PAGES MISSING



the strongest fence that could be_ ouilt. But the scarcity of stone and its prohibitive cost-not to mention the length of time necessary to construct one-make the stone fence a luxury which few of us feel like indulging in.

But as far as strength and years of service are concerned, a worthy succes-sor is found in the Frost Wire Fence. It is the strongest fence constructed to-day. It rivals a stone fence in the years

It is the strongest fence constructed to-day. It rivals a stone fence in the years of service it will give. Unlike the stone fence. the Frost Fence is not constructed at a prohibitive cost. It is really a necessity instead of a luxury. You need the Frost Fence on your farm because it will improve the appearance of your estate—increase largely the value of your property. You need the Frost Fence because it will keep horses, cattle and pigs absolutely con-fined in the fields encircled by it. It holds them prisoners same as a stone wall would. They cannot break through or reot under it.

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Notice that the lateral wires on the Frost Fence are of a special grade No. 9 hard steel coiled wire, heavily galvanized. Any grade of coiled wire will expand, but the only kind we know of which will unfailingly contract is this special grade we are using on Frost Fence —the kind that always keeps Frost Fence taut.

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weak, filmsy No. 9, No. 13 or No. 13 soft wires used as stays on many fences. See the difference between a Frost galvan-ized lock and others. Unlike others, the Frost Lock is the strongest, most unvielding part of the fence—not the weakest. And it practically welds the lateral wires to the stays where they cross each other, which assures a perfect distribution of any strain or enormous pressure that may occur—adds years to the life of the fence.

the life of the fence. Contrast the appearance of the Frost Fence with other fence which has been up for the same number of years. You'll find the difference all in favor of the Frost. Truly the Frost Fence is the strongest fence built to-day—the most solid kind of an investment. If you would like to know more about Frost Fence write for our Free Catalogue, which explains it in detail

Frost Wire Fence Company Limited

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Seedsmen, 142-146 McGill St., MONTREAL

Farm for Sale.

THE farm property of the late James Fair, Chinton, Ont., comprising part of lot 24, con. 1, Hullett (now in Clinton); south half lot 23 and lot 24, con. 2, Hullett, exceepting 30 acres at the north-east corner of lot 24; 10 acres of the south half of lot 25, con. 3, Hullett; ; acres of lot 36, con. 16, Goderich Township, and 3 acres of lot 35, con. 16, Goderich Township, and 3 acres of lot 35, con. 16, Goderich Township, and 3 acres of lot 30, con the south of the south the formation of the south the formal state of the south the formation of the south south of the south of the south and the sould is in excellent condition. There are 25 acres of fall wheat, and all fall plowing is done. The soil is a clay loam. Terms: Immediate possession can be given; 10 per cent. of the purchase money down, and balance in 30 days without interest. The exce-utors reserve the right to make one bid. Panutors reserve the right to make one bid. Par-ticulars may be had on application to the undersigned.

JAMES FAIR, NORMAN M'L. FAIR, JAMES SCOTT, Auctioneer



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These Are Facts It Pays To Remember When You Buy a Manure Spreader.

TN I. H. C. SPREADERS-Corn King and

Cloverleat—one lever controls every operation. Operator can remain seated from time he leaves the barnyard until he returns.

and brings the manure up squarely to the cylinder

Cylinder is large and runs easily, and the

teeth are long, square, high carbon steel. The wheels are steel with staggered ron is equipped with three sets of rollers attached to slats, running on steel tracks. The wheels are steel with staggered spokes. Both rear wheels are fitted with lugs, affording ample traction in wet or frozen fielde. And Cloverleaf Spreaders. The key-note in the I H. C. line is strength and simplicity of construction. Apron is equipped with three sets of rollers attached to slats, running on steel tracks. Is driven from both sides and cannot bind.

Apron drive clutch is automatically thrown

Range of feed is three to thirty tons per acre

with ten speeds. Ends of apron slats are protected so that no manure can work in and bind or clamp the apron. That's a good deal to say of a manure spreader, and yet that is by no means all you should know about I. H. C. Corn King. a Return Apron machine; each is made in three sizes. Call on our local agent or write nearest branch house for catalogue.

London, Montreal, Ottawa, Regina, St. John, Toronto, Winnipeg, CANADIAN BRANCHES: Calgary, INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U.S.A. (INCORPORATED)

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sufficient to indicate the superiority of the Chain drive, direct from rear axle to cyl-I. H. C. line. They tell you not to buy a spreader until you have seen the Corn King inder, gives easy transmission of power.

The key-note in the I H. C. line is Strength in every part means much, for a manure spreader has hard work to do. Simple construction means that it will not out of gear when load is fed out and Box is attached to frame by means of heavy and be easily operated. Those are the things you want in a manure spreader. get out of order, that it will have light draft and be easily operated. Those are the

I. H. C. spreaders are made in two styles, re-enforced at corners by metal braces. Cloverleaf, an Endless Apron machine, and

comb, send 50c to pay express charges and we will send you one latch free,

ALBANY HARDWARE SPECIALTY 60., Box,115 Albany, Wisconsin, 8,

Whitcomb Steel Barn Door Latch

We want every reader of this paper to

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The Whitcomb is the most convenient The Whitcomb is the most convenient latch made. Can be attached to any door with ease. No fitting necessary. Holds door open or closed. Horses cannot open it. Nothing about it that will catch in the harness. Two large handles enable you to open the door from either side. Strong and durable. Enameled finish with galvanized durable. Enameled finish with galvanized

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Frame is made of carefully selected lumber



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Established 1866.

No. 752

VOL XLII.

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"Persevere and

Succeed."

EDITORIAL.

More Thorough Supervision of Official Tests.

The Holstein-Friesian Association of Canada. in annual meeting at Toronto this month, adopted the system of yearly testing, recognized the Dominion Government's plan for a Record of Performance, based on yearly tests under the Department of Agriculture's supervision, and appointed a committee to arrange the standards of milk and butter-fat production necessary to qualify Holstein heifers and cows for registration in the Record of Performance for their breed. The Record of Performance they are willing to publish as an appendix to their herdbook, but they assume no responsibility for such records, which they set forth as private tests under Government supervision, and decline to accept them as of equal credibility or value with the weekly and monthly tests conducted by their association, under strict official surveillance, and published in their own well-established Record of Merit. The feeling among most of the Holstein breeders was not very strong in favor of the Record of Performance system of yearly testing, but it was adopted for the benefit of those members who might desire to take advantage of it. It was decided, however, not to proceed unless the Government were found willing to continue to bear all the expense of the official supervision. This proviso was inserted on the strength of a report that the Government would not bear the expense of keeping more than one man engaged in this work of supervising tests of pure-breds, and that if the work grew beyond his ability to look after, breed societies.

We are not advised whether the above rumor is correct or not, but we trust the Department will not, for the lack of a few men, discourage any breed society or any individual owners of pure-bred dairy cattle from taking up this excellent line of work. We believe the Record-of-Perormance idea is fraught with more possibilities for the economic improvement of dairy herds than all the live-stock exhibitions in the country. - If there are enough breeders anxious to test cows in their herds, with a view to qualifying them for admission to the Record of Performance, to keep a dozen officials busy, so much the better. Those dozen men will accomplish more substantial good for the country than the same number at Institute work talking up the doctrine of stock improvement. Our pure-bred herds are the fountain-head of all stock improvement. Whatever assists in the intelligent breeding of pure-bred stock, tends ultimately to improve the grade and mongrel herds in all parts of the country. Not only would the Minister of Agriculture be warranted in defraying the expenses of testing a largely-increased number of herds, but the force should be strengthened to enable the work to be much more thoroughly and carefully supervised. Inder the present system, the official representing the Department visits each herd about four times a year. He takes the samples for testing, and his visits are also a check upon the daily milk records. In the main, this system gives us fairly accurate records, and, with an honorable breeder, the test is as reliable as could be wished. But while the great majority of Canadian breeders will keep accurate records without much oversight, there are occasional ones who might yield to the temptation to give the cow credit for half a pound or a pound more milk a day than she actually yielded. If she fluctuated from any cause, the tendency would be to overlook a tem-

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

LONDON, ONIARIO, FEBRUARY 21, 1907.

porary shortcoming and set down the weight of by one man, and five dollars on every the previous milking rather than record a shrinkage. In fact, there are various chances for padding the records so as to make the yearly milk yield 500 pounds or so higher than it actually is. What we need is a much more frequent inspection -once a month would be none to often-so as to keep a closer check on the breeder's milk record and increase the chances of a fair test for butterfat. The Holstein men pointed out these things, and held that, as absolute official weekly tests of their great cows were doubted by the public, still less value would be attached to the somewhat looser Record-of-Performance test. They believed that the other system of their own, which they are now encouraging, of making weekly or monthly official tests of cows just after calving, and of same cows again eight months later, was more reliable and better than the Record of Performance. There is some force in their contention, and, while we favor yearly records as being simpler to write and talk about, more easily comprehended by the public, and more satisfactory all round, still we would again urge what we have held before, viz., that the official supervision of these yearly tests should be much more thorough than it is, and we hope the Minister of Agriculture, Hon. Sydney Fisher, and his Lieutenants of the Live-stock Branch may give this matter further attention. We want yearly records that cannot be impugned, and the more of them the better

Dog Tox and Sheep Insurance.

At the Dominion Sheep-breeders' annual meetthe extra expense would have to fall upon the portant matters discussed was the executive's recommendations in the way of asking the Ontario Government to amend the "Act for the Protection of Sheep, and to impose a tax on dogs." As explained editorially in "The Farmer's Advocate'' of Jan. 3rd, there is on the Provincial statute book a fairly good law providing that a municipality shall levy on each dog kept within its limits a tax of one dollar, and on every bitch two dollars, excepting in the case of a kennel of pure-bred dogs, which is taxed a straight ten dollars. The money thus levied is intended to constitute a fund from which the council shall pay to the owner of any sheep injured or destroyed by dogs which cannot be discovered, or by dogs owned by persons from whom nothing can be recovered by law, a sum not exceeding two-thirds the value of the sheep destroyed. The weakness of the law is that, on petition of twenty-five ratepayers, the council may, pass a by-law annulling this act in whole or in part, so far as their municipality is concerned. As there is no provision for restoration upon counter petition, the act stands partially or wholly repealed in many townships. In other cases a minor injustice has resulted from the council's rule of establishing a maximum valuation for sheep destroyed and refusing to recompense the owners to an extent beyond that amount. Consequently, the owner of a scrub sheep killed, may, in some cases, receive as much damages as the owner of a valuable pure-bred. It is true the law gives the councils no authority to fix any such maximum valuation, and the owner of a valuable sheep can, by action, compel them to pay two-thirds of the full value, but lawsuits are notoriously expensive. and few individuals care to incur them, preferring to take what they can get without suing.

bitch, with the exemption already provided for kennels of pure-bred dogs. The clause requiring not more than two-thirds compensation for sheep destroyed, was changed to read "not less than two-thirds." The right to repeal the act by local by-law, the sheepmen desire to have struck out entirely, making it operative in full in every township. They also asked to have a new clause inserted providing for the appointment in each locality of a competent sheep inspector to appraise damages in cases where the owner intends to make application to the council for compensation, the inspector to be given notice by the sheep owner within forty-eight hours after the injury is committed. The inspector would then investigate the case within forty-eight hours after receiving such notice, and forthwith make his report in writing to the clerk of the council, his report to be used as evidence in adjusting the claim.

The changes suggested are designed to reduce the number of worthless, sheep-worrying curs and at the same time provide a fund for the insurance of sheep owners, without imposing any real hardship upon the lover of a good dog. No man who really cares for his dog will begrudge a tax of one dollar a year. Many people feel that a farm is incomplete without a good collie, but in the interest of the sheep-breeders, whose business is more or less jeopardized by the keeping of dogs, are abundantly willing to contribute their share of the sheep-insurance fund. To ask the sheepmen to provide their own insurance is unfair. The man who keeps the stock which does the damage should pay the man who suffers.

There is, to our mind, just one lack in the ing at Toronto, a fortnight since, one of the im- above redommendation. It makes no provision for the use of town and incorporated-village dog taxes to help pay damages caused by these half-starved curs in neighboring municipalities. One of our correspondents has suggested that the dog taxes of each county be pooled to accomplish this end. At first sight this looks plausible enough, but there seem to be several objections. Township councils would be somewhat jealous of any attempt to take the control of the dog tax out of their hands, even if, as has been mooted, the balance over and above the amount paid out as sheep claims were returned to them pro rata at the end of the year. Then, too, county councils do not meet frequently, and there would be some delay in the settling of sheep claims. Furthermore, the county council is not supposed to deal with matters of purely local nature. At the same time, there should be some means devised, if at all possible, whereby a part of the tax on town dogs might be available for compensation of sheep killed or injured by them in the country. It is scarcely fair to ask the owners of country canines to pay taxes to reimburse owners of sheep killed by town dogs, and we trust our legislators may find some means of adjusting this matter.

The recommendations passed at the Sheepbreeders' meeting call for a tax of one dollar on a

The whole subject is a legitimate one for discussion, and we desire the opinions of readers, not only in Ontario, but in other Provinces and States as well.

Machinery and science in farming have released the successful farmer of to-day from the thraldom and drudgery of labor to a great extent. The successful farmer is the man who has learned the science of the soil and the growth of crops, or of growing and fattening of animals, or increasing the production of milk, eggs and other farm products by the best use of the feeds and materials at hand.

May not cattle be comfortable without being single dog, two dollars on a second dog kept either coddled or exposed to hardship?

THE FARMER'S ADVOCATE

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AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN' THE DOMINION.

> PUBLISHED WEEKLY BY THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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Address-THE FARMER'S ADVOCATE, or THE WILLIAM WELD COMPANY (LIMITED),

LONDON, CANADA.

The Farm Yields What is Better than Gold.

The farm is more generally appreciated as the tendency grows to revolt against the sordid vulgarity of wealth. The artificialities which money alone procures will probably never be enjoyed so largely on the farm as among the privileged few of the cities. People who hanker after the indulgence of exclusive luxuries are not those who will be first attracted by the wholesome natural enjoyment that farm life offers in such refreshing contrast. The city Crœsus speeds through the country in his automobile. He surely does not find much pleasure in it beyond the hollow desire to do something his neighbor cannot afford. The farmer, or rather those few farmers, who have learned to appraise the advantages of their occupation at something near their true worth, walks over his fields, drinking in the beauty of Nature in her various moods, reflecting soberly but contentedly upon the higher duties and privileges of existence, glad to be alive and estimating his advantages for the joy and happiness and peace they bring to him, envying them not to his neighbor, who may also share them to the full. Not to despise common pleasures because they are cheap, but to value them because they are within and volley after volley of musketry was fired over sooner or later, we shall come. The universal beauties, the simple foods; a wholesome, .netural, easy life, rich in experiences of intellectual, moral and religious life, are blessings which will be taking highly appreciated as time goes on. Let us finds for these, envying not, but pitying the pu proud rich who think to purchase happiness with gold.

How to Advertise a Country.

A proposition is before the Maine State Legislature to build a new Capitol. The farmers of Maine, while anxious to keep down the tax rate and expenses of Government, also wish to have more done for good roads, rural schools, the agricultural interests, the State hospitals, and the suppression of the brown-tail and gypsy moths. "The Farmer's Advocate" is asked for an opinion whether the farmers will gain more through the possible advertising of the State by the erection of an expensive Capitol, situated in the chief commercial center of the State, than by spending any available funds for the other objects, and retaining the Capitol as at present, within a few miles of the center of the population ?

Now, the question of the cost and location of the State building of Maine is one of domestic concern, upon which it is hardly proper for us to venture an opinion. While the building should be in keeping with the requirements of a great State, we believe that millions have been needlessly lavished upon such structures elsewhere, and there can be no question whatever of the greater advantage to farmers and the people generally of more liberal expenditures for the promotion of agriculture and for the alleviation of human suffering than outlays for public works, in the benefits of which usually a few contractors and public officials are the chief beneficiaries. A contented and prosperous people is the best advertisement of Maine or any other State.

HORSES.

History of Old Messenger.

When Messenger landed in America, on May 16, 1788, the history of the trotting horse began. flame was kindled that has never gone out. Messenger's light will never fade away, and any facts connected with the horse are always interesting to most horsemen.

For many years there was a doubt about the place where Messenger was landed in America. It was claimed by some that he was landed in New Jersey, others insisted that New York was the place where the horse first set foot on American soil, while others claim that Philadelphia was the city in which he landed.

From a systematic search of the Congressional Library, made by George P. Floyd, a prominent turf writer, he states that he found a volume of the Pennsylvania Packet and Advertiser for the years 1788-89, which was published in Philadelphia.

In the issue of May 17, 1788, was found a notice of the arrival at Philadelphia of the brig Dove (the vessel docked at the foot of Market street), with assorted cargo and the stallions Messenger and Governor, from Liverpool. There was where Messenger was landed.

In a copy of the same paper, June 15, 1788. was found an advertisement of a stallion bill, stating that the gray stallion Imported Messenger would stand for service during the season of 1788 at the Black Horse Tavern stable, on Market street, at a fee of \$10 the season and \$1 each the groom

FOUNDED 1866

ger got his trotting instinct from, is to some a hard problem to solve, while others seem to have struck the keynote. Engineer was by Sampson, a thick, heavy-made horse, with large, bony legs, heavy mane and tail, with shaggy fetlocks, a big head, and rough-coated ; so much was he like a cart horse that many doubted his being sired by Bass, who was a fine-made, clean horse. His propensity to trot was very strong. He would always start off on a trot, and trot quite fast; he was obliged to be whipped hard to induce him to change his trot into a run. These facts are proved in the old turf papers and books of that day

Although Engineer or Mambrino showed no inclination to trot, perhaps it was because they had no chance to do so. The instinct to trot and sire trotters cropped out in Messenger, and probably started in Samson.

Messenger had no great reputation while in England, and his star did not commence to shine on this side of the sea for some years after he came here. Messenger had been in America but a short time when the Pennsylvania Legislature passed a law prohibiting racing. That compelled those owning horses to keep them for road About that time, the country roads purposes. growing better, and road wagons made lighter. trotting came into fashion, and the wonderful trotting speed of the Messenger family was dis-It seems to have been more a matter covered. of accident than anything else that Messenger was found to be a great sire of trotters. The progeny of Messenger, sons and grandsons, found their way in considerable numbers into Canada in the thirties and forties of last century, and produced a grand class of carriage, road and general-purpose horses, the blood of the old horse being remarkably prepotent.

The Enrollment of Stallions and its Effect in Saskatchewan.

Editor "The Farmer's Advocate "

With regard to the enrollment, I beg to say that we have but few expressions of opinion on file concerning the work of the ordinance; but from what I know of the horsemen and farmers in general, gathered from personal contact, I may say that the ordinance meets with public approval, especially among the better horsemen and more advanced farmers. It has also had the effect of bringing to the notice of some purchasers that what they supposed to be pure-bred stallions are not pure-bred, and cannot be enrolled as such in this Province.

The striking thing about the working out of the ordinance is the information gleaned therefrom as to the comparative number of grade horses in use. I was prepared to expect a large proportion, but must confess disappointment on finding that the proportion is so large as it is.

No distinction is made between sound and unsound animals in the Horse-breeders' Ordinance.

A. P. KETCHEN, Deputy Commissioner of Agriculture Sask

LIVE STOCK.

Payment of Dog Tax Should Exempt

To reproduce "June conditions" in Januar is a costly process. Does it pay?

At what temperature is your stable ?

The seasons of 1798, 1865 and 1806 he stood at Oyster Bay, Long Island, at Townshend Cock's farm. His fee had been raised to \$45.

Jan. 28, 1808, Messenger was found dead in his barn. Doubtless he died from old age, he then being 28 years old. Such was the estimation in which the horse was held that the news of his death spread like wildfire throughout that part of the country. Hundreds flocked to see the last of the great hero. His grave was made under a large chestnut tree; the grave lined with cedar plank. The great sire was dressed in his holiday attire. He was loaded on a stone cart, and six of his sons, all gray, with a black body blanket, were hitched to the stone drag.

A military company with a band of music and hundreds of people formed a procession and followed the monarch of all sires to his last resting place, where he was buried with military honors, his grave. A headstone was place on his grave, with the inscription : "Messenger, Monarch of Sires. Foaled 1780. Died Jan. 28, 1808."

Messenger was a dapple gray, 15.3 hands high, large bony head, with large ears, a splendid hazel eye, short, thick neck , his nostrils were twice the size of any ordinary horse, very powerful loins ed quarter, very large hocks and knees, perfect, here. Whether in motion or at rest, always Fort position. His mane was sparse, but e h La solendid flowing tail. He was sired by

subgree, as it is given, traces through the

from Individual Liability Owner for Sheep Claims.

Editor "The Farmer's Advocate"

I have read with interest the letters published by you in regard to the sheep-and-dog question. I do not entirely agree with any of them, but think that Mr. Misner's is most fair. My flock of sheep has been injured by dogs a number of times, and only once were the owners of the dogs discovered. On that occasion a neighbor saw the dogs, and recognized them as his own and another neighbor's. As they were honest men, they reported to me and compensated me in full. Now, I claim that the present law is an injustice in a case like this. Why should the few whose dogs are discovered pay damages as well as taxes, while the many are let off with a paltry dollar per year? If dogs be not a nuisance, there is no more reason for taxing them than any other live stock, and it is unfair, in relationship to other live-stock owners, to tax dog owners for the general benefit. If, however, dogs be a nuisance. it seems to me to be quite fair to tax them, to reimburse in full the industry injured. But in order to be fair to the dog-tax payer, he should be assured against all personal liability for damage that might be caused by his own dog. Another improvement on the present law would be to have some one to assist the claimant for compensation in estimating his loss. As it is highly important that sheep-killing dogs should be de stroyed, the law in that respect should be made. if anything, more strict than at present. I think, too, that if the amount of dog tax depended as; Childers directly to Darly Arabian, upon the number of sheep killed, perhaps dog ported on account or her view as a owners would be more careful of their own and the and for the experiment i rate their neighbor's dogs. G. M. BALLACHEY. Brant Co. Ont.

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t. 1 THE FARMER'S ADVOCATE.

Formalin for Calf Scours.

A correspondent of the Breeders' Gazette reports a case where treatment with formalin saved the life of a calf that had a bad case of white scours. He procured half an ounce of formalin and diluted it with 15; ounces of water. As the calf was so far gone it would not drink from a pail, he took a pint bottle with nipple and fed one pint new milk three or four times a day, adding a tablespoonful of the solution to each pint of milk. On the third day after giving the treatment the bowels seemed to be working in a normal condition, and the calf has continued to thrive. He adds that he had previously had considerable trouble with white scours, and nearly every case proved fatal. For the information of "The Farmer's Advocate" readers, we may say that American experiment stations have reported very favorably upon the internal formalin treatment for a certain form of calf scours. The washing of the navel cord of the new-born calf is also recognized as the best-known preventive of joint-ill in colts, and of white scours in calves. Formalin is a wonderful disinfectant and antiseptic. When administered to calves suffering from scours of bacterial origin, the results are claimed to be most satisfactory, but in a case of scours arising from mechanical irrita. tion, the feeding of cold milk, or irregularity in time and quantity of feeding, formalin could not be expected to have any good effect. In such cases a mild nonirritant purgative, such as raw linseed oil or castor oil, is indicated to clean out the bowels. For stubborn cases of scours, however, which will not yield to ordinary treatment, formalin is worth a trial. Will any who have tried it kindly report results ?

Water in a Trough in Sheltered Shed."

Editor "The Farmer's Advocate"

In reply to the question under the heading, "How are Your Stock Watered ?" in your issue of February 7th, I give my system very briefly The well is 600 feet from the buildings. A windpower pump forces the water through inch piping to a supply tank (capacity, 30 barrels) placed in cellar of kitchen in house. This supplies an abundance of fresh water for the house. From the supply tank it runs to the barn, there being plenty of fall, into a float box placed in the passage in front of the horses, entirely free from The water runs from the float box to a frost. large trough placed against the front wall of the barn and near the center of a 16 x 84-ft. shed, The shed is sheltered on the south end by a stone wall, on the north and north-east by a hogpen, and open to the east a space of 70 feet. The trough is made of pine planks, matched, with lids of one-inch lumber, matched. A case of matched lumber, with a six-inch spaced filled with sawdust, around the trough, makes it frostproof.

The system cost \$180 to instal, and has been in use 12 years.

The one great advantage is in having an abundance of fresh, pure water always on hand. Another important advantage is that the stock drink freely in the shelter during the most stormy Other advantages are that weaning weather. calves take to drinking more readily; fresh water is palatable, and the stock drink regularly, thus avoiding excessive gorging of ice-cold water; by having the float box arranged for dipping a pail, Great care should be exercised, in installing the system, to prevent leakage, by using galvanized piping, proper fittings, floats, tan

THE FARM.

Quality in Wheat.

The third annual report of the Canadian Seedgrowers' Association, just to hand, contains some very interesting papers and addresses on the question of seed grain, etc. The most interesting, perhaps, is that treating of "Quality in Wheat," by Chas. E. Saunders, Ottawa, and Wheat-growing in the Canadian West," by Hon. W. R. Motherwell, Minister of Agriculture for Saskatchewan. From these we find some facts of far-reaching importance to this country pretty well established, among which are that Canada has become world-famous as a producer of the best hard wheat in the world, and that this supremacy is owing to the ability of our West to grow to perfection the famous old Red Fife wheat. And the question that naturally arises is, Should the Fife wheat fail, will not our reputation as a producer of hard wheat go with it ; have we any other to take its place-any that will at all compare with it?

Why does this particular variety stand preeminent? The answer is not far to seek, viz., because of its superior milling qualities. It is rich in gluten, and that of a high quality. This gives it its superior bread-making quality. It has the thinnest bran of any wheat, and gives a larger yield of flour per bushel than any other It will make much more bread per 100 variety. pounds of flour than any other, and that of a higher quality. In short, it gives the strongest and best flour for bakers' use of any wheat ever grown in this country. Where did it come from, and how did it originate? Just here I would refer to the history of this wheat, given in "The Farmer's Advocate " of May 3rd, 1906, where a very interesting account of its origin is given. It tells how Wm. Struthers, a Scotchman, took a handful of wheat from a Russian vessel which was unloading its cargo in the port of Glasgow. This he gave to the late David Fife, of Otomabee Township, in Peterborough County, Ontario; how Mrs. Fife planted this wheat in the garden where a log-heap had been burnt. How five heads grew from one grain which were different from the rest, in that while all the rest were stricken with rust (which, by the way, was the greatest obstacle to the growing of spring wheat at that time), these were entirely free ; how nearly these came to being all devoured by the oxen which had broken into the garden (but three of the heads were rescued)-all reads like a romance. But from these three heads of wheat have come results greater than most people are aware of, probably without a parallel in the whole history of agriculture. It interesting just here to note that Mr. Fife, in propagating this wheat, selected each year the est kernels, in which he was assisted by his

field. Thus we find that David Fife and his family were doing over half a century ago what the Seed-growers' Association are doing to-daypedigreeing the seed on the principle of the survival of the fittest.

The fact that David Fife never sought to make any financial gain out of his discovery, as he might well have done, but gave it to his neighbors at the current price of ordinary wheat-all gives added interest to the story of Fife wheat.

The value of this new wheat, in the eyes of the farmers of those days, was its rust-proof qual-While other varieties were stricken with ity. rust, this new wheat seemed to be proof against But when it was brought to the mill to be it. ground, it was condemned by the millers. Those were the days of the stone mill, when the grinding was done with burr-stones, and the new wheat presented a problem to the millers they had never encountered before. It was so hard that they could not soften it in the process of grinding, and they said that most of it went to middlings and The skill of the miller, apart from his shorts. ability to keep his burrs in perfect balance and the grinding surface perfect and true, lay in his fingers. The feel of the meal as it came from the stones told him when he had his burrs set just right. In the process of grinding, the top burr, or runner stone, was gradually lowered by means of a lighter-screw, bringing the grinding surfaces closer together, until the miller; by regulating the feed, feeling the meal, and turning the lighterscrew, knew when he had it just right. This was indicated by the meal having a soft, silky feel, his object being to get all the flour out of the wheat and have the bran clean and light, and at the same time make a good flour that would rise well in the process of baking. It was well known by the miller that if he set his stones too close on any ordinary variety of wheat, there was danger of killing the flour; that is, the gluten cells of the wheat were broken down to such an extent that the flour would not rise, and its usefulness for breadmaking was destroyed. To strike "the happy medium-to grind close enough to clean the bran and get the fullest possible yield of of flour, and at the same time avoid killing it by too close grinding-was the object of the miller, and that called for the exercise of his skill and judgment. But this new wheat was a surprise to him; he could not soften it. He might turn the lighter-screw until he had the whole weight of the runner-stone on it, and yet the meal had a hard, gritty feel. He soon found, also, that he could not kill it by close grinding, like other kinds; and to-day it still retains the same quality, and in the large modern mills it is found necessary to subject this wheat to the action of steam in order to get the best results in the process of grinding. But gradually the prejudice of the millers wore away, and they found that in this foundling of David Fife's they had the best family, until enough was raised to sow a small milling wheat that Canada, or perhaps the world.



also to have piping sufficiently deep to avoid freezing.

There are places where a hydraulic ram can be used more profitably than the wind pump.

I arranged my system for installing water cups in the stable, but after investigating concluded that water cups in the stable are not profitable, as stock require considerable exercise. Without sufficient exercise stock will degenerate, thus defeating the object of stockmen. Waterloo Co., Ont.

A. S. FORBES.

Onerous Customs Regulations.

At the recent meetings of the Dominion Cattlebreeders' and Dominion Sheep-breeders' Associations, in Toronto, there were several complaints from Canadian exhibitors at the International Live-stock Exposition, of Chicago, regarding the American customs regulations under which our stock is admitted duty free to compete at the show. One breeder said it cost him last year about \$12.00 in brokerage to get his stock in and out of Chicago. Representations will be made to the Manager of the International to intercede in our behalf, and Dr. Rutherford, Canadian Live-stock Commissioner, also promised to take the matter up unofficially with Dr. Melvin.

Paper Worth Four Times as Much as Any Other.

I received the premium knife all right, and it is dandy. It is well worth \$1.00. The new abscriber likes "The Farmer's Advocate" all ght. He says it is better worth \$2 to the anadian farmer than any other paper is worth LATCHFORD THACKER. ' cents. Bruce Co., Ont



Diadem (12.550).

Feur-year-old Clydesdale stallion; sire MacRaith, dam Hecuba, by Baron's Pride. Imported August, 1906, by B. Rothwell, Hillside Farm, Ottawa, Ont.

ever saw On the newly-cleared, rich lands of refuse to receive for registration any variety of this Province it did remarkably well for a number of years. Gradually it worked its way westward, and on the rich virgin soil of the Western prairies of Minnesota and the Dakotas it seemed to find congenial conditions for perfect development. The City of Minneapolis is called the Flour City, and to the traveller, the chief interest is in its immense milling industry, for it has the largest mill and largest milling capacity of any city in the world ; its reputation for high grades of flour is And if the traveller asks for a reaworld-wide. son for all this, he might truthfully be told that it consisted of two things-the great water-power and the hard Fife wheat.

And in our own great West, with the great mills of the Ogilvies, Lake of the Woods, and other companies, and the long line of big elevators stretching along the railways and looming up huge and massive in all our lake ports, the Fife wheat has had more to do with all this development than most people have any idea of.

The ability to grow this wheat is one of the most valuable assets of our Northwest to-day. remember a time, back in the eighties, when the Northwest was in a fair way to lose its reputa-There had been frequent damage from tion. frost, and it was thought the Fife wheat was too slow in maturing; also that there were other kinds that would not only mature earlier, and thus escape the frost, but at the same time give a larger yield, and so they began to sow other The result of this would have been varieties. disastrous, and would soon have ruined the reputation of our Canadian West as a producer of high-standard milling wheat. But two large corporate interests came to the rescue and saved the situation, because their own interests were going to suffer if they did not-the C. P. R. and The C. P. R., with the shrewdness the millers. and foresight so characteristic of that company, carried seed of the pure Fife wheat free of charge, and the millers, especially the Ogilvies, furnished pure Fife wheat for seed at a low price-below actual cost, I think. And so, between the two. a propaganda was begun in favor of the growing of the famous hard wheat; and that action has had a far-reaching effect in re-establishing the supremacy of the Fife.

Dr. Saunders, about this time, introduced a new wheat from Russia, the Ladoga. It was thought this would be a substitute for the Fife. and would ripen earlier. Analysis of this wheat showed it to contain as high a percentage of gluten as Fife. But that did not make it its equal, as there is a vast difference in the quality of the gluten of different wheats, and we never hear now of the Ladoga wheat; it had to take a back seat.

Back in the seventies the Fife wheat was still being grown in Simcoe County, and was still doing fairly well on rich clay soils, but was showing signs of failing in yield. About 1874 or 1875 a new wheat was introduced that was intended to replace the Fife. It was called the "Farrow wheat. It gave a large yield, and in color and appearance closely resembled the Fife, though it was a little darker in color. But there the resemblance ceased, for when the flour of it reached the baker it was condemned. The millers who stocked their mills with this wheat found that they had a white elephant on their hands. It gave a poor, weak, starchy, gray-colored flour that nobody wanted at any price. However, the White Fife, for a number of Vears ftor duction, did very well; and on rich clay loam, where the land is rolling, and on high table land, it still continues to do fairly well. It is the best substitute for Red Fife ever tried here. do not know the origin or history of the White Fife, but it is no doubt a sport of the Red Fife, different in color, not quite so thin in the bran, but giving a strong, rich flour. Speaking of varieties, Mr. Motherwell says, on page 60 : " As to varieties sown, the Red Fife stands head and shoulders above all competitors. I have always contended that the Fife wheat grown here 35 years ago was as hard and as good in every particular as any ever grown in the West. In proof of this, Mr. Saunders, on page 65, speaks of an old sample of Red Fife, grown at Ottawa in 1902, and used in the baking tests, which earned 1041 marks, the standard of comparison being that 100 marks signified a very strong flour, and 75 a very weak one. Mr Saunders attributes this largely to the age of the sample used. But that is not the whole reason. In my own opinion, it goes to show that if we could find the conditions necessary in order to get this wheat to grow and yield in Ontario as it did 35 years ago, and furnish these conditions, there need be no fear as to its hardness. On the same page Mr. Saunders speaks of a variety of Club wheat grown in Manitoba, and has this to say of it : "It gives fairly hard kernels, of a deeper red color than red Fife, and commands a high price on the mistaken idea that depth of color always indicates strength." But he goes on to say that this wheat gives flour of a dark color, low in gluten and very deficient in strength, and should be condemned ; and, further.

wheat from districts where wheat is grown chiefly for export, if the variety is known to be of poor quality.

All this goes to show that the propaganda in favor of good seed, improving the quality by selection, has not been started any too soon. And just here I would refer to a remarkable statement made by Mr. T. G. Raynor at the Winter Fair, viz., that he knew a man in Renfrew County who, by selecting for a series of years, had produced a crop of Red Fife wheat that yielded 30 bushels per acre.

But selection is not the only means of improving our seed grain. We may get, and no doubt have already, some valuable new hybrids by cross fertilization. Dr. Saunders began work along this line several years ago, and now has several promising hybrids in cultivation, nearly always, think, using the Red Fife as one of the parents. And if Dr. Saunders succeeds in originating a wheat such as David Fife's great protegee has proved itself, it will be worth vastly more to the country than the total cost of all the experimental farms. It is pleasing to note that this work has lately been taken up also at Guelph, with some very interesting results.

So much for the spring wheats. And now a word about the fall wheats, which now constitute the bulk of wheat grown in Ontario. In the early seventies the old Soules and Dhiel, or Delhi, were the varieties grown in this county. Then a little later the Treadwell was introduced. At first it was not in favor by the millers. It had a very thick bran and gave a small yield of flour. But in a few years it improved considerably in this respect, and it always gave a good flour. This wheat or the Soules, mixed with a third of Red Fife, and ground in the old way-in the old stone grist mill-gave us flour that was a de-It had that moist, sweet, nutty flavor light that we cannot get nowadays with our modern systems.

flour, rich in all that goes to make a high-class article of bread.

The miller does not always know a good milling wheat when he sees it, as witness the reception given the Red Fife by them when first introduced. The deciding test is with the baker. It is the breadmaking quality that counts.

