R. J. HINE'S OXFORDS AND SHORTHORNS.** On Linden Stock Farm, owned by Mr. R. J. Hine, near Dutton, Ont., on the Michigan Central Railroad, is maintained as choice a flock of Oxford Down sheep as can be found in this country. Mr. Hine has been importing this favorite breed of sheep for a number of years, and on every occasion has bought nothing but top-notchers that were winners at the Royal and other leading shows in England, and as a result the present flock on his farm is as good as the best. This flock has carried off first prizes and sweepstakes at the leading Canadian shows for the last ten years, showing the winners in ram and ewe lambs at the Royal Show, England, for the last four years. Most of the breeding ewes are Royal winners, imported, there being at present on the farm no less than three pens of first-prize winners at the Royal. This year's crop of lambs are from the imported Royal winner, Adesbury Warrior, a Stillgoe-bred ram of most beautiful conformation and quality. The lambs are all that could be desired, showing a covering that will put the majority of Shropshires to shame. All the members of the flock are in fine condition. The winners of last year are looking superb, and will be on deck again this fall. In the flock are representatives of such noted English flocks as those of Stillgoe, Reading, Hobbs, and Brasse. The yearling rams offered for sale could scarcely be duplicated on the continent.

On this farm can also be seen a few very choice Shorthorns of the noted Linden Blossom family. The cow, Linden Blossom 32373, is an animal hard to beat. She is of the present up-to-date kind, deep, lengthy, short-legged, with a broad back and well-sprung ribs. The present stock bull, Lord Roberts, by that noted sire, Scotland Vet, is a bull of beautiful symmetry, a large, heavy, meaty fellow. His calves are of the right kind, being uncommonly lengthy and well-proportioned. Among them is a roan bull calf, 7 months old, that is Shorthorn perfection itself, and if present indications count for anything, will certainly make a prizewinner.

**E. D. GEORGE'S HOGS AND HOLSTEINS.** Merton Lodge Stock Farm, the home of Mr. E. D. George, near Putnam, Ont., on the C. P. R., enjoys a continental fame for breeding high-class hogs of the three bacon breeds, Tamworths, Yorkshires, and Chester Whites. The Messrs. George have been engaged in the breeding of pure-bred hogs for a large number of years. Their sales now cover the Dominion of Canada from the Atlantic to the Pacific, and a large part of the United States. Their records as prizewinners at all the leading Canadian shows are almost an unbroken series of successes, easily accounted for by their thorough understanding of the qualities necessary to success in conformation and breeding of the different varieties handled, and the use of sires and dams of nothing but typical animals, bred on the most approved lines. The chief stock boar at present in use in the Chester White herd is the 800-pound boar, Chester Monarch 1371, bred by N. C. Alexander, Delaware, Ill., U. S. He is sired by Banker 7193, dam Lady Fenn 3rd 8160. The dams of this breed, numbering some 20 odd, are a very large, lengthy lot. Prominent among them is the 700-lb. sow, Alma 888, imported, sired by Coco 2223, dam Junta 5722, by Johnny Dimple. Lady Clare, another dam, was the sweepstake at the Provincial Winter Show at Guelph. She is sired by Crown King, dam Snowflake. Last fall's winnings by this breed were, all told, 32 firsts, 28 seconds, and 6 thirds. At present on the farm there are only some 25 head of Tamworths, the sales in this breed having been exceedingly heavy. The stock boar, Redfellow 2nd 1412, was sired by Redfellow 879, dam Beschene Lass 811, by Rodman 166. He is a massive animal, turning the scales at 900 lbs. Possibly the heaviest dam of this breed on the farm is Belle of Dingman 557, sired by Longfellow 494, dam Maud 236, by Buffalo Bill. This great sow weighs 700 pounds, and at the same time is a very smooth, nicely-formed animal. In Yorkshires, the stock is low, the demand being so much greater than the supply that nothing but the dams and stock boar are to be seen.