Most valuable work is being done at the Dominion Experimental Farms in the breeding and testing of wheats. In the report of 1901, 117 varieties of spring wheat were under test, and the Fife wheats stood well to the front. It is pleasing to note that 54 of the varieties tested were cross-bred sorts, and that in a select list of 48 varieties of the best spring wheats, the Fife wheats and their crosses stood well to the top, with average yields at all the farms of from 32 to 35 bushels per acre. Dr. Saunders was on the right track when, in looking for a wheat that might be a worthy successor to the Fife, in case that variety should deteriorate and fail, he looked to the country from which the Fife wheat came; and, although the Ladoga proved a failure itself as a substitute (I note that it comes next to the bottom of the select list), yet, by crossing it with the Red Fife, he has produced a wheat-The Preston-that bids fair to rival the old stand-by itself. In the report of 1904, at the Brandon Farm, Red Fife stood next to the top, with a yield of 36 bushels and 40 pounds per acre, and at Indian Head it stood eighth in a list of 36; but on the same Farm, in a field test with eight varieties, in plots of from two to ten acres (the eight varieties were nearly all the Fife wheats and their crosses), the yield was from 31 to 42 bushels per acre, and the Red Fife on the 10-acre plotgave a yield of 40 bushels and 57 pounhs per acre. This was on land which had been summer-fallowed. In view of all this, is there any reason why Canada should not retain her supremacy as a producer of the best hard wheats in the world?

Should the Fife wheat fail or deteriorate, or, in common phrase, " run out," there seems to be

evidence that we

will have some varieties of its progeny worthy to take its place. The deterioration or running out of a variety may be deferred for a long time if the propaganda of the Seed-growers' Association is successfully prosecuted. Of this we have abundant evidence. In the West they have the soil and climate for hard wheat ; the rest depends upon the skill of man. In the experiments being carried on at the Dominion Farms and at Guelph in crossbreeding and testing varieties, and in the work of the Seed-growers' Association, we have



First-prize Sborthorn Heifer.

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And reserve for championship for best Shorthorn at the Smithfield Club Show 1506. Bred and owned by His Majesty the King.

These fall wheats after a time began to de- portant one-the soil. To get good seed of any generate in yield, and new varieties were introduced. But up to the present we have never had a variety in any way comparable with those old varieties mentioned. One of the best yielding of the varieties introduced since then was probably the Dawson. It was a very vigorous grower, a healthy, strong plant, but the flour from it was a disappointment. It was so dry and starchy, so low in gluten, that when baked the loaves cracked open. This was a subject of general complaint, and was only avoided by mixing it liberally with spring wheat for gristing purposes. It is claimed that the new variety from Kansas, Turkey Red, has high milling qualities; but, with that exception, we have not had a good milling fall wheat since the days of the old Soules and Treadwell.

The history of our wheat-growing is, briefly, this: The wheats we grew 30 or 40 years ago were all, or nearly all, good milling wheats. When the yield began to fail, new varieties were introduced, giving a larger yield on the same land, but poor in milling quality. There has been quite a long list of varieties grown since the days of the old Soules and Treadwell, but nearly all giving poor, starchy flour, of poor breadmaking quality. Of course, a certain amount of this flour is always used in pastry and the making of all kinds of biscuits. But for the wholesome, spongy, moist, sweet bread which is so desirable. and which everybody wants and everybody rel ishes, we must have the hard wheat, of the lest he suggests that the Seed-growers' Association milling quality, rich in gluten and giving a strong

two strong factors in the problem. But there is an-

kind, the soil must be right, and here I would refer to Prof. Harcourt's address, on page 56 of the report-one of the best I have read on the subject of soil conditions. I would refer to one quotation. On page 56 he says : " An insufficient supply of phosphoric acid is always followed by the production of poor yields of shrunken grain.' Nitrogen forces the leaf and stem growth, and the presence of phosphoric acid is needed to hasten maturity. So strong is the action of phosphorus in this direction, that at maturity three-quarters of the constituent taken up by the plant is found in the seed. He further shows the function of potassium, which, he says. aids in the formation of all organic matter; and of lime, which seems to aid in the construction of the cell wall. Each of these constituents has its own particular work to do, and the absence or deficiency of any one of them will cause the death or the incomplete development of the plant.

It is plain from all this that we must have the aid of the Agricultural Chemist in the solution of the problems presented : and one of these is. Why cannot we produce fair yields of good hard spring wheat in Ontario, as we did 35 years ago? Why is it that, almost invariably, when we got a wheat, either spring or fall, that would give a larger yield per acre, it just as surely deteriorated in breadmaking quality ? he a reason. Can we not find it out ? There must

The idea of installing a miniature mill and bakery at the Experimental Farm is a capital It is money wisely and well spent, for the DED 1866

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value of any wheat that may be originated, either by selection, cross-breeding, or importation, will always depend upon its breadmaking quality, and the bake oven is the final and crucial test

There are four articles of agricultural produce in which we may be said to excel nearly all competitors in the world's markets. These are our hard wheat, our cheese, our bacon, and our apples; and of the two latter I expect to have something to say in a future article. We cannot afford to allow any of these articles to deteriorate in quality, and, to keep them up to the present high mark and, if possible, to still improve the quality, should enlist the best efforts of our men of science and our men of close observation who have learned much from long years of practical experience in the various lines of Canadian agriculture. G. C. CASTON.

Simcoe Co., Ont.

FEBRUARY 21, 1907

Nitric Acid from the Air.

Dr. Wm. Saunders, Director of the Dominion Experimental Farms, gave some interesting information in an examination before the Select Committee on Agriculture and Colonization, Parliament Buildings, tawa. His subject was "The Progress of Agriculture and the Extension of the Experimental Farm System." The doctor laid great stress upon the importance of the farmer of the present day being well equipped in knowledge for his important work. Twenty years ago in Canada, he said, farming was thought to be good enough for the men who had tried everything else and failed. Now it was generally recognized that to be a successful farmer a man had to have a wide knowledge of the processes and materials of production. At that time no branch of the public service could give farmers the information they needed. Recognizing this need, the experimental farms were established, and their correspondence had increased enormously.

In the course of the address several discussions were brought up in questions. One member asked if Sir William Crookes' discovery of a method of manufacturing nitric acid from the atmosphere would not revolutionize methods of fertilization. "Yes," was Dr. Saunders' answer, " when the process can be sufficiently cheapened to make it possible to produce the acid in competition with older processes." The doctor then told of a factory in Norway (where there was abundant water-power) that was making nitric acid wholesale, and mixing it with lime to make nitrate of lime. This was sold in competition with the nitrate of soda of Peru, and successfully competed with it in the mar-The nitrate beds of the world, Dr. Saunders said, would be exhausted in twenty years at the present rate of consumption. At present the process of making nitric acid as followed in Norway could not be commercially successful where the power cost more than \$4.00 per horse-power per year.

The doctor gave a most interesting comparison of the average productive powers of the soils of different countries, paying special attention to those that competed with Canada. Some of the figures were as fol-Oats-Great Britain, 30.06 bushels per acre; lows : Ontario, 36; Manitoba, 38.61; Northwestern Canada, 34.76; United States, 29.15 bushels per acre. Wheat-Ontario, 18.92 bushels per acre; Great Britain, 30.95 bushels per acre; France, 19.75; Manitoba, 18.45; Northwestern Canada, 19.13; Russia, 9.05; United States, 13.43; Argentine Republic, 14.76; South Australia, 6.62, and West Australia, 11.51 bushels per icre. Dr. Saunders' address was

THE FARMER'S ADVOCATE.

The Manure Spreader Defended.

Editor "The Farmer's Advocate":

The question in your recent editorial, entitled, What about the manure pile ?" I think is not being discussed as much as its importance demands. have tried putting out manure in different ways. One We way was to spread it on the fields in winter, which I think is a very good way for corn, or, in fact, any late crop, but for early-sown grain it keeps the ground too cold and damp, and so retards the cultivation and the seeding and growth of the crop. Another way was to put it out in large heaps in winter, but we do not approve of this method, as too much is lost by fermentation. I think a very good way to handle manure is to keep it under cover as much as possible, to be kept well tramped by cattle or hogs to prevent fermentation, and if any has to be piled in the barnyard to use it as soon as the frost leaves it in the spring for top-dressing meadows, which are to be plowed the following autumn, and the balance to be applied in the fall and immediately plowed under as shallow as possible. If this plan is adhered to I think there will be very little of the value of the manure lost.

I, for one, cannot agree with J. E. M. on the manure-spreader question, in the issue of January 31st. In the first place he is putting the cost for wear and tear of the machine rather high. When a machine of that sort begins to cost \$10 a year for wear and tear it is time it was laid aside, and I think with proper care it ought to last much longer than twelve years. In the next place, if there are two men loading the machine. I think the second man will find plenty to do while the other is unloading, if so inclined. Then, again, if two men were to spread a load of manure from a wagon in the same time as the spreader would do it, I am sure it would not be so evenly spread. I think the manure spreader takes the place of one man at least every day it is worked, and does the work to very much better advantage. I would advise any farmer who has much manure to handle, and has money at his disposal, to invest in a manure spreader, and I think before many years he will have good interest on the money expended. Those are my views on the subject, and are open to criticism, so I would like to hear from anyone through the columns of your valuable paper. ROBT. J. MCEWEN.

Lanark Co., Ont.

A British Columbia Basement Barn.

Editor "The Farmer's Advocate"

Our basement barn, built eleven years ago, is 68 feet wide and 120 feet long. For the foundation we dug a trench 18 inches deep and 18 inches wide, and filled it with round stone and fine gravel, to within two inches of the surface. The outside wall is of stone and mortar, 18 inches above the ground ; the basement wall from that up is 12 inches thick, shiplap outside and in, and filled with sawdust. There are five ventilators on each side of basement, 12 by 16, made of D. D. shiplap, opening in the stable at the top of stone 18 inches above stable floor, and extending wall, through the roof just above the eaves. These ventilators should have extended to the ridge, as when the wind is strong ventilators on the windward side send cold air into basement. There is plenty of windows

with two feeding alleys and three driveways for carting away manure, which is taken at once to the field The gutters are level, and no drain from them. Liquid as well as solids are carted away. Stalls for 80 milch cows are in the south end of basement. In the north-east corner is a stone silo, 26 feet high, holding 150 tons. In the north-west corner is a bull pen, and between this and the silo is a feed room, 20 x 25 feet. The silo empties into feed room; the granary above feed room also empties through a chute into feed room. Roots are carted from the pit in the field to the floor, above, where there is horse-power and pulper, run by bull. The pulper stands over a chute, which takes them at once into feed room. Straw and clover are cut by same power by two horses. and stored beside feed room for mixing with ensilage and roots. In feeding we use a two-wheeled barrow, with box on it. which will carry 500 lbs. of mixed feed. It is a pleasure to go into the cow stable, so cool in the hot days in summer and warm in the coldest days in winter. No drafts, but pure air and light as day. We have none of the dampness complained of by some of your correspondents who have basement barns.

New Westminster, B. C. A. C. WELLS.

Waste.

Perhaps the farmer has no greater foe than It is only when one settles down to a waste. little figuring and thinking that he realizes how much he loses through downright waste. For instance, if one wastes but five cents per day, he wastes a sum which, if saved and invested in a savings bank, would in twenty years provide him with as fine a team as any farmer could wish for Putting it in another way, he wastes more than enough to procure him a brand-new binder and a mower and a wagon and a plow and a top buggy and a fine set of harness. Yet such is the case, as a little careful calculation will prove to any-This letter is calculated to indicate a few one. sources of waste.

There is, first of all, the waste that comes from not knowing how to care for one's stock. In a way, the dairy cow or the bacon hog, or the well-bred horse or good poultry, are all of them as artificial products as any piece of machinery on the farm. Yet we find farmers handling these creatures who do not understand their work, or, what is worse, intrusting these valuable and delicate creatures to the tender mercies of help who neither know nor care to know how to handle them to advantage. Then, what room for costly fads in such matters? The average farmer cannot afford to make experiments taking him far afield from methods approved by the experience of generations. Experiments there must be, but the place for them is the experimental station, rather than the farm, where the aim is to make both ends meet, with a reasonable profit to spare. It is in connection with such matters as these that "The Farmer's Advocate" becomes the farmer's best friend, as it is in possession of the best information that years have proven valuable, and it is in a position to warn its readers regarding processes and devices whose value is yet to be established.

Then there is the loss from the leaky roof in as high as possible in the basement to make it light the barn, that so often destroys grain or hay, the to the center. The ceiling is 10 feet clear from floor shingle lacking on the implement shed that means to bottom of joist. The floor is paved with cedar a rusty machine or a ruined carriage or cutter blocks, cut 7 inches long and stood on end. There cushion ; and the deadly draught in

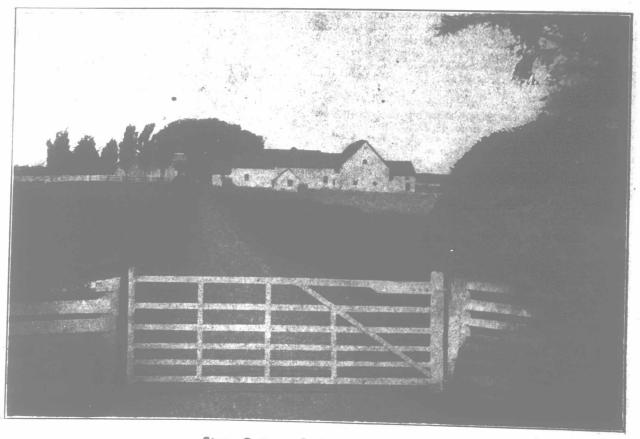
are four rows of cow stalls running lengthwise of barn, or poultry house. These may seem to be small the first sitting, but adjourned until a few weeks later.

Merits of the Corn Crop.

Editor "The Farmer's Advocate"

Among the many crops grown on our farms, we think corn-growing in our section pays the best, as we can grow more to the acre than anything else except red clover. While corn takes a considerable amount of cultivating, yet this is just what the ground needs to prepare it for other crops, and there is no better way whereby we can clean our soil of weeds than by growing a crop of corn or roots. In former years we used to grow the Western horse-tooth corn, with splendid results; although it did not produce cobs, it yielded a lot of stalks per acre. Now we prefer growing ear corn, such as Yellow Flint or Early Learning, as these varieties mature before there is much frost to injure them, and they produce good long ears which make splendid feed for milch cows and other stock. We usually do our corn-planting about the last week in May, and it is ready to harvest quite early in September. though care must be taken not to store it in the barn until it is thoroughly dry, and then stand tt up on end. BEAN. Bruce Co., Ont

After all, there is no place like the farm, and $f^{(i)}$ people like farmers. The more intimate one with city folk, their ways, their frivolous and hollow ambitions, the more exalted is one's opinion of the genuine, simpler, but nobler traits of rural character, born of natural environment, and strengthened by a wholesome, self-reliant occupation.



Stone Cottage, Springfield, P. E. I.

matters. but they are spouts that carry away the profits which have cost not a little toil and self-denial.

There is a worse form of waste still-the waste resulting from a neglect to provide the farmer's house with every possible device for saving his wife and daughters from the drudgery of their work. The family doctor knows that many a woman is broken down in the years when she should be in the glory of her influence and usefulness through the discharge, in an unnecessarily burdensome manner, of work that might have been done in a way that would have made it little harder than a pleasant recreation. Water is carried that might as well run through a pipe; bread is kneaded that should be prepared in a "mixer"; backs are wearied over the backbreaking washboard, while efficient washing machines and wringers may be had at a reasonable outlay. Tables and furniture generally are "lugged" that should run lightly on casters, and so on. These are channels of frightful waste to the farmer, and result in losses to him, the least of which is the hole in his pocketbook. There are scores of devices for saving time and drudgery which have long since passed the experimental stage, and which the farmer cannot afford to neglect.

I have mentioned only a few sources of waste. Let each one face the question himself and stop the leaks. To fail to do so is to act like the man who enlarges the hole in his pocket or who attempts to market his grain in bags with rents in them. 0. C.

Wentworth Co., Ont.

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Basement Stable Equipment.

Editor "The Farmer's Advocate ":

Now that the question, " Is the basement stable a success ?" has been pretty well discussed (and the general opinion seems to be that if properly built, with air space in walls and well ventilated, that it is), I may be permitted to ask the question, "How should the basement stable be equipped, in order that the cattle may be fed, watered and bedded, and the manure drawn out and placed on the field with the least amount of labor, and at the same time get the best results from the cattle ?'' For a person following mixed farming, I favor the following plan : The barn should be large enough to hold generally all the crop that can be grown on farm, and should have basement stable underneath, properly built walls, with air space, and at least nine feet high and well ventilated. The doors of stable should be wide enough for a team and sleigh, or wagon, to pass through, and cattle kept in pens, with gates between each, so arranged that team and sleigh or wagon could be driven to all parts of stable to clean out and draw manure directly out and spread on field.

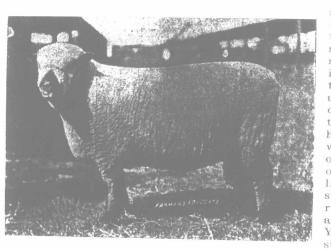
The horse stable should be placed in one end of basement, horses in stalls, and so arranged that manure could be conveniently carried over and placed in cattle pens, thus using it as an absorbent and preventing it from freezing.

One of the strongest arguments in favor of the basement stable is that, with the aid of gravity, the farmer can place the food in front of his cattle with the least amount of labor. The next question then is how to remove that food, in the shape of manure, with the least amount of labor, and at the most convenient for mortise holes, and no plank sill would be re time, which is undoubtedly in winter, and place it on

Building and Ventilating a Frame Basement.

Editor "The Farmer's Advocate"

So much has been said on the basement stable in your paper of late that I almost feel I am intruding on your space in further referring to it. What experience I have had has been in a stone basement, and as it is similar to that already given by many of your correspondents, I will not repeat. But as an advocate of or convert to the two-story frame building first described in your editorial of the 29th November, would like to add a few words in commendation of it. None of your correspondents who favor this style of building tell us how they are going to enter the second story. To bank up with earth, the usual material used for filling an approach to a stone basement (and I think there is nothing can beat mother earth for an approach), would be disastrous to a frame building. In all basements built in this locality, a generous space is always allowed for roots. Now, why not build a stone root-house the size desired on the side of the building where the approach is to be built. Under the rest of the frame put a cement foundation three feet above ground. Why three feet above ground ? For the reason that, in a frame structure coming within a foot or so of the ground, the part next the ground is apt to become damaged in time, and this gives the whole building an unsightly, dilapidated appearance. Especially would this be true of the side of the building on which the stables opened. A three-foot wall also adds greatly to the strain the studding will stand, as every foot added to the wall makes the studding just that much shorter. When finishing the top of this cement wall, if little, square wooden blocks are set in the cement wherever the studding will rest, these little cavities could be used



Shropsbire Yearling Ram. Winner of numerous prizes at English shows.

We now come to the posts. Have the outside posts cut long enough to run right through and rest on the cement wall. Mortise in sills the height you desire to make the stable, the same way as girts are mortised in the upper structure. Support these sills by putting 3-in. x 6-in. cedar on edge for studding, 2 feet apart, and $2\frac{1}{2}$ feet where a window is desired. For windows, put in double sash, the same as are used in dwelling houses. Have them fitted so they can be raised from the bottom and lowered from the top. If you want them very convenient for opening and closing, hang them with weights. This could be The fact that numerous farmers throughout Ontario easily done in a wooden wall. Windows that slide weaken a wall of this kind too much, because they have to be made long; and then, too. at this time of the year, owing to ice or moisture collecting at the bottom of the sash, it is often difficult to make them slide, and they are seldom if ever opened. Before commencing to board up studding on the outside, tack on building paper, allowing it to overlap pretty well, and cover with good shiplap lumber. Now take common laths and nail them between the studding where paper overlaps. This makes equally as tight a building as blind leareding before papering, and cuts down the bill tumber considerably. Board up on the inside with matched lumber, but before boarding tack on building paper here also Don't neglect to do This is what makes the wall tight, and the chapest material going into it. Give the oppose a cost or two of pain: Don't think

FOUNDED 1866

tend to paint it. Would also be tempted to de away with all outside girts in upper structure by using 2-in. x 6-in. uprights instead, then shiplap and paint.

For a system of ventilation, I do not think I have seen anything better, at least in respect to being inexpensive and not requiring any attention to keep in working order, than common drain tile placed near the top of the wall. But they make a stable draughty at times, and it is difficult to maintain an even temperature. As for bringing in fresh air by the underground-tile method, is there not always a damp, earthy odor to air brought in in this way? No one would think of bringing fresh air into a dwelling house in this way, and what is not good for man is not good for beast. If the fresh air brought in must be warmed, why not use the space between two of the overlays for this purpose by covering on the bottom with galvanized sheeting? The warmest air in a stable is next the ceiling, and the metal being a good conductor, the fresh air brought in in this way would possibly be warmed a little, but one of the intakes would have to be closed all the time, according to the way the wind was blowing. Distribution could be effected by means of galvanized piping, attached to lower edge of overlays, with an elbow running into this space. But this system might savor of being expensive, and would perhaps work better in theory than practice in a country like this, where the wind changes so often.

So I am going to offer the following system as one that I think would give fair satisfaction in all kinds of weather, without requiring any attention whatever, and not have to work automatically, either. This may be a rather sweeping assertion to make at the start, but I think it will stand the test. When building wall on which ends of overlays rest, build the stonework right up between overlays level with edge of flooring, and put a four-inch tile in wall midway between each of the overlays, and quite close to flooring. If a wooden wall, a little smaller opening would, perhaps, be better, the size depending on the thickness of the wall. Be sure that the space between any two overlays runs right through from wall to wall without any obstruction. Enclose this space by nailing on under edge of overlays two inch strips of half-inch lumber, leaving about a two-inch space between each strip. strips as you nail them on with cut straw or Cover the some other porous material to a depth of six inches. This will leave a four-inch air-space between straw and flooring if ten-inch overlays are used. If the spaces is thought to be too narrow, it could be increased by nailing 4-inch boards on edge to lower side of underlays before putting on the half-inch strips. Now, no matter how calm the weather may be, there will always be a current of air passing over this straw one way or the other, and all foul air and gases given off by the live stock will find their way up through this straw, to be carried away by this current.' Get rid of this foul air, and you won't need to worry about fresh air, or whether it is warmed or not. Yet, you do not want a direct draught on your stock, which you often will have if you depend on chutes to carry off the foul air, for you can never tell when this draught will change and blow down instead of up. And another thing in favor of this method of ventilating, it would tend to preserve the timbers from decay, which is quite a considera-

the field in the best condition possible. The plan I have outlined will take more straw, but the person following mixed farming usually has enough, and in this part of the country there is usually dozens of stacks of pea-straw-burned every year, that if used for bedding would materially add to the fertility of the farm.

The drawing out of manure in summer is one of the biggest contracts of the farm. With us we never could place it all on our root ground, and though we did not approve of summer-fallowing, we either had to leave a field without crop for the manure, or else leave it lying around until the crops were harvested, a very wasteful method, and one that we did not try more than once.

have recently built or intend building basement stables. with narrow doors and stalls for cattle, with the intention of dumping the manure out in the barnyard to freeze, to be drawn out again in the busy summer, or else make a trip with a one-horse sled every day. stormy or otherwise, to the field, leads me to conclude that they do not approve of the plan 1 have outlined. or else it has not been presented to these monds, so I think a discussion of it through "The hater is Advo cate" would be quite as profitable as your recent popular question, " Is the basement a succes FLOS FARMENT Simcoe Co., Ont.

As the farmers of this country become elecate more and more, the higher will become the digniof farm life, the greater the reward, the me numerous the comforts and luxuries, and more attractive the occupation for the young a who are seeking a life of independence and an home for their children.

barns with as our fathers had to select from. I know of barns in this locality, erected only a few years ago, in which the overlays are showing signs of decay already, and will, no doubt, have to be renewed in a few years. Wellington Co., Ont. G W B

Variety Tests of Oats in Indiana.

Variety tests of oats at Purdue Experiment Station, Indiana, placed American Banner at the head of the list in 1906, the yield of the plot being at the rate of 74.9 bushels per acre, while the average of the 42 kinds compared was 61.4. Or the average of the tests of 1905 and 1906, however, the Banner was outclassed by a good many other sorts, its average for the two years being 62.7 bushels, or just a few pounds more than the average of all the varieties tested.

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The early part of the season of 1906 was not favorable to the development of oats, the stand secured being rather thin, and the growth back-Towards the end conditions were more favorable, and good yields were secured, though the straw was short. About half the varieties were sown on the 4th of April and the rest on the 7th, the delay being caused by rain, but no appreciable difference in later development was observed The ground was corn stubble, and was prepared for the oats by double disking, harrowing and dragging. The seed was drilled at the rate of two and one-half to two and threequarters bushels per acre, according to size and quality of seed. The averages of the two years show that there is about 13 days difference between the earliest and latest varieties in the time of ripening. The Banner, together with some 20 other varieties, ripened about July 12th.

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FEBRUARY 21, 1907

The Farmer and Labor Legislation.

Editor "The Farmer's Advocate"

 ${\bf I}$ desire through your columns to call the attention of my fellow farmers to a bill now before the Dominion Parliament, introduced by Alphonse Verville, M. P., for the constituency of Maisonneuve, Montreal City, and who, I understand, is President of the Dominion Trades and Labor Congress, the main provisions of which are as follows ;

EIGHT-HOUR DAY.

"1. Every contract to which the Government of Canada is a party which may involve the employment of laborers, workmen or mechanics, shall contain a stipulation that no laborers, workman or mechanic in the employ of the contractor or sub-contractor, or other persons doing or contracting to do the whole or a part of the work contemplated by the contract, shall be permitted or required to work more than eight hours in any one calendar day, except in cases of extraordinary emergency, caused by fire, flood or danger to life or property.

STIPULATION IN CONTRACTS.

" Every such contract hereafter made shall contain provision that unless the person or corporation making or performing it complies with the provisions of this Act, the contract shall be void and the person or corporation shall not be entitled to receive any sum, nor shall any officer, agent or employee of the Government of Canada pay or authorize payment from the funds under his charge or control to the person or corporation, for work done upon or in connection with the contracts which in its form or manner of performance violates the provisions of this Act.

DAY LABOR.

" This Act shall apply to work undertaken by the Government of Canada by day labor.'

While the design of the proposed legislation is to arbitrarily restrict labor on Government contracts only to eight hours per day, it would initiate a movement in respect to all labor that would never rest with that Compulsory eight-hour work generally would be the end. We, as farmers, have many interests in common with working men, just as we have with the manufacturing and other business classes of the country. In a broad sense, we stand or fall together. Being individually the most isolated of all classes, we are not, and judging by the history of the past, never can be effectually organized for mutual protection as are the manufacturing and laboring classes, unless these latter interests so far overstepped the bounds of farmers to get fresh meat during the summer fairness as to rouse the antagonism of farmers as a months. mass, who have the power to overwhelm all others in Parliamentary representation. We have received less and stand to lose more through class legislation than any other element in the country, but we have preferred to rest our cause upon the general principles of justice.

What is the situation to-day in Canada in respect to industry and labor? The progress of farming is most seriously hindered in Ontario and other portions of Eastern Canada for want of population to till the soil to advantage. Obviously this Lill would tend to make labor more scarce. Thousands upon thousands of acros have been laid down to grass, and we are everywhere resorting to neighborly co-operation and machinery to perform our work. Public works, and nearly every manufacturing and other similar industry, are hampered and unable to fill their orders for want of help. Rolling stock for railways cannot be supplied, and both producers and consumers suffer for the non-delivery of goods. Yet, in the face of all this, agitators seek to restrict immigration on the one hand, and on the other to cut down by law the day's work to eight hours. This enforced reduction would make necessary the presence of probably 100,000 more men instead of fewer to do the present work, without regard to the growth of the requirements of the country. Is this reasonable or just? I believe in a fair day's pay for a fair day's work. The workman in our great industries should not only receive enough to maintain and educate his family in comfort, but make provision for the future. In other words, he should have enough not only to produce, but to reproduce labor of an efficient class. What about the manufacturer or other large employer of labor who invests his capital ? He should have some reasonable prospect of security for his enterprise. He must take large risks, provide ahead for depreciation of plant and buildings. improvements required by changes in demand, danger of fire, etc., interest on capital, and superintendence, beside a fair return for himself. When one looks over the record of, say, 35 or 40 years, in any city or town with which he is acquainted, how many enterprises have survived ? Now, we may frighten or cripple capital by enactions, and thus hinder legitimate progress and destroy employment. Let us be fair to

THE FARMER'S ADVOCATE

lation tends to foment class distinctions, widen the rift between capital and labor, and should be rejected Western Ontario. FARMER.

Cost of Cement-block Building.

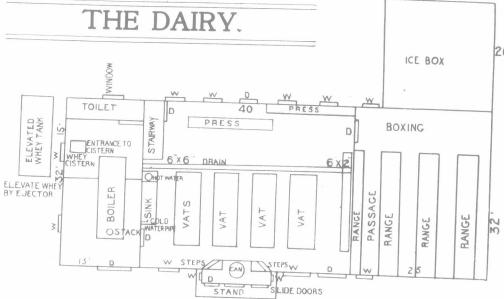
Editor "The Farmer's Advocate

In reply to D. H. T.'s inquiry in your issue of Jan. 24th, re cost of cement-block house, I will give you my experience in making a number of solid cement-concrete blocks, $8 \times 10 \times 20$ inches, the concrete being composed of one part Portland cement to eight of good clean gravel, not screened, throwing out the largest stones during the process of mixing. The price of material and labor was : Gravel, delivered, 50 cents per yard ; cement, delivered, \$2.35 per barrel; labor, with board, \$1.75 per day; two men, making 100 blocks per day; cost of blocks, 12 cents each. It is impossible for me to give cost of laying blocks in wall; my opinion is that about three cents per block for labor and cement for mortar would cover it (use rock cement for mortar). A building, 24 x 28 x 19-ft. wall, less the ordinary space for windows and doors, would require 1,250 blocks, at a cost of 15 cents each in wall, amounting to \$187.50. These figures are based on above prices of material and labor. I have not figured on rent of machine for making blocks. Norfolk Co., Ont. E. L. STICKNEY.

A Sixteen-share Beef Ring.

Editor "The Farmer's Advocate "

In response to your inquiries as to experience with beef rings, I might say we have in this neighborhood a sixteen-share ring. It has been working satisfactorily during the past seven years, and is organized again for the eighth year. I have been the butcher for two years, and cut from the chart published in "The Farmer's Advocate" two years ago. It gives each patron a boil and a roast, the steak going to make up weight of any light shares. Each beast should dress 320 pounds. If the beef is too heavy, the overplus goes to the owner. I receive \$2.00 for killing and cutting up each beef. Our aim in the ring is to have all the animals as uniform as possible, whether stall or grass fed, and no difference is made. This ring generally starts on the second or third week in June, running, of course, for 16 weeks. I think there is no better way for INTERESTED READER. Grey Co., Ont



A Profitable Dairy Herd.

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Editor "The Farmer's Advocate ":

In the first place, our farm is known as Maplehurst Dairy Farm, and consists of 100 acres, We keep about 30 head of about 20 in bush. cattle, and we milk the year through. We ship our milk to Montreal. On an average, we milk about 15 cows. We have them coming in at all times of the year. For winter feeding, we feed ensilage twice a day and clover hay or green-cut oats at noon. We give them after ensilage, in the morning, a feed of straw, and they always pick some out of it; also bran and shorts thrown on the ensilage, which is our principal feed. We used to feed a lot of carrots, but it is so hard to get help we have quit growing them. If we have ensilage left over, we feed it in summer if pastures are dry. Last summer we had none, and we just gave them clover hay and nothing else. We fed every month but June and August. The grass was good in June, and in August we let them on some after-grass. We got last year 17 cents a gallon in winter and 12 cents in summer, and there is 11 cents of freight charged on every 4gallon can of 40 pounds of milk. This year we are getting 18 cents in winter and 13 cents in summer. I might say we did not ship steadily this last two summers, as it paid better to send to the cheese factory, cheese was so high, and our city buyer let me stop a while when some of his customers were out of the city for the summer. As to statement of pounds of milk to each cow. I could give that, but it would be considerable trouble. However, we made an average of \$70 a cow for the season for milk alone, not counting anything on calves sold. We never let our cows out in winter, but curry occasionally and keep them well bedded and clean, as it is a very particular piece of business shipping to Montreal, but I can say I have been at the business about 15 years, and I never lost a can yet through dirt. Stormont Co., Ont. VICTOR BEGG.

A Milk Record Enthusiast.

Editor "The Farmer's Advocate ":

Keeping individual records of cows pays the best of any time spent, either in a small or large I started in the spring of 1905, with herd. pencil, and long, perpendicular rows marked out on sheet of paper for each cow; but thanks to the Government for the nicely-arranged sheets

furnished free for 20 the asking, we are able with these and a small platform scale to weigh and 20 mark down the weight in less than 30 seconds by the watch. We tack the sheets on a planed board in rotation, just as the cows stand in the stable, place it just above the scales, where plenty light shines on both, and bore a hole or two in the post slanting downward to hold the pencils, which is much handier than hanging by a string. One of the many advantages in keeping records is the satisfaction of knowing your cows, A Prince Edward County Cheese-factory to tell exactly what each cow gave yesterand being able day, last week, or in the season; and if anything will create in the hired help or the farmer's sons an interest in the individuals, this weighing each milking will do it, as it takes but little effort by the owner to get up a little rivalry by giving each milker cows that give about the same amount of milk each, by a few encouraging words. I have seen them go back immediately and restrip a cow to get two ounces more to equal or beat the other cow. This clean stripping is both paying and beneficial to the cow; besides, the more interested we get the helpers, the lighter the work, and the easier it is to keep the boys on the farm. By weighing each milking, we found out that our cows give three pounds of milk more a day on our sweet cornstalks than on good mixed hay. This we have tried week about, with the above difference both tests, other conditions being equal. We also find, by leaving the cows out a couple of hours after drinking, we lose a pound or more of milk, although we have an enclosed barnyard, protected by evergreens. And by the same method we learned that our cows gave two pounds a rule, the hired man expects in due course to be a new mill to the anome include and be could be prejudicial to the crease the allowance as the calf grows older, but not only once—as we have only normal condition : a farmer himself, and what would be prejudicial to the crease the allowance as the calf grows older, but not only once—as we have only normal condition : a spring well in the yard-and we now always let them out twice a day to have a rub and a lick

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each other. Public interests demand restrictions on human ac tions in certain cases, but it seems to me this bill. without due warrant, exceeds the limit in restricting the liberty to employ or to work if one wishes to. Incidentally, it will add immensely to the cost of public works to be paid for by the masses. It is a move that will hardly commend itself to farm help, fer, as with one-fourth pound per day for calves a month old ;

Floor Plan of Quinte Cheese Factory, Ameliasburg. Ont.

Editor "The Farmer's Advocate"

I am sending the plan of my factory and cost of construction of the same. It is built of a solid cement 12-inch wall, 13 feet high, cement floor, 8-inch partition walls; cost of cement, gravel and work \$750; cost of completion of factory in 1905, \$1,400.

In 1906 we lined up curing-room, according to the Government specifications for cool-curing rooms; cost, \$200. Building an ice box 20 x 20 x 13 feet, after the Government plan; cost, \$400. We think we have the most up-to-date factory in Prince Edward County. Prince Edward Co., Ont. W. J. KEMBER.

Meal for Calves.

Hoard's Dairyman suggests the following recipe for calf meal : One part pure ground flaxseed, two parts finely-ground corn meal sifted, two parts finely-ground oatmeal sifted, and the whole well mixed; then boil and allow to stand for twelve hours covered. Begin new milk for the month previous and no solids. Indetrimental to his interests to-morrow. Such legis second cutting of clover or alfalfa hay before them.

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as well as fresh-pumped water, which is much preferred to ice-cold water out of a pond or creek. The better the cattle are doing, the more they enjoy the rub around the stack, and will generally lick their feet and legs, as well as body, giving one the impression it is much more humane to water outside than to depend on inside tank- andpipe system. By keeping records, I think we have saved more than one veterinary bill, as a cow will show it in the pail if sick quicker than in any other way. And right here let me put in a good word for Epsom salts. No dairyman should be without at least two doses of 11 pounds each on hand, as, for anticipated milk fever, caked udder, bloody milk, indigestion, and most other cow ailments, give salts; and for stoppage in the rumen or overdose of grain, add one-half pound common salt, with lots of water, and, if kept moving, this will (if the case is not too far gone when the animal is found) relieve all trouble.

I hope "The Farmer's Advocate" will keep right on advocating this keeping of records, as it will help the expert feeder, as well as the owner of the poorly-kept herd, and increase the output of any factory in two years' time, I am positive, by at least 20 per cent., by getting the patrons interested, and inducing them to feed, breed and weed. GEO. H. CAUGHILL. Elgin Co., Ont.