The Messrs. George are also somewhat extensively engaged in the breeding of pure-bred Holstein-Friesian cattle, and are showing some very nice representatives of that popular dairy breed. The herd was founded some few years ago from purchases made from the herd of S. C. Smoke, of Toronto. The cow, Corelia Ykema 4527, sired by Ykema 322, dam Aultje Santema 948, is an excellent cow of heavy-milking conformation. Another nice one is the cow, Sadie A 1273, sired by Count Mink Mercedes 221, dam Bixx Funny 2nd 104. The richly-bred DeKol cow, Princess Bonnie 2735, is sired by the bull, Homestead Albino DeKol 23389, dam Geraldine 1965. This cow shows all the peculiar characteristics of an extra heavy milker, and if given a chance should be a record-breaker. The stock bull in use is Pet's Paul 1382, sired by Sir Paul's De Kol Clothilde 904, dam Mercena's Pet Jewel. He is a very smooth, evenly-built bull, that, from his rich breeding and fine conformation, should make his mark as a sire. The youngsters on the farm are a very even lot, and should the present form continue, they will without doubt be heard from both in the show-ring and in milk and butter tests.

**WEST'S FLUID** WHICH IS ALSO A SURE CURE OF CONTAGIOUS ABORTION. Standard Sheep Dip is Good, also Cheap. Manufacturers: The West Chemical Company, TORONTO, ONT.

**Hawthorn Herd of Deep-Milking Shorthorns** Stock for sale of both sexes. Herd headed by the Isabella bull, Golden Eagle = 30943 =, by Golden Measure.

**BONNIE BURN STOCK FARM** 40 rods north of Stouffville Station, Ont., offers Shorthorns, Shropshires, Berkshire. Pigs just weaned, good breeding, good quality, including a few choice out of imp. sow. Pairs not akin at low prices. **D. H. RUNNELL**, Stouffville, Ont.

**For Sale:** Shorthorns—Young bulls, heifers and calves. Berkshires—Young boars and sows. Leicesters—Aged, shearlings and lambs, both sexes. Southdowns—Rams and ewes, all ages. Write or come to **E. JEFFS & SONS**, Bond Head. om

**Maple Lodge Stock Farm** ESTABLISHED 1854. **SHORTHORNS**—Grand young bulls and heifers for sale. We have the first-prize milking strains. Imported Knuckle Duster and Imported Sir Wilfred in service. **LEICESTERS**—First prize flock of Canada for past six years. Imported and home-bred for sale. **ALEX. W. SMITH**, MAPLE LODGE P. O., ONT.

**SHORTHORNS:** We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruickshank, with Lavendar and Miss Ramsden dams. **THOS. ALLIN & BROS.**, Oshawa, Ont.

IT PAYS TO ADVERTISE IN THE FARMER'S ADVOCATE.

**A Good Complexion**

Depends on Good Digestion. This is almost an axiom, although usually we are apt to think that cosmetics, face powders, lotions, fancy soaps, etc., are the secrets for securing a clear complexion. But all these are simply superficial assistants.



It is impossible to have a good complexion unless the digestive organs perform their work properly. Unless the stomach, by properly digesting the food taken into it, furnishes an abundance of pure blood, a good complexion is impossible. This is the reason so many ladies are using Stuart's Dyspepsia Tablets, because they promptly cure any stomach trouble, and they have found out that perfect digestion means a perfect complexion and one that does not require cosmetics and powders to enhance its beauty. Many ladies diet themselves or deny themselves many articles of food solely in order to keep their complexion clear. When Stuart's Dyspepsia Tablets are used, no such dieting is necessary. Take these tablets and eat all the good wholesome food you want, and you need have no fear of indigestion, nor the sallow, dull complexion which nine women out of ten have, solely because they are suffering from some form of indigestion. Bear in mind that beauty proceeds from good health, good health results from perfect digestion, and we have advanced the best argument to induce every man and woman to give this splendid remedy a trial. Stuart's Dyspepsia Tablets can be found in drug stores, and cost but 50 cents per package. If there is any derangement of the stomach or bowels, they will remove it, and the resultant effects are good digestion, good health, and a clear, bright complexion.—Adv't.

To Rid STOCK of Flies, Lice, AND ALL SKIN DISEASES, USE

**West's Fluid**

WHICH IS ALSO A SURE CURE OF CONTAGIOUS ABORTION. Standard Sheep Dip is Good, also Cheap.