Weight of a Gallon of Cream.

The standard weight of a gallon of water (liquid measure) is 10 pounds. It is a well known fact that milk is heavier than water, and a gallon of milk of average composition is supposed to weigh 10.36 pounds. The weight of a gallon of cream will change with its richness, because the fat in cream is lighter than water but the weight of a gallon of cream of any richness may be obtained by determinthe specific gravity of the cream and ing multiplying this by the weight of a gallon of Cream containing from twenty to thirty water. per cent. fat has a specific gravity of about 1. hence a gallon of such cream will weigh the same as a gallon of water, or 10 pounds. The specific gravity of cream containing forty-five per cent fat is .95, and a gallon of it will weigh 10 imes 0.95, or 9.5 pounds.

It will take nearly five per cent. difference in richness of cream to have much effect on its weight, so that it may be assumed, as a rule, that:

One gallon of cream containing ten per cent fat weighs 10.23 pounds.

One gallon of cream containing fifteen per cent fat weighs 10.12 pounds.

One gallon of cream containing twenty per cent fat weighs 10.08 pounds.

One gallon of cream containing thirty per cent fat weighs 9.96 pounds.

One gallon of cream containing thirty-five per cent. fat weighs 9.80 pounds.

One gallon of cream containing forty per cent fat weighs 9.66 pounds.

One gallon of cream containing forty-five per cent. fat weighs 9.50 pounds.

The weight of a gallon of cream is influenced somewhat by the quantity of air which it may contain from either fermentation, agitation or separation. All of these treatments of the cream may mix more or less air with it, and this will make it lighter : but the figures given are for cream which is sweet and contains little or no air.

In the winter, a good plan is to keep the cream at about 65 degrees F. for the first twelve hours. and then reduce it to 60 degrees F. for the remainder of the time. So, if we have a quantity of cream at a temperature of 60 degrees F., and the temperature of churning-room be 70 degrees F., to what temperature would Prof. Dean reduce the cream before churning; or, if the cream be 60 degrees F., and room be 60 degrees F., at what temperature would he churn the cream? As I said in my last letter, I could write an article on temperatures relating to dairying, only it would take up too much space in your columns.

Further, he thinks mixing skim milk with cream objectionable. In a weak way he says the result would likely be soft butter. From these last words I conclude the Professor has never tried this remedy, as he seems to overlook the fact we are trying to overcome sleepy or unchurnable cream, and therefore could not expect to have such good results as would be obtained from cream churned under ordinary conditions. I may state here that I have experimented and churned under conditions given many times, so am speaking from practical experience. Shall be glad W. C. J. to hear further on the subject. East Grey, Ont.

GARDEN 🔅 ORCHARD.

"Number One." Π

Since we must admit that the "pay-dirt" is found in " Number One," let us further follow the considerations requisite to obtain it. I take it for granted that you have planted the up-to-date remunerative varieties of whatever kinds of fruit you are growing, on properly-prepared and suitable soil, and that you have taken the pains to prepare the heads by close pruning annually. There are, in the main, four positive essentials to the production of "Number One." and very often They are (in their order of sequence) five. First, close pruning ; second, feeding (if the land is not already well supplied with nitrogenous and potash properties) ; third, spraying ; fourth, cultivation: and 5th, thinning the specimens of fruit set. There seems to be a prevalent idea that it is not necessary to perform all of these, and that pruning (which in far too many instances is what we term a lame pretence at it), plowing (or cutting down the weeds before or even after their seeds have matured), and picking are all the lines of work that are necessary, that the rest may be credited to the list of voluminous details promulgated by some exacting college professor. This is decidedly erroneous, and is in the line of the practices followed by those who come out with deficits. Selection of varieties is very necessary, but this alone is not sufficient. Close pruning alone is not capable of bringing about this result. Feeding (manuring and plowing under soilage crops, etc.) will not do it alone. Spraving only will not do it Cultivation alone will not do it. Thinning the fruit will not do it. But, when each one of them has been properly done you will get the desired result, produced by the united effect of each essential-" Number One." You may call in a half-dozen men to assist you

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of them. Cut them back and force them to grow strong and stocky to carry their load of valuable fruit when it is on. Open up the tree-head uniformly to admit plenty of sunlight, and yet have it properly distributed through small openings instead of huge skylights. My plan of it is this : I always study to throw the tree-head into the prevailing wind-quarter, and thus maintain the proper balancing of it, and keep it in position to have its own foliage protect its large limbs and trunk. This is done by beginning on the opposite side from that whence the prevailing winds come, and cutting off the branches which are found on the under side of the main limbs. As I work over toward the wind-quarter, I find that I have to cut off those that are on the opposite side of the upright limbs; e.g., if the windquarter is that of the south-west (as is the case throughout most of this country), I cut off those branches which are on the north-east side of the When I get over on the wind-quarter main limbs. side I work off those branches which grow on the upper side of the main limbs. When I want to shorten those which I leave, I am careful to select a place where there is a bud pointing toward the south-west, and cut immediately above it. This would be on the same plan as the pruning, and my bud would be found on the upper side of the branch in the north-east quarter of the treehead, on the south-west side of those which were growing upright, and on the under side of those which are in the south-west quarter. The reason for this is that the new branch always starts out in an angle to the one from which is springs, and want to take advantage of this in order to steer it as pointedly as possible into the wind, which always exerts a telling influence on it by reason of the surface presented by its foliage while it is vet sappy and not mature wood. After it has had a year or two of growth it will be in better shape to maintain itself in correct bearing.

Another thing to strictly avoid is the interference of branches. I never allowed them to cross each other. Keep them sufficiently apart that a gallon measure can be thrown out from the center of the head without striking a branch. Never allow them to go without being well cut back; the results of this will be seen in after years. when there is a good crop of fruit on them. Do not get impatient, and think that you must have fruit as soon as there are blossoms on your trees; if you allow them to produce when they are young, you may find that you are 100 per cent. a loser in what you should get in the crops of later years, and that your trees have been permanently damaged from taxation when they were too young to stand it.

Another very helpful thing to do, in order to maintain the perpendicular standing of your trees. is to go round them every spring while the ground is yet soft and take out a shovelful of earth from the south-west side and place it around on the north-east side and tramp it down well, while at the same time you hold the tree over in an inclination of about 52 degrees into the south-west. Even after you have done this well each year while the trees are growing, you will find that you have in nowise exceeded in wise precautions; the wind is tireless. Sun-scald is responsible for far more than many may dream of. Indeed, I find too many who do not know what it is. For the information of some who may wish to know this I will say that it is a burning of those parts of the large limbs and the trunks of the trees which are directly exposed to the streaming heat from the sun for the greater part of the day. effect is a drying up of their bark, and a subsequent separation of it from the wood, which gradually becomes completely dried, and cracks and I have many times seen trees with the rots. greater portion of their trunks eaten through by this destructive element. It can be avoided if care is taken to follow the practices above mentioned. W. H. BRAND. Lincoln Co., Ont.

Prof. Dean's Comments Disputed.

Editor "The Farmer's Advocate"

I am indebted to you for placing my letter before H. H. Dean, of O. A. C., Guelph. previous to going to press. He makes an assertion that I have not clear ideas on the science and practice of dairying. According to his comments, I fail to see where he claims any advantage over the article, " Causes of Slow-churning Cream, and Hints How to Overcome the Difficulty." which I on all of these subdivisions of the orchardist's have placed before your readers.

I have visited many dairy schools and factories abroad, and come in touch with professors of dairying and buttermakers who all teach and practice the use of a straining-cloth, so am sorry to see Prof. Dean condemn straining the cream into the churn because he does not consider it according to the best practice.

I have seen a good many buttermakers in Ontario and Western Canada pour cream into the churn which was too thick almost, to leave the can, whereas, had it been strained through a cloth it would have been made a proper thick ness and "uniform consistency." His idea of straining I consider absurd, as cream that has been properly usined and stirned during the ripen ing stage cherry not have particles of drive energy or curd present. The considers the table of tour peratures of an error constants the form of the temperature of an error shall be admit to the to know field the ensure sharped the prostants of suitable (diguestine) lafere (hurping cream is the principal factor in buttermaking

get your wagon out of a hole in which your team is not adequate to the task. If each one lifts to his utmost ability alone, nothing but dismal failure will result : but if the whole of them put a shoulder to the wheel at the same time, they will achieve success. United and simultaneous effort is what counts. You may manure, cultivate and trim, and yet have the whole of your work rendered useless by simply a failure to sprav or, you may do it by neglecting to prune or do any of the other requisites. If profit is wanted. no man can afford to neglect to do that which is necessary in order to gain it. Let the care be indiciously divided among them all, and your product will be such as will encourage you.

in your efforts to

There is always a great deal said and written work, consequently I will confine myself to those of pruning (chiefly) and spraying. I am often amused at what is called "a good trimming " by many growers. I usually tell them to go over it again and take out from one-half to two-thirds of the outer small branches which they have left and they will then have done a pretty fair job none too much taken out when that has been done One should never tackle an apple or other tree with an ave and bucksaw, cut out a large branch here and there, and call that oruning. It is a stavle that should be called " butchery," and rele cated to the history of the dark ages. Its chief refulness is to admit conious streams of sunlight in specific places, producing a permanent damage on the large limbs and whenever they pointedly trike the truck. If is only occasionally that it to neces any to remove large limbs (the heads hould be so leid out and trained while they are . The ratio will not be peeded later only

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CUPY

POOR

Less Weeds and Labor with Low Head. Editor "The Farmer's Advocate '

Replying to your inquiry re "At What Height to Head Young Fruit Trees," we are much in favor of the best fruit-growers' tendency to head low, as there are decided advantages in this method. Standard apples should be headed 38 to 40 inches in height : standard pears and cherries, the same ; peaches and quinces, about 30 inches : some advocate even lower. Some of the advantages are that the wind has less effect on them when in fruit; the expense in picking is less : the ground is kept cleaner of weeds, being more shaded, and moister as well ; trees are less likely to be broken. Cultivation may be done with a wide harrow or disk, but even this is made less necessary by the fact that weeds are less luxuriant under the low, shading tops.

BROWN BROTHERS COMPANY. Welland Co., Ont. Nurservmen

The knife received sharp on time, and, like The Farmer's Advocate, it is first-class in every way H. A. BODWELL Norfolk Co., Ont.

FEBRUARY 21, 1907

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THE FARMER'S ADVOCATE

Growing Early Tomatoes.

The growing of early tomatoes is a business which comes only by experience; but there are certain essential principles which must be followed to be successful, and the neglect of even one is to invite failure.

The seed is the first. One must procure good seed, especially in the early varieties, as these are inclined to grow rough, flat tomatoes, and green on the stem-end when fully colored below on the blossom-end. These will perhaps sell as early tomatoes, if not too rough, but if they come in competition with the later or smooth, deep-fruited, well-colored varieties, they will not find a ready sale; hence the necessity of a good strain of seed, such as some of the larger seed houses make a specialty of. The variety for extra early most commonly used is Earliana, and there is a new variety, Early June, which is being introduced and called the Pink Earliana, which I have not yet grown, but will test this season. The seed is sown in a well-enriched sandy soil in a sunny spot in the greenhouse about middle of February to March 1st, broadcast, or in rows 2 to 4 in. apart, and not too thick in row. When second leaves form, prick out in trench about 2 inches each way; then, when they crowd, transplant to 4 inches each way. Then they are next shifted into pots (usually 4-inch pots are used), allowed to get a good start, then hardened off by putting out in cold-frame, if weather will permit, or else in frames with about 4 inches of manure for bottom heat, and covered with earth, the pots set on these, and the frames are covered with glass sash, or perhaps cotton, left uncovered during day if weather will permit, and covered from frost at night. Great care must be taken in watering; too much water and not enough sun will favor the growth of the damping-off fungus, which attacks the plants if they are drawn-up and sappy. To prevent this, withhold any excess of water, stir the soil between the plants, and give lots of sunlight and air the house. I don't mean to chill the plants, but to ventilate and keep the heat up to from 55 degrees at night to 70 degrees in daytime, except when sun is very bright it may run higher; then be sure and harden off plants before planting outside. Never crowd plants, as you want a short, thick, stocky plant with truit set on it, and when properly hardened it will often withstand light frosts, when set in a suitable soil. The date we set out here varies, but is from 15th to 24th of May, or perhaps earlier in very favored locations. The soil should be the earliest is a naturally well-drained, early ; gravelly soil or sandy loam. This should be well enriched the previous year by barnyard manure, and grow a cleaning crop, such as corn, potatoes or roots; then add a good dressing of superphosphate and potash salts, as here is where we get our crop. If the soil has not sufficient already, use about 600 to 1,000 pounds of some good superphosphate or bone meal, and from 200 to 400 pounds of the potash salts, muriate or sulphate of potash, well worked in. Set plants about three feet apart each way. Nitrate of soda, applied close to plant, but not near enough to burn it, at rate of 160 pounds to acre, will start plants into early growth, and, being very soluble, will act quickly; excessive amounts, or even if applied too late in season, will make a too vigorous leaf-growth at the expense of early fruiting, but will materially increase the yield. The phosphoric acid is the part that aids early maturity, the potash favors fruit-forming, and the nitrogen is the leaf-and-plant-grower. After plants are set, cultivate regularly and hoe. Cultivation usually ceases on account of vines filling up the rows

the failures in tomato-growing are caused from want of plant food in the soil. The tomato requires lots of it. Too much barnyard manure, especially fresh manure, and, worse still, in a wet season, will give an excessive vine-growth; the fruit will not set, or set late and be frosted, and fruit is more subject to fungous diseases Lincoln Co., Ont. GEO. A. ROBERTSON.

Cultivation and Advantages of Lowheaded Trees.

Editor "The Farmer's Advocate"

In answer to yours of Feb. 1st, in regard to what height to head young fruit trees, as nurserymen, we find that the leading fruit-growers of Ontario, and especially those of British Columbia, are desiring low-headed trees.

The advantages are many. To begin with, low-headed fruit trees are much better protected than the high ones; better able to stand the severe blasts of winter, so that the fruit-buds come through in the spring in better condition. A low-headed tree, when young, is in a much better position to afford protection to the tender bark than a high-headed tree, where the branches cannot shelter and protect the trunk, so that the trees are liable to be badly damaged by sun-scald in the late winter and early spring, when the sun is strong, causing the sap to flow during the day, which is trozen at night.

So far as cultivating the trees is concerned, the disk harrow makes it an easy matter for the grower to cultivate low-headed trees, and any disadvantage there may be in this way is more than compensated for by the easy picking of the truit. One large grower of cherries tells us that with low-headed trees he has been able to pick three crops from the ground, without the use of ladders or any other help, which he considers saves him all kinds of time and expense in pick-For the small individual grower, or ordiing. nary individual, who very seldom uses horse labor for the cultivation of his trees, and the man using a hoe or a spade will find it just as easy to cultivate low-headed trees as high ones. High-headed trees, when young, are apt to be topheavy ; there is too much leverage, the wind gives the roots too much play, and the trees are shaken about so that they are not in a position to attain the stocky, vigorous growth which low-headed trees, better balanced, would attain. We would therefore recommend, as the best standard tree. trees headed at from three to four feet from the STONE & WELLINGTON. ground. Welland Co., Ont.

How Trees are Headed at the Central Experimental farm.

Editor "The Farmer's Advocate ":

In the early days, when Ontario farmers were beginning to clear their land, every cleared field was precious, and the owner wished to get as much from each field as possible, hence the trees were trained high, so that he could drive and plow or harrow under the branches, and thus be able to utilize most of the soil for other crops, especially when the trees were young. In some cases, also, no doubt, the custom of heading the trees high was followed because this had been the plan adopted in the Old Country, where, for other reasons, it was necessary to get as much as possible off the land. Fairly high heading of trees may be advisable to-day with some farmers who are not making a specialty of fruit-growing, as the trees are much more likely to be cultivated than if the branches are low, when, with the ordinary implements used by the farmer, it would be rather difficult to get close to the trees, and they would be likely to go to sod, a condition which, though giving fair results in some cases, is not a desirable one, as a rule, in Ontario. Where a farmer or fruit-grower intends to pay a fair amount of attention to his treee, low-headed ones are undoubtedly the best. We should recommend the heading of apple trees at from three to four feet; lower is not advisable, except in the colder districts, when the branches should start from near the ground. At Ottawa we are heading our trees at about two to two and a half feet, and believe this the best distance here where the winters are severe. If the snow did not break the branches, they would be headed lower. If headed lower than three feet in the parts of Ontario where the trees grow large, the branches, when laden with fruit, will bend to the ground, unless they have been carefully pruned, which is not desirable. Pears, plums, cherries, peaches and quinces should not be headed more than three feet, while dwarf pears and quinces should always start from near the ground. Very good results are being obtained from heading peach trees practically at the ground and up to eighteen inches, and this method will probably soon be the only plan adopted by the best fruit-grow-

A good average height for pears, peacher, ers. plums and cherries is from two to three feet.

A farmer with a small orchard should head his apple trees about four feet from the ground, and his pears, peaches, plums and cherries at three At this height the branches can easily be feet. pruned to permit of cultivation close to the tree with ordinary implements. This height would not apply to quinces or dwarf pears, which are smallgrowing trees, and are always headed low. When one is well acquainted with varieties, the height of the trunk may vary, as the upright-growing sorts do not need to be headed so high as the spreading ones.

The reasons in favor of low-heading are: Greater ease and economy in picking, and in thinning the fruit on tree when desirable; fewer windfalls; less injury to windfalls; trees are easier pruned, and easier, cheaper and more effectually sprayed; less injury from sun-scald; trees are not so easily broken in storms.

The only objection to low-heading is that cultivation is more difficult, but with improved implements this is obviated.

We have had experience with the extension disk harrow and the extension two-horse cultivator. Both of these are excellent implements, and make this work of cultivating low-headed trees easy. W. T. MACOUN, Horticulturist.

Experimental Farm, Ottawa.

How a Quebec Orchardist Heads His Trees.

Editor "The Farmer's Advocate ":

In reply to your questions about the height to head young trees, I would say three and a half to four feet for apple trees; pear, plum and cherry, two and a half to three feet.

The main reason in favor of low-heading is the saving in time and labor in picking the fruit; it is easier to spray the tree, and we have fewer windfalls. Young trees will not be so liable to sunscald if low-headed. This is a great item in our northern climate. With reference to sunscald in our Laurentian hills, on the southern slope of these hills the trees sunscald badly, while the northern slope is all right; even the sugar maple sunscalds badly, hence you will see the southern slope of the mountain covered with birch, and the northern with maple. To protect young apple trees from sunscald and mice, the wooden-veneer tree protectors are the best thing.

In a winter when there has been a great snowfall, low-headed trees are liable to be broken down with the snow. We have spent days on the side-line of our orchards, where the snow lay deep, digging out the trees. To overcome this, we had to do away with any hedge or obstruction that would gather the snow.

We cultivate the trees for the first ten years, then seed down to clover. In Ontario and the West you cultivate to retain the moisture in the soil; in Quebec our rainfall is much heavier, and the question is how to keep the moisture out of our soils. To keep up the fertility, we cut the grass and leave it as a top dressing. Where you can get ashes or potash in any form you have better apples, and far better colored, than if you don't use any ashes. When the sod gets mossy, it is a sign the land is getting sour. Use a cutaway harrow, one with side draft is better, give a top-dressing of ashes, or if you can't get the ashes, use lime for the sour soil, and seed to clover again.

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And now for the profits. This rests partly with the grower, the season and the weather.

If the grower knows his business, and stays with his tomatoes from the time the seed is sown until fruiting commences, the profits are always satisfactory. If he tries to put the same time in caring for three acres of plants that should have been spent on 150 plants, he would fail. One good plant is worth 20 mediums and 100 poorer ones. If he has not good seed, he will find difficulty in marketing the later fruits at a profit. If his land is not adapted for growing early stuff, he better leave it alone; and if he is located in a section which is not as favored as other sections, he better aim at supplying his local market only. Some seasons have an excessive amount of rain in one section of the country, while another part is comparatively dry and warm, and vice versa; and as the tomato is a sub-tropical plant, it does best where not too moist, and will thrive best with lots of hot weather. If the land is heavy and inclined to be poor, a wet spring, followed by a dry spell, will perhaps cause blossom-end rot; or the too liberal use of fresh manure just before planting.

As no two seasons are alike, the methods followed one season, which perhaps would result in success, would, if applied another season, result in failure. I have tried to tell the why. Successful growing is overcoming all weather conditions, and experience alone can teach this. A man must know his own soil requirements. Many of

Try to maintain a growth of young wood of at least 18 inches; of course, when there is a heavy crop of apples the growth of new wood will be less. Hochelaga Co., Que.

R. BRODIE.

Low-headed Trees at B. C. Experimental Farm.

Editor "The Farmer's Advocate ":

In reply to your list of questions, I would say the height at which I head apple trees is 21 to 81 feet ; pear trees, 21 to 31 feet ; plum trees, 8 to 31 feet ; peach trees, 3 to 31 feet ; sweet cherry, 2 to 21 feet; sour cherry, 3 to 31 feet.

I know of no reason why a farmer with a small orchard should or need head his trees differently, as the reasons for low heads apply to one tree as to one hundred. The fruit-grower who gets fine, clean fruit has to fight for his success, as there are so many enemies to both tree and fruit, and low-headed trees are very much easier to examine carefully, to prune, to spray, and to pick the fruit; and in this case ease means, for one thing, very much less expense.

I have endeavored to have all the trees of the sorts named headed low, very few of them exceeding three feet, and those only in Morello cherries, which do not grow very large or high. Trees headed low shade the ground under and about the trunk, so that there is less trouble in keeping down weeds, and the surface of the ground is cooler and mellower, and the trunk is, to a considerable degree, protected from sun both in summer and winter. The extension disk and a wide harrow appear to be the best implements for lowheaded trees. THOS. A. SHARPE, Agassiz, B. C.

Superintendent Exp. Farm.

The Valuable Artichoke.

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The Jerusalem artichoke (Helianthus tuberosus), or tuberous sunflower, is not grown as much as it deserves to be, considering that, unlike the potato (yet a native of the same warm country). it does not feel the frost, being perfectly hardy, and has no insect enemies or diseases ; this alone is a saving of labor and Paris green. The artichoke is as nutritious or even more so than the potato, and is valuable for feeding pigs, and is especially recommended for sheep. lt is an excellent substitute for potatoes, and is very prolific. An Ontario seedsman claims that artichokes planted in rows four feet apart, on strong soils, will produce 1,500 bushels per acre.

The ground should be prepared for artichokes in the same way as for potatoes. Any method that will succeed in growing good potatoes, will grow good artichokes. Last summer we succeeded in growing an excellent crop of artichokes by furrowing out and putting stable manure in the furrows, and, after covering the manure, dropping the sets a foot and a half or two feet apart in the rows, and the rows three feet apart. The crop was hoed once, and kept growing by constant cultivating; thus the ground was kept friable all summer. This treatment yielded us a splendid crop of large artichokes, with stems eight and nine feet high, a dense mass of foliage, sur-mounted by small golden sunflowers. It is said that the artichoke rarely flowers, but this year I saw the plant in all its glory.

All through September and into October, after the frost had taken the corn, we were able to cut fresh, green artichokes and feed them to the cows, which they enjoyed, leaves and stalks. This was an experiment of my own, as I had heard that sunflowers were used in a similar way, and I saw no reason why artichokes should not answer the purpose.

Since my experiments proved successful, I have read that the French are in the habit of feeding artichoke leaves to cows. In this way I got rid of my artichoke tops, got green food when it was scarce, and still had a good crop of tubers in the ground. The early frosts that injured the corn did not affect the artichokes, and we had an abundance of them growing behind the barn.

There are two varieties of Jerusalem arti-The white are chokes, the white and the red. not so irregular as the red or purple, and are easier to pare; but as far as quality goes, they are much alike. The best time to plant artichokes is in April or May, or in the fall, whenever the ground can be worked, as they are perfectly hardy. The sets should be cut like the potato. but the small ones ought to be planted whole. It is customary in England to sort out the small ones and save them for sets, and in the Old Country they plant them six inches deep, but I prefer shallow planting.

The artichokes may be dug from September onwards, or may be left in the ground until spring; but late in spring they begin to grow, and lose their value. Sometimes we plow the tubers out, or dig them with a fork or hack. Although artichokes are not affected by the frost when under the ground, it will not do to leave them exposed. If left to the influence of sun or frost, they will spoil quickly. They should at once be put in the cellar and covered with sand or sacks, as they wither easily, and it is desirable to keep them crisp and nutty.

The one disadvantage that the artichoke has

The artichoke will grow anywhere, but the better the soil and the better the cultivation, the better the artichoke. It pays to grow big tubers. Neglect means the little tubers that we often find in some out-of-the-way corner.

The artichoke is a native of Brazil, and was introduced in the year 1617. It is not a true artichoke, but a tuberous sunflower. The term Jerusalem is a corruption of the Italian word Girasole," as it is claimed that the first artichokes were grown in Rome.

For home use, we consider the artichoke one of our best vegetables. It can be eaten raw in salads or pickles, or cooked in soups or stews, and used as a substitute for potatoes. For pigs and hens, artichokes are good boiled or raw. Even the horses will eat tops or tubers, but some animals have to get accustomed to the taste of the leaves before they will eat them.

In French agriculture the artichoke fills prominent place; the leaves are fed to the cattle and the stalks used as fuel. The tubers are given to sheep and cows with salt and half the weight of dry food, and the young stalks are fed off to sheep and cows in spring before plowing. The artichoke will thrive under trees, where other things will not, and, to add to its many uses, it is grown by gamekeepers near preserves for feeding pheasants. EUNICE WATTS. King's Co., N. S.

A Nova Scotia Orchardist's Practice in Heading Apple Trees.

Editor "The Farmer's Advocate":

We have some thousand apple trees in orchard form, and have headed about five feet from the ground. After some twenty years' experience, am not inclined to vary much from this standard. I should certainly advise a farmer who intends to crop his young orchard to head his trees at five feet. The specialist, who intends to give his land fully up to the orchard, may with impunity drop the head a foot or two lower.

A low-headed tree will, in some measure, at least, protect the trunk from sun-scald, which often does serious injury. The low-headed tree is more easily pruned and sprayed, and, when the crop is thinned or graded on the tree, as our British Columbia friends are doing, the lowheaded tree becomes an essential. Gathering the crop, too, in these days of dear labor, is all in favor of a low-down tree. On the other hand, the greater difficulty in clean cultivation is an objection to low heads. In this, too, the professional orchardist has the advantage in lowheading, for he will be supplied with special tools, while the men who grow an acre or two of orchard as a side line to general farming must work their orchards with ordinary farm tools.

In these days one can hardly advise what course to pursue, for we are liable to have a revolution in fruit-growing methods in the near future. S. C. PARKER.

How a Lincoln County Fruit-grower Heads His Trees.

Editor "The Farmer's Advocate"

The following is about the height I should head young trees, varying some, perhaps, according to the habit of the variety : Apples, 3 to 31 feet ; plums, 2 to 21 feet; pears, 2 to 21 feet; peaches,

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tion of pollen, which falls or is carried by the wind from the tassels at the top of the plant to the silks at the end of the ear. Investigations here have shown that rye is also, to some extent, dependent upon the wind for pollination, whereas most of the other grains, such as wheat, oats and barley, are self-fertile. The red clover is largely dependent upon the bumblebee for pollination, although it was claimed by some beekeepers a few years ago that, with the introduction of the Italian, Cyprian and Holy Land races of the honeybee, these would be able to work upon the deep flowers of the red clover as well as upon the shorter flowers of the white clover, but I doubt if experience has proven that any of these strains of bees have proboscis long enough to reach the deep flowers of average-sized red-clover blossoms. O. A. C. H. L. HUTT.

The Bees in Midwinter.

This is the time of year when it is the bees' business to do nothing-absolutely nothing but stay alive, And the nearer to nothing it requires to keep them alive the longer they will live. From the time the bee takes its last flight in the fall until it flies again in the spring, its body must retain all the waste from the food it takes to keep it alive. It is, therefore, important that conditions should be such that the bee can maintain life with the least possible consumption of food. These conditions consist in absolute comfort and quietness, with a temperature just low enough to keep the bees in a semi-dormant state. The lower the temperature below the point at which the bees become dormant, the more food will be required to keep up the animal heat in their bodies. If, in addition to being too cold, the atmosphere be damp, conditions are very much worse, for it is cold and dampness that bring on dysentery, the great destroyer of bees in the winter. Any disturbance to a hive in the winter will excite the bees and cause them to consume more food than they otherwise would, with a corresponding increase in the accumulation of waste, and a decrease in comfort ; but a disturbance, such as having the cover lifted off their hive for a moment if wintering outdoors, or having a light taken into the cellar if wintering inside, produces only a temporary activity, and sometimes none, if the act be not repeated too frequently; whereas cold and dampness produce a continual and always increasing discomfort, which is very hard on the bees, and wears out their vitality, so that they die very soon after commencing work in the spring. But playing with bees in midwinter certainly does no good, and they should be let strictly alone, unless there is reason to believe that something is going wrong. It may be necessary to place a comb of honey or a cake of hard candy on a hive, that from some reason went in to winter light in stores; it may be necessary to break the crust on the snow, if such forms over the entrances of outside-wintered colonies, or to clean out the dead bees from the entrances, if there is danger of their becoming clogged so the inside bees cannot obtain fresh air sufficient to keep them comfortable; or to look at bees in the cellar occasionally, to see that all is well; but the more the bees can be helped in their work of doing absolutely nothing at this time of year, by being let entirely alone in perfect comfort and quietness, the better will be their chances for earning dividends for their owner five months hence. E. G. H.



that it is hard to get out every tuber when digging. Many of the tubers branch out quite a distance from the plant, and any left in the ground will be sure to grow next season. The best artichoke-digger is the old sow; she never fails, and I should think that where ground is infested by white grubs it would be well to plant artichokes and turn the pigs in to root out grubs and artichokes, thus killing three birds with one stone.

After Braconnot analyzed the tubers of Jerusalem artichokes, he obtained the following results : Water, 77.150; grape sugar, 14.800; inuline, 3.000; citrate of potash, 1.070; gum, 1.220; wood fibre, 1.220, and small percentages of albumen, fat, phosphate of potash, sulphate of potash, phosphate of lime, citrate of lime, chloride of potassium, malate of potash, tartrate of lime and silica.

Boussingault gives the average composition of the artichoke tubers as follows :

and the second	Fresh stat	e. Dry.
Nitrogenous matter	2.38	10.00
Organic matter free from nitrogen	19.99	84.00
Ashes	1.43	6.00
Water	76.20	
	100.00	100.00
The composition of the artichol ing to Boussingault, is as follows	:	
	Fresh	Dry
	stems.	stems.
Nitrogenous matter	2.18	2.5
Organic matter free from nitrogen	82.48	94.7
Ashes	2.44	2.8
Water	12.90	
v	100.00	

cherries, feet to 3 feet

The reasons for low heads are several : It is not so much trouble to prune or pick your fruit; the fruit is not so liable to be blown off by wind, and the trunks are less liable to sun-scald.

The chief objections are in cultivation, which may be overcome by use of proper implements, such as grape hoes, extension harrows and cultivators, plows, etc. I have never found any serious trouble in several years' experience. Would do the same either in small or large orchards. Lincoln Co., Ont. A. M. SMITH

APIARY.

The Bee as a Pollinizer.

Please tell us in a few words how far the pollination of flowers, fruits and grains is dependent upon the agency of the bee? C. W. L.

The pollination of flowers, fruits and grains is 10.00too large a subject to be disposed of with a few 84.00 However, to be brief, I may say that words. 6.00 most of the flowers and fruits which have large blossoms are largely dependent upon the bee and other insects for distribution of the pollen. The 100.00 common honeybee is one of the most valuable agents in this work of pollination. I have frequently noticed that some of the most productive orchards in this Province are those in which the growers make a practice of keeping a few hives of bees, or where bees are kept in the near vicinity. There are, however, many species of wild bees, as well as other insects, which are active in the distribution of pollen.

With regard to grains, I may say that corn 100.00 is largely dependent upon the wind for distribu-

Man's Methods for Getting A Young Winter Eggs.

It seems to me a great many people must keep hens because they think hens are worth keeping for the sake of a few summer eggs, or else they do not think at all. I have had only a few years' experience, but I have come to the conclusion that the hens which lay throughout the winter, when the prices are high, are the ones that are putting money into their owners' pockets. I am not boasting about my hens, neither do I think they have done extra well, but I think they have more than paid for their keep. Here are a few of my figures : In October, 1906, I sold 111 doz. eggs, receiving for them \$2.08; in November $11\frac{1}{2}$ doz. for \$2.90; in December 11 $\frac{1}{2}$ doz. for \$3.02; in January 171 doz. for \$5.25; in February (to date, 11th) 16 doz. for \$4.00. The prices per dozen ranged from 17 to 30 cents.

I keep about 60 hens, and in the morning throw some oats in the litter for them, along with about a handful of broken crockery and green bone. This keeps them scratching till about noon, when I give them a pail of dry provender, composed of equal parts of oats and barley; and every intervening day I give them a pail of skim milk and warm water, with beef scraps in it. Then, about three o'clock they receive some more grain, to keep them scratching till bed time. Every day I throw open the door so as to allow them to get plenty of fresh air and sunshine. I always keep clover chaff in a shallow box in their pen, and they seem to like the little clover leaves. I always try to keep them scratching and working hard the whole day long. Glengarry Co., Ont.

A. M.

FEBRUARY 21, 1907

THE FARMER'S ADVOCATE.

Nestful of Nuggets from the Poultry Institute at Guelph.

The second annual Poultry Institute, held at plan to last more than four years. the Ontario Agricultural College, opened on Tuesday, February 5th, under very auspicious circumstances. There was a goodly number in attendance, composed of Short-course students and interested poultrymen from far and near. The meetings were addressed by a number of very able men-experts in their own particular lines-among whom were Charles A. Cyphers, Buffalo, N. Y.; J. L. Nix, Homer City, Fa.; Prof. J. E. Rice, Ithaca, N. Y.; L. H. Baldwin, Toronto; Prof. W. H. Day and Prof. W. R. Graham, of the O. A. C., and a number of other well-known poultrymen. Throughout the entire session the keenest interest was evinced by the audience, as of men who were there to learn, and truly great opportunities were at hand for the gaining of knowledge along the various phases of poultry-keeping. It is regrettable that this Conference is not more widely advertised, in order that people might know just what is going on, and that even more might take advantage of this great source of practical information.

SELECTING, FEEDING AND HOUSING OF LAYERS.

In the opening session of Tuesday afternoon, Prof. Graham dealt with "The Selecting, Feeding and Housing of Laying Hens." He stated that egg-production was the best end of the poultry business; if we could increase this, we were doing a great stroke of business. The average hen throughout Ontario did not produce over 80 eggs in twelve months. Even in the average experiment stations he did not think it would be more than 100 eggs per year. The only sure method of advance was by the use of trap-nests; by finding out what each individual hen was doing, and breeding only from the heavy producers. He was much surprised when he started to use trap-nests at the very small percentage of really good layers that existed among his own flock, and of the large percentage of drones he possessed-some that never laid an egg, and never would. The only absolutely sure way to locate and eliminate these non-producers was by means of the trap-nest. Other systems had been advanced for their identification, but all had failed to a greater or less extent. The chief drawback to the trap-nest was the amount of labor it involved, but breeders would have to use it sooner or later, or be forced to the wall by those who were using it. The hen with a large crop could usually be counted on to be a good producer. Like the dairy cow, she must be able to consume feed in order to produce. This could easily be determined after feeding time and the hens had gone to roost by feeling of the individual One should select cockerels that crow crops. Constitution was the strong point to be early. considered. Early-maturing birds usually proved to be the best producers, but in following this up one must guard against lack of size and bone. The male is at least half the flock, therefore one could not be too careful in his selection. As to the matter of housing, there was a great diversity

colony-house plan was the best for the beginner. Mr. F. C. Elford, of Ste. Anne de Bellevue, Que., was then called upon. He briefly outlined the work of the Poultry Department at the new Macdonald College.

A SCIENTIFIC STUDY OF INCUBATION PRINCIPLES.

On Wednesday morning Prof. W. H. Day very clearly outlined the scientific research he had made in connection with artificial incubation during the past summer. Several factors were concerned, among which were temperature, evaporation, and the question of carbon dioxide. He believed the hen to be our best teacher, and we must find out the conditions which prevail under her. When we know the proper conditions for the best results in artificial incubation, little difficulty will be experienced in making the mechanical contrivances to supply these conditions. All that had previously been done in connection with this problem had been mere guesswork. They were endeavoring to find out the real facts of the case by scientific

HEAT AS A FACTOR OF INCUBATION.

Mr. Chas. A. Cyphers in the afternoon took up the discussion on artificial incubation. He considered heat to be the common principle and the great factor in incubation. A certain number of heat units were necessary to ripen the egg for hatching. It was a question of applying the heat to the egg. The more one could cool the eggs, and still get the chick out on time, the better the hatch he would have, and the more vigor he will get in the chicks. The question of balancing up the heat with the cold solves the problem of artificial incubation in his estimation. Losing sight of this was the cause of imperfectly-hatched chicks and of chicks sticking in the shell.

Mr. Nix then took up the discussion. He said the work that Prof. Day had accomplished during the past season was the only scientific work that had ever been done on artificial incubation; all the rest had merely been guesswork. The problem at hand was a difficult and intricate one. There was little difference between hens and incubators up to the seventh day of incubation. The great difference was at time of exclusion from the shells. More chicks die in incubators than under hens. There were no absolute facts in artificial incuba-tion. He believes the "old hen" is onto her job ; that is, the normal hen in which the natural instincts have full play. We must find out the unknown factors, such as the amount of carbon dioxide, which exist under the hen, and apply them to our machines. This, Prof. Day was endeavoring to do, and he deserved great credit for his work.

ARTIFICIAL BROODING.

On Thursday morning Chas. A. Cyphers again occupied the platform, this time discussing artificial brooding. Different brooders required different manipulation; no rules would apply to all Chicks must be kept warm enough for the alike. first week or two, should not become chilled, or white diarrhœa would result. A board floor, with a cut-clover litter, he found to he Dest Ior Leg-weakness he considered due to lack them. of fresh air and exercise. The hopper system of feeding was all right for outdoor work, but chicks could not stand it inside. Of course, chicks must be kept dry; a man who would rather let his chicks get wet than get wet himself, had better keep out of the poultry business. Mr. Nix followed on the same subject. Successful artificial brooding was a matter of vitality, which was difficult to obtain out of the natural season. We must have good eggs well incubated before brooding could be a success. The best results were obtained from an individual lamp brooder with a regulator on it. The first ten days was the critical period in a chick's life. The temperature and ventilation must be right. A uniform temperature was necessary, the heat being applied from the top, and using forced ventilation (not accidental, as was too commonly practiced), these being the essentials of a successful brooder. The brooder temperature should be regulated by the appearance of the chicks. A good nursery brooder should be good enough to hatch eggs in; the conditions should approach those of the incubator for the first few days. A sheet of coarse paper, used in the house, as in a canary cage, made it easily cleaned. The lamp should be left going constantly, no matter how warm the day, as the chicks were easily chilled and then trouble would set in. A brooder chick will eat anything it can swallow during the first few days, therefore care must be exercised in that which is placed in its way. The hopper system was unsafe before the ninth or tenth day. Anemia was the great ailment of brooder chicks ; one hundred per cent. of them were more or less affected by it. A hen hatches a normal egg into a normal chick ; the incubator does not. never knew but one poultry plant on the extensive about 80 per cent. of the conditions are right in

The best brooder made At least, the the best incubators. would not reproduce the conditions found in nature; therefore, here, again, we have vitality im-paired, the extent of which is dependent upon the care and experience of the operator.

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EXPERIMENTS AT CORNELL ON FORCED MOULTING.

Prof. J. E. Rice gave the results of some recent experiments conducted in the Poultry Department of Cornell University. The first was an experiment to prove if the hens could be forced to moult. Six pens of hens were used in this ex-Part of them were starved for a time periment. in order to induce moulting ; the others were fedin the ordinary way. In the starved lot, a great lowering in the production of eggs took place; the moult was started earlier, but both lots finished their moult at the same time, and from the lot fed in the normal way a much greater production of eggs was obtained. The conclusion drawn was, better to let a hen lay when she wants to lay, and not stop her and take chances on getting her laying again. Just twice as many eggs were laying again. produced by the normally-fed lot.

HEAVIEST LAYERS THE LAST TO MOULT.

Some observations during the experiment were : The heaviest producers were the last to moult; the poorest layers moult first. Thus, a farmer who followed this method of selection, and killed the hens that moulted last, would do away with his best-laying stock. A normal hen when she stops production will moult ; a healthy, normal moult takes place-a few feathers at a time, without being noticeable. He had discovered where the first feathers came from : The down on the chick's body forms into the first quills-i.e., the down grows into feathers-just as the down on a youth's upper lip would grow into a moustache. UNDERFEEDING PULLETS DID NOT LESSEN MOULTING.

The next was an experiment in the treatment of early-hatched pullets to keep them from moulting the first fall. One lot of pullets were restricted in their nitrogenous feed at the time they began to shoot the red, in order to retard eggproduction. The other lot were fed normally on egg-producing foods. The results were : The pullets that had been doing the heaviest laying those which were fed to produce eggs-moulted the least. Some that had never laid an egg moulted the most. Therefore he concluded that holding back meat and egg-producing food from pullets had no effect upon retarding moult ; that one had better feed liberally and take chances on moulting; to let nature take her own course as to moulting, and to take the eggs when you can get them.

LIME NECESSARY FOR HEALTH OF FOWLS.

Another, experiment was to ascertain the function of grit. Two pens of cockerels were selected, fed normally, except that all lime was withheld. One pen received powdered mica spar, the other pen the ordinary mica spar, or crystal grit. The birds did not thrive, and had to be turned out in order to save their lives. In trial of the same kind with pullets, they their eggs when lime was kept away from them. By testing breaking joint of thigh bones of these birds, it was proved that a hen would use the lime in her bones to produce eggshells if she could not procure it in any other way. One pullet's legbones actually became flexible during the experiment. The pullets seemed to have an abnormal craving for something they could not get. When lime was restored to them, all quit eating their eggs. Thus, oyster-shells or lime in some other form were proved to be absolutely essential to the hen. A laying hen must have lime in liberal quantities.

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of opinion, but the majority at the present time stood for the so-called cool house, dry, and comparatively free from drafts in the roosting compartment. His hens laid better in cold houses than in warm houses. He wanted a dry house in which there was no smell of hens. There was nothing equal to a straw loft for keeping the house dry in winter time and cool in the summer. The feeding of laying hens was not a difficult problem, if the breeding and housing were right. The breeding was the largest problem ; we should pay more attention to it. In feeding, a great deal depended on the attendant. There were three points to bear in mind in feeding : Feed vegetables, meat and grain, and give exercise.

Mr. W. A. Brown, of the third year at the ('ollege, was the second speaker of the afternoon. He interested the audience by a graphic description of the work of the West Virginia Poultry Experiment Station, after which an interesting discussion took place on hopper-feeding and trapnesting.

IMPORTANCE OF VITALITY IN EGGS.

The evening session was addressed by President Creelman, who dealt with the general conditions of Ontario and the work of the College.

Mr. Nix, of Homer City, was the second speak-He laid great emphasis unon "Vitality," claiming that everything in the poultry business was involved in this word. If eggs were strong in vitality, any machine would hatch them. Poor vitality in eggs was a great source of disappointment to the poultry-raiser. He stated as his belief that the dry method of feeding (hopper-feeding) had done more to increase vitality than wet feeding had ever done. In order to keep up this vitality, we must resort to the colony-house plan, with the open range and hopper-feeding. He

MORE ABOUT INCUBATION.

Mr. L. H. Baldwin, the efficient chairman of the Conference, then resumed the discussion of artificial incubation. He recommended the running of machines at a high temperature, as less mortality resulted than with lower temperature. The ordinary thermometer sent out with machines was not reliable ; great mischief might be worked by an unreliable thermometer. He was convinced that 103 degrees on the eggs by an accurate thermometer was the best temperature to start with. After that the eggs should get more airing and cooling than was usually given. The percentage of evaporation seems to make little difference; the egg seemed to be able to control its own evapora-White diarrhoea, so common among incubator chicks, was rarely found in hen-hatched This disease could be overcome, he believed, by running incubators at a higher temperature; at least his experiments had proved it to be so.

In the evening Professor Rice gave an illus-trated address on "Poultry-raising in New York State." He advocated free range as the great means of keeping up vitality. He also gave a very fine series of slides, showing in a graphic

manner the principal points in his address of the afternoon.

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LET US TAKE OUR CUE FROM THE HEN.

In the morning of the last day of the Conference Prof. Graham took up the already muchdiscussed artificial incubation, but dealt with it from the practical side. The size of air cell was little indication of incubation ; weighing was the only accurate means of determination. Vitality was the all-important question. The old hen knew her business, and we could not imitate her too closely if we would have success in incubation. He thinks the question of evaporation of little consequence, and that it is impossible to drown chicks in shell by lack of evaporation. A machine should be run with two thermometers-a suspended one, and a clinical thermometer on the eggs, so as to get the maximum temperature.

Mr. Wm. McNeil, of London, was then called on to give his experience in the poultry business. He stated if the eggs were produced right, it was no trouble to hatch them, but it was a hard job to hatch a poor egg. Breed from a few good hens, and you would get more chicks. One should never place a setting of eggs under a hen until she had set for three or four days and settled down to her business.

Miss Yates, of England, claimed as her experience that "laying propensities" was a matter of strain, not of breed.

In the closing session, Friday afternoon, Mr. McNeil gave a practical demonstration of fitting birds for showing. The essentials of the business were to have the bird tame, well trained, and looking his best. Birds could be fed to color, to produce gloss, etc. The great cause of roup was feeding too much water and soft feed. Some practical demonstrations in judging exhibition stock were then given by Mr. Oke, on Buff Orpingtons; Milton Cosh, on Barred Rocks, and John S. Martin, on White Wyandottes, which were very intently followed by the audience.

Before adjourning the Institute for the year, a resolution was passed requesting the Government that they continue in the work of investigation which has been started, and that they lend the aid necessary in ferretting out these problems that mean so much to the poultry interests at large.

Prof. J. E. Rice, of Cornell University, Ithaca, N. Y., in the course of an address at the Poultry Institute at Guelph, said one of the results of withholding lime from pullets was that they ate all their eggs. When lime was supplied, they quit the habit. This may account for not a little of the egg-eating about which so many correspondents complain.



Ireland's International Exhibition.

A couple of months ago I intimated my intention of supplying the readers of "The Farmer's Advocate" with some particulars regarding the great International Exhibition which is to be held this year in Dublin Now, when we have got within sight of the actual opening date, is, perhaps, a most appropriate time at which to fulfil this promise. At the outset it may be said that, like most undertakings of its kind, the exhibition is primarily intended to directly benefit the country in which it is held, but true to its title,

not assume the serious nature it threatened, loomed ahead for the promoters. A certain section of the public took a somewhat vigorous exception to the idea of an International Exhibition, and agitated in favor of an exclusively national display. This division of opinion did not, however, lead to any very farreaching results, as the "extrems homers" soon retired from the battle of arguments, and the much more numerous, influential and broad-minded "international" enthusiasts, enjoying the assurance of a guarantee fund which soon amounted to over £150,000, and has since increased, went on their way rejoicing.

On visiting Herbert Park at the present time a scene of wonderful bustle and activity is presented. A staff of about 600 or more men is busily engaged in levelling the ground, marking out the designs for artistic horticultural plots and landscape gardening effects, making the broad, gracefully sweeping carriage drives and promenades, and pushing on towards completion the other exterior and spectacular features that demand attention throughout the grounds. Inside the numerous buildings the constant dinning of the workman's hammer forms a welcome, if not harmonious, music, to remind us cheeringly that a time of general and increased activity may yet revisit the trade circles of our big city. With an area of over fifty acres, ample room is afforded for the purposes of the exhibition; already the erection of most of the principal buildings has been nearly completed, and when all have been finished, and the laying out and decoration of the grounds effected, the opening of the gates early in May will give admittance to a series of most entrancing scenes, constituting a panorama as striking in its heauty and impressiveness as the art and skill of man could make it.

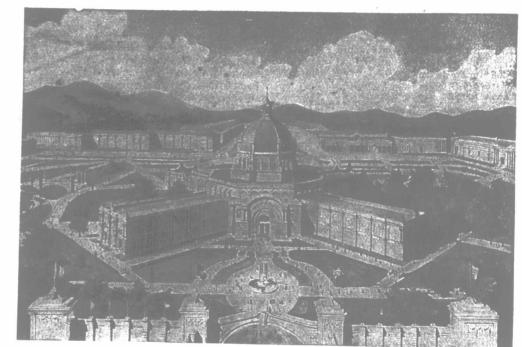
The engraving which appears on this page gives a much clearer impression of the manner in which the grounds have been utilized than would any number of

will be a feature of prime importance, but agriculture will also have an additional representation, as with great enterprise an influential body, known as the Irish Manure Manufacturers' Association, have taken, in conjunction with the Potash Syndicate, a considerable space, and have planned a large number of demonstration plots. On these it is proposed to show during the season the effects of various combinations of artificial manures on different crops, and also to test the merits of different seeds, etc. An attractive pavilion of inquiry, which will contain a display entitling it to the name of a museum, is being erected, and everything would point to the section possessing a very direct and beneficial interest of an educational mature.

On the left of the picture will be seen a portion of the artificial lake, spanned by a couple of pretty Venetian bridges, which greatly enhances the beauty of the spot, and still further in the same direction, but too far to be shown, a most instructive and interesting display will be made, under the superintendence of our esteemed and popular Vice-Reine, Lady Aberdeen, who is arranging to have a model laborer's cottage, garden and homestead.

Taken collectively, the various sections catered for may be summarized as follows : Irish industries; history and education; fine arts; arts and crafts; liberal arts, manufactures; textiles and various industries; engineering and shipbuilding; civil engineering and transportation; electricity; motors; gas lighting, heating and cooking; agricultural implements and chemical industries; agriculture and food products; sport and fishing; mining and metallurgy; hygiene; women's section, and cottage industries.

Travelling is so rapid and comfortable nowadays, it is anticipated that the exhibition will be patronized by large numbers of visitors from abroad, while the crowds from various parts of Ireland and Gt. Britain are certain to be enormous. Boarding-house keepers columns of written description. The various buildings and hotel proprietors are, therefore, being organized,



Irish National Exhibition Buildings.

are both extensive and

and the necessary steps taken to cope with the great influx visitors. friend of mine, recently e o m e home from Canada, tells me in many that parts of the Dominion, as well as in the States, the coming event is arousing much attention, and that several people intimated to him their intention of "taking a trip across to Ireland for your Dublin Exhibition of 1907. Im view of this, I hope these few notes may prove of interest. Need it be said, that even without an exhibition in its capital, Ireland is a coun-

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scope is not in any sense limited to Ireland. The objects aimed at are two-fold, viz.: (1) to promote the industries, art and sciences of Ireland, by a display of the products for which the country is famous, and of the products of partially-developed industries, for which special facilities exist in the country; and (2) to stimulate commercial development and promote industrial education, by inviting all nations to exhibit their products, both in the raw and finished state. No such project, with any pretensions to international importance, could possibly be of "mushroom" growth, and Dublin Exhibition is no exception to the general rule in this respect. As evidence of this, it is sufficient to mention that no less than four years have elapsed since the venture was first mooted, so that the event to which we are looking forward with keen anticipations of success will be the outcome of careful deliberation and persistent effort.

The main difficulty that had to be surmounted at the very start was the selection and obtainment of a suitable site. The merits and demerits of many places surrounding the Irish metropolis were considered, but they were found in one way or another inadequate. Eventually, however, the obstacle was removed by the acquisition of an extensive site (about 55 acres) a mile and a half from the center of the city, and almost adjoining the spacious show premises of the Royal Dublin Society, at Ballsbridge, the two being separated only by the River Dodder. The locale of the exhibition known as "Herbert Park," and is served by too he than three lines of electric tramways-there are. haps, no finer cars in the world-and is within an significant distance of a railway siding, which afford inter-communication with all the sea ports, docks and railway stations in the country. Admirahly, therefore, was the initial difficulty overcome, but when it was disposed of, another trouble, which, fortunately, did

sign-quite in keeping with the pretty setting in which nandsome architectural de they are located. The main entrance for the public, at Ballsbridge, is an imposing arrangement of towers of mediæval style, which open to a spacious courtyard, from which access is gained to the grounds proper by means of a structure that can best be likened to a drawbridge on a huge scale. From the inside end of this the visitor is confronted with the main building, which forms the most prominent feature of the illustration. It consists of a central octagonal court, 215 feet in diameter, surrounded by a corridor opening into four radial wings, each 164 feet long and 80 feet wide. It is proposed to devote these outjutting sections to exhibits of industries, etc., representing the four Irish provinces. The building is surmounted by an octagonal dome, 80 feet in diameter, and reaching to a height of 150 feet. The surrounding pavilions, shown in the illustration, will be utilized for the various other exhibits usually found at such events. A building 900 ft. in length is to accommodate machinery of different kinds, and a special fireproof structure is being erected for the installation of collections of modern art from sources at home and abroad. Most of the colonies and foreign countries are coming forward with exhibits, and I understand that pre eminent among the features under this category will be the magnificent structure which is to represent in Cauadian Government. It will occupy, I am inenel, 20,000 sq. feet, and is being especially conmiled for the purposes of this exhibition. It is tel in the vicinity that appears in the picture at right hand side, behind the central dome. No $r_{\rm ev}$'s the educantageous position and extensive space coursel will be made good use of in effectively a the products of Canada's agricultural and al section set upart for Irich fairy produce

natural attractiveness, due largely to its fresh scenic beauties, which it possesses in a variety peculiarly its Strangers who come to our shores are good enough to unanimously admit that the Irish people are unsurpassed for their kindliness and the warm-hearted welcome they ever extend to the visitor, so that all I can say by way of conclusion is : If you can, just take advantage of the many travelling facilities that will doubtless be provided, come along some time between May and October, and see how things are getting on with us in what to many readers of "The Farmer's Advocate " will ever remain, the dear old homeland. EMERALD ISLE.

Questions Answered for Subscribers Only.

D. H. Wason, of Glengarry Co., sends questions about cement fence posts. We do not find the name on our subscription list at the place indicated in his letter, but if he will advise us that it is on at any other post office, naming it, of course, or if he will send \$1.50 for a year's subscription, his inquiries will receive attention. Every now and then we receive inquiries from non-subscribers, accompanied by a stamped envelope for really. They do not seem to realize that the stamp is the least expense of an answer. The time of the editors and stenographers is the principal item, and every minute of it is worth money. Our questions and answers department is free to subscribers. but to them only. We cannot allow ourselves to be imposed upon by others. The least any non-subscriber may do in asking us for information is to send along the price of a year's subscription, for which he will receive full value in the fifty-two issues of the paper. To send a question without is a waste of

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THE FARMER'S ADVOCATE.

Many Tariff Changes.

Hon. Mr. Fielding, Finance Minister, has given Parliament notice of 120 changes in the Canadian tariff, as originally submitted on November 29th last.

A bounty is authorized on binder twine manufactured in Canada from manilla fibre not to exceed # of one cent per pound, and equal to the amount paid as export duty in the Philippine Islands on manilla fibre. This is represented as meeting the chief demand of the twine and cordage manufacturers without (directly), inereasing the cost to the consumer. A second resolution exempts from the dumping clause provision binder twine manufactured from New Zealand hemp, sisal grass, sunn or single-ply mixtures not exceeding 600 feet to the pound.

As a concession to market gardeners the duty on potatoes is increased 21 cents per bushel, being fixed at 121 cents preferential, 171 cents intermediate, and 20 cents general.

The specific duty on fresh tomatoes, which was respectively 50 cents, 65 cents and 75 cents per 100 pounds, is changed to an ad valorem duty of 20 per cent., 271 and 30. The duty on plums goes up from 20 cents per bushel to 30 cents. To the free importation list of certain classes of florist stock is added "seedling stock and rose stock for grafting." The duty on figs and dates is slightly reduced.

The British preferential tariff on preparations of cocoa and chocolate (N.O.P.) is reduced from 25 per cent. to 221; the other rates remain at 321 and 35 per cent.

The general tariff on crude petroleum, gas, oils, other than naphtha, benzine and gasoline, is reduced from 21 to 11 cents per gallon.

In item 445, after "reapers," the words are added, " and complete parts thereof, not including shafting," preferential, 12; intermediate and general, 17; per cent. each. A similar provision is made regarding complete windmill parts, preferential, 121; intermediate, 17; general, 20 per cent.

en the free list. Another item provides for a draw- 12; fish scales, 6; spring scales, 6; lard pails, 80. Let back of 99 per cent. of the duty on bituminous coal us be grateful that there are not many cities on this

matter, tobacco, articles containing spirits or mer- home conditions.

chandise for sale when the duty otherwise payable thereon does not exceed 50 cents in any one case under regulations by the Minister of Customs, free in all tariffs. Microscopes valued at less than \$50 are also put on the free list, and certain parts of machinery used by twine manufacturers.

Hereafter, raw sugar, to get the benefit of the preferential duty, must be imported direct and entered at a Canadian port, which will affect adversely the Montreal refiners who have been importing via New is evidently designed in the interests of Canadian shipping and our Maritime ports.

From a South African Reader.

From far South Africa comes a letter from a friend of "The Farmer's Advocate," Thos. Bradshaw, Department of Agriculture, Orange River Colony, who in sending his subscription encloses a few notes which remind us of the seasons and doings of our British cousins under the Southern Cross: "We are having a splendid summer," he writes, "rain, blessed rain, in abundance, and crops are looking fine. We have started cutting hay this month; last summer it was February when we started. What a difference the rain makes in a dry, hot climate like this. Corn looks well; one farmer alongside of us has 1,000 acres. It is a sight to see, with its nice dark-green color. All the corn is allowed to get ripe. There have been great swarms of locusts in different parts of the country, and some farmers have had all their crops eaten off. This locust is a terrible pest in Africa."

The Chicago city "Sealer," Joseph Grein, as the result of a year and a half's work by his office on the lake front, confiscated over 1,000 fraudulent weights and measures. It included : Dry measures, 600; liquid Well-drilling machinery, not made in Canada, is put, measures, 100; baskets, 50; bottles, 300; ice scales, when imported to be converted into coke for smelting. continent with such depth of business and moral de-Hereafter "presents" will be on the free list, a pravity as obtains in the Windy City. Chicago, howelause as follows being inserted : Casual donations ever, has no monopoly of the cheating business. It from abroad sent by friends, and not being advertising is worth while for other cities to take notice of their Stewart will naturally come under Provincial jurisdic-

Prospects for Beef.

Present indications point to higher prices for beef cattle this season. The unusual severity of the Western winter has had a serious effect upon the range stock, of which it is estimated by several authorities that fully fifty per cent. will have perished through exposure and starvation. For some twenty years such a winter has not been experienced. In addition to York, in order to secure better ocean freights, but it the heavy snowfall the Chinook winds have not been sufficiently long continued and warm to uncover the Alberta grass, and being quickly succeeded by severe frosts, the prairie became coated with an icy crust. Many ranchmen put up little or no feed or shelters for stock, so that the cattle that do not die outright will be very thin. As the Western population is growing rapidly, and much railroad and other work being done, a great deal of meat will be required this year, and the Northwest people are liberal meat-eaters under all circumstances. Consequently, there will be fewer cattle to ship east.

> Through several of the beef-feeding sections of Ontario fewer export and butchers' cattle are reported in the stalls, and feeding cattle of any sort are hard to secure. These facts, coupled with the higher prices of other animal products, such as cheese, butter and bacon, will naturally tend to force beef prices up to a high figure.

> We should like to hear from feeders what the prospects are for supplies, and prices in their respective districts.

Dominion Superintendent of Forestry Resigns.

Mr. E. Stewart, Dominion Superintendent of Forestry, has resigned to connect himself with a large lumber company in British Columbia. A successor may not be appointed for some time. In the Eastern Provinces forestry is looked after by the Provincial Governments. The Dominion foresters' work has been chiefly in connection with Western lands, and now that Saskatchewan and Alberta are provincially organized, some of the work hitherto done by Mr. tion.



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The Ontario Agricultural College Stock-judging Team, Champions and Winners of the Spoor Trophy at the Chicago International, 1906. From left to right : Standing-W. J. Hartman, Prof. G. E. Day, Dr. J. Hugo Reed, Prof. H. S. Arkell ; sitting-C. C. Nixon, H. Barton, A. McKenney, R. S. Hamer,

Our Maritime Letter.

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The rather frank criticism of Mr. Registrar White, at the annual meeting of the Fruit-growers' Association of Prince Edward Island, has had the effect of compelling, in the officiality of the institution, a degree of introspection seldom if ever before equalled in that body. They were living, if the inferences were at all true, in a sort of fool's paradise; and possibly cumbering the good ground, which planted to better stock would long ago have brought forth fruit both pleasing to the eye, delicious to the palate, and potent in the wealth of dollars from it obtainable. No acknowledgment whatever of any virtue in the administration would be made either.

The oldest members of the association, feeling perhaps for the chair, and for their own reputation as members of a useless society, were inclined to resent the imputation somewhat peremptorily. The flush of rising indignation crimsoned the President's cheek, but, controlling himself, he there and then resolved that if he must occupy the position longer, the charge would have to be examined into in all its bearings-denounced if denouncement worthy; admitted if just, and the necessary steps taken to remove the organization from the blameworthy circle.

In this world of puff and foolish adulation, the tendency, even with those we call sensible men, is to apply the flattering unction to their souls in coats thick enough to scale off readily in a moment, one would think; and go on inhabiting the fool's paradise, in a state of sweet and serene unconsciousness. We may have been there. It is a blessing to have someone with the courage of Mr. Registrar White to disallusion that sort of functionary. We have the candid friend for our own, in any case, and we are going to profit, in so far as may be, by his fraternal correction. ready we have increased our concern in the New Year's work, and hope to be able to face our constituency next time with the record of something done.

"You have been organized now for eleven years," he said in substance, "I'have come here year after year for five years, and in all that time I have never heard a discussion on varieties; not a single variety has been discussed to a finality and adopted by the association as the right one for any Islander to grow." There was an impeachment for you ! If this were the primary work of the F.-G. A., then had we surely Interested in "Amateur Farmer's" Ac-

Let us hasten to inform our readers, however, that we have had discussions time out of memory, on varieties. They come up always. The chair has its greatest difficulty in side-tracking them. We had even had committees appointed to recommend the sorts of apples adapted to growth here; but nobody, it is true, had debated a single variety to the general acquiescence, and declared it the apple of all others Islanders should grow. Our sin was one of omission; it was a sin all the other organizations had fallen under; equally, it is likely to hold against us long, for we are convinced that we will never reach that happy concensus of opinion when unanimously, and after discussion even bordering on physical exhaustion, all will agree to pronounce this or that apple the one par excellence for the country.

Here is the list our association had long ago recommended to planters, and every year revised. Some would fight forever against any one of those being preferred before the other. We can grow them all well; that is all : Alexander, Baldwin, Baxter, Ben Davis, Blenheim, Canada Red, Fameuse, Gravenstein, King; McIntosh Red, Mann, Northern Spy, Oldenburg, Ribston, Roxbury Russet, Stork, Talman Sweet, Yellow Transparent.

But if we are to be condemned on the White charge risum teneatis amici-how are the other associations busy age, to justify existence. The instruction cam- of all in such a manner that they cannot well be forpaigns even must be aggressive. If there is anything to do we should be up and doing. Is there anything to do? Scan the Agenda Paper of the Council and see for yourself? But the means to do this with? It will be forthcoming, too, if the work be well considered and of a kind to impress the country. Governments of the day follow rather than mould public sentiment. The question is, what is Ontario doing, what is Nova Scotia doing, what is Quebec doing, to make their fruitgrowers' associations a vital force in the land? And, as we said, we put the question primarily to ourselves.

A. E. BURKE.



A. C. Halman, Breslau, Ont. President Holstein - Friesian Association of Canada.

counts.

Editor "The Farmer's Advocate"

In your issue of February 7th I notice a balance sheet showing a net profit of \$1,251.01 from a 195acre farm, signed "Amateur Farmer." Now, I have been keeping farm accounts for the past six years, and I was very much interested in that balance sheet, but there were some items upon which I would like more information, and since "Amateur Farmer" seems like good fellow, perhaps he wouldn't mind giving a classified statement of his expense account, not in detail, but how much for wages, threshing, etc., also how many bushels of grain he threshed; also his receipts, what all he sold that went to make up that \$2.702.20.

I have been a reader of your paper for only three Knockenlaw Daisy, '03; R. Anderson, Salford 205 years, and will continue to be as long as I can make a profit out of farming. INQUIRER. Hastings Co., Ont.

[Note.-We hope to hear from "Amateur Farmer" again, as well as from others who have been keeping held in the Winter Fair building, at Amherst, N. S., farm accounts. Let each correspondent describe his on February 14th. There were some good Shorthorns

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gotten.

'As regards the work and mode of carrying it on : On Tuesday morning, January 8th, the students gathered in the new mechanical building, and every morning after met at the same place for one hour's study of seeds and seed-growing. From the seed building we always went to the judging pavilion - a round building, well heated and with abundance of light and seating space for about four hundred.

. . .

"Wednesday afternoon was devoted to the beefcattle score-card, a great thing in the education of the mind for picking out points.

* * *

 $^{\prime\prime}$ The study of seeds, taken up from day to day by Professor Zavitz; there was great interest taken in this branch by all the class, and a lot of valuable information derived from the same, both as to the quality of seed to sow and the time of sowing.

. . .

"The lectures conducted each evening by different men on different subjects were also a very important part of the programme, dealing with the soil cultivation and the feeding of different stock.

"There were in the neighborhood of three hundred and fifty young men and old attending, and all any one could say was that it was one of the finest and most instructive courses or meetings they had ever attended. All wished the course to be longer, and thanked the Professors for their great and untiring interest.'

S. J. Prouse's Clydesdale Sale.

The auction sale of imported Clydesdales belonging to Mr. S. J. Prouse, of Ingersoll, Ont., on February 13th, was fairly successful, in so far as the disposal of the mares and fillies was concerned, though Mr. Prouse expected far better prices for some of them. Stallion buyers were not present in any considerable number, and only two were sold, so Mr. Prouse has a number of useful stallions that were not put up, owing to the absence of demand, and these are held for sale privately at reasonable prices. Following is the sale list of mares and fillies :

MARES AND FILLIES.

Polly Homes, foaled 1902; Thos. Delaney, Ingersoll ...

Stately Step, foaled '05; Jas. Henderson, Belton... 220 Cumberland Belle, '04; Walter Leonard, Craigville... 295 Beauty, '04; A. Williamson, Ingersoll 295 Lady Lyndoch, '02; E. Dingman, Maplewood...... 355 Neilston Jess, '04; J. R. Johnson, Springford...... Bess Orr, '04; E. Nelyott, St. Mary's 280 Reverie, '04; A. Nelyott, St. Mary's 255 Hartland's Queen, '03; G. Coursey, Lucan 300 Rose of Hartland, '99; E. Sendrick, Ingersoll....... 310 Topsy of Hartland, '00; Wm. McGhee, Beachville 350

HACKNEYS.

Lady Lackford, '02; M. T. Buchanan, Ingersoll..... 240 Terrington Kitchenmaid, '01; J. O. Culter, Inger-

The Maritime Sale.

The Maritime auction sale of registered cattle was system of bookkeeping, and give a concise tabulated offered, but several of the animals in the ring were statement of receipts and disbursements, as set forth not what should be desired. It was gratifying notice how quickly the bidders appreciated anything the ring without a bid. As a rule prices were disap-

to escape the same censure? What have your old, wise and powerful institutions of Ontario, Quebec and Nova Scotia to say? Our young New Brunswick sister must not be made to blush even by being mentioned. We find nowhere the record of preference in these old societies. Please go away back, then, to the consciousness of an ill-spent life and remodel. Misery likes company; and we are likely to have plenty of it.

True, we asked our critic to tell us himself the apple we should grow, and he answered not ; true, we called on all the growers to speak out and mame the sole desirable, but the answer, if any was souchsafed, varied with every tongue that spoke. In this perplexity of our interrogator and the profession, we were able to regain our own composure. We all admit that it would be, perhaps, of benefit if we were able to say so, but since choice in so many even more important matters in life depends upon individual taste, and every man is admitted to be a law unto himself in this respect, how are we to reach anything like agreement anyway? That wasn't the best ground to attack us on, Mr. Registrar White.

But a much more sweeping censure might possibly be preferred against the F.-G. A.'s of Canada, by simply enquiring what they are doing just at present to merit encouragement and support. No man or association can long trade on the past. It does appear to us, little as we like it, and it is to be taken home to ourselves as well as directed at others, that those associations are doing little more than meeting yearly portant branches of work taken up by the College, ated with a gasoline engine, and the only attention familiar topics, if you like, and registering a flood of practical work taken up by Professor Day and Dr. move the milk. fugitive discussion. The activities of the associations Reed in the judging-ring, and by Professor Zavitz and

by his account books. The study of such statements is not only interesting, but suggestive. Our desire is good, while inferior animals often had to be led from to hear not merely from those who have had an exceptionally prosperous year or two, but from those' pointingly low. Only the following reached \$70 or who have kept books for several years. The value of such articles lies not in the size of the profits shown, so much as in the method of bookkeeping, in the clearness with which the writer's financial position is shown and the effect of his letter in stimulating others to emulate his example. By his close scrutiny of the contents of "The Farmer's Advocate," "Inquirer" displays one of those characteristics, the application of which usually result in making farming a profitable business.-Editor.]

Benefits of the O. A. C. Short Course.

The large and enthusiastic attendance at the short course in grain and stock judging, at the Ontario Agricultural College last month, is the subject of remark in a communication received upon its conclusion from one who signs himself Short-course Student. The Louisville, Ky. : "Boyle Co. has an invention to do detail, day by day, but as the course had been reported by special arrangement with one of our con-

fugitive discussion. The activities of the associations need in the junging ring, and by tracesser starte and in the trial tests, even the mean kicking, fidgety are either becoming restricted or they cannot find ex- Mr Howitt on seeds, with the objects of discussion be- milkers are said to succumb with reclining ears and pression in practical results. We want work in this fore the class at all times, sinks facts into the minds benign complacence."

Shorthorn bull, Minto of Riverside, contributed by Geo. T. Thompson, of Little River, N.S., to A. S. Mac-Millan, of Upper South River, Antigonishe Co., N.S.,

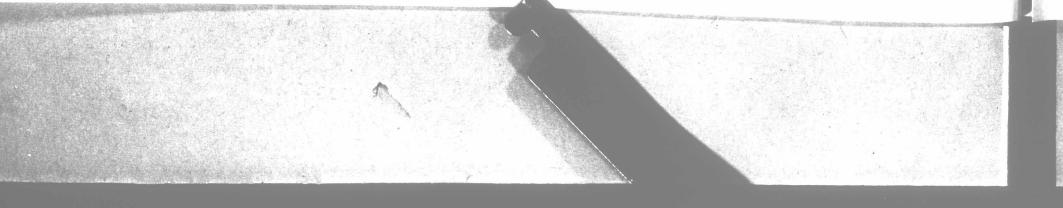
Dominus, from R. J. Messenger, Bridgetown, N.S., to David Withrow, Newport Landing, N.S., \$70.00.

Marcus, from C. A. Archibald, Truro, to Geo. L. Slipp, Sussex, N.B., \$135.00.

Females-Miss Albino, from Wm. Holmes, Amherst, to N. T. Blakney, Fort Lawrence, \$75. Rosabella, from C. A. Archibald to Geo. L. Slipp, \$100. Belle Bradloy, from C. A. Archibald to Geo. L. Slipp, \$140.

Four-legged Milking Machine.

The New York Herald published the following from away with the milkmaid. It embraces a four-legged arrangement covered with the hide of a calf. The interior of the body is much like a water cooler, and is tributors, we are scarcely warranted in covering the constructed of galvanized zinc. The mouth is lined ground again. We are pleased, however, to make use with rubber and the jaws work on hinges. By the of a few appreciative extracts, which, we are sure, ingenious mechanical perfection of the device the caudal appendage of the dummy switches most vigorously "For farmers and farmers' sons throughout the during the milking act and the oldest cows are forth-Province this short-course is one of the most im- with completely captured. The whole thing is opercoming at a time when farmers are not busy. The required is the presence of a boy with a bucket to re-



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FEBRUARY 21, 1907

Another Reply to Sandy Fraser.

Editor "The Farmer's Advocate ":

I have read was a great deal o' pleasure several cpistles fra the pen o' Sandy Fraser. I have heard it surmised that Mr. Fraser was a bachelor, and noo I'm kind o' thinking he maun be a Tory, and we a' ken the Tories are aye a hundred years ahint the times and that accounts for the antiquated views he hauds as ta the means o' advancing teachers' salaries. ken, Mister Editor, Mr. Fraser is a Scotchman like mysel', an' I jist think his warm Scottish haert has for the moment rin awa wi' his better judgment, and of coorse he is ower dour to admit it.