Manufacturers: The West Chemical Company, TORONTO, ONT.

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**SPRING BROOK**  
**Holsteins, Tamworths & B. P. Rocks.**  
 2 choice De Kol bull calves, 1 cow, 2 heifer calves—all De Kols. Tamworths: One boar, 9 months; a few sows. Orders booked for spring litters.  
**A. C. HALLMAN,**  
 Waterloo Co. New Dundee, Ont.

**BROOKBANK**  
 Is headquarters for Holstein bulls. They are going fast; be quick if you want one. In writing, state age, etc., preferred.  
**GEO. RICE,**  
 Currie's Crossing, Ont.  
 Oxford Co.

**Riverside Holsteins.**  
 2 BULLS 7 months old, sired by Victor DeKol Pietertje, imp. Dams: Woodland Molly DeKol (imp.) and Gemma Wayne.  
**M. RICHARDSON & SON,**  
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**WHERE ARE THE BEST HOLSTEINS?**  
 Have you read of Lilith Pauline DeKol's wonderful record? Her sire was bred here. Have you read of Susie DeKol's record? She was sired by a son of our great cow, DeKol 2nd. We can give our customers more of the blood of the greatest producers than can be found in any other herd. Look over official reports and see where the sires of the great producers were bred. We have over 30 young bulls for sale, and a large number of females. Animals shipped to Canada are accompanied by certificate of health, and are subject to no duties or quarantine. If you want the best, write or visit—  
**BROOKSIDE HERD.**  
 H. Stevens & Sons, Lacona, Oswego Co., N.Y.

**Maple Glen Stock Farm.**  
 SPECIAL OFFERING: A bull calf born Aug., 1900, a grandson of Inka Sylva, the sweepstakes prize and test winner last season. Also one year old; dam a full sister of the great Carmen Sylva. A choice cow due to calve 1st July.  
**C. J. GILROY & SON,**  
 Brockville, on C.P.R. or G.T.R. Glen Buell, Ont.

**Jersey Calves**  
 From large, deep-milking cows, who have given 7,000 lbs. each of 4 1/2 per cent. milk during the past year; good colors, and from two to six months old.  
 For description and prices write  
**W. C. SHEARER, - BRIGHT, ONT.**  
**LIVE STOCK AUCTIONEER.**  
 The undersigned is prepared to conduct pure-bred auction sales. 20 years' experience. References: John I. Hobson and Alfred Stone, Guelph; Jas. Hunter, Alma, and Mossom Boyd, Bobcaygeon. THOS. INGRAM, care Mercury Office, GUELPH, ONT.

**UNADILLA FARM.**  
**F. L. GREEN, GREENWOOD, ONTARIO,**  
 BREEDER OF

**St. Lambert Jersey Cattle and Yorkshire Pigs.**  
 My Jerseys are bred for business. Both sexes for sale. I offer an extra choice bull, dropped Feb. 27th, 1901, for sale, a son of Queen May of Greenwood, who made 18 lbs. butter in 7 days, and is a Pan-American now. A lot of very choice Yorkshires on hand. Also Barred Rocks, Light Brahmas, and Bronze turkeys. Prices right.

**SPLENDID**  
**Jerseys for Sale.**  
 Two bull calves and two heifer calves that will equal anything I know of; age, 1 to 3 months; price, \$30 to \$60. One yearling heifer, blood of old Massena, 900 pounds butter in one year, \$100. One yearling bull, extra breeding, \$80. All registered. Crated and put on express car.

**MRS. E. M. JONES,**  
 Box 324. BROCKVILLE, ONT., CAN.  
**BRAMPTON JERSEY HERD.**  
 For sale: 2 yearling bulls; 8 bull calves, sired by Brampton's Monarch (imp.), and out of first-class cows. A number of cows and heifers in calf. Also some unregistered cows and heifers, fresh-calved and springers—grand family cows.  
**B. H. BULL & SON, BRAMPTON, ONT.**

**Dairy Jersey Heifers**  
**FOR SALE.**  
 10 Registered St. Lambert Jersey heifers, in calf to pure St. Lambert bull. No better dairy strain in Canada. Solid grays and fawns in color. Their dams have proved themselves dairy cows of high order. Can supply a carload of heifers from 6 months to 2 years old. Two fine solid gray bull calves 8 months old. No fancy price expected. Come and inspect or correspond. Address:  
**E. PHELPS BALL,**  
 LEE FARM. ROCK ISLAND, P. Q.

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**THE FARMER'S ADVOCATE.**

**GLEN ROUGE JERSEYS.**  
**WILLIAM ROLPH, Markham, Ont.,** offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right.

**FOR SALE:**  
**THREE BULL CALVES,** from 4 to 10 mos. old, from choice Ayreshires of deep-milking strains. Prices reasonable. Come, or write to  
**W. F. STEPHEN,**  
 Carr's Crossing, G.T.R. Brook Hill Farm. Trout River, Que.

**CHOICE AYRSHIRE BULLS.**  
 I OFFER: Five bull calves, one dropped in each of the months of August, November, December, January, and April. Good individuals, and from deep-milking strains.  
**W. W. BALLANTYNE,**  
 "Neidpath Farm" adjoins city, on main line G. T. R.

**Maple Cliff Dairy and Stock Farm.**  
 BREEDERS OF  
**AYRSHIRE CATTLE, IMPROVED BERKSHIRE AND TAMWORTH PIGS.**  
 FOR SALE: 5 bull calves, a few heifers; young pigs, pairs not akin; 2 boars, 4 months old; young pigs. Farm adjoins Central Experimental Farm, Ottawa.  
**R. REID & CO., Hintonburg, Ont.**

**TREDINNOCK AYRSHIRES**  
 Imported bulls at head of herd: Glencairn 3rd, Napoleon of Auchinrain, and Lord Dudley. Forty imported females, selected from leading Scotch herds, and their produce from above-named bulls. Size combined with quality and style, well-formed udders, good-sized teats, and capacity for large milk production. Bull calves for sale; also a few young cows and heifers. For prices and particulars, address  
**JAMES BODEN, Mgr.,**  
 St. Anne de Bellevue, Quebec.  
 Farm close to St. Anne Station, G.T.R. & C.P.R., 20 miles west of Montreal.

**SUNNILEY FARM.**  
 For sale: Jerseys—6 yearling bulls; females any age. Tamworths—30 boars and sows, different ages. Shropshire sheep—rams and ewes of good breeding. Prices reasonable.  
**H. E. WILLIAMS, Knowlton, P. Q.**

**Spring Burn Stock Farm.**  
 BREEDERS OF  
 Ayrshire cattle, Oxford Down sheep, Berkshire pigs, and Black Java fowls.  
 FOR SALE: 1 bull, 11 months old; females any age; 6 choice ram lambs. Also young pigs and fowls.  
**WINCHESTER, MORRISBURG, C. P. R. G. T. R.**

**Ayrshire Bulls:** Write to **J. YULL & SONS,** Carleton Place, for special prices on Ayrshire bulls from 14 years to 6 months. Four over 15 months, fit for service, from special milking stock. Sired by prize bull, Jock of Burnside—1684—, also females of all ages. Shropshire sheep of all ages; a number of fine ram lambs. Berkshire pigs of either sex, of the best bacon type. B. P. Rocks.

**EUROPEAN ADVERTISEMENTS.**  
**FAMOUS ALL OVER THE WORLD**  
**ALFRED MANSELL & CO.,**  
 LIVESTOCK AGENTS AND EXPORTERS,  
 SHREWSBURY.  
 BRITISH STOCK selected and shipped to all parts of the world. Write for prices to ALFRED MANSELL & CO., Shrewsbury, England, or to our American representative, Robert Miller, Stouffville, Ont., Canada.

**W. W. Chapman,**  
 Secretary of the National Sheep Breeders' Association, Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and Late Secretary of the Southdown Sheep Society.  
 Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.  
 Address: FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W. Cables—Sheepcote, London.