As tae the matter o' salaries, we a' ken they waur gye low, but the thing was fast richting itsel', an' there was na need o' the Government interfering. A' thing it was din for is ta mak the profession mair permenant. Weel, I dinna think it wull accomplish much alang that line.

Young men o' ambition wull still mak' it a steppin' stane ta something better, and as for the lassies, we a' ken what they wull dae whenever a fitting opportunity presents itsel'. I'll jist tell ye, Mr. Editor, the farmers o' Ontario canna stan' onything that savours o' a privileged class. We have aye been strong believers in the truth o' the auld proverb, let every tub stan' on its ain bottom, and we are firm in the belief that teachers should sell their labor in the open market like the lave o' us.

Mr. Fraser insinuates in his letter that it's the dollars and cents that's making some o' us kick. Weel, I can assure oor freend, that if salaries gang up tae four or five hundred dollars, frae the same cause that wheat sometimes gangs tae a dollar a bushel, or ony ither legitimate way, the farmers o' Ontario wull meet the obligation like men.

Na, na, Sandy, we canna thole tae be driven like sheep, and compelled by Act o' Parliament to pay ower oor hard earnings without having a word tae say in the transaction. I didna like tae hear Mr. Fraser callin' my fellow farmers skinflints and nicknames o' that sort.

For the last quarter o' a century, and mair than that, the Government o' Ontario has been striving with a' their micht tae perfect the school system, and hae been successful in evolving a system, the peer o' ony in the world, an' I ken o' nae class that has stood mair loyally by oor legislators, wi' baith their bairns and their means, than the farmers. It's the men that Mr. Fraser ca's skinflints that hae made auld Ontario what she is the day, the banner Province o' the Dominion-the men that hae felled the forests and endured a' the privations o' pioneer life; the men that hae turned the haunt o' the wolf and the home $\boldsymbol{\sigma}'$ the savage into well-tilled fields and comfortable hamesteds; the men that ken the value o' a dollar, for they earn it by the sweat o' their brow, and often hae tae wrest it fra a stubborn soil, and the men that ken fine when they are robbed o' their time-honored richts. It's no likely that men o' that stamp will ever be satisfied till their richts are restored.

But, Mr. Editor, I maun stop, for I find the pen trembling in my hand under a kind o' sword-like grasp; my brows are knit, and my Celtic blood is coursing through my veins like a mountain torrent, the presager of a rising storm; so I maun bid you adieu, adieu. SANDY MCALLISTER.

Two bills providing for different methods of creamery inspection have been introduced into the Kansas Legislature, and brought before the house committee, says the New York Produce Review. One bill, prepared by the board of health, provides for inspection of creameries under the direction of the secretary of the State board of health, examinations to be made as often as possible by one inspector. The other bill provides for the appointment of an inspector by the Governor, inspection of factories only being made on complaint of some patron against the condition of the creamery.

THE FARMER'S ADVOCATE.

Canadian Ayrshire Breeders' Association

The annual meeting of the above Association was held in Montreal on Feb 14th, inst. The meeting was large, representative and enthusiastic. Breeders were present from Ontario, Quebec and New Brunswick. The President, Mr. Robert Hunter, Maxville, gave a stirring address, stating that the past year had been a prosperous one for Ayrshire breeders, as the demand had been better than in any former, year. He stated he had great faith in the Ayrshire as the general-farmers' cow. He also noted that good prices had been realized for stock sold; as high as \$1,000 had been received by R. R. Ness, of Howick, Que., for the imported cow and calf, Jean 3rd; while for her mate, Lady Jane, \$600 was realized. Other breeders realized equally as good prices. One breeder in Ontario, on a little over 200 acres of land, had sold from his Ayrshire herd in 1906, stock and milk to the value of \$3,998. He stated the uniform scale of points had been adopted by the American Ayrshire Association, and also the Scotch, and it remained for this Association to adopt this scale to complete the round. Later in the meeting, this was done by resolution. So there is now one scale of points for judging Ayrshires in Scotland, United States and Canada.

The Secretary reported 257 members; 35 new members were received during the year. The exhibit of Ayrshires at the fall shows were well up to the mark; and at the winter shows more than held their own in the dairy tests. About \$700 was voted as special prizes at the leading exhibitions. He reported thirteen breeders had entered 98 cows in the Record of Performance. A few have already qualified, with good margins to spare. Notably: Almeda of Danville 15282, owned by Gus. A. Langlier, Cap Rouge, Que., with a record of 11,357 lbs. milk, and 409.95 lbs. butter-fat. It was agreed to ask the Hon. Minister of Agriculture to discontinue the taking and testing of monthly samples, as they have no bearing on the test. It was resolved to increase the registration fee to \$1.00 for members for each animal; to non-members, \$2; double those rates for animals over two years of age.

It was also resolved to recommend the holding of a National Dairy Show, and that Messrs. W. W. Ballantyne, John McKee, N. Dyment, and Wm. Stewart, be a committee to work with other associations to bring this about.

Also resolved that we request exhibition boards to divide the yearling classes as follows : Class A .- Ages dating from August 1st. Class B.-Ages dating from Jan. 1st.

Messrs. Ballantyne, Hume, McKee and Stephen were appointed a committee to confer with Hon. Mr. Monteith and Prof. Day, re placing of good specimens of the breed in the Agricultural College stables at Guelph.

The Secretary-Treasurer reported: Receipts, \$2,533, leaving balance of \$977 on hand.

The Registrar reported having registered 2,067 pedigrees and 774 transfers, an increase of nearly 400 pedirees and transfers over last year.

The following officers were selected : Hon. President, Dr. J. G. Rutherford, Live-stock Commissioner, Ottawa; President, R. Hunter, Maxville, Ont.; Vice-President, R. Ness, Howick, Que.; Sec.-Treas., W. F. Stephen, R. Huntingdon, Que. Vice-Presidents-Ontario, Alex. Clark, Brinston's Corners; Quebec, Robt. Ness, Howick; Manitoba, Dr. W. J. Thompson, Winnipeg; Alberta, J. G. Clark, Calgary; Sask., J. C. Pope, Regina; British Columbia, A. C. Wells, Sardis; Nova Scotia, F. S. Black, Truro; New Brunswick, M. W. Parlee, Sussex; P. E. Island, Jas. Easton, Charlottetown. Directors : Ontario-Alex. Hume (Menie), Wm. Stewart (Menie), W. W. Ballantyne (Stratford), John McKee (Norwich), A. (Byron), N. Dyment (Clappison), R. Hunter Kains (Maxville); Quebec-Senator Owens (Montobello), R. R. Ness, M. Greenshields (Danville), Jas. Bryson (Brysonville), H. Gordon (Howick), N. Lachapelle (St. Paul l'Ermite), Arsene Denis (St. Nerbert). Executive Committee-R. R. Ness, Nap. Lachapelle, Senator Owens, Wm. Stewart, A. Kains, and W. W. Ballantyne. Revising Committee-R. Hunter, J. W. Nimmo, and the Secretary. Delegates to exhibitions : Toronto, W. W. Ballantyne; London-A. Kains and Geo. Hill; Ottawa-R. Ness and R. Hunter, Jr.; Sherbrooke-Jas. Bryson and W. D. Parker; Fredericton-M. H. Parlee; Halifax-C. A. Archibald; Charlottetown-Jas. Easton; Dom. Cattle Breeders' Association-W. W. Ballantyne and Secretary. Judges recommended : Toronto-A. Kains, R. Hunter, and (reserve) Geo. McCormack; London-

John McKee, Jas. Boden, Sr.; Ottawa-W. F. Stephen, W. W. Ballantyne; Sherbrooke-D. Drummond and W. T. Wells (Newington, Conn.); Halifax-W. F. Stephen and T. Irving, (reserve) Nap. Lachapelle; Fredericton-Jas. Boden and Jas. Bryson (reserve); Bertier-Cloris Ouimet and Louis Lorallu (reserve); Winnipeg and Regina-W. F. Stephen and W. W. Ballantyne; Brandon-J. G. Clark and Wm. Stewart.

Co-operation for Fruit-growers.

We now have in the Province of Ontario some 27 co-operative fruit associations, and the results of the operation in connection therewith during the past season have been most satisfactory to the fruit-growers concerned. The prices received by the individual grower have been, in the majority of cases, much beyond that realized before co-operation was introduced. The Department of Farmers' Institutes and the Provincial Fruit-growers' Association are co-operating in the holding of special meetings to further the interests of co-operation. Letters have been addressed to a number of points at which it is thought co-operation could be introduced to advantage. Some likely places have, no doubt, been overlooked in this. Fruitmen are asked to make application either to P. W. Hodgetts, Secretary of the Fruit-growers' Association, or to G. A. Putnam, Superintendent of Farmers' Institutes, if a meeting is desired with a view to placing before the fruitmen the possibilities and advantages of this line of work. Co-operative companies can be organized at a nominal fee, and fruitmen have nothing to lose and much to gain in forming an organization.

Applications for assistance should be made at once.

Bulletin for Maple-sugar Makers.

The Department of Agriculture, Ottawa, has issued a bulletin on maple sugar and syrup. It not only deals with the manufacture of maple sweets, but explains the sections of the Adulteration Act, having reference to maple syrup and sugar. It also gives a "form of warranty," which has to be signed by the sugarmaker himself, and handed on to the wholesaler, retailer and consumer, thus giving the purchaser assurance that the goods sold as pure maple syrup or pure maple sugar are what they are represented to be. Write the Department of Agriculture for this publication, mentioning "The Farmer's Advocate,"

Trent Valley Canal Outlet.

The long-standing question as to whether the outlet of the Trent Valley Canal would be at Trenton or Port Hope has at last been decided in favor of Trenton. Surveys show that while the Port Hope route would be slightly the shorter, and would, therefore, according to the engineer's report, cost about \$40,000 less than the ditch to Trenton, the latter has an advantage as respects land damages and waterpower privileges. Another advantage is that it will provide a continuous land-locked channel through which barges may be taken from Midland, while if Port Hope were the lower outlet of the canal they would have to be towed for a considerable distance in the open waters of Lake Ontario, a risky, and at times, dangerous experiment.

A Rival of Oxford.

A local report from Lucknow, Ont., states that there are on a certain five miles of road in the County of Bruce no less than 47 bachelors eligible for marriage, and as many desirable maids not far away. And yet some people puzzle over the scarcity of farm help and the country goes on importing shiploads of immigrants.

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Col. F. L. Lessard will represent Canada as one of the judges at the first International Horse Show, to be held in London in June next. He will be assigned to the Hunters and Jumpers class, and will be associated with one English and one French judge.

The official title of J. A. Ruddick, Dairy Commissioner in the Dominion Department of Agriculture, has been changed by a recent order-in-council to Dairy and Cold-storage Commissioner.

A. L. Currah, Secretary of the North Oxford Farmers' Institute, in sending in a good list of subscribers to "The Farmer's Advocate," reports, some of the very best meetings ever held in the riding since he became Secretary-Treasurer, and adds regarding the delegation : "Dr. Standish, as our chairman-Angus Rose, of Woodstock-expressed it, is 'a regular perambulating encyclopedia of horse lore'; Mr. J. N. Paget is a forceful and instructive speaker on dairy lines, while Dr. Annie Backus, in her handling of the subjects, 'Training in the home,' 'The education of girls,' 'Hygiene,' etc., is just grand.''

Mr. David Rife, Hespeler, Ont., breeder Pietertje, and, when fully matured, of Holstein cattle, writes : "Through my advertisement in 'The Farmer's Advocate," I have sold several head, and have had numerous enquiries for stock. Having sold all my old stock, I have a fine young herd, all under six years old; among these I might mention: Alexena, official record at three years old, 60 lbs. milk a day, and 15% lbs. butter in a week. Have three fine daughters from this cow, sired by Duke Netherland Pietertje, whose sire is T. R." Homestead Albino Paul De Kol, dam Mavourney's Pietertje Netherland, record 75 lbs. milk a day, and over 17 lbs. but-

ter a week, grandam imported from Holland, milk 90 lbs. a day. Have three daughters of Madame Melba, official record 65 lbs. milk, and 151 lbs. butter. These three are sired by Duke Netherland being Ayrshire cattle, Berkshire hogs, Ox- all ages. The Berkshires are a strictly next week.

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Have two should make good ones. choice heifers, sired by Sir Mechthilde Posch, whose four nearest ancestors average over 25 lbs. butter in seven days. These are two very promising heifers, and have every appearance of making good cows. This stock is all young, and, no doubt, when tested will make good records. My farm is only 10 minutes' walk from Hespeler Station, G.

About eight miles north of Morrisburg Station, on the main line of the G. T. R., lies Springburn Stock Farm, the property of Messrs. H. J. Whittaker & Son, prominent among the leading breeders of Eastern Ontario, their specialties

ford Down sheep and Buff Orpington poultry. As usual, we found everything in apple-pie order, and the stock in prime condition on this well-managed farm. The Ayrshires are an exceptionally choice lot from a productive standpoint, as breeding along the lines of increased production and increased profit is the motto on this farm, and looking over the typical and large, even udders, we concluded that here certainly was a profitable herd of Ayrshires. The stock bull is Reliance of Ste. Annes 21804, bred at Macdonald College, Ste. Anne, Que., out of that great cow, Kirsty Wallace, pronounced by competent judges to be one of the best Ayrshire cows in Canada. Reliance is an ideal bull of show-ring form. For sale are several young bulls and females of

up-to-date lot; the breeding stock are as good as money will buy, and intending purchasers can always depend on getting something choice here. So with the Oxford Downs, perfection in form and covering is the standard. The Buff Orpingtons, too, are A1. Orders are now being booked for eggs for hatching.

MORE CLYDESDALES AT AUCTION. Mr. Jas. Innis, Woodstock, Ont., who has just landed another importation of 17 Clydesdale stallions and 50 mares and fillies, personally selected in Scotland, advertises in this issue that these will be sold by auction, in Woodstock, on March 8th. Look for more particulars



LIVE STOCK.

Receipts of live stock at the City and Junction markets were light in comparison with those of a week ago. The quality of both butchers' and exporters, with a few exceptions, was not good. Trade was brisk last week, with prices about steady. At the Junction market, on Monday, there were 105 cars, of 2,190 cattle, 44 sheep and lambs, and 15 calves. Exporters eased off, but butchers' held strong at following quotations:

Exporters .- The best export cattle sold at \$5.25 to \$5.50, but few brought the latter figure; the bulk of the best sold at \$5.25 to \$5.35. There is a class of light exporters averaging around 1,200 lbs., about half fat, that are selling at \$4.85 to \$5 per cwt. These cattle are really not much better than good feeders.

Butchers' .-- Few well-finished butchers' cattle are coming forward, not enough to supply the growing demand. A few picked lots sold at \$4.80 to \$5; a few loads of the best sold at \$4.25 to \$4.50; common loads, mixed with cows, at \$3.50 to \$4; cows, \$3 to \$4; canners, \$1 to \$2 per cwt.

Feeders and Stockers .- Not many feeders and stockers are being marketed. One or two loads, 700 to 900 lbs. each, sold at \$3.50 to \$4 per cwt.

Milch Cows .- The demand from Montreal caused a brisk trade for good to prime milkers and forward springers, which sold from \$40 to \$60 each, with two or three extra-quality cows at \$70 to \$75 each. Veal Calves .- Trade good for best quality, with prices steady at \$3.50 to \$7 per cwt. Sheep and Lambs.-Light receipts caused a brisk trade at steady prices. Export ewes, \$4.75 to \$5.25; culls and rams, \$3.75 to \$4.25 per cwt. Lambs of best quality sell at \$6 to \$7 per cwt.; common, \$5 to \$5.50.

15 to 16 hands, \$150 to \$175; service- express, \$125 to \$150; old, broken-down able workers, \$60 to \$100; serviceable animals, \$50 to \$100 each, and choice drivers, \$15 to \$125.

BREADSTUFFS.

Grain.-Wheat-No. 2 white, 71ic. to 721c.; No. 2 red, 71c. to 72c.; No. 2, mixed, 71c. Manitoba, No. 1 Hard, 85c.; No. 1 Northern, 84c.; No. 2 Northern, 82c. Corn.-No. 3 yellow American, 52c. to

521c., at Toronto; Ontario, 44c. to 45c. Oats .- No. 2 white, 39c. to 40c. ; No. 2, mixed, 381c. to 39c. Rye.-69c. to 701c.

Barley.-No. 2, 51c. to 52c.; No. 3, extra, 49c. to 50c. Peas.-No. 2. 81c.

Buckwheat.-56c.

Bran.-Bran is very scarce, and hard to get. City mills quote it \$22 to \$23. Shorts .- \$22 to \$23.

Flour.-Manitoba patent, \$3.85, track, at Toronto; Ontario, 90 per cent. patents, \$2.70 bid for export; Manitoba patent, special brands, \$4.50; strong bakers', \$4.

COUNTRY PRODUCE.

Butter.-Market steady for creamery, other grades a little easier. Creamery, pound rolls, 27c. to 28c.; creamery boxes, 25c. to 26c.; dairy, pound rolls, 23c. to 24c. ; tubs, 21c. to 22c. ; bakers' tub, 17c. to 18c.

Eggs .- New-laid, 30c. to 32c.; coldstorage, 25c. to 26c. Cheese.-Market steady. Large, 14c.,

twins, 14c. to 14 c. Honey.-Strained, 12c. per lb.; combs,

\$2.60 to \$2.75 per dozen sections. Evaporated Apples.-9c. per lb.

Potatoes .- On account of cold weather, receipts have been light, with prices firmer. Car lots of New Brunswick Delawares, 90c. to 95c. per bag, on track, at Toronto.

Poultry.-Receipts light; prices firmer as follows : Turkeys, 15c. to 17c.; geese, 11c. to 12c.; ducks, 11c. to 14c.; chickens, 11c. to 13c.; old fowl, 9c. to 10c. Hay.-Baled, market unsteady. No. 1 timothy, \$11 to \$11.50; No. 2, \$8.50 to \$9 for car lots, on track, at Toronto. Straw.-Baled, \$7 to \$7.50 for car lots, on track, at Toronto.

SEEDS.

Prices offered are unchanged as follows Alsike, fancy, \$7; alsike, No. 1, \$6 to \$6.25; alsike, No. 2, \$5.75 to \$5.85; alsike No. 3, \$4.65 to \$5.10; red clover, No. 1, \$8 to \$8.25; red, No. 2, \$7 to \$7.25; timothy, No. 1, \$1.50 to \$2.00; timothy, No. 2, \$1.20 to \$1.40.

HIDES.

E. T. Carter & Co., 85 Front St., have been paying the following prices : Inspected hides, No. 1 steers and cows, 101c.; No. 2 steers and cows, 91c.; country hides, cured, 9c.; country hides, green, 8c. to 9c.; calf skins, No. 1, city, 12c.; calf skins, No. 1, country, 11c. sheep skins, each, \$1.30 to \$1.40; horse hides. \$3.50 to \$3.75 horse hair

driving and saddle animals, \$350 to \$500 each.

Dressed Hogs and Provisions .-- Owing to the advances in the market for live hogs, dressed hogs have been marked up in price fully ic. per lb. Fresh-killed abattoir stock is in good demand at 10c. to 10[‡]c. per lb., while country-dressed is in good demand, though not very plentiful, at 91c. to 91c. per lb. There is little change in the market for hams and bacon. Hams are quoted at 131c. to 14c. per lb. for extra large, 14c. to 15c. for large, 14jc. to 15jc. for medium sizes, ranging from 12 to 18 lbs., and extra small, 8 to 12 lbs., 15c. to 151c. per lb.

Potatoes.-78c. per 90 lbs. has been paid in many cases for choicest white stock, on track, and shippers have refused to supply more at that figure. For the same stock, 81c. per bag of 90 lbs., including bags, has been paid, on track, and 75c. has been paid for carloads, not bagged, to arrive.

Butter .- The market continues fairly active, the recent cold weather being in every way stimulating to consumption. There is very little butter being made in the country just now, and very little will be made until spring. Prices are 25c. to 251c. per lb. for choicest creamery, in lots of a few dozen boxes, or more, and 241c. to 25c. for good stock. Imported creamery sells at 231c. to 24c., and dairies at 22c. to 23c., according to quality.

Cheese .- The demand is good, but purchasing has not been so free as formerly, doubtless owing to the advanced ideas of holders. For Easterns, 131c. is being demanded, but it is likely it would be very hard to get. Holders of finest Ontarios are asking 14c., but it is likely that 13%c. would be hard to get. Dealers, however, are not worrying, as they fully expect to see importers on the other side come to their figures shortly. Eggs.-The market is holding firm. Prices are quoted at 32c. to 35c., in case lots, this being for really fresh. Coldstore stock is quoted at 21c. to 23c., according to quality and quantity.

Flour and Feed.-Millers report a slight improvement in the car situation. Deliveries are being made more freely, and it is hoped that from this forward the situation will be less complex. Demand for Manitoba grades is very good, and prices hold steady at \$4 to \$4.10 per bbl., in bags, and \$4.50 to \$4.60 for patents. The demand for millfeed cannot be satisfied, but prices hold unchanged at \$21 per ton for bran, bagged, and \$22 for shorts.

Hay and Hayseed .- Prices for hay are too high for the export trade, but the local trade is still buying protty freely, the recent scarcity having left bare storehouses. Prices are about steady at \$13.50 to \$14 per ton for No. 1 timothy, FOUNDED 1866

Buffalo.

Veals.-\$4.50 to \$10.25. Hogs.-Heavy and mixed, \$7.40 to \$7.45.

Sheep and Lambs.-Lambs, \$5 to \$7.85; yearlings, \$3.25 to \$6.60, a few at \$6.75.

British Cattle Market.

Liverpool. - Liverpool and London cables are steady at 11c. to 12%c, per lb. dressed weight; refrigerator beef is quoted at 91c. to 91c. per lb.

GOSSIP

LYNDALE HOLSTEINS

Fifty-eight head to pick from, and only six of the entire lot in milk that are not in the Advanced Registry, and these, for the reason that they have not yet been officially tested, is the result of ten years' intelligent breeding made by Brown Bros., of Lyn, Ont. One of the first foundation cows was Josephine of Brockside, with a yearly milk record of 14,700 lbs., and a seven-day butter record of 18.60 lbs. Three of her daughters now in the herd are Inka Josephine Abbekirk. with a seven-day butter record of 21.956 lbs., and milk record of 579 lbs.; she has a four-months-old bull calf. Lady Waldorf De Kol, with a three-year-old record of 15.75 lbs. butter in seven days, was sired by De Kol 2nd's Butter Boy 3rd, who has six daughters in the Advanced Registry, and whose dam, De Kol 2nd, has an official record of 26 lbs. butter in seven days. Countess De Kol is the other daughter of Empress Josephine of Brookside. She has a two-year-old butter record of 12 lbs. 3 ozs. Then, there are two daughters of Inka Josephine Abbekirk: Inka De Kol Waldorf, with a three-year-old record of 18.17 lbs. butter, and 416 lbs. milk in seven days. The other is Inka De Kol Pietertje, with a four-year-old butter record of 15 lbs. The next purchase as foundation stock was Carborn De Kol, with a seven-day record of 20.12 lbs. butter, and 466 lbs. of milk. Her daughter, Carborn De Kol 3rd, has a four-year-old record of 26.15 lbs. butter, and 484 lbs. of milk. The next was Sarah Jewell Hengerveld, with a seven-day butter record of 24 lbs 12 ozs., and a thirty-day milk record of 2,452 lbs., the largest ever made in Canada, and second largest ever made in America for four-year-olds. Her daughter, Sarah Jewell Hengerveld 3rd. has a three-year-old butter record of 17.10 lbs. She was sired by the \$3,000 bull, Beryl Wayne's Paul De Kol, whose dam, Beryl Wayne, has a seven-day record of 27 lbs. 14 ozs. She is, therefore, closely related on her sire's side to the world's champion, Aggie Cornucopia Pauline, whose official seven-day butter record is 34.31 lbs The present stock bull Count De Kol Pietertje Paul, a son of Mutual Pietertje Paul, whose dam has a four-year-old butter record of 25 lbs. 8 ozs. His grandsire was De Kol 2nd's Mutual Paul, who has thirteen daughters in the A. R., and is a full brother to the great bull, De Kol 2nd's Paul De Kol, dam Countess De Kol Bawn, whose record at three years and thirteen days of age, is 401 lbs. of milk and 18.54 lbs. butter in seven days. Her sire, Pietertje Hengerveld Count De Kol, has 63 daughters in the Record of Merit, and his brother, Hengerveld De Kol, has 57; no other two living sires can equal them. His predecessor in service was Beryl Wayne's Paul Concordia, whose four nearest dams have records that average 22 lbs. 11 ozs. each in seven days. Three of the young bulls for sale are sired by him, and out of A. R. cows. Another is out of Sarah Jewell Hengerveld, above described, who, by the way, is a halfsister to the world's milk champion, De Kol Creamelle, who gave the phenomenal yield of 119 lbs. a day, and 10,017 lbs. in 100 days. This young bull is sired by Witcop De Kol Korndyke Wayne, whose four nearest dams' records average 24 lbs. of butter, and whose milk tests averaged 4 per cent. of butter-fat. This youngster's four nearest dams' records average 22.80 lbs. of butter in seven days, making him one of the richest-bred young bulls alive. He is for sale, together with several others almost as richly bred. Females of all ages are for sale also.

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Hogs.-Prices easier at \$6.80 for selects, and \$6.55 for lights and fats, with light receipts.

Horses .- There has been a healthier tone to the market for the past week than there has been during any week so far this year. Prices do not advance materially, but the bidding was generally spirited, and more life shown in the making of sales. The inquiry for farm mares and geldings has been strong, at steady to firm prices, and the supply has been equal to the demand. Extra good horses bring good prices. There is no scarcity of ordinary horses, as they are coming forward in greater numbers than for several years; but the farmers who were looking for big prices express much disappointment at the prices paid for some of the commoner of those offered. The following is the list of prevailing prices during the past week : Drafters, 1,450 to 1,700 lbs., \$190 to \$235; general-purpose horses, 1,350 to 1,450 lbs., \$140 to **\$185; delivery horses, 1,100 to 1,350** lbs., \$120 to \$165; matched pairs, to \$300 each; light-draft, 1,460 to 1,500 carriage horses, 15.2 to 16 hands, \$356 to \$500; single cobs and carriage horses, 1,306 lbs., \$175 to \$225 each; common

per lb., 30c. to 32c.; tallow, per lb., 5 c. to 6c.

Montreal.

Live Stock.-There was a very fair trade in the local markets. Receipts of cattle were liberal, but other animals were on the scarce side. Prices of everything, save hogs, held steady, the latter being, however, scarce and higher. Choice cattle sold at 4%c. to 5c. per lb4; fine at $4\frac{1}{2}c.$ to $4\frac{3}{4}c.$; good at 4c. to $4\frac{1}{2}c.$; medium, 31c. to 4c., and common, 2c. to 3c. Lambs were steady at 6c. to 61c. per lb., and sheep at 4c. to 41c., calves being scarce at \$3 to \$16 each, or about 6c. to 61c. per lb. The strength of the market for hogs was due partly to the increased demand from England. Prices here ranged from \$7.30 to \$7.40 per 100 lbs. for select hogs, off cars.

Horses.-Dealers still report an active demand for all kinds of good horses, draft horses being particularly in request. The demand, at the present moment, comes more especially from the city, the transport companies being evidently in need of more horses. The railway construction companies are also in need of draft animals. The supply throughout the country continues light, and the merket is consequently extremely firm. Quotations are : Heavy-draft animals, weighing from 1,500 to 1,700 lbs. each, \$250 1bs., \$200 to \$250 each; express, 1,180 to

\$12.50 to \$13 for No. 2, and \$11.50 to \$12 for clover and clover mixture. The hayseed situation shows little change, save for a decline in the prices for red clover. This is now almost all in, and, lately, prices have weakened 25c., at \$6.75 to \$7.75 per bushel of 60 lbs. Alsike is unchanged at \$5.50 to \$6.50 per bush., and timothy, \$1.25 to \$2 per bushel of 48 lbs. These are the prices offered by dealers at country points. Most of the timothy is coming in from the United States, and it is thought that there is not more than 25 per cent. as much as usual of Canadian.

Grain.-The market is firmer all round. Oats, 43c. to 431c., store, for No. 2; 42c. to 421c. for No. 3, and 41c. to 411c. for No. 4. Manitoba No. 2 Northern wheat, 90c., store, and Ontario white winter, 80c. No. 2 peas, 90c.

Chicago.

Cattle .- Plain to best steers, \$4 to \$7; heifers, \$2.65 to \$5; cows, \$3.10 to \$4.75; bulls, \$3 to \$4.40; calves, \$5.50 to \$7.75; stockers and feeders, \$2.50 to \$4.85.

Hogs.-Choice heavy shipping, \$7.15 to \$7.171; butchers', \$7.10 to \$7.15; mixed, \$7.05 to \$7.10; choice light, \$7 to \$7.05; packing, \$7.05 to \$7.121; roughs and heavy packing, \$6.50 to \$7.121.

Sheep and Lambs.-Sheep, \$1.50 to 5.60; yearlings, 4.60 to 6.60; lathles \$4.75 to \$7.50.

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IS i, and only hat are not these, for t yet been ult of ten by Brown f the first of Brookof 14.700 record of hters now Abbekirk, of 21.956 lbs.; she alf. Lady ee-year-old seven days. itter Boy n the Adm, De Kol 6 lbs. but-De Kol is Josephine o-year-old 3 ozs. of Inka Kol Walrecord of milk in De Kol ld butter chase as De Kol. lbs. butdaughter, r-year-old 484 lbs. h Jewell y butter hirty-day rgest ever gest ever lds. Her veld 3rd record of ю \$3,000 l, whose ay record rø, closee world's Pauline ecord is bull is son of m has a 5 lbs. 8 ol 2nd's aughters ther to Paul De n, whose en days 8.54 lbs. er sire, Kol, has erit. and has 57; as Beryl ose four average . Three ired by other is , above a halfpion, De nomenal 017 lbs. sired by whose age 24 k tests t. This records n seven est-bred ale, to-

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Lite, Literature and Education.

FEBRUAR1 21, 1907

[Contributions on all subjects of popular in-terest, whether relating to the Literary Society discussions or not, are always welcome in this Department.]

Our Literary Society.

Out of a collection of suggestions, for our next essay contest we have selected the following topics

1. The function and place of the Kitchen in home-life improvement.

- 2. Canada's National Destiny.
- 3. Remodelling old houses.

The ideal farm home. 4. 5. Essay on Wordsworth's "Inti-

mations of Immortality." Some of the above topics are practical rather than literary, and as such will, we trust, induce into essay-writing many who have hitherto kept out of the more purely literary work of the society. Each contributor is asked to write on but one topic, and to send his or her contribution not later than March 7th.

Study, "Peele Castle" (concluded).

It is impossible to give all the quotations sent in answer to question 8, hence we have made a selection of the most apt. Two or three very good ones were omitted by reason of their length. Question 8 was as follows: "Quote from any other poet who has given expression to thoughts similar to any expressed or suggested in Peele Castle.'

Weep a while if ye are fain,-Sunshine still must follow rain. Be ye certain all seems love Viewed from Allah's throne above; Be ye stout of heart, and come Bravely onward to your home." -Sir Edwin Arnold "'Tis better to have loved and lost, Than never to have loved at all." -'Tennyson : In Memoriam

Sent by D. MacCallum.

"But the tender grace of a day that is dead.

Will never come back to me." -Tennyson.

Sent by Marion, Nanor, and S. E. Oill.

The shade by which my life was crost, Which makes a desert in the mind, Has made me kindly to my kind."

Sent by A. L. McDiarmid.

What sorrow was thou bad'st her know, at others' woe."

-Gray.

Sent by S. E. Leeson.

'They learn in suffering what they teach in song.''

-Shelley.

" Patience is more oft the exercise Of saints, the trial of their fortitude, Making them each his own deliverer, And victor over all That tyranny or fortune can inflct."

-Milton.

Sent by Mrs. Whelpley.

- Beyond the eye's horizon's outmost girth.
- Garners all beauty, on all mystery pores :---Like some ethereal fountain in its flow

Finds heavens where the senses may not go." -William Wilfred Campbell.

Sent by J. D. Taylor.

With earth's warm patch of sunshine another well content. Tis sorrow builds the shining ladder

up, Whose golden rounds are our calamities,

Whereon our firm feet planting, nearer God.

The spirit climbs, and hath its eyes unsealed.'' -Lowell.

Sent by H. J. Brillinger.

THE ESSAYS ON "PEELE CASTLE."

The following essays have been The arrangement selected as best. does not necessarily indicate the order of merit. It will be noted that the names of some of the writers given below did not appear last week in the "highest" list. This was due to the fact that the total number of marks won on the paper, not those awarded for the essay alone, determined the standing.

ESSAY I.

Peele is a thriving seaport town on the western extremity of the Isle of Man. The harbor is large and commodious. The southern extremity is formed by Peele Island, on which is situated the ruins of Peele Castle, also two cathedrals and churches. Sir Walter Scott, who was a contemporary and friend of Wordsworth, has practically made it the scene of one of his novels—" Peveril of the Peak." Wordsworth had visited these ruins, which, with their historic facts and legends, together with their beautiful situation, would naturally leave a strong impression upon the mind of this ardent lover of nature. He says to those in search of his whereabouts, to look for him on

" Some tall craig

That is the eagle's birthplace, or some peak

it illustrates strain : strength and endurance. Notwithstanding this new aspect of life, sorrowful though it was, the loss irreparable, there were things that came through this bitter experience which he could not lightly esteem : fortitude, patience, cheerfulness, and amid all, the hope beyond-that hope to which 'another great poet, at the death of his friend, has given expression in the following words :

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"And doubtless, unto thee is given A life that bears immortal fruit In those great offices that suit The full-grown energies of heaven." " MILLA." Rouville, Que.

Our members will be pleased to read the above excellent essay from the pen of "Milla," who, it will be remembered, told us, in connection with her "Three Fishers" study, that she was sixty-four years of age, and had never written on such examinations previously.

ESSAY II.

This poem is typical of Wordsworth, inasmuch as the language is simple, its subject is an ordinary scene, it is of a didactic nature; but, unlike some of his poems, the lack of poetic fire is scarcely perceptible.

While some critics hold that the province of poetry is not to inculcate a truth, this poem not only does so, but does it in such a manner as to convince one that it is expedient to do so. Let me try to explain this statement.

In the poem we have two distinct pictures of the same scene, namely, Peele Castle. The first picture appeals to the taste, or expresses ideal beauty. The second picture appeals to the reason, or expresses simple, every-day truth. That the latter is the more excellent one, is brought home to him in the remembrance of his brother's death by shipwreck. He realizes the folly of presenting such a scene as one of ideal beauty alone, when it may so readily be trans-formed, in fact, into a scene of danger and death. Hence, it would appear to him that truth is preferable to mere beauty.

-Tennyson.

THE FARMER'S ADVOCATE.

ME MAGAZ

And from her own she learned to melt

Sent by M. Jose

"We will be patient and assuage the feeling

We may not wholly stay-By silence sanctifying, not concealing, The grief that must have way." -Longfellow.

Sent by L. E. H., and others.

" Then welcome each rebuff That turns earth's smoothness rough, Each sting that bids nor sit, nor stand, but go ! Be our joy three parts pain, Strive, and hold cheap the strain, Learn, nor account the pang; dare, never grudge the throe ! "

-Browning.

Sent by "Zorra."

"But now afflictions bow me down to earth,

Nor care I that they rob me of my mirth, But oh ! each visitation

Suspends what Nature gave me at my birth,

My shaping spirit of Imagination." -Coleridge.

Sent by E. B. Augustine.

We see but dimly through the mists and vapors,

Amid these earthly damps, What seem to us but sad funereal tapers

May be Heaven's distant lamps." -Longfellow.

Sent by "Bruce" and others.

"The glory and the loveliness have passed away from earth."

-(Bernardo del Carpio).

Sent by "Sed."

M. MacDonald, W. B. Fallis and others refer to Tennyson's "Palace of Art" and "Lady of Shalott"; "Elic" and others, to Longfellow's " Psalm of Life."

"Within the surface of the fleeting river, The wrinkled image of the city lay, Immovably unquiet, and for ever It trembles, but it never fades away." -Shelley.

Sent by A. G. McIntosh and L. McDermid.