**J. E. CASSWELL'S**  
**LINCOLNS,** Laughton, Folkingham, Lincolnshire, England.  
 Breeder of Lincoln Long-wooled sheep. Flock No. 46. At the Palermo Show, 1900, 25 rams bred by J. E. Casswell averaged £51 each; 14 of the best averaged £63 each, this being the highest sale of the season in the Argentine. Ram and ewe hoggs and shearlings for sale; also Shire horses, Short-horns, and fowls. Telegrams: "Casswell, Folkingham, Eng." Station: Billingboro, G. N. R.

**IMPORTANT SALE OF**  
**PURE-BRED COTSWOLD SHEEP.**  
 Owing to the death of the late Mr. Robt. Garne, and the Aldsworth farm of upwards of 1,000 acres being given up, the 3, 2 and 1 year-old ewes of this celebrated flock are offered for sale. An unrivalled opportunity to secure registered Cotswolds of the highest quality and merit is thus afforded. Rams and ewes from this flock during the last 11 years have won 28 first, 11 second, and 12 third prizes at the Royal Agricultural Society's Shows. Apply—  
**W. T. GARNE,**  
 Aldsworth, Northleach, England.

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**MANSELL'S DISPERSION SALE.**  
**Shropshires.**  
 Andrew E. Mansell, Harrington Hall, Shipnal, England, who is settling in Tasmania, will sell by auction, without reserve, on Thursday, August 29th, 1901, his unrivalled flock of Shropshires. Sheep bought for America and Canada will, if desired, be sent in charge of Mr. Robert Mansell. Particulars and catalogues obtained from Alfred Mansell & Co., Auctioneers, Shrewsbury, England. Commissions carefully executed.

**The Biscathorpe Flock**  
 (Lincoln Flockbook, Vol. I., page 28).  
 ABSOLUTE DISPERSAL of this world-renowned flock of pure-bred Lincoln SHEEP, bred by the KIRKHAM FAMILY for upwards of 125 years, comprising about 1,500 breeding ewes, ram and she lambs, shearing rams, two-shear rams, and valuable stud rams.  
 WHICH WILL BE SOLD BY AUCTION, BY  
**MESSRS. DICKINSON & RIGGALL,**  
 ON  
**Wednesday, 4th Sept., 1901,**  
 AT  
**BISCATHORPE HOUSE, LINCOLN, ENGLAND.**  
 (2 days previous to Lincoln great ram fair.)  
 A full pedigree of sire and dam of each animal is recorded in the Biscathorpe Flockbook, and will be given in sale catalogues.  
 Few foreign buyers of Lincoln sheep have visited England during the last 60 years who have not inspected and purchased sheep from this superb flock.  
 Catalogues may be had of the auctioneers, Louth & Grimsby, a fortnight previous to the sale.  
**Inspection invited by arrangement.**

**'LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH'**  
 THE ORIGINAL  
**Non-Poisonous Fluid Dip**  
 Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large breeders.  
 For sheep. Kills ticks, maggots; cures scab; heals old sores, wounds, etc., and greatly increases and improves growth of wool.  
 Cattle, horses, pigs, etc. Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.  
 Prevents the attack of Warble Fly.  
 Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.  
 No danger, safe, cheap, and effective  
 Beware of imitations.  
 Sold in large tins at 75 cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to breeders, ranchmen, and others requiring large quantities.  
 SOLD BY ALL DRUGGISTS. SEND FOR PAMPHLET.  
**Robert Wightman, Druggist, Owen Sound.**  
 Sole agent for the Dominion.

**LINCOLNS.**  
 Rams and ewes (all ages), consisting of those bred at Fairfield and importations from the flocks of Dudding, Dean, Wildsmith and Wright. I can supply show flocks that will win. Pointon Fairfield, 456 lbs. at the great International show at Chicago, first-prize winner in England and sweepstakes ram of Canada and United States, at head of flock.  
**J. H. PATRICK, ILBERTON, ONT., CAN.**  
 1 mile from Ilerton. Post office. Telegraph office. 10 miles from London. Railway station.  
**Lincolns, Shorthorns, Berkshires.**  
 Am offering a few choice bulls from 3 to 18 months old, from imp. stock of Miss Ramsden and Varuna families; also some extra nice Berkshire pigs.  
**ALEX. LOVE, - EAGLE P. O.**  
 BISMARCK STATION ON M. C. R.