"Heaven is not mounted to on wings of dreams, Nor doth the un hankful happiness of youth

Aim thitherward, but floats from bloom of the gale. to bloom,

Familiar with forgotten years."

He had looked upon this scene for four weeks, and had he been a painter of the brush, instead of the pen, he would, if he could, have painted it with a beauty not of earth-a "sea pure as crystal," and in a world where no dark clouds lower-no sign of stress or storms. If we study Wordsworth's life, we find, thus far, it runs parallel with this poem. Constantly in communion with nature, and entranced with his muse, so self-centered and self-appreciative that the ridicule of reviewers could not move him; supplied with a modest competency which sufficed for a man of his simple tastes; happy in the companionship and sympathy of his sister Dorothy, and, later, of his wife-life, like the summer scene upon which he had looked, presented a tranquil sea. Then the relentless sea, that looked so fair, has brought to him a sudden, crushing sorrow, had robbed him forever of a dear Then, the painting of the brother. scene by his friend, under such different conditions-the angry, stormtossed waves, the lowering clouds, and the battered hulk, at the mercy. of wind and wave-all suited his He felt himself like altered mood. the dismasted ship, left to the fury

The Castle now speaks to him in

Following out the same line of thought, he reproves the folly of all those who attempt to withdraw themselves from the stern realities of life and establish themselves in an ideal world, as the Lady of Shalott He believes that it is much did. better to understand those things that we may be called upon to endure, and look for happiness, not in escaping from trials, but rather in learning to meet and master them.

The philosophy of the poem is unquestionably sound, and if a fault could be found, it would be that its beauty is surpassed by its logic. Not that it is lacking in beauty, however. The rhythm, the ease of expression, and the poetical words and phrases indicate a master hand. We cannot but admire such phrases as"" A deep distress hath humanized my soul," or, "Merely silent nature's breathing life." While such pleasing and comprehensive pictures as are presented in the second and twelfth stanzas would be difficult to Lanark Co., Ont. J. S.

FOUNDED 1866

ESSAY III.

In this poem we have an example of Wordsworth's art at its best. Not only does he, as always, clothe his thoughts in the choicest of language, but those thoughts are most characteristic of the poet whom Macaulay has called the "High Priest of Na-In addition to this, Wordsture." worth shows a deep knowledge of the effect of sorrow on one's life-a knowledge gained in the hard school of experience.

The circumstances under which he gained this knowledge were most distressful. His favorite brother, John, was captain on board the "Abergavenny," a vessel in the service of the East India Company. While on a home voyage, in 1805, this ship was, through the incompetence of the pilot, wrecked off the Bill of Portland, and nearly all were drowned. Among those lost was Wordsworth's brother, who died, as he had lived, at his post. His death was keenly felt by Wordsworth, who wrote this poem the same year.

Before this, sorrow had been to Wordsworth only as "a still, sad music." Now the hand of affliction fell on him, and he bowed under it. Nature was not now to him the calm. smiling presence she had been; he had learned that she could be stern and cruel. His own soul had undergone a change. He feels this when he says : " A deep distress hath humanized my soul." Sorrow had been necessary to make him realize that life was not all pleasure, but that same sorrow had also given him a greater sympathy with others. He could now feel the truth underlying Beaumont's picture. The power to see only the ideal state of existence was gone from him. His eyes had been opened to the sorrows around Yet he did not shrink from him. either his own sorrow or that of others. Although he knew that the feeling of his loss would n'er be old. still he determined to bear that loss bravely and cheerfully, and from it to draw fortitude for himself and This is a tenderness for others. sorrow that develops character.

Simcoe Co., Ont. L. E. H.

ESSAY IV.

This poem, like all productions worth study, grows more beautiful

descriptive writer is to bring out the details of a pen-picture so that the reader will, of necessity, see the scene. After reading verses 1, 2 and 3, who could fail to see Peele Castle as Wordsworth saw it? And still.

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ture after reading 10, 11 and 12? The figures used are good. The personified apostrophe in verse 1 is remarkable for its tone of "Camaraderie." The euphony of language is also good. So perfect the rhyme, so well chosen the words in their connections and sequence, that harshness or abruptness is almost totally absent. For myself, I would prefer the word "wavered," instead of "trampled," in stanza 2, line 4. I can understand an image or shadow wavering, a man or animal tramp-The transition from nature ling. to man in stanzas 13 and 14, is also characteristic of Wordsworth. It is a poem well worth study.

is it not easy to see Beaumont's pic-

R. J. MESSENGER. Annapolis Co., N. S.

How many of our members agree with Mr. Messenger re the word trampled "?

ESSAY V.

Wordworth is the poet of nature. He has written many poems, directly on nature, and throughout a great deal of his work there breathes that cordial sympathy for nature he evidently felt at all times. This poem is one that shows he was under 'the spell of nature when he wrote it. As he tells us in the opening stanza, he was the neighbor of this castle once for "four summer weeks," but, unlike a great many sordid souls who would have scarce noticed the quiet splendor of nature, "so like from day to day," that very quietness and sameness of nature so threw its spell over him that he longed for the power to wield a painter's brush, that he might portray that entrancing scene.

Then, all unconsciously, the living in company with that tranquil scene instilled into his soul something of its own tranquility, and he drew a picture in his mind of a scene of 'Elysian quiet, without toil or strife," and we doubt not there came over him a longing to live such a life as was exemplified in the quiet with his own soul, such a light as scenes around him, away from the never was in nature "on sea or

was awakend to the fact that he the depths of his own being and inmust bear his share of life's burdens, by a great sorrow that overtook him;

This poem, to our mind, bears a lesson for us all, penned in quietly passionate language. It is abstruse. It requires study to comprehend its meaning. In his description of the scene, and the painter's picture of it, he leaves very much for the imagination to fill in; but, for the student who will study it sufficiently to reach its hidden meaning, its very obscurity gives it an added charm, and its lessons probably sink deeper because of the fact that they require effort to find them.

Although we may not be an expert judge of poetry from a literary standpoint, we have enjoyed the reading and study of this poem because of the subtle charm wrapped up in it, and the smooth, flowing language in which it is expressed.

J. D. TAYLOR.

A less frequent repetition of the word "nature" in the first part would have improved the "wording " of this otherwise very good essay."

ESSAY VI.

The poem is a description of a change in the poet's soul. great Some time before he had spent four happy weeks near Peele Castle, and all the time the sea was guiet and the sky so clear that the image of the castle could be seen in the depths The poet's life, also, was below. calm. He had had no bitter grief or sorrow, and the quiet beauty of nature during those four weeks was the reflection of the quiet of his life through the years that he had lived. Nature, to him, was gentle and beautiful, and he could not conceive her acting in a harsh or cruel manner.

If, then, during those days, his "had been the painter's hand," he would have given an altogether different setting from that of the artist Beaumont. He would have painted a far different picture-" no motion," silent nature's breathing life," " Elysian quiet," etc. But over and above all this, he would have added "the gleam," the light that he saw with study. One great power of the carking cares of this world ; then he land," but which came forth out of

vested what he saw before him with intense and radiant beauty. This he knows to have been merely

a poet's dream, for since then he has learned, through the death of his brother that life has an altogether different content. It is not one even flow of calm. He has submitted to a new control-i. e., nature in her harsher aspect. His soul has been humanized, brought to the level of the real, with its suffering and pain, and no more can he dream of the even calm and beauty.

Beaumont is right in his interpretation. The raging sea, the struggling ship, the threatening clouds and cruel rocks mean death, but death is a part of life. Nature at times is calm, but she is also fickle and harsh.

Then the poet bids farewell to his old self. His heart had lived alone, out of real sympathy with his suffering fellow men. The death of his brother brought him from his selfish life of happiness in his enjoyment of nature-which is to be pitied, because it is narrow and forgetful-to a sense of fortitude and patient cheer in the face of the grief and sorrows which humanity has to bear. He suffers now with his fellow men.

Thus, we see, the poem is an expression of the poet's development from a narrow selfishness, where he was lost in the contemplation of the beauties of nature, till he came to a higher level, and could hear "The still, sad music of humanity.

DONALD MacCALLUM. Frontenac Co., Ont.

ESSAY VII.

It seems to me that the chief beauty " of Wordsworth's Elegiac Stanzas, as studied this month, consists, or is accounted for, by the fact that the poet has presented the most sublime and lofty emotions that his soul is capable of in the plain and simple language of everyday life. If this poem were a painting, we would "It is true to nature.". Sumsay. mer sunbeams were smiling on the peaceful waters of the sea off the coast of Lancashire, when Wordsworth visited the scene, during his vacation, in 1794. Peele Castle, fortified, stately, threw its calm, strong reflection in peace upon the waters; rest and quiet were characteristic of the scene. So he found it, and so his poetic soul drank in the beauty, and, in after days, from a background of storm and sorrow, reproduced the scene. With characteristic love of detail, he tells us minutely his relationship to the scene described-the length of his vacation, the frequency of his visits. With a master hand, he uses these details in such a way as to make us appreciate the beauty of the scene, and see with him "The light that never was on sea or land." But yet, beautiful as is the scene, and masterful as is the description, we might not be able to see it as Wordsworth saw it were it not for the explanation and the earnest truths expressed in the stanzas which follow this, the most poetical of the stanzas of the poem (4). In these stanzas, in the same simple, powerful way, we are introduced to the poet's change in his view of life, and his reasons for that change. Another scene is presented to us. The sea is tempest-tossed. Danger and death are lurking in the angry though once peaceful sea. Sorrow and trial are near ; but the staunch castle is still stately, unyielding, unconquered. Cleverly the poet calls up these details, and then we see the circumstances in full which produced the beauty of the stanza written before, and sympathize with and appreciate the poet's feeling as he says, "the feeling of my loss will ne'er be old," and emphasizes it with the natural, carnest, almost "childlike" state-ment, "That which I know I speak with mind serene." So, the background of Sorrow makes the forefround of Beauty all the more beautiful, and suggests to us for the trials and sorrows of life a hope not with-

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out which are we left "to suffer and upon his soul. to mourn." W. B. FALLIS. Perth Co., Ont.

ESSAY VIII.

"Peele Castle" brings out very strongly two phases of life placed in opposition. It shows, in a poetic form, the effect of bereavement on an affectionate and thoughtful nature. It illustrates the refining power of sorrow and the knowledge of a fuller, higher life which sorrow convevs. In a very suggestive way, it shows how a greater sympathy with mankind in general is awakened by personal bereavement. As a whole, besides being "a thing of beauty and a joy forever," it is a record of a great crisis, not only in Wordsworth's life, but in the lives of many of humbler origin and lesser fame. "FENBOIS."

ELEGIAC STANZAS.

This poem is almost perfect from every point of view. It sets forth two views of life, each of which is illustrated by a picture of Peele Castle. In the picture which the poet himself draws, we get a glimpse of his own life before sorrow had left the print of its chastening hand

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scene represents the poet's own long- of nature, rather than a "longing ing for rest and peace, and the shrinking of his sensitive nature did not come until he was aroused from all contact with the rude, hurrying world. But, "'tis so no more." Just as the tranquil sea has been lashed into fury by the raging storms, so a mighty conflict has raged in Wordsworth's soul, and, like the rugged castle, he has weathered the storm and come off victorious. Sorrow makes all men equal." The truth of this saying came home to the poet. He found that the ideal life could not be lived in Elysian quiet and seclusion, but among our fellow men, and that to live, in the highest sense of the word, does not mean to overcome sorrow and distress by avoiding them, but it means to " rejoice with those who do rejoice, and weep with those who weep," and to take up the burden of life bravely, willing to aid the brother whose cross is heavier. In the last two stanzas he compares the two ways of living, in brief, and states decidedly which way he considers best.

MARGARET McDONALD. Wyoming, Ontario.

A pleasing essay. We think, however, that the calm represented per-

The calm, quiet fect contentment, perfect enjoyment tor rest. The poet's sense of unrest by the death of his brother.

> We cannot close without calling the attention to our readers to a question brought up by "Sed " in regard to Question 10: (1) What impression has the study of the poem left on you as to mood ?"

> She says : "A very strong desire that the third line in the ninth stanza had been left out. Why did he write that to stand out in such painful prominence, changing the aspect of the whole poem? A person can smile, talk cheerfully, say manly, noble things because it is right, and he has been accustomed to it, while his very heart is aching and breaking. His grief was so fresh that, although he was striving to take up life bravely, and did, yet there seems something contradictory about it."

"Sed " seems to have an idea here which she seems trying to grasp, and of which we, personally, seem occasionally to catch a flying gleam. Would anyone like to comment ?keeping, of course, close touch with the poem ?

Good Dressing, not "Dudishness.

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A friend remarked the other day that many styles of men's dress which used to be regarded as "dudish " are now quite common, and considered in perfect taste. His observation prompts the thought that it is not so much what a dude wears that makes him objectionable as the eccentricity of his attire and the exaggerated emphasis which it indicates that he places upon dress. A man may deck himself out in many an article formerly confined to the wardrobe of dudes without placing himself in the category of that despised and worthless class. Apparel does not make fops; fops choose apparel that denotes the shallowness of their characters. He who dresses in keeping with his occupation and his means, and with a sensible desire to look his best, need never fear being called a dude. Neat, bright and attractive clothes are to be encouraged, and a reasonable amount of time bestowed upon personal appearances is always well spent.

W. D. A.

is especially present. If our bodily eyes were opened to see His glory, we might be like St. John, who fell at His feet as dead. But the thought of His presence should bring more joy than fear, as He says : " Fear not, for I am with thee," and again : "It is I, be not afraid."

There is another weed which threatens to choke true religion out of our heartsthe pursuit of novelty. Like the Athenians, we are ready enough to flock in crowds to hear a preacher who will tell us some "new thing." Sermons are a good thing, but the right object for going to church is not the listening to a sermon. From earliest times men have come into the presence of God to give rather than to get. All nations have seen the necessity of offering sacrifices to God; and we, who have received so much, should have somewhat also to We should come to offer the great offer. Memorial which Christ instituted the night before His death, to offer the sacrifice of praise and thanksgiving, to offer gifts of money and, last, but not our least, to offer and present ourselves, our souls and bodies, to be a real sacrifice laid at His feet. Do not fancy that a restless craving for novelty, or a selfish seeking after your own good and indifference to the needs of other people, indicate a truly devotional spirit. should not come regularly to church only because the service is attractive and we like the preacher, nor even for the good we may find that our souls get from the habit. To stay away, without good and sufficient reason, is to disregard the invitation of the King of Kings. When an earthly monarch invites a subject to an interview with him, the invitation is really a command. And our King has declared that the people who disregard His invitation shall, in the end, be shut out. If they refuse the summons to sit down at the table of the King, they will find at last that the door is shut, for "none of those men which were bidden shall taste of My supper," He says. Remember, the excuses made by the men in the parable were what people consider reasonable excuses for staying away from church. One had his farm to look after, another was busy with his cattle, another was newly married and must stay at home with his wife. God has declared that He will not accept such excuses. Is it likely that the Sunday headache-which would be unnoticed on a Monday-the desire for a walk or a drive, the fear of a shower, the cold or heat, the "having company," will be accepted ? Let us come to the Place of Meeting to offer ourselves and all we have to our King, and then we shall go away far richer than we came, for the blessing of the Lord, not only "maketh rich," but He eddeth no sorrow with it. HOPE,

The Quiet Hour.

The Place of Meeting.

It shall be a continual burnt offering throughout your generations at the door of the tent of meeting before the LORD: where I will meet with you, to speak there unto thee.-Exod. xxix.: 42 R. V. And there I will meet with thee, and I will commune with thee.-Exod. xxv.: 22.

" It matters little where I'm led, Placed by the usher's hand; Whether I sit in cushioned pew Or with the paupers stand ; It is God's house, and He will be Surely a gracious nost to me.

"It matter little what my garb, If it be plain or fine; Whether rich silks and jewels bright Or threadbare robes be mine ; But God will see if my soul's dress Is made of Christ's pure righteousness

" It matters little who shall greet Or who shall shun me there; God knows if my heart speaks to Him In anthem and in prayer And I shall surely know if He Hath spoken gracious words to me.

" It matters little what I drop Into the passing plate; 'Tis God's acceptance that doth make The smallest offering great;

decorations, eloquent preachers are advertised to draw a crowd; until anyone from a heathen country might easily suppose that Christians did not go to church to meet GOD and worship Him, but only to an interesting place of amusement, which they had to be bribed to enter.

Long ago the Christians had their places of meeting with GOD in tombs underground. Though they met together in peril of their lives - perhaps because it was a dangerous thing to do-they did not forsake the assembling of themselves together, as the manner of some is. But now, when the LORD is in His holy temple, instead of all the earth keeping silence before Him, and coming into His presence with the awe Moses felt when he found himself on holy ground, we see crowds drawn to this church or that by various attractions, struggling for the best seats, eager to see and be seen. They come away, too often, not with the trembling gladness or holy fear of souls that have been face to face with God, but with good-natured ridicule of the singers, criticism of the clothes of their neighbors, an inclination to pick the sermon to pieces, or with the bored feeling that a wearisome duty has been performed. Of course, there are multitudes of people who do not go to church at all, but there is something wrong when our public worship is degraded to such a mockery of service as this. What is the matter ?

Man is a religious animal. We have all

ing to His messages, remembering that they are words spoken directly to us-if He told the Israelites that He would speak to them in the tent of meeting, we can surely trust Him to speak also to us. And when we do pray, let our prayers be for others, at least as much as for ourselves, let us seek grace and pardon for them as very members with us of Christ's Body. Then we shall find that the church is not only a place for meeting our Father, but our brothers also. The fellowship of Christians is a deep spiritual reality, in spite of the jeering cry : "See how these Christians hate one another ! " It is a real fellowship of real Christians, a sweet communion of saints-and not only of saints in Paradise. Listen to the wonderful words of a modern preacher:

" Christ's love beats like a great heart, pulse upon pulse, combating, defeating, expelling that slow death which has crept over the body of humanity. And thus, 'in Christ, all are made alive.' All : the whole human race is swept forward, is borne upward, by the power of the risen Lord. Where, before, there was degeneration, there is now regeneration. Within the ring of a Christian civilization is the ring of those over all of whom the Name of Christ acts as a living spell, the ring of all those who cling to Him, and cry to Him, and send up heart and voice to Him, and in His Name cast out devils, and do many mighty works. They call upon Him, and the Lord knows them that are His, and He showers down favor upon them as

And well He knows my scanty store That e'en to Him can give no more.

In many homes no word, no smile, No greeting waits for me But here the Father's every child Must always welcome be

() house, to weary spirit dear, I cannot come too often here.'

If God was willing to have a Tent of Meeting that He might meet the Israelites and commune with them, surely He is not, less willing to meet with those who are merafted into the mystical Body of His dear Son, and made entirely one with Him through the wondrous Mystery of the Incarnation. The tent of meeting is set up within easy distance of most people in this Christian land. God is there, true to His covenanted promise : Where two or three are gathered together in My Name, there am I in the midst of them." Just think of it ! The Infinite GOD comes to the place of meeting, only to find, too often, that the creatures He has made are too busy or too idle to meet Him there. There are plenty of professing Christians in our hand to fill the churches, and yet the churches are half empty, unless some unusual attraction has been advertised to fill the empty seats. Just think of it, I say ! That people should go to church to hear a popular preacher, and yet stay away when invited to meet their GOD ! Every inducement is held out to attract people to church in these days. Music,

felt-sometimes, if not often-the marvellous joy of drawing near to God and multitudes, who are swayed, as the tides holding real communion with Him. We are dissatisfied with the sham that our own church-going often is. Let us not look so much at the faults of our neighbors as at our own faults, and try to keep our own vineyard free of weeds and planted with good seed.

Let us first clear away the weed of Selfishness. A common excuse for staying away is : "I don't find that it does me any good." Now, that may seem a reasonable excuse, but it expresses the lowest selfishness. We are invited by our If Father to meet Him in His House. you heard a man say, "I don't often visit my father because he doesn't give me anything when I go, it doesn't do me any good," wouldn't you think that man a monster of selfishness? We should not visit our Father in that Spirit. coming away vexed and disappointed because we don't feel that we have received anything from Him-we never really meet Him without receiving some priceless gift, though the full value of the blessing may not be revealed to us on this side of the Veil, but that is His Royal bounty, and not the reason for our coming.

In order to root out this weed of Selfishness, we must plant Love in its regarded when "the eyes of the LORD place. Instead of going to church principally for our own good, let us go with the thought that we may there meet our Father. Let us lift up our hearts as well as our eyes to His face, praising Where two or three are gathered toand thanking Him in real earnest, listen- gether in His Name there our dear Lord

they look up to Him : multitudes upon of the immeasurable sea, by the magic of His love, as it moves moon-like above them and carries them hither and thither, like mighty waters that shake, and roll, and swing, and murmur, and ebb and flow, and ebb again."-Rev. H. S. Holland.

Then there is the weed of Irreverence. Think of the irreverent behavior of many people in our churches. The giggling and whispering, the turning round to stare at late-comers, the inattentive words of prayer and praise which we dare to offer to the Most High, the pretence of kneeling, which is such a common mockery of Him Who cannot be deceived. God has given us many warnings of the danger of irreverence. He smote Uzza for simply touching the sacred ark, and the men of Bethshemesh because they looked into it. Korah and his company were destroyed by fire because they ventured to offer incense-which only the priests might do-and King Uzziah was a leper until the day of his death because he pushed his way rashly and unlawfully into the Temple. Can we fancy that our irreverent behavior, wandering thoughts and mock prayers are unnoticed or disare in every place, beholding the evil and the good." The surest way of conquer-The surest way of conquering inattention and irreverence is the consciousness that GOD is in this place.

Lo ! what a change within us one short hour Spent in Thy presence will prevail to make ! What heavy burdens from our bosoms take !



What parched ground, refresh as with a dhower !

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We kneel, and all around us seems to lour ;

We rise, and all the distant and the near Stand forth in sunny outline, brave and clear.

We kneel, how weak ! we rise, how full at power !

Why therefore should we do ourselves this wrong,

Or others-that we are not always strong; That we are ever overborne with care; That we should ever weak or heartless be, Anxious or troubled, when with us is prayer,

And joy, and strength, and courage, are with Thee ?

-Dean Alford.



The British Parliament was opened by King Edward on February 12. * *

Constitutional Government in Persia has been recognized by the Shah.

Earthquake shocks were felt on Feb. 11th in Jamaica, Virginia and Spain. .

The Hague Peace Conference will meet on June 15th for a two months' session.

The Japanese trouble in San Francisco is practically over. A conference will be held to arrange terms of settlement. . .

The C. P. R. is building in Britain three new steamers, two of which are intended for trade on the great Canadian lakes.

Over twenty "suffragettes" were arrested for trying to force their way into the British House of Commons on February 13th. .

A terrific explosion recently wrecked the chemical department of the famous arsenal at Woolwich. All the windows in the town were broken, but no lives were lost. .

Owing to continued discontent over the modus vivendi, several members of the Newfoundland Legislature are advocating the secession of the colony from the Empire.

Mackenzie and Mann have asked for Government assistance to build a railway line between Port Arthur and Sudbury. Should the plan be carried, railway communication per C. N. R. would be established all the way from Toronto to Edmonton.

The Letter Box.

Cousins .- There are one or two Dear things I want to tell you this week. First. I have received the recitation called "Caleb's Courtship," from Olive McConnell, and if Apple Blossom will send me her address, with a promise to return it when copied, I will send it to her. Next, I am sorry the letters about China are so late in getting printed. This week closes the discussion of this subject. The following are subjects for discussion, and the best letters on each will be printed, as far as possible, on the date fixed:

Feb. 28th.-Canada's feeling for the United States.

March 14th.-Are large families better than small?

March 28th .- The advantages of education for farmers.

These letters must not be very long, as we must keep space for the little tots' letters, stories, etc.

COUSIN DOROTHY. 52 Victor Ave., Toronto.

P. S.-After this, only the very best letters will be printed. C. D.

The Yellow Peril.

Dear Cousin Dorothy,-Upon seeing Fred's letter, I thought I would like to dispute his idea that China would take the place of Great Britain. In the first place, China is fast developing, but the question is, when will she catch up? For we all know Britain is also developing. But see how Britain has helped China by sending her missionaries to Christianize them. Then look at the number of years since Britain has been civilized and her people have been Christians. She has been said to be fast advancing in the last hundred years, and China may do the same; but it is a long time since Britain was in the place of China. I think Britain has nothing to fear in the "yellow peril," as she is as friendly to our cousins across the line as China is to Japan. GRAHAM REID. Palmerston, Ont.

Dear Cousin Dorothy,-I think much the same about the older Cornerites as Fred Black does. I think they should write something more interesting than they have been writing.

I am going to express my views about the "yellow peril," which Fred Black mentioned in his letter. I think it will be in the distant future, if ever, that China will reach the height Great Britain has. In the first place, China is a country that will not readily take up new ideas. They wish to go on in the same old way. They will not, or do not, train their soldiers as carefully as Great Britain, United States or Japan. It would take a great many years to get their men aroused and trained. Then they have not enough able men to train them. Imagine how many men it would Farmer's Advocate," I felt that I could take to train fifty million men. Again, no longer withhold from writing you a they helieve in many heathen customs, letter. I think just as you do about and what could an army gain who some older ones writing interesting let-

Children's Corner. which they believed to be a token on their defeat. China has a small navy, which they believed to be a token of also, and not let the younger ones do all and it would take much time, as well as money, to fit out a fleet to match Great Britain. If Japan and China join, they might conquer one great kingdom, but if they are getting ready to declare war against all other countries, Great Britain, with United States, could defeat them, let alone all other countries. Wishing the members of the Corner every success.

VERA WILLIS (age 14). Aylmer, Ont.

Dear Cousin Dorothy,-In the last issue of this magazine, I read a letter written by Mr. Fred Black, and I thought it was the best I have ever seen. I think he has the right idea about the letters some boys and girls write about "their pets and father's animals." In my eye, they seem more like catalogues than letters. I do not mean to say they are all alike; some are very good. I think it is all very well for little boys and girls, seven or eight years old, to write about their pets, as they interest them; but when they get older, there are other things that will interest us a great deal more, I'm sure.

In regard to the subject proposed, I do not think that China will take Great Britain's position very soon, for you will see that the sturdier races are bound the farthest away from the equator, and that power started in Greece, then went to Rome, and then kept going northward all the time. But I do think, if the opium habit was abolished, that China would progress a good deal more; but, on the other hand, that the power that Great Britain now holds will stay where it is rather than go back to where it is started, in the warmer climate. A READER.

Canada Virst!

Cousin Dorothy,-This is my Dear second letter to "The Farmer's Advocate." I read all the letters, and would like to open up a discussion with brother Fred. But why go away off to China or Japan, or any foreign country ? Why not take up something about our own " Canada "-the best and richest country under the sun. Just think of the silver mines of Cobalt, and then drop down to our mineral wealth of Hastings and Peterboro Counties - iron, copper, silver, arsenic, lead, mica, marble of all colors. All we want is capital and a government support to make Canada the richest country under the sun. Now, brother Fred, pull on your end of the cord. And when it comes to the stock, why Canada has taken the lead in all the fairs open to the world. And we don't have to go out of Hastings or Northumberland Counties to get the stock either. Why do I know? Because I attend the fairs with my dad, and see for myself.

LORNE BROOKS. Glen Ross, Hastings Co., Ont.

An Old Indian Village

FOUNDED 1866

the writing? I think Cousin Dorothy deserves great credit for the success she has made of our Corner in the past year, with so little help from us older ones. This little village of Onondaga is a very old one. It has an Indian name. It has no very interesting features, nor any picturesque spots. The Grand River flows beside it, and it is always cool and inviting in summer, and in winter it affords excellent skating places.

Our Sunday school is small, and is, I am sorry to say, not so very inviting. Of course, as there are four churches in this small place, that makes a vast difference to the attendance to each. Formerly, I lived in Cainsville, but a year ago we moved here to live. This year, at the beginning of the new quarter, I was elected as secretary. We have a very good library in the Sunday school, which I enjoy very much. It contains many books which are interesting as well as helpful and instructive.

Now, dear Cousin, I do not wish to tire you with too long a letter, so I will now close after asking some more boys and girls of my age, fifteen, to write us about some interesting thing in their own town or village. Wishing you much success. GYPSY.

Onondaga, Brant Co., Ont.

Dear Cousin Dorothy,-I think Eulalie Jeffs expressed a fine idea. It would be much more profitable to those who write to discuss something of the times. I do hope you will have a debate, for I think they are fine. It becomes very monotoncus reading about cows and horses in every letter. Are any of the Cornerites fond of poetry? I think it is very nice reading. My favorite poet is Tennyson. I am very fond of reading books too. I like Rosa N. Carey's books. Has anyone ever read "Mary St. John"? I have, and I think it is very good. A subject for a debate might be: "Which has the more advantages, a town school or a country school ? "

Hoping that my letter may meet with your approval. KATY B. PLANK. Acton West., Ont.

Dear Cousin Dorothy,-I live in Ailsa Craig. My father is a farmer and cattle We built a bank barn last year; dealer. it is very handy; the water runs in front of cattle into large basins, and is always there. I have five sisters and two brothers. I have a dog for a pet, and call him Jack. We own 800 acres of land, and my father stocks about 1,200 acres more. We have 108 cattle, and in the summer-time we have about 300 on grass. We have 16 horses, and milk 4 cows. We use a National separator. My mother says it is the best made. I turn it, and am not ten years old yet. We have two pigs. My father has taken "The Farmer's Advocate" for over ten years, and would not be without it.

HOUSE OF LORDS REFORM. Judging by a guarded reference in the King's speech at the opening of the British Parliament last week, the old struggle between the House of Lords and the House of Commons is liable to assume an acute form at an early date, the crisis having been precipitated by the Education-bill controversy. The House of Commons, with an enormous majority, fresh from the people, passed the Bill, but it was practically wrecked with amendments in the Upper Many concessions had Chamber. been made, but the point to which the Government finally refuses to accede was that requiring regular teachers to give denominational instruction in village schools on the days when such instruction is permitted, in order that what is regarded as a public control of the schools, as against clerical control, might be preserved. Several speeches made of late indicate that the Government may reenact further legislation, which, almost of certainty, will be rejected by the Lords. Following that, the next step would probably be to go to the people on such a measure for the reform of the House of Lords as would bring it more into harmony with the spirit of democracry now visibly gaining ground in Great Britain.

Dear Cousin Dorothy,-After reading your paragraph in a late issue of "The would not fight if they saw something ters. Why do not some older ones write

Riddle : Why does a man wear yellow braces ? Ans .- To keep up his breeches. CARL ROBINSON. Middlesex County.

Dear Cousin Dorothy,-I thought I would write you a little letter, as I have



I'll Share with You.

I Didn't Mean You to Have It All.

NDED 1866

er ones do all usin Dorothy aucceas she he past year. s older ones. uga is a very ame. It has nor any pic-River flows cool and inin winter it 289.

Il, and is, I inviting. Of urches in this ast difference Formerly, I ear ago we year, at the rter, I was have a very school, which tains many as well as

not wish to ter, so I will more boys to write us in their own u much suc-GYPSY.

hink Eulalie It would be e who write mes. I do for I think y monotond horses in Cornerites is very nice Tennyson. ooks too. I Has anyone '? I have. A subject ich has the chool or a

meet with PLANK.

o in Ailsa and cattle a last year; r runs in ins, and is sisters and for a pet. 1 800 acres ocks about 108 cattle. have about orses, and tional sepais the best ten years My father ocate " for be without

FEBRUARY 21, 1907

THE FARMER'S ADVOCATE.

never seen any from any person around here. I am a little boy, ten years old, Ans .- The more you lick it the faster it ing the letters in "The Farmer's Advoand go to school pretty often, and have a good time. My brother has a gun, and we go out shooting sometimes on Saturdays. We got a rabbit the other day, and had a rabbit pie, and it was all right. My papa has taken "The Farm-er's Advocate" for twenty years. I have a sheep of my own; she had two lambs last year, but one died. My brother has a sheep too. My sister has a turkey. I think I will be a farmer when I grow up. I will close now. TALMAGE NIXON. Good-bye. Arva, Oat. 🎍

RIDDLES., 1. When is grass like men? Ans .--When shooting.

The Ingle Nook.

Some Fads and Fancies.

again, and I suppose many of you are

looking forward to having new houses

built on your farms as soon as the

weather is fit. If so, may I just whisper

in your ear-don't let husband, or son or

architect have the whole word in the dis-

position of that house. You are the one

who will have to work in it; you are the

one who will suffer by any little un-

necessary distance here or there-the few

extra steps which may mean so many

hundreds in the course of a busy day;

you are the one who, if a closet is

omitted where it should be put, will

have to spend hours in the course of a

year, brushing, shaking and cleaning

clothes which might otherwise be hanging

in sweet and dustless peace. And re

member, putting up a new house is like

taking a husband-you have it for better

or for worse, and if it turns out a dis-

appointment, why you simply have to put

So see to it that you get that plan in-

to your hands before the first shovelful

is dug for the cellar; study it; live with

it, if need be; pin it up on the wall

where you can see it every day,

and imagine yourself working in just

such a house, making beds, getting meals,

setting tables, running about to cellar, or

pump, or yard. Then, after all this, if

you have an awkward or inconvenient

house-well, you'll rather deserve to have

I suppose every woman has some idea

of the house which would be her ideal,

or at least some hobby in regard to it.

I know one woman who adores mirrors.

As a consequence, she has them-big, full-

length ones everywhere. You can't turn

around in her drawing-room without see-

ing yourself and becoming painfully con-

scious if there is a wrinkle in your waist,

up with it.

it, will you not?

The summer is fast coming back to us

2. Why is a horse like ice cream? goes.

3. Why is wheat like a rosebush? Ans .- Because both are prized for their flour (flower).

4. What has ears, but cannot hear? Ans.-Corn.

5. What has hands, but cannot feel? Ans.-Clock.

6. In yonder field there is a little red heifer, give her hay and she will live, give her water and she will die. Ans .- Fire. 7. What has legs, but cannot move? Ans.-Couch.

8. Black without, red within, lift up your foot and stick it in ? Ang .- Over-M. B. B. shoe.

Wallacetown P. O.

attachments, by which hot water can be supplied directly to the sink (bathroom, etc., of course), all the better. . . In the library or living-room, I should have similar built-in cupboards, but with handsome glass doors, for bookcases; in the bedrooms, or closets off the bedrooms, others for holding hats, ironed clothes, etc., thus dispensing with the ubiquitous "dresser," whose place might be very well taken by a full-length mirror, with tiny shelves near it for comb, brush, etc. . . . Think of the saving in room-cupboards, sideboards, book-cases, etc., all flush with the wall, no awkward corners jutting out, no clumsy furniture breaking what might otherwise be an even and pleasing surface. Just here is where some of you may, at first, disagree with me; you may think that such furnishing may make a room look "bare," and yet I cannot see why this should be so. Unless used for a living-room, a dining-room really needs very little furnishing; while a living-room,

the myriad number of these rugs and their disposition at all sorts of angles, gave a feeling of some-what shall I say ?- distraction. The effect was scarcely restful. Otherwise the house seemed to me perfect, and I was assured that the doing away with the carpets had made the greatest difference in "the work." At frequent intervals, the rugs were taken up, thrown over a line, and beaten. As a consequence, there was no lodging of dust as in tacked-down carpets; the house was invariably clean, and the big annual house-cleaning bout had become a thing of the past.

Dear Cousin Dorothy,-I have been read-

cate," and thought I would like to write

one too. I am nine years old. I am in

the Senior Second Class. I have one

mile and a half to go to school. This

week I had to write a composition on

"what I saw on the way to school." 1

saw so much that it took two pages of

my scribbler to write it. My father has

taken "The Farmer's Advocate"

for a long time. I like to read

the letters and the stories. I am

reading "Bob, Son of Battle," and like

it very much. I have read a lot of

books: Glengarry School Days, Black

Beauty, and Uncle Tom's Cabin are about

the best. We live in Pickering, and call

our farm Lakeview, because we can see

so much of the lake. We have five horses

The second house was a cottage, dainty throughout, yet quite inexpensively furnished. It, too, was guiltless of carpet. The floors were well laid, and were stained; but, instead of small rugs, each room contained a single large one, occupying the central part of the floor to within a yard of the wall, an older fashion than the small-rug fad, but, I think, a more restful and more permanent

and one little pony, which we call Fawn. I ride her, in the summer, to the post office. We have twenty-three head of cattle. We have a black dog named Jack. We have a great big black cat named Tom; he knows his name when we call him, but he is shy of strangers. He is eleven years old. I have three sisters and two brothers, all grown up, and four little nieces.

RALPH E. M. MOWBRAY (age 9).