**"Farnham Farm" Oxford Downs.**  
 FLOCK ESTABLISHED 20 YEARS.  
 Forty superior yearling and two-year rams. Two extra fine imported rams. Sixty yearling ranch rams. Forty yearling ewes. One hundred ram lambs. Stock good and prices reasonable.  
**HENRY ARKELL,**  
 Guelph, Ont., G.T.R. Arkell, Ont., C.P.R.

**BROAD LEA OXFORDS.**  
 We have a choice lot of lambs this year, bred from our imported rams, Royal Warwick 3rd and May King 1st, some weighing 17 lbs. at birth. Also some good shearing ewes and rams. Also a few shearing ewes and rams fitted for show purposes. All of which we are offering for sale at reasonable prices.  
**HENRY ARKELL & SON,**  
 Phone and telegraph, Teeswater, Ont.

**LINDEN OXFORDS.**  
 A few extra nice yearling rams from Imp. Reading's 10 and Hampton Duke, winners at London, Eng., and Toronto; also two young Shorthorn bulls.  
**R. J. HINE, Dutton P.O. and Station, M.C.R.**

**SMITH EVANS, GOUROK, ONT.,**  
 Breeder and importer of registered Oxford Down Sheep. Selections from some of the best flocks in England. Stock for sale at reasonable prices. Inspection invited.  
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**Dorset Horn Sheep**  
 THE largest flock in America. The most celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand.  
**John A. McGillivray, Uxbridge, Ontario.**

**COTSWOLDS FOR SALE.**  
 3 yearling rams, sired by Imp. Swanick Lad 104—extra choice ones. Also this season's crop of lambs. Joseph Ferguson, Uxbridge P. O. and Station.

**Stop! Look!! Listen!!!**  
**FAIRVIEW SHROPSHIRE**  
 Good rams having the best of quality. Do you want one or two? If so, write for circular.  
**JOHN CAMPBELL, - WOODVILLE, ONT.**  
**SHROPSHIRE TO HEAD FLOCKS.**  
 ESTABLISHED 1881.  
 20 Yearling Rams, 30 Ram Lambs, 20 Ewe Lambs, of superior quality, form and covering, the get of an extra good imported ram and choice dams, a number of which have been imported from Thomas, Farmer, Tanner, Minton, and Barber flocks. Also a few choice English Collie pups ready for shipment.  
**GEO. B. PHIN, HESPELER, ONT.**  
 Waterloo County. - G. T. R. and C. P. R.

**SHROPSHIRE FOR SALE**  
 35 yearling ewes and 30 yearling rams. Also spring lambs of both sexes, well bred and stylish.  
**Estate Jas. Cooper, Kippen, Ont.**  
 HURON COUNTY.  
**SHROPSHIRE.**  
 FOR SALE: Yearlings of both sexes—extra good ones. Also this season's crop of lambs.  
**N. H. SWITZER, Streetsville, Ont., Peel Co.**

**1901 Importation**  
 of Shropshire rams and ewes of finest quality, from the best breeders, now being offered at reasonable prices.  
**ROBERT MILLER, Stouffville, Ontario.**  
**50 REG. 50**  
 FOR SALE:  
 Shearling and two-shear rams; also stock ram, bred by John Miller & Sons, and this season's crop of lambs ready for the fall trade. Foundation stock bred by Mansell, England. Prices moderate. A card will bring them.  
**ROWAT BROS.,**  
 Phepston station, G. T. R., 5 Hillsdale, Ont. miles east. Simcoe County.

**W. H. BEATTIE, Wilton Grove, Ontario,**  
 IMPORTER AND BREEDER OF  
 Shropshire sheep, collie dogs, White Holland and Mammoth Bronze turkeys, and Barred Rocks.  
**HIGH-CLASS SHROPSHIRE.**  
 A flock of 75, of good type. Two-shear rams, shearing rams, ram lambs, ewe lambs, fine lustrous fellows. Flock headed by a fine imported ram. Write for prices. **Abram Rudell, Hespeler P.O., Ont.**  
 C. P. R. and G. T. R.

**SHROPSHIRE**  
 Shearing rams, ram and ewe lambs. Well covered, Good colors. Good individuals. CHESTERS: Bacon type. Litters ready to ship. **W. E. WRIGHT,**  
 Glanworth, Ont.  
 IN WRITING  
**PLEASE MENTION FARMER'S ADVOCATE.**

**BROAD LEA OXFORDS.**  
 We have a choice lot of lambs this year, bred from our imported rams, Royal Warwick 3rd and May King 1st, some weighing 17 lbs. at birth. Also some good shearing ewes and rams. Also a few shearing ewes and rams fitted for show purposes. All of which we are offering for sale at reasonable prices.  
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 THE largest flock in America. The most celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand.  
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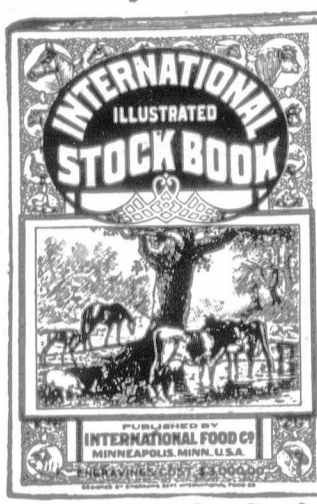
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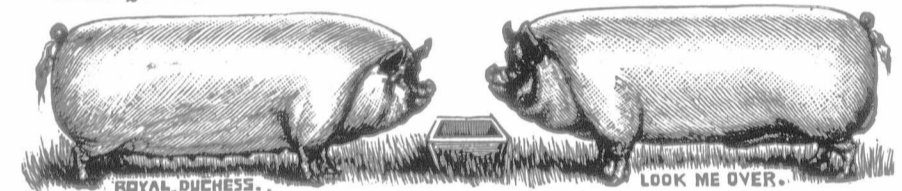


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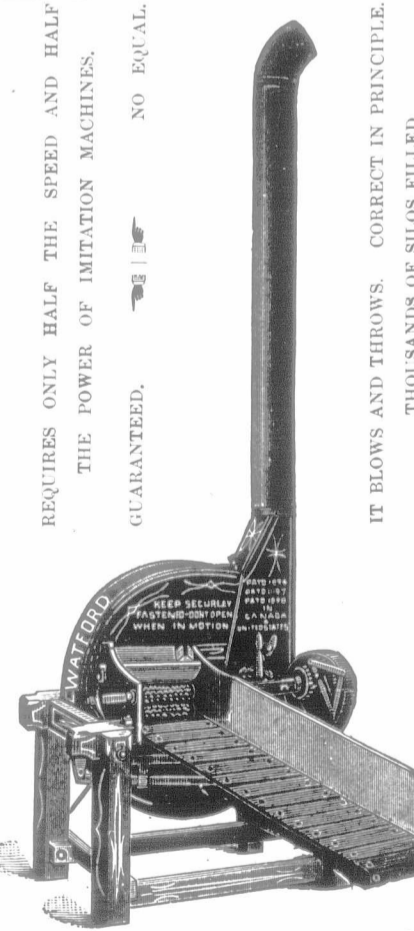
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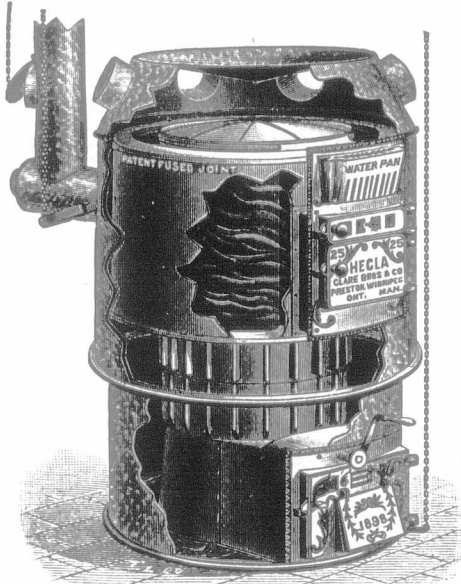
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