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Kinsale P. O., Ont. You see, the little boys can write good 0. D. letters, too.

[All letters for Children's Corner must be addressed "Cousin Dorothy," 52 Victor Ave., Toronto. Otherwise they will not be published.]

Our Girls.

Dear Dame Durden and Chatterers,---May I accept the low stool of honor at Dame Durden's feet, so graciously conferred upon me by Rosebud, and tell you my opinion of the young women of the present day ?

Each and every one of the inferences drawn might exactly describe some of the young women we know, but I do not for a moment think that all have so far deteriorated from the characteristics of the ideal woman. It seems natural, and perhaps on that account rather pardonable, that young girls have a proverbial weakness for display and protty things, and also prefer a young man for an escort of the "sporty type," because of his attractiveness. Yet I shall venture to say that even those young women who have been veritable queens of society prefer to marry "thoughtful, earnest" men, knowing they will make better husbands.

The belief that young women are prone to regard pecuniary motives of more importance than natural preference upon entering matrimony is surely contrary to the dignity of noble womanhood. There are undoubtedly instances of it, but I cannot think that it is true in the majority of cases. In fact, I know of more than, one young woman who has refused an offer of wealth with accompanying social position, and accepted a man in poor circumstances, simply because she loved him. Again, I know many young girls who had a positive mania for dress and gayety, and were considered abnormally extravagant, yet abandoned their professions or respective occupations in life, and developed into sensible, economical women.

In my opinion, the keynote of the whole matter is the all-powerful element of love. The most practical man or woman may propound theories innumer able concerning the imperfections of the opposite sex, but when their "Romeo" or "Juliet" appears on the scene, the whole world assumes a roseate hus. When those young gentlemen-critics have discovered their "alter ego," they will quote with Scott :



ear yellow is breeches BINSON.

thought I as I have

C?

or an imagined dip in your skirt. My personal hobby would be for built-in cup-boards. Some of the "women-folk " at our house, who occasionally build veritable castles in the air just for diversion, laugh at my mania; but, after all, I think there is just a little bit of sense, if not of method, in my madness, so I give it to you for what it is worth.

You all know, as well as I, how hard it is to move heavy pieces of furniture about in order to clean under them, and behind them, and in all the crevices where the dust is sure to lodge. Build your cupboard into the wall instead of having a separate one or a sideboard, and presto ! What have you ? All the convenience of the ordinary cupboard or side-board, with no "under" or "behind" to clean. Of course, if one can afford a handsome buffet, all right; otherwise, a dinner-wagon will do very nicely for laying things on temporarily, and it and the built-in cupboard together will not begin to cost as much as the buffet. . . In the kitchen I should have these cupboards-big ones-for stowing away cooking materials and utensils. With these, and a baking-table or cabinet placed conveniently near, a pantry might be dispensed with, and the space usually devoted to it in the farmhouse utilized for a china-closet, which should be placed directly between the kitchen and diningroom, and supplied with a sink and draining board, at which the dishes might be washed and placed in the shelves without a single unnecessary step. If you can afford a tank in the attic and hot-water Fireplace of dull-red brick, with homemade book-cases on each side. You might pay \$60 or more for a fancy grate, which would not be nearly as artistic as this.

shapes, a table, books, a few choice pic- and interstices for palms and ferns, sepatures, plants, and, possibly, a grate and piano, should surely be cosy enough for anyone. If the grate and piano be lacking, then let books-above all, bookstake their place.

But, now I must stop this ramble. I don't want to try to force my opinions on you, and I should like to hear what some of the rest of you have to say. In closing, then, may I just tell you about two houses I saw lately, which appealed from the sublime to the ridiculous, but to me very strongly as desirable. The it was necessary to stop somewhere-and first was quite a large house. It had the piano, easy-chairs, long book-cases, grate (brick, by the way), and all other things one might like for luxury as well as comfort. Here, however, is the point. It hadn't a carpet in it from roof clothes-yard, made an impression. to basement. All the floors were hardwood, waxed, and, instead of carpets, there were small rugs thrown everywhere. Some of houses, but time is up. Can't we have these were expensive, yet in looking at a cozy chat about some of these things them I thought of the rag rugs in soft before house-building and house-cleaning greens and blues and brown, described time comes ? Will not some of the rest some time ago in "The Farmer's Advo- of you bring forth your ideas? cate." It did seem to me, though, that,

supplied with easy-chairs of various one. In this cottage, an arch, with pillars rated living-room and hall, the latter being furnished simply with a hall-seat, a grandfather's clock, and a row of carved wooden pegs, instead of the cumbrous and expensive hall-rack. There were also built-in book-cases in the living-room; and, down in the basement was the handiest little launder ever you saw.

> There, I suppose, I have got somewhat really that laundry, with its stationary tubs with pipes leading therefrom, its clothes "horses," its fine lighting, its long ironing-table and ironing-boards, and its door leading easily out into the

I should like to go on talking about other things-the paper, etc.-in these

DAME DURDEN.

"Love rules the court, the camp, the grove,

And men below, and saints above.

For love is Heaven, and Heaven love ! "

Wrinkles, I have enjoyed your various articles regarding poultry very much, and found your information most valuable. I have been sorely tempted, by way of contrast, to send a description of our poultry last year, dwelling particularly upon our progress with an incubator. It was our first experience, and even now to my mental vision come rushing memories innumerable instances of fluctuating of temperature, infertile eggs, chickens dying in the shell, etc. However, let me re-frain from a more detailed account lest I might discourage anyone contemplating the purchase of an incubator. An old adage is: "Experience is the best teacher," and we have fond aspirations of success during the present year. Your little whisper regarding your pullets laying made me just a little-supply the word, please-as ours just began in Jan-They are pure-bred Plymouth uary. Rocks, too.

However, it is not yet two years since was positively afraid of a broody hen, but now conditions are quite reversed; my approach strikes terror into the most persistent sitter. I am extremely interested in poultry-raising, and am resolved to make a success of it.

Dame Durden, have you vacated your rocker ? FORGET-ME-NOT. Perth Co., Ont.

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LAKE OF THE WOODS MILLING CO., LIMITED.



Many thanks for your very kind private letter. Upon my word I had imagined you thirty-five at least. But I shall not depose you from your seat among the "mature women" for all that. Maturity of head or heart does not always depend upon age, does it?

Chilblains-Clothes Mittens.

D. D.

Dear Dame Durden,-I wish to tell the Ingle Nookers, and those who are troubled with chilblains, a very simple cure, one that I never knew to fail to relieve the most painful case. As a girl, I suffered very much with chilblains. The pain when the feet were cold, and the maddening itching when they were warm, was very distressing. When the feet or hands are chilled, which is due to a stoppage in the circulation, rub gently with your hand, and then briskly as you can bear it for a few minutes. One or two rubbings and you will forget all about the chilblains. This is how I have 'treated my own children, and when we have had visitors stay at the home, I have had their grateful thanks for the same treatment. If mothers of little ones would look at their feet when they undress them for bed, and, if there is any sign of chilled feet, would rub them for a few minutes, it would save the little ones and the big ones, too, much discomfort. Another thing we have done for many years is to have a pair of white woollen mittens, either knitted or crocheted, with nice long wrists, for hanging out and taking in clothes in winter. I think one feels the cold more when taking in the clothes than when hanging them out. The mittens are used for nothing else, and when the cold weather is over, they are washed and put away until winter comes again. Try it, Nookers, and you will find what a comfort they are. you will doubtless remember the account of Mrs. Craigie our Dame gave us a few months ago, one of the successful women. I received an English paper this week, and read an anecdote about her, which I send, 8.8 it may amuse you as it did me. "When Mrs. Craigie was in America, she was invited to give an address at a cer-The chairman was a tain meeting. stupid person, and introduced before her some speakers who were not on the programme at all. It was nearing 11 o'clock when he said, with a smile and bow, 'Mrs. Craigie, the eminent author, will now give us her address.' She rose and said, 'My address is No. 56 Lancaster Gate, Hyde Park, W., London, and I now wish you all good-night, for I am far from home.' " HELPONABIT. The Lilacs, York Co., Ont.

Nut Sandwiches, Etc.

Dear Dame Durden,-Have read with in-

FOUNDED 1866

Turnip Seled.

(Contributed by V. H.)

Take some turnip, and cut with a cabbage cutter. Boil till soft, with salt added to taste. Drain, and let cool a little. Take a little butter and lard, and put in a pan; when hot, add some vinegar. Pour this over turnips, then add pepper and onions to taste, and, last, pour cream over it.

A Most Interesting Letter.

Dame Durden,-So often I have resolved to let Dame Durgen have a piece of my but the resolution would fade mind, but this time she must get it, away; even if only to toss aside to the W. P. Now, I think, Dame Durden, you furnish us with a very needful page each week, and I admire the common sense that is used to leaven the various articles written for it (I expect this will need it). The majority of letters written are very practical, and of all things we need on a farm it is practical knowledge to help us each and every day. The many wrinkles help to make work lighter and life pleasanter; and, when you talk of pleasant living, the farm is the one place where it can be found. I have spent all my days, and they are quite a few, on the farm, and am now what might be called a bachelor farmer, as mother and I alone manage and run successfully a farm, which forms one of the many about us in a prosperous neighborhood. And, let me say right here, we are more thankful each day that the lines have fallen to us in a pleasant place. The independence and comfort we enjoy, even if we have the outside work to do, which men only are supposed to do, is amply repaid by improved health, and a more thorough knowledge of our horses and cattle, pigs and hens, and their various needs.

One of the largest causes of ill health on the farm, that of the wives and daughters, is, I am firmly convinced from observation and experience, too small a proportion of the time being spent outdoors. Let me emphasize the fact, if possible, hy saying that every wife and daughter should know thoroughly that part of the work outside, usually termed "men's work"; then, if the necessity arises, as it did with me, of shouldering the whole work, there will not be that helpless condition that too frequently prevails.

Let them strive to know the values of stock and grain, and learn to estimate the proportions of food needed for the former, and the proper uses of the latter, and they will save themselves many a regret when a pinch comes, as it often does. In acquiring such knowledge, they will require daily contact with each, and thereby gain the required medicine for poor health, the best on the market pure and free oxygen.

I imagine I hear some say, "she knows little of housework." Perhaps so; but one

son-Lock Fencing with other wire fences erected in your neighborhood you will be convinced with its superior merits. You will observe that

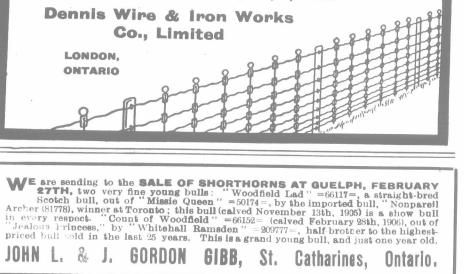
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is the heaviest, strongest, stiffest of them all. Strength and quality considered, it is the cheapest wire fencing on the market at the price it can be erected for.

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quickly acting as our representative. Exclusive territory to the right men. Write to day for our good proposition.



terest all the letters in Ingle Nook for a long time, and I must say they are varied and interesting, many, many good ideas being brought to light. Could anyone give a receipt for nut sandwiches? They are very, very nice, but I do not know just how they are made. And could anyone give the address of McCall's Magazine? It is a fashion magazine, and I think is published some place in the States. Here is a receipt for a very nice cake: Two eggs, 1 cup sugar, 🛓 cup butter, ½ cup milk, 2 teaspoons baking powder, 21 cups flour, and, lastly, add a cup of finely-chopped raisins, and a cup of canned raspberries free from juice. Cook either in a loaf or layers.

Brant Co., Ont.

Nut Sandwiches.—Put a variety of nuts through a meat chopper; add a little salt, and spread over thin, buttered slices of white or brown bread. Peanuts alone may be used, if preferred.

CLEMATIS.

Almond (or other nut) Sandwiches.— Whip $\frac{1}{2}$ cup sweet cream to a stiff froth; add to this $\frac{1}{2}$ lb. finely-chopped nuts; add 2 tablespoons sugar, and spread on buttered bread. If almonds are used, blauch before chopping by pouring hot water on, then, after a time, rubbing off the skins with a coarse cloth.

Another: Grate the yellow rind of 2 lemons; blanch and pound 1 lb. almonds, adding to them the juice of 2 lemons. When in a smooth paste, add the grated rind. Then add yolks of 4 hard-boiled eggs, rubbed to a paste. Spread on buttered bread. lesson I've learned under practical experience—that a spotlessly clean house and torturing aches and pains do not count much for happiness in this world. Be particular and clean, but draw the line at reason, and enjoy something outside of the narrow walls of a house. Cultivate an acquaintance with the mute, appealing eyes that await your sympathy outside, and find a new pleasure in living. Now, Dame Durden, I must not trespass on your good will any further, but I feel this is a subject that might well bear discussion, and hope you will encourage the same.

Perhaps some time I will tell you how to make farming pay from a woman's experience. AUNT NAN.

We hope you will soon fulfil your promise of coming again, Aunt Nan. I am sure the Chatterers will most anxiously await what you may have to say on the subject of farming.

A New Member

Dear Dame Duraen,—I greatly enjoy reading the letters of the Ingle Nook, and as you have so kindly invited us to write, telling how we get along, I thought I would say a little. I am a farmer's wife, and, of course, have a lot of work to do, but do not consider myself a drudge. I do not keep a hired girl either. My husband and I are partners of the firm, and consult each other. When we have no hired man, I help him to milk the cows, and he turns the separator. When he is away at thrashings, and comes home late and tired, I have **IDED** 1866

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with a cabt, with salt let cool a nd lard, and t, add some urnips, then taste, and,

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ave resolved piece of my would fade ust get it, the W. P. Durden, you l page each nmon sense the various ct this will ters written things we knowledge The many nter and life talk of ne one place ve spent all a few, on might be other and ccessfully a many about od. And. nore thankve fallen to dependence we have men only repaid by thorough attle, pigs eds. ill health vives and inced from

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GRAY AND FADED restored to its original color in ten days when **Princess Hair Rejuvenator** is used. It is neither greasy nor sticky, clear as water, free from all injurious ingredients, prompt to act, easy to apply, safe to use, sure in its results. Price \$1.00, express paid. **PRINCESS DANDRUFF CURE** prevents premature grayness and baldness, promotes a healthful condition of scalp, and clears it of dandruff. Price \$1.00, express paid Bugerfluous Hair, Moles, etc., eradicated forever by our method of Elec-trolysis. There is positively no other treat-ment that will destroy hairs on face and arms. Satisfaction guaranteed. Send stamp for booklet "F." Established 15 years. Graham Dermatological Institute, 502 Church Street, Toronto. Special Low Rates CANADIAN PACIFIC West \$41.95 \$39.45 VANCOUVER NELSON, B. C. VICTORIA ROSSLAND SEATTLE TRAIL PORTLAND ROBSON TACOMA SPOKANE, WASH. FROM LONDON. SECOND CLASS. ONE WAY. Proportionately low rates from all Ontario sta to above points and many Western and Coast points not named. Ask for particulars. Tickets good going March 1 to April 30 See naarest C. P. B. Ticket Agent. City Office: Corner Richmond and Dundas Sts., London, Ont. **Children's** finest quality of checked gingham

FEBRUARY 21, 1907

THE FARMER'S ADVOCATE.

that part of the work done. Sandy Fraser says to the farmer, "Get a hired girl for your wife, and don't have her trying to do her work with one hand, and a crying bairn on the other arm. I don't think there is any necessity of carrying a healthy baby around on one arm and trying to work. He would be far better left to amuse himself for a while; but if baby is sick, give him all the care possible till better again.

Let baby lie on his back on the carpet, out of the draft, with a pillow under his little head. It delights him to hear his heels pound on the floor. If it is too cold weather for the floor, put a folded quilt and pillow on the table, and put him there. Be sure he is not able to roll over, or great will be the tumble. A bed or couch is not so interesting, as he cannot hear his heels pounding. I think a baby trained in this way will walk sooner than one that is held in the arms of a .nurse, or kept tied in a chair. I have known them to walk at from nine to eleven months old, and have their limbs the natural shape. I am not speaking from theory only, as we have four healthy children; the eldest is about nine years old, and the youngest fifteen months.

I would say to mothers : let the little ones be around you when you are at your work, for then they will get interest in the work; but don't get impatient with questions. Let all help a little, from the little tot of three or four, making a loaf in a patty tin for papa, to the girl of six or eight, making her own bed. Then, when they grow up, work will not come so hard on them. Let them play around you, too, and it will make you feel young yourself. They say, "Work well planned is half

done." So, dear Chatterers, let us plan our work so we can get it done and visit our neighbors a little too, as it brightens us up to get in touch with other people. Hoping my "say" has not taken too much room, I will close, wishing "The Farmer's Advocate " and all the members a prosperous year. CONTENTED ONE. "

Kent Co. Thank you for your kind private letter, with its encouraging words.

Colds-Date Coke.

Dear Dame Durden,-I have been a silent reader of your Ingle Nook chats for some time, and now may I come in and join you. We have taken "The Farmer's join you. We have taken "The Farmer's Advocate" for several years, and would not like to be without it now. I enjoy reading the letters, and we have tried many of the recipes which have been given, and have found them to be very good.

As this is the time of year for colds, may I suggest a few simple remedies? For cold in the head, try steaming over a dish of hot water to which has been added a small lump of camphor. This should be done at bedtime, for if a person goes out after steaming the head he or she is apt to catch more cold.

A Woman's Society. Dear Dame Durden,-In answer to "One

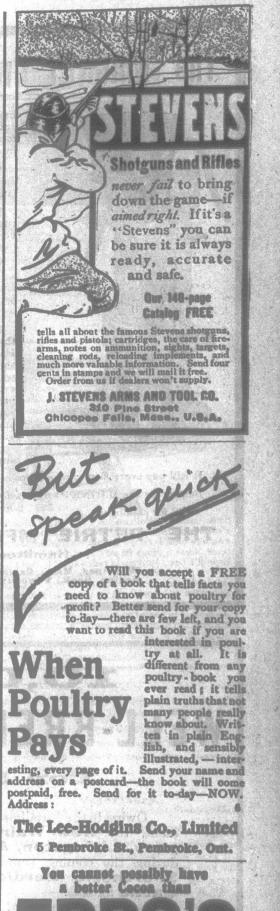
of the Mothers ": We have a society in our neighborhood which is much appreciated by the members, of which there are thirty-six. We meet once a month at the members' homes in turn, the hostess providing lunch, which is passed instead of setting tables. She also provides work; as yet, this has always been quilting or sewing carpet rags. When joining, each members pays twenty-five cents, and five cents each month. This money is used for charitable purposes. We have a president, vice-president, sec.-treasurer and an executive committee of two. The officers are changed every year. meetings start at two, and continue until five. The mothers who have no one to leave the children with, bring them to the meetings: As most farmers' wives can drive, we generally manage to be present. We find this a very pleasant way of visiting. We also have a set of resolutions; of course, you can make these to suit yourselves. Wishing your proposed society every success, A member of E. L. S. C. the---

Something About Our Cirls

Dear Dame Durden,-It is only for the past few months that I have had the privilege of reading "The Farmer's Ad-vocate," but in that short time I have become much interested in the magazine department, and particularly in the Ingle Nook. Only a very just and righteous indignation, caused by the article of Jan. 24th issue, gives me courage to ask for admittance to your circle after so short an acquaintance.

I feel that our young women should rise in arms," not to deny the truth of the criticisms given, for, as you say, we all know girls whom the descriptions exactly fit, but to protest that they are not the true type of the Canadian girl of to-day, and are, therefore, not representative. A number of girls who answer these aescriptions may possibly be found in almost every community, but they are not the girls who give tone and character to that community; they are not the girls who are ready and willing to help in the different good works that may be carried on in the neighborhood. Girls belonging to such a class as described are soon known at their true value, and their lives are of little importance to anyone outside of their own small circle of acquaintances. But I maintain that these are not representative.

I have realized the truth of the assertion that a great many young women prefer the man of the "sporty" type, and have several times heard young women ask why the young men one is likely to meet engaged in church work are not as "nice" as the average young man one meets in society. But I believe with you, that it is not the sporty or fast quality of their natures that attracts, but something else which this class of men usually possess. Is it a certain ease of manner and the ability to put others at their ease, which men who are much in the "world " soon acquire? It is quite noticeable that men, who, through disinterest or other reasons, are limited in their social sphere, lack the breadth of interest and the quick discernment of details that those of broader sympathies usually possess, and so are less likely to create a pleasing impression on short acquaintance. These quieter, though by no means more shallow, natures are understood and admired only by the few who learn to know them. Could these thoughtful, earnest men take time and some little pains to try to see the individuality of each person they meet, which is called forth so naturally by the quick sympathy of the other class of men, they, too, might find themselves much more closely in touch with ordinary humanity than they fancy themselves. I have already taken up too much of your valuable time, but, before closing, I would like to call the attention of all young women who may read this to a book which I would urge them to obtain, if they do not already possess a copy. I refer to "Sesame and Lilies," by Ruskin. If our young women could be brought to realize the possibilities before them; if they will but use the power they may have--" purer than the air of heaven, and stronger than the seas of earth "-there would be no need for such an expression of opinion as Rev. Dr. Van Horne solicited. JUSTICE. You surely did not need to apologize about coming. Come again, will you not?



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Aprons

in blue and white, pink and white, or white cross-bar muslins; sizes 2-6 yrs.

PRICE, 75 CTS.

Also infants' outfits of 28

Sir William Ramsay, the noted British scientist, will go to Asia Minor in the early future to investigate ancient, especially Bible history. He will be assisted in the work by Lord Strathcona's gift of \$2,500 a year.

Liquor and Tobacco Habits

A. McTAGGART, M.D., C.M., 75 Yonge St., Toronto, Canada.

75 Yonge St., Toronto, Canada. References as to Dr. McTaggart's professional standing and personal integrity permitted by : Sir W. R. Meredith, Chief Justice. Hon. G. W. Ross, ex-premier of Ontario. Rev. John Potts, D.D., Victoria College. Rev. Father Teefy, President of St. Michael's College, Toronto. Bight Rev. A Sweatman, Bishop of Toronto. Rev. Wm. McLaren, D.D., Principal Knox College. Toronto Dr. McTaggart's vegetable remedies for the Hiquor and tobacco habits are healthful, safe, inexpensive home treatments. No hypodermic injections, no publicity, no loss of time from business, and a certainty of cure. Consultation or correspondence invited.

For cold in the chest, try the following: Mix mustard with equal quantities of goose oil and turpentine into a thin paste. Heat, and rub well into the chest, sitting by the fire as you do so. Then put a piece of thick brown paper on the chest: this keeps the clothes from being soiled by the mixture, and is a preventive from taking more cold.

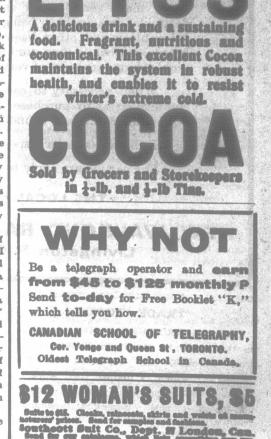
For sore throat, gargle with a strong solution of salt and water. Rub well on the outside with Electric oil or British Troop oil, and put one of the stockings you have been wearing around the neck at bedtime.

These are simple remedies, and probably are known to some of the Ingle Nook readers, but I suppose there are others who have not heard of them. I hope they will help someone. We find them verv satisfactory.

Here is a recipe for date cakes, which are real good : Stone 1 package or more of dates, and boil until soft; sweeten, and set away to cool. Then prepare enough for cakes as follows : Two cups oatmeal and 2 cups flour (mixed), 1 teaspoon salt, and 1 teaspoon soda, and 2 of cream of tartar, 1 cup sugar, and 1 cup lard. Mix thoroughly together. Wet with cold water. Roll out thinly, and cut out as for jam-jams. Put dates between, and cook.

I hope I have not stayed too long, and I may come again some day if this finds its way into the columns of your Ingle LOUISE. Nock.

Dufferin County, Ont.



By ALFRED OLLIVANT.

Bob, Son of Battle.

[Serial rights secured by "The Farmer's Advocate and Home Magasine."]

CHAPTER XXV.-Continued.

" It's not what I think, my dear; it's what the judges think," the parson replied; and what he thought their verdict would be was plainly writ in his face for all to read.

Right on to the centre of the bridge the leading sheep galloped and-stopped abruptly.

Up above in the crowd there was utter silence; staring eyes; rigid fingers. The sweat was dripping off Long Kirby's face; and, at the back, a green-coated bookmaker slipped his note-book in his pocket, and glanced behind him. James Moore, standing in front of them all, was the calmest there.

Red Wull was not to be denied. Like his forerunner he leapt on the back of the hind-most sheep. But the red dog was heavy where the gray was light. The sheep staggered, slipped, and fell.

Almost before it had touched the water, M'Adam, his face afire and eyes flaming, was in the stream. In a second he had hold of the struggling creature, and, with an almost superhuman effort, had half thrown, half shoved it on to the bank. Again a tribute of admiration, led by

James Moore.

The little man scrambled, panting, on to the bank and raced after sheep and dog. His face was white beneath the perspiration ; his breath came in quavering gasps; his trousers were wet and clinging to his legs; he was trembling in every limb, and yet indomitable.

They were up to the pen, and the last wrestle began. The crowd, silent and motionless, craned forward to watch the uncanny, white-haired little man and the huge dog, working so close below them. M'Adam's face was white ; his eyes staring, unnaturally bright; his bent body projected forward; and he tapped with his stick on the ground like a blind man, coaxing the sheep in. And the Tailless Tyke, his tongue out and flanks heaving, crept and crawled and worked up to the opening, patient as he had never been before.

They were in at last.

There was a lukewarm, half-hearted cheer : then silence.

Exhausted and trembling, the little man leant against the pen, one hand on it; while Red Wull, his flanks still heaving, gently licked the other. Quite close stood James Mcore and the gray dog; above was the black wall of people, utterly still · below, the judges comparing notes. In the silence you could almost hear the panting of the crowd.

Then one of the judges went up to James Moore and shook him by the hand. The gray dog had won. Owd Bob o'

Lady Eleanour marked the ... forlorn .little figure, standing solitary on the fringe of the uproarious mob. She noticed the expression on his face; and her tender heart went out to the lone man in his defeat. She went up to him and laid a hand

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upon his arm.

"Mr. M'Adam," she said timidly. "won't you come and sit down in the tent? You look so tired ! I can find you The corner where no one shall disturb you.

The little man wrenched roughly away. The unexpected kindness, coming at that moment, was almost too much for him. A few paces off he turned again.

"It's reel kind o' yer hadyship," he said huskily; and tottered away to be alone with Red Wull.

Meanwhile the victors stood like rocks in the tideway. About them surged a continually changing throng, shaking the man's hand, patting the dog.

Maggie had carried wee Anne to tender her congratulations; Long Kirby had come ; Tammas, Saunderson, Hoppin, Tupper, Londesley-all but Jim Mason; and now, elbowing through the press, came squire and parson.

"Well done, James ! well done, indeed ! Knew you'd win ! told you soeh, eh ! " Then facetiously to Owd Bob: "Knew you would, Robert, old man ! Ought to-Robert the Dev-mustn't be a naughty boy-eh, eh ! "

"The first time ever the Dale Cup's been won outright ! " said the Parson, and I daresay it never will again. And I think Kenmuir's the very fittest place for its final home, and a Gray Dog of Kenmuir for its winner."

" Oh, by the by ! " burst in the squire. "I've fixed the Manor dinner for to-day fortnight, James. Tell Saumderson and Tupper, will you? Want all the tenants there." He disappeared into the crowd. but in a minute had fought his way back. "I'd forgotten something !" he shouted. "Tell your Maggie perhaps you'll have news for her after it-eh ! eh ! "-and he was gone again.

Last of all, James Moore was aware of a white, blotchy, grinning face at his elbow.

"I maun congratulate ye, Mr. Moore. Ye've beat us-you and the gentlemenjudges.'

"'Twas a close thing, M'Adam," the other answered. "An' yo' made a gran' fight. In ma life I niver saw a finer turn than yours by the two flags yonder. I hope yo' bear no malice."

"Malice ! Me ? Is it likely ? Na, na. 'Do onto ivery man as he does onto you-and somethin' over,' that's my motter. I owe ye mony a good turn, which I'll pay ye yet. Na, na; there's nae good fechtin' again fate-and the judges. Weel, I wush you well o' yer victory. Aiblins 'twill be oor turn next." Then a rush, headed by Sam'l, roughly hustled the one away and bore the other off on its shoulders in boisterous triumph.

any separator I have examined." It will pay every farmer who keeps cows to investigate the MAGNET. Remember the MAGNET turns easier than any other separator. Write for catalogue. PETRIE MFG. CO., LIMITFD, Hamilton, Ont.,

or Winnipes, Man.; Calgary, Alta.; St. John, N. B.; Regina, Sask.; Vancouver, B. C.; Edmonton, Alta.

10,000 WELL-BRED CATTLE

For Sale.

Owing to the curtailment of their range by settlement, the New Walrond Ranche Company, Livingston, Alberta, intends to offer during the coming summer their entire herd of Shorthorn, Herdford and Galloway Cattle for sale.

Owing to the winter feeding and careful handling these cattle are semi-domestic, the young heifers are easily made gentle. For settlers they are the most desirable imaginable, being absolutely free from tuberculosis and other diseases common among dairy breeds, and while they are high-class beef cattle, they yield a large quantity of very rich milk.

The MAGNET Cream Separator

has a skimmer that takes all the cream out of the milk, besides separating all

foreign matter from both. It is made

The steel bowl is supported at both

The MAGNET is built with square

running gears, the only gear that should

be applied to a fast-running machine

We ask you to compare the strong

square gear in the MAGNET with the

cheap worm wheels, and in some cases

two worm wheels, in other makes, and

we know you will select the MAGNET.

the MAGNET Cream Separator Co.,

Hamilton : "There are four points in

the construction of a cream separator

which should be thoroughly studied by

every manufacturer, viz.-ease in clean-

ing, ease in turning, durability of con-

struction, perfection in skimming. I

am pleasad to state that, to my mind,

your machine, which is made in Canada,

combines these to a greater degree than

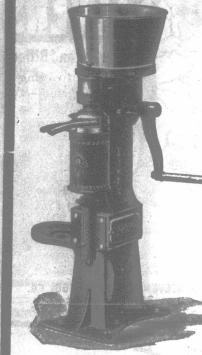
Prof. F. M. Logan, of B. C., writes to

ends, making it run steady, and prevents

in one piece-therefore easy to clean.

it getting out of balance.

like a cream separator.



312

When necessary to car them, neighbors should combine so as to purchase a train-load, say 300 to 400, smaller numbers cannot be handled profitably.

Bulls will also be disposed of.

For particulars apply to

THE LOCAL MANAGER.

NEW WALROND RANCHE CO'Y, LTD. Livingston P. O., Alberta.

TRADE TOPIC.

THE AIR RUPTURE CURE, advertised in this paper by the Lyon Manufacturing Co., Toronto, as explained in the pamphlet, which is mailed free, appears termilk. Cook on a pan on top of stove. to be a safe, reasonable and inexpensive specific for this somewhat common trouble. Those interested should look up the advertisement, and write for the booklet.

Soda Scones .-- One pound " Five Roses" dour, 1 teaspoon cream tartar, 1 teaspoon soda, 1 teaspoon salt, 1 pint but-Dropped Scones.- One pound "Five Roses" flour, 1 teaspoon soda, 1 teaspoon cream tartar, 2 tablespoons sugar, 1 egg, 1 pint buttermilk. Cook on a well-greased griddle.

Recipes.

Kenmuir had won the Shepherds' Trophy outright.

A second's palpitating silence; a woman's hysterical laugh,-and a deepmouthed bellow rent the expectant air : shouts, screams, hat-tossings, back-clappings blending in a din that made the many-winding waters of the Silver Lea quiver and quiver again.

Owd Bob o' Kenmuir had won the Shepherds' Trophy outright.

Maggie's face flushed a scarlet hue. Wee Anne flung fat arms toward her triumphant Bob, and screamed with the best. Squire and parson, each redcheeked, were boisterously shaking hands. Long Kirby, who had not prayed for thirty years, ejaculated with heart-felt earnestness, "Thank God ! " Sam'l Todd bellowed in Tammas's ear, and almost slew him with his mighty buffets. Among the Dalesmen some laughed like drunken men; some cried like children; all joined in that roaring song of victory. To little M'Adam, standing with his

back to the crowd, that storm of cheering came as the first announcement of defeat. A wintry smile, like the sun over a March sea, crept across his face.

"We might a kent it, Wullie," he muttered soft and low. The tension loosed, the battle lost, the little man almost broke down. There were red dabs of color in his face; his eyes were big; his lips pitifully quivering; he was near to sobbing.

An old man-utterly alone-he had staked his all on a throw-and lost.

In giving the Cup away, Lady Eleanour made a prettier speech then ever. Yet all the while she was haunted by a white, miserable face ; and all the while she was conscious of two black moving dots in the Murk Muir Pass opposite her-solitary, desolate, a contrast to the huzzaing crowd around.

That is how the champion challenge Dale Cup, the world-known Shepherds' Trophy, came to wander no more; won outright by the last of the Gray Dogs of Kenmuir-Owd Bob.

Why he was the last of the Gray Dogs is now to be told.

(To be continued.)

FEEDING THE SOIL.-Two exceedingly interesting booklets have recently been issued by the Dominion Potash Syndicate, 1102-1105 Temple Building, Toronto, one a translation from the German, by B. L. Emslie, P. A. S. I., entitled "The Importance of Potash in the Culture of the Sugar Beet," a subject of growing importance in Canada, and the other on "The Improvement of Poor Permanent Pasture," by Prof. R. P. Wright, Principal of the West of Scotland Agricultural College. Both are illustrated and well deserving careful perusal. Copies may be obtained gratis, simply by writing a post-card request to the Potash Syndicate, address given above. As the years go by, such subjects must receive a greater share of attention from everyone concerned in soil improvement.

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? Na. na. does onte hat's my rood turn, a; there's -and the ell o' yer urn next.'' , roughly the other s triumph

FEBRUARY 21, 1907

tree.

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Hay Loaders

One farmer goes around complaining

that farm help's scarce-the other buys

a New Decre Hay Loader, the only farm help that doesn't like to sit under a

tree. The New Deere does the HARD work of hay making and does it right.

The New Deere is a new type of loader -the only one with floated gatherer having flexible fingers. These fingers are NOT "hook formed," consequently pick up nothing but hay. Its work is the cleanest, gets all the hay-leaves all the trash. The New Deere is the lightest weight

all the trash. The New Deere is the lightest weight loader of its width and it is the highest at the delivery point. It has unlimited capacity, and re-quires no change in going from swath to windrow, or vice versa. Handles the hav softly a valuable

Handles the hay softly-a valuable feature in alfalfa, clover, beans, peas,

etc. Descriptive booklet clearly explains all details, and is sent free. Get it at once, and post up on Hay Loaders.

Deere & Mansur Co.

Manufacturers Moline · Illinois

THE FARMER'S ADVOCATE.



MAN tried to sell me a horse, once. He said it was a fine horse and had nothing the matter with it. I wanted a fine horse. But, I didn't know anything about horses much. And, I didn't know the man very well, either.

So I told him I wanted to try the horse for a month. He said "all right, but pay me first, and I'll give back your money if the horse isn't all right."

Well, I didn't like that. I was afraid the horse wasn't "all right" and that I might have to whistle for my money if I once parted w th it. So I didn't buy the horse although I wanted it badly. Now this set me thinking.

You see I make Washing Machines-the "1900 Junior" Washer. And, as I said to myself, lots of people may think about my Washing Machines as I thought about the horse, and about the manwho owned it.

But, I'd never know because they wouldn't write and tell me. You see I sell all my Washing Machines by mail. (I sold 200,000 that way already-two million dollars' worth)

So, thought I, it's only fair enough to let people try my Washing Machines for a month, before they pay for them just as I wanted to try the horse.

Now <u>I know</u> what our "1900 Junior" Washer will do I know it will wash clothes, without wearing them, in less than <u>half the time they</u>

can be washed by hand, or by any other machine When I say half the time, I mean half-not a little quicker but twice as quick.

I know it will wash a tub full of very dirty clothes in Six minutes. I know no other machine ever invented can do that, in less than 12 minutes, without wearing out the clothes.

I'm in the Washing Machine business for Keeps. That's why I know these things so surely. Because I have to know them, and there isn't a Washing Machine made that I haven't seen and studied

Our "1900 Junior" Washer does the work so easy that a child can run it almost as well as a strong woman And, it <u>don't wear</u> the clothes, nor fray the edges nor break buttons, the way all other washing machines do

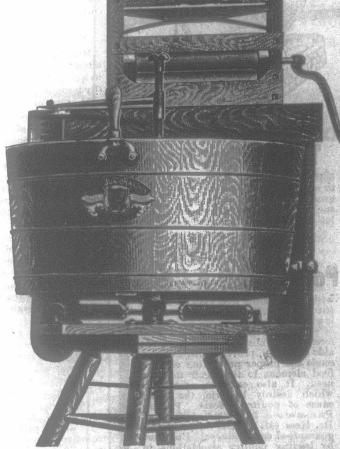
It just drives soapy water clear through the threads of the clothes like a Force Pump might

If people only knew how much hard work the "1900 Junior" Washer saves every week, for 10 years-and how much longer their clothes

saves every week for 10 years—and now much longer their clothes would wear, they would fall over each other trying to buy it. So said I, to myself I'll just do with my "1900 Junior" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer to do it first, and I'll make good" the offer every time That's how I sold 200,000 Washers I will send any reliable person, a '1900 Junior" Washer on a full month's free trial! I'll pay the freight out of my own pocket. And if

you don't want the machine after you've used it a month, I'll take it back and pay the freight that way, too Surely that s fair enough, isn't it? Doesn't it prove that the "1900 Junior" Washer must be all that I

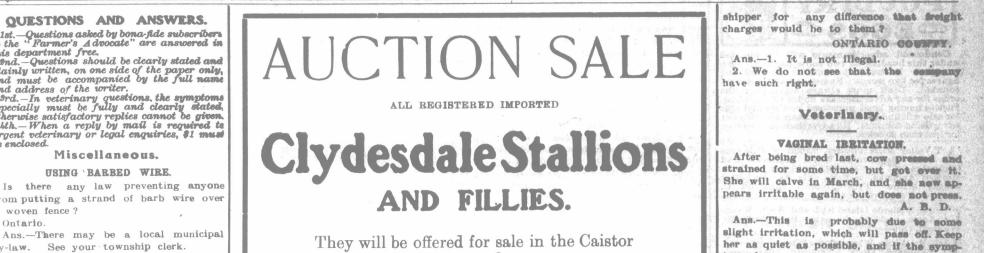
say it is? How could I make anything out of such a deal as that, if I hadn't the finest thing that even happened for Washing Clothes—the quickest, easiest and handsomest Washer on Earth. It will save its



3.8

whole cost in a few months, in <u>Wear</u> and <u>Tear</u> on clothes alone. And then it will save 50 cents to 75 cents a week over that in Washerwoman's wages. If you keep the machine, after a month's trial, I'll let you pay for it <u>out of what it saves</u> you. If it saves you 60 cents a week, send me 50 cents a week till paid for. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance. Now, don't be suspicious I'm making you a simple, straight

Now, don't be suspicious I'm making you a simple, statistic forward offer, that you can't risk anything on anyhow. I'm willing to do all the risking myself! Drop me a line today and let me send you a book about the '1900 Junior'' Washer that washes Clothes in 6 minutes. Or, I'll send the machine on to you, a reliable person, if you say so, and <u>take</u> all the risk myself. Address me this way- F.A.B Bach, Manager ''1900'' Washer Co., 355 Yonge St., Toronto, Ont. Don't delay, write me a post card <u>now</u>, while you think of it.



QUESTIONS AND ANSWERS.

When Writing Please Mention this Paper

Ist.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free. Ind.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and adverse of the writer.

and must be accompanied by the full name and address of the writer. Srd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given. Mth.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

Miscellaneous.

be enclosed.

HSING BARBED WIRE.

from putting a strand of barb wire over a woven fence ? Ontario.

Ans.-There may be a local municipal

Eleanou ver. Yet y a white, e she was lots in the -solitary, huzzaing

challenge Shepherds' ore; won ray Dogs

tray Dogs

xceedingly y been is-Syndicate, conto, one n, by B. ed " The ulture of growing other on ermanent Wright, nd Agrillustrated l. Copies by write Potash As the receive a everyone

by-law. See your township clerk. GARNISHING PROCEEDINGS.

A and B thrash together. A owns the engine; B the separator. A has not any share whatever in B's machine. A gets one-half the profit, and B the other half. If B could not pay for his machine, could the company garnish A's profit SUBSCRIBER. for B's machine? Ontario. Ans.-No.

POOR REPAIR WORK.

I have a windmill pump. The sucker comes uncoupled. I have to secure the service of a man and tools to do the job. If any accidents occur on account of poor tools, or carelessness, have I to pay him for his extra work, and for the repairs made to pump caused by the accident ? NEW SUBSCRIBER. Ans.-Probably not.

PROMISSORY NOTE-EXTRA PREIGHTAGE.

1. Is a note of the following description legal, or was it necessary for second owner to have it changed? A having bought five cattle from B, gave B his note for the amount, and at the part in the blank form, which reads, "for value received," A marked out "value," and wrote "five cattle," making note read, " for five cattle received "?

2. When a company buy hay, through a representative, by verbal agreement, to bale, and, through a smaller car than is usually used for the purpose being sent, not enough hay is put in car to suit company, have company right to charge House yards on

FRIDAY, MARCH 8TH

17 stallions and 50 fillies (all imported).

Capt. Robson, Auctioneer. Jas. Innes, Prop., Woodstock. Ont.

For catalogue apply to owner.



her as quiet as possible, and if the symptoms have not ceased by the time you see this, or she commences to press, give her 2 ozs. laudanum in a pint of cold water as a drench, and, if necessary, repeat the dose in three or four hours.

MISCELLANBOUS.

1. Filly, three years old, was bred last year, and aborted in five months as a result of eating frozen grass. Had I better breed her again, and, if so, how can I guard against abortion ?

2. Three - year - old filly, imported eighteen months ago, has itchy legs. She rubs and bites them.

3. Draft horse has hard lump deepseated on the point of his shoulder.

R. T. M.

Ans.-1. As the accident was caused by an attack of indigestion, caused by eating frozen grass, prevention will consist in avoiding the cause. Mares readily acquire the habit of aborting, hence between the fourth and sixth months of gestation be very careful of her, feed lightly, and give regular exercise. If she shows symptoms of aborting, give 2 ozs. tincture of opium in a pint of water, every four hours, until the symptoms cease.

2. Dress the legs twice daily with solution of corrosive sublimate, 30 grains to a quart of water, and give her 2 ozs. Fowler's solution of arsenic, twice daily for a week.

3. This is a tumor, and the only successful treatment is dissection. Get your veterinarian to operate.



The Paying Hen is the one which contributes 150 eggs or more in a year, toward the family grocery bill. The sure way to have such heas, eggs in abundance, and a lot of ready cash is to give a little of DR. HESS

314

Poultry PAN-A-CE-A with the morning feed every day in the year. Dr. Hess Poultry Pan-a-ce-a is a tonic, the sole purpose and action of which, is to assist nature in the performance of necessary functions. It aids digestion, prevents disease, and sends the proper proportion of each food element to the organ most in need. It also contains germicides which destroy bacteria, the usual cause of poultry disease. Poultry Pan-a-ce-a is the prescription of Dr. Hess (M. D., D.V.S.), and is a guaranteed egg-producer. Endorsed by leading poultry associations in United States and Canada. Sold on a written guarantee, and costs but a penny a day for 30 fowls. 11 lb. package, 35c. 12 lbs. \$1.75, 5 Ibs., 85c. 25-lb. pail, \$3.50.

Send 2 cents for Dr. Hess 48-page Poultry Book, free. DR. HESS & CLARK,

Ashland, Ohio, U. S. A. Instant Louse Killer Kills Lies



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

A T Valley Mills Poultry Ranch—Fertile eggs from Single.comb White Leghorns, Buff Orpingtons, \$1 per setting, \$4.50 per hundred. Mottled Anconas, settings only, \$2. No better winter layers. Free circular. Edmund C. Apps. Box 284, Brantford, Ont.

HOICE Rhode Island Red, and White Wyan Welland, Ont. GGS-White Wyandottes, White Leghorns.

THE FARMER'S ADVOCATE.

COSSIP.

The Galt Horse Show Association have selected the dates, June 6, 7 and 8, for their show of 1907, in the town of Galt,

CLYDESDALES AND HACKNEYS.

Mr. B. Rothwell, Ottawa, Ont., whose advertisement appears in this issue, writes : "I have three recently-imported Clydesdale stallions-big, thick horses, with lots of quality and Clydesdale character. Having use for but one in my business. I offer any two for sale at reasonable prices. The lot comprises the hig, drafty four-year-old horse, Lord Durham, by the good breeding horse, Lord Fauntleroy, a son of the 3,000-guinea horse, Prince of Albion. Lord Durham has five recorded dams, representing some of the choicest blood of the breed. Diadem, whose portrait appears in this issue, a four-year-old son of MacRaith, out of the great brood mare, Hecuba, by Baron's Pride, has plenty of size and flash quality to recommend him. Hillhead Stamp, by Hillhead Chief, is rising three years old; will easily develop into a ton-weight; is a model draft horse and a grand goer. His sire, Hillhead Chief, is probably the most successful sire of big, high-priced cart geldings in Scotland. I have, also, the four-year-old Hackney, Dainty Duke of Connaught, by Garton Duke, out of a Denmark mare, and some registered Clydesdale mares. The stallions are a big, sound, fresh lot, with abundant quality, and straight, true action, and will commend themselves to anyone wanting a good horse and a moneymaker for the incoming season. Write for prices. Farm, three miles east of Ottawa. Visitors will be met by appointment."

ANNANDALE HOLSTEIN SALE. The catalogue of Mr. Geo. Rice's great sale of Holstein cows, heifers and young bulls to take place at Annandale farm, Tillsonburg, Ont., on Wednesday, Feb. 27th, is the finest production of the sort ever brought out in Canada, being illustrated with photogravures of his great cows: Iosco Pride, first and sweepstakes at Toronto and the Pan-American; Daisy Texal, 18 lbs. butter at three years old, and sweepstakes at the National Dairy Show, 1905; Calamity Jane, sweepstakes at Ontario Provincial Dairy Show, making in one day 85 lbs. milk in public test, and an official seven-day record of 25 lbs. (86 per cent. fat) butter; also portraits of nearly a dozen other great producing cows, and of such noted bulls used in the herd as: Prince Posch Calamity, whose dam and sire's dam averaged 26 lbs. butter in seven days, and of his sire, Sir Pietestje Posch, a son of the great young cow, Alta Posch, who holds the world's record for two- and three-yearolds, 576 lbs. milk, and 27.1 lbs. butter in seven days, 86 lbs. milk in one day, and an average of 82 lbs. for a week, Prince Posch's dam being Calamity Jane, with her record of 572 lbs. milk in This will certainly be a great week. sale, and it will well repay dairymen to attend, whether they buy or not, to see such a grand aggregation of heavy-milking cows. and have the chance of buying a young bull bred in such deep-producing Geo. Rice, the apostle of cowlines. testing and of public-record performance in Canada, richly deserves the patronage of the dairy world, and a record attendance should honor him and his work on the 27th, at Annandale, the home and scene of the splendid work of the late Mr. Tillson, whose herd of 65 head of Holsteins, pure-bred and grade, mostly bred on the farm, as the result of good breeding and feeding, averaged 10,000 lbs. milk yearly. One can hardly make a mistake in buying a good cow at present prices of dairy products. She will soon pay for her cost, in calves and milk. Poor cows are dear at any price, as they scarcely pay for what they eat, leaving nothing for labor in attending and milking them. Canadian farmers are just waking up to the importance of improving their cows for profitable production, and the possibilities in this cattle, Ottawa. direction are amazing. A visit to Annandale farm will be a revelation to many. The establishment, it is true, was built up by a wealthy man, but Geo. Rice is a plain, hard-working man, earnestly and honestly and successfully carrying on the work of improvement, and all may rely on straight and honorable treatment who West, Ont., Aberdeen-Angus and buy stock from him.

The Royal Agricultural Society's Show, for 1907, will be held in the city of Lincoln, June 25th to 29th. An invitation to hold the show for 1908 at Newcastleon-Tyne has been accepted.

Attention is called to the new advertisement in this issue of the Magnet cream separator, by the Petrie Manufacturing Company, Hamilton, Ont. See the advertisement, and send for catalogue, to headquarters, or to the agencies in the leading cities named.

At a public meeting, recently held in Aberdeen, of breeders of Shorthorn cattle, to consider a proposal to present Mr. Wm. Duthie, of Collynie, Tarves, with some tangible recognition of the esteem in which he is held, and of the great service he has rendered the cause of Shorthorn-breeding and agriculture generally, it was decided that the presentation should take the form of his potrait in oils, painted by a competent artist.

An important clearing sale of pure-bred stock is advertised in this issue to take place at Clayfield Stock Farm, Jarvis, Ont. (G. T. R.), Thursday, March 7th, when the owner, Mr. J. C. Ross, will sell by auction seven Clydesdale mares and fillies, a two-year-old stallion, 26 head of Shorthorn cattle, and a number of choice Cotswold and Hampshire Down sheep. The quality of this stock may be relied on as of high-class character, as Mr. Ross is an enterprising importer, a careful breeder, a discriminating judge, and a reliable man.

CRERAR'S CLEARING SALE.

On Wednesday, March 13th, as advertised in this issue, Mr. Jas. A. Crerar, of Shakespeare, Ont., a station on the G. T. R., near Stratford, will sell his entire herd of 45 Scotch-bred and prizewinning Shorthorn cattle, imported and Canadianbred. This herd has stood well up to the top at leading Canadian shows in the last ten years or more, winning second in the herd competition, first for cow, and senior championship female at the Dominion Exhibition, at Toronto, in 1903, and third at Toronto and first at London for herd in 1906. For thrifty, thick-fleshed, early-maturing stock of upto-date type and breeding, this sale will afford a good opportunity for those looking for that class to secure them at their own price.

Arthur F. O'Neil, Maple Grove, Middlesex Co., Ont., has recently purchased from James Henderson, Belton, the imported three-year-old Clydesdale stallion, Celtic Prince (12901), sired by the champion Everlasting, by Baron's Pride, dam by the champion Hiawatha, grandam by the sire of champions, Prince of Wales (673), breeding than which no better can be desired or procured. This horse should prove of great benefit to the locality in which he stands, as in addition to his superlatively good breeding he is individually all one would exFOUNDED 1866



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

Automotions visitions, res back, and misseliances advantising. TERMS—Three cents per word each insertion. Neeh initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. Ne advertisement inserted for less than 50 cents.

FINE stock farm of nearly 700 acres; level A FINE stock farm of nearly 700 acres; level land; running stream; magnificent pas-ture: clay loam; large barn with two wings; good house; forty acres of wood; one mile from post office; ten miles east of Hamilton; two miles from railroad. Must be sold to close estate Will consider exchange for city prop-erty. Easy terms. Price less than fifty dollar per acre. Apply Burk & Co., 28 Toronto street.

Toronto. COMPETENT, experienced and practical herdsman wanted to take charge of the largest and best Jersey herd in Canada Must thoroughly understand breeding and feeding, and the producing of pure, clean milk, and all the details. Box C., Farmer's Advocate. London.

The desails. BOX C., Farmer S Advocate. London. R GOR SALE-140 acres six miles from Brant-ford, two miles north of Cainsville. The land is rolling clay loam. Bank barn with power mill and water basins. Good orchard; neverfailing creek; a quantity of timber. Farm well fenced. Good frame house of ten rooms. Apply Henry Coles, Brantfrd.

FOR SALE - Wo-story brics house. Ten rooms. With six acres of land. One hun-dred fruit trees. Outskirts of town. Three thousand population. Great Bargain. Drawer F., Clinton, Ont.

F., Othern, one. F. OR SALE-50 acre farm, 7 miles from London, on the London and Sarnia road; 13-story brick house, been 35 x 50, driving house and horse stable 30 x 40, shed >6 x 60. Excellant water; soil clay loam, in a high state of cultivation. Apply B. F. Tuckey, Ferguson.

For QUICK SALE-Farm and Stock consist-ing as follows: North-east quater-section 24, Township 6, Rance 17. 80 acres wheat land, 20 acres hay land, balance bush. All fenced. New barn, stone foundation, which will hold 35 head of stock. New house, frame, with stone basement Good water. South-east quarier-section 25, Township 6, Range 17. 130 acres cultivated, balance wheat land. 100 acres ready for crop. 24 head horned stock, 9 head horses, 10 tons hay, about 1000 bushels cats. about 500 bushels barley, complete outfit of farm implements. Price \$9,700.00. \$4,000 cash, balance to suit. Interest 6%. Might exchange for city property. Apply to A.E. Liloyd, Wa-wanesa Man., or Houghton Land Corporation, Union Bank Building, Winnipeg Man OR QUICK SALE-Farm and Stock consist-

MARRIED couple, without family, want sit-farm; experienced. Lovett, care Nancekivel, Ingersoll, Ont

WANTED-Man to take charge and work farm of 400 acres on share basis, 220 acres all plowed Supply own machinery, horses and help. Good house and stables near railway, school, etc. Located on Roseau River. Willing to sell. Address for particulars, J. H. Basker-ville, Dominion City, Man.

Wanted Dominion City, Man. WANTED - Reliable farmer, well recom-mended, to take ranch in Saskatchewan on one-third shares. Twenty horses, stallion, and full equipment Good buildings Railway building through the property. Four hundred arres ready for spring crop. A rare chance to right party, Apply L. G. Harris, 518 Euclid Avenue. Toronto, Ont.

Special Several first-class farms; ready for crop; close to elevator. Fourteen dollars per acre. Also several choice unim proved three-hundred-and-twenty-acre farms near Moose Jaw. Ten dollars. These exceptional bargains. A. & F. MAYBERY, Moose Jaw, Sask.

Dollar per setting. E. W Burt, Paris, Ontanteed

Standard

FOR SALE - White and Buff Wyandottes, Brown and White Leghorns. Prizewinners. Eggs. \$15) for fitteen. Joseph Booke & Son, 117 Wellington Rd., Lendon.

FOR SALE — Three Chatham incubators, seven indoor brooders. Used one season. **Perfect condition.** A. Pennoyer, Cookshire, Que.

HOR SALE-High-class White Leghorn cock Hereis. Bred from grand exhibition and laying stock. Prices reasonable for quick buyers. Jas. McCormack. Brantford, Ont.

MAMMOTH Bronze Turkeys, Silver-Gray Dorkings, Barred Bocks, from prizewin-ners. Pairs not akin. Alfred E. Shore, White Oak, Ont.

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

MAMMOTH Bronze turkeys - Heavy birde. M Ammorin Bronze turkeys — Heavy birde. and hens. Part of stock from the first-prize Pan-American winners. Pairs not akin. I won first and second prizes cn cockerels and first on pullet at London last September. Eggs in sea-son. R (4. Rose. Glanworth, Ont

SELECTED Barred Plymouth Rock cockerels. 2 for \$2. Oliver S. Hunter, Durham, Ont. SURE KILL LICE-How to keep eggs fresh These recipes are simple, but will do the work. Price twenty cents each: all for fifty. Ingredi-ents obtained at all druggists at little cost. Ad-dress, Smith Scott, P. O. Box 1008, Station C. dress, S. Toronto.

WHITE Wyandottes - Few fine, vigorous cockerels. Eggs in season. W. D. Monk-man, Bond Head. Ont



pect from such breeding, winning second at the Canadian Stallion Show at Toronto last year in strong company. The farmers of Middlesex and adjoining counties are to be congratulated on securing the services of a horse of this class, which, from his breeding and quality, cannot fail to prove a most valuable sire.

SALE DATES CLAIMED.

Feb. 27th.-Geo. Rice, Tillsonburg, Ont., Holsteins.

Feb. 27th.-Provincial sale of pure-bred cattle, Guelph, Ont.

Feb. 28th.-L. K. Weber, Hawkesville, Ont., Shorthorns.

March 1st .- Provincial sale of pure-bred cattle, Port Perry, Ont.

March 6th.-Arthur Johnston, Greenwood, Ont., Shorthorns.

March 7th .- Thos. Mercer, Markdale. Ont., imported Clydesdale fillies.

March 7th .- J. C. Ross, Jarvis, Ont. Clydesdales, Shorthorns and sheep.

March 7th.-G. J. Jopling & Sons, Bridgenorth, Ont., Shorthorns.

March Sth .- Provincial sale of pure-bred

March 12th.-Hay Bros., Tara, Ont. Shorthorns.

March 13th .- Jas. A. Crerar, Shakespeare, Ont., Shorthorns.

March 14th .- John Vance, Tavistors, Ont., imported Clydesdale mares.

March 19th .-- John O'Brien, Londor cattle, and farm stock.



MORGAN'S CHICK FEED Makeschic s grow and keeps Makes chic s grow and keeps them healthy—it pays—ask for free article on "Feeding Chicks and Poutry." Use Morgan's Roup Cure, 25 cents postpaid-Use Morgan's Meat Meal, Leg Bands and Markers-

Holsteins for Sale! Two three-year-olds, two bull calves. Prices right for quick sale. Buff Orpington and White Rock ergs, one dollar per setting. David Rife, Heapeler. Ont. Rock ergs, one dolla Hespeler, Ont.

24 POUNDS OF BUTTER. A telegram from Mr. Geo. Rice, of Tillsonburg, Ont., to "The Farmer's Ad-vocate." announces that the five-year-old Holstein cow, Rose Rattler, included in his auction sale, to take place on February 27th, has just completed a seven-day test, in which she produced 24 lbs. of butter.

The old and reliable seed merchants, John A. Bruce & Co., Hamilton, Ont., have again placed their advertisement of farm and garden seeds for 1907 in "The Farmer's Advocate." For information re the newest-tested and best varieties of wheat, oats, barley, clover, corn and other farm, garden and flower seeds, send for their illustrated catalogue, which may be had for the asking.



Catalogue

Simple, perfect, self -regulating. Hatch every fertile egg. Lowest priced first-class hatchers made. GEO. H. STAHL, Gainey, Ill.

UNDED 1866

FEBRUARY 21, 1907



ertied under this perties, Help and and miscellancous rd each inserties

rd each insertion. d and figures for sues are counted. the order. No than 50 cents.

700 acres; level magnificent paswith two wings; d; one mile from Hamilton; two be sold to close e for city propthan fifty dollar Toronto street.

and practical a charge of the a Canada Must ag and feeding, a milk, and all vocate. London. vites itom Brant-Cainsville. The Cainsville. The Good orchard; f timber. Farm fe of ten roogs.

a house. Ten and. One huntown. Three orgain. Drawer

road; 15-story house and horse ant water; soil ivation. Apply

quarter-section es wheat land, h. All fenced. sh will hold 35 ne, with stone h-east quarter. 17. 130 acres 00 acres ready head horses, ats. about 500 fit of farm 4,000 cash, ight exchange Lloyd, Wa.

Corporation, fan nily, want sitber; man for Nancekivell,

rge and work asis, 220 acres ry, horses and dear railway, iver. Willing J. H. Baskerwell recom-

askatchewan sses, stallion, igs Railway our hundred are chance to 518 Euclid

farms; ready to elevator. veral choice -twenty-acre lars. These AYBERY.

THE FARMER'S ADVOCATE.

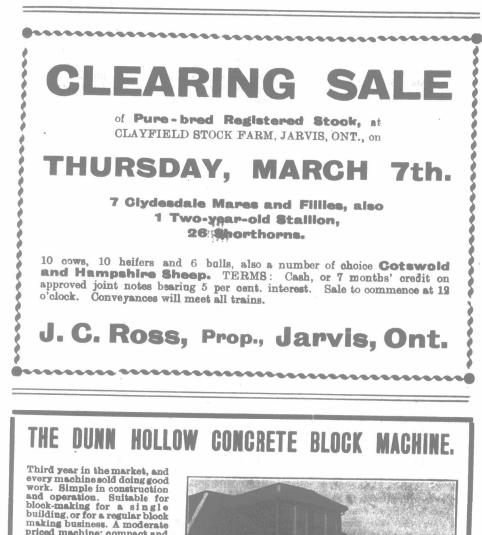
ESTABLISHED 1856.

Simmers' Seeds

F YOU have never planted them, try them this year. They never disappoint; they grow; they yield. You are always sure of freshness, purity and reliability. For this reason thousands of farmers, gardeners and planters in Canada plant Simmers' Seeds exclusively.

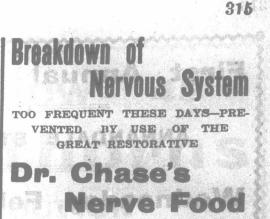
Our **1907 Catalogue** contains many suggestions and directions, the result of over fifty years' experience in the seed business. Write for it to-day. It is **Free**.

J. A. SIMMERS, Seeds, Bulbs, Plants. TORONTO, ONT.



COSSIP.

ARTHUR JOHNSON'S SALE. The dispersion, by auction, of the noted Greenwood herd of Shorthorns, to take place on March 6th, at the farm, near Claremont, C. P. R., and Pickering, G. T. R., will certainly be one of the most important events of the present year in live-stock circles. Founded over forty years ago, and continuously improved by the importation of personally-selected seed stock by a careful and discriminating judge from the best herds in Britain, the Greenwood herd has been kept up-to-date in type and quality as well as in breeding of the most desirable character. It is safe to say that no man in the business in America. has shown better and few equally discerning judgment than has Arthur Johnston in the selection of young animals in moderate condition, and not forced for show purposes, which have developed into first-prize and sweepstakes winners at leading shows, and become the progenitors of stock making similar records. Those who have observantly followed the fortunes of the show-ring at Toronto in the last twenty-five years will bear witness that the percentage of first-prize winners and champions during that period, tracing to the Greenwood herd and to sires and sons of sires bred in that herd, has been greater than can be credited to any other one herd in the What better evidence than Dominion. this is needed to attest the quality of a man's judgment and skill as a breeder and buyer, or the character of a herd. Moreover, it is doubtful whether any other herd in Canada has furnished foundation stock for more first-class herds in America, or any breeder sold so many Shorthorns by correspondence with such satisfaction to the buyers. Mr. Johnston's selection and purchase, in thin condition, of the since far-famed Crutckshank-bred Victoria bull, Indian Chief, at a time when the prospects for the Shorthorn trade were far less promising than to-day, was one of the most far-seeing and skilful exhibitions of discriminating judgment, and one of the most profitable investments for himself and for the interests of the breed ever made by any breader in the Dominion, adding it may millions to the solid value of our herds. The catalogue of the herd, as it is to-day and to be dispersed on March 6th, will satisfy any discerning breeder that here is much of the best blood of the leading herds of Great Britain in the last thirty years. The success of this sale will depend largely upon the helpful presence of the breeders of Canada, and on its success will hinge, more than on that of any other in recent years, the interests of the breed and the breeders in the Dominion in the next few years. And no better opportunity has occurred for many years, or is likely to occur in the near future, to secure foundation at ock for establishing a herd, or the most desirable blood to introduce into an existing herd. The catalogue opens with the imported six-year-old roan cow, Carnation Queen, of the favorite Miss Ramsden family, the dam of three calves, all living, and she is well gone with her fourth. Following is the Marr-bred imported four-year-old Lady Annie Sth, and Lady May (imp.), bred by Gordon, of Newton, and sired by the champion Cornerstone. Three of the Uppermill Princess Royal family, two of them imported, follow. A trio of Bruce Mayflowers, with half a dozen crosses of Cruickshank and Willis sires showing in their pedigrees, are followed by a trio of Kilblean Beautys, including Imp. Beauty 41st, bred by Mr. Manson, sired by the W. S. Marr-bred Merry Mason, almost a full sister to Mr. Willis' three times Royal champion, White Heather. A quintette of Heatherwick Fortunas, including the imported cow and twin daughters, with capital top crosses of Cruickshank sires, are followed by a pair of Lavenders, a pair of Nonpareils, a trio of Duchesses of Gloster and a Marr Clara of the choicest breeding. Space forbids further mention of individual animals, but these gleaned from an incomplete copy of the catalogue, will serve to indicate the character of the herd as a whole and to satisfy the most fastidious that the offering will be found an uncommonly attractive one. Those interested should send for the catalogue, which furnishes vastly more information than can be supplied in these hurried notes.



The keen competition of hife is now felt in all grades of society, and as the result prostration, paralysis and insanity are becoming more and more common as the natural outcome of exhausted nerves.

Sleeplessness, irritability, indigestion, headache and general lack of energy and ambition are among the early indications of nervous troubles, and with women the result is not infrequently derangements and irregularities of the feminine organism.

If a committee of experts on diseases of the nerves were to prescribe for you they would give you just such a formula as that of Dr. Chase's Nerve Food, for this medicine is composed of the most powerful nerve restoratives known to medical science.

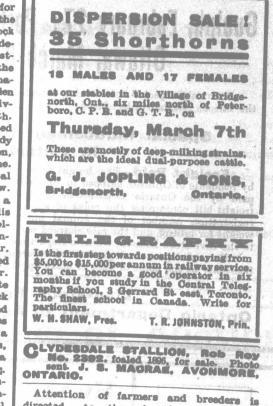
This is no idle boast, as we shall be pleased to prove to you if you will have your physician call at these offices and examine the formula.

What we consider as better proof of what Dr. Chase's Nerve Food will do for you is to be found in the letters of recommendation published from time to time in Dr. Chase's Almanac and in the newspapers of this country.

Mr. Alexander Honsburger, 10 Moore St., St. Catharines, Ont., writes: "For some years I was much afflicted with hervousness, which grew on me and developed into paralysis of the limbs so that I became helpless. The best efforts of three doctors failed to even relieve me, and, though I tried a Buffalo specialist, he, too, was baffled in my case. I gradually grew worse, and was in such a bad condition that I despaired of being well again.

"Shortly after I commenced using Dr. Ohase's Nerve Food, I was able to resume work, and am now feeling better than I did for twenty years. I consider Dr. Chase's Nerve Food the king of all medicines, for through its use I recovered health after long suffering."

Dr. Chase's Nerve Food, 50 cents a box, 6 boxes for \$2.50, at all dealers, or Edmanson, Bates & Co., Toronto.



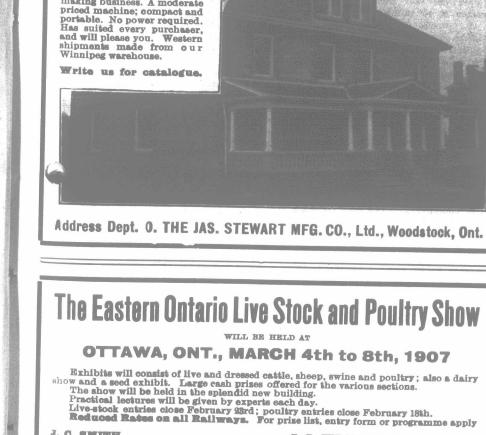
ICK FEED w and keeps bays—ask for oding Chicks se Morgan's is postpaid. eat Meal, d Markers.

Sale ! es. Prices and White avid Rife,

R. Rice, of ner's Ade-year-old cluded in on Februseven-day lbs. of

erchants, on, Ont., sement of in "The mation re idetics of corn and r seeds, atalogue, g.

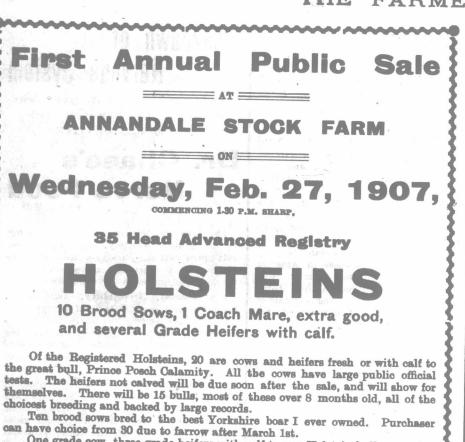
ns by the JBATOR IEN egulating. ... Lowest is made. liney, fill.



J. C. SMITH, President.

A. P. WESTERVELT, Secretary, Parliament Buildings, Teronte. Attention of farmers and breeders is directed to the advertisement in this issue of the dispersion sale, by auction, on March 7th, of the Shorthorn herd of Messrs. G. J. Jopling & Sons, at Bridgenorth, Ont., near Peterboro, G. T. R. and C. P. R. The offering consists of 35 head-18 males and 17 females-bred from deep-milking strains, the ideal dual-purpese sort, suitable to the general farmer. 316

THE FARMER'S ADVOCATE.



One grade cow, three grade heifers with calf to our Holstein bull, one extra fine German Coach mare, 7 years old, suitable for heavy carriage in city. Orders taken for seed corn, to be seen on the ear.

All will be sold without reserve, as I propose to make this sale a yearly event of importance. I am putting in an extra fine lot of stock. Catalogue with over 30 cuts of animals offered, and complete information as to breeding, records, etc., on request. Barns 100 rods from Main St., G.T.R and C.P.R. M.C.R. one mile.

Terms: 8 months' credit on approved notes. 6% discount for cash. Sale under cover.

MAJOR E. R. ALMAS, Norwich P.O., Ont. CAPT. T. MERRITT MOORE, Springford, Ont. Auctioneers. GEO. RICE, Prop. COL. L. G. PEARCE, Tillsonburg, Ont. Tillsonburg, Ont.



WILL BE HELD AT THE FOLLOWING POINTS :

Guelph, February 27; Port Perry, March 1; Ottawa, March 8; 1907

QUESTIONS AND ANSWERS. Miscellaneous.

STALLION INSURANCE.

1. Is there any insurance company in Canada that would insure the life of a stallion ? If so, please give rates and principal conditions. E. T. Ans .- See answer to Subcriber, of simi-

lar question in this issue.

STOCK BOOK.

Please answer me, through the columns of "The Farmer's Advocate," which is the best stock book, and where can I get it? **B**. **B**.

Ans .- We know of no one book covering all breeds and management that we could recommend. Please be more specific as to what is required.

EXAMINATION FOR ENGINEERING.

Where would I have to go to take examination for a stationary or portable engineer, and what would the fee be? Where could I get books treating on engines ? J. B.

Ans .-- You can be examined by any holder of a first-class certificate. Fee is usually \$2 for third-class; \$4 for second. You can get any books from the Hill Publishing Company, 505 Pearl St., New York.

INDIGESTION.

I have a bull that does not seem to be thriving. His hide is rough and unhealthy; he grinds his teeth, and grunts, and, at intervals, there is a discharge of blood in the dung. He loses his appetite, switches his tail, looks dull and stupid. Pleare advise what to give him. SUBSCRIBER.

Ans.-We would advise a purgative of 11 to 2 lbs. Epsom salts, if over three years old, or 1 lb. if under that age, dissolved in two quarts warm water as a drench, adding 2 ounces ginger. Then, follow up with 1 dram each sulphate of iron and gentian, three times daily. Feed lightly and blanket.

WHITE HAIRS-SHEEP FEEDING.

1. I have a black horse, about twelve years old, that has turned white below the eyes. What is the cause of it, and what will cure it ?

2. What is the best feed to give sheep in the fall of the year to fatten them ? SUBSCRIBER.

Ans.-1. We find no reference in veterinary books to cause or possible treatment of this

2. Rape, sown in June or first July, is one of the best provisions for fattening lambs and sheep. A pint of oats, with the same bulk of bran, daily, is a safe and fattening grain ration.

ABURTION IN COWS-AILING PIGS.

1. Is there a disease among cows known as contagious abortion? State the cause and preventive, if any.

2. Six shoats, about four months old, fed corn on the cob since they were in supplies of this kind. weaned, seemed to be doing all right until about two weeks ago, when one of them turned a peculiar black color, and stiffened up in the hind quarters so that it was with great difficulty he could get up at all. They have a good large pen, with lots of room for exercise. Please advise as to treatment. G. C. H. Ans.-1. Yes; it has frequently been described in "The Farmer's Advocate." It is a very serious scourge when it gets started in a herd of cows. It is a germ disease, and is communicated via the vagina, and finds its way to the womb, where it sets up trouble that ends in abortion, generally at 5 to 7 months after conception. The only known preventive is carbolic acid, given in 25drop doses, twice a day in drinking water, in bran, or as drench, for a week, and repeat after a week of cessation. The germs are said to be carried by the bull from one cow to another, and it is advised that his sheath be disinfected by means of a syringe, if he has served an aborting cow before serving a healthy cow. Stables must also be disinfected with Zenoleum, or with creolin and readers of the paper have used cement for water (1 to 1,000), and the tail and granaries, and can speak from acother hind parts of the cows daily tual experience, which is the safest washed with the same. 2. Change the feed, giving ground cats, at once. The finishing coat of, say, shorts and bran, and some greasy swill half an inch for such a floor should be to move the bowels. If this is not mixed about equal parts cement and available, give raw linseed oil, either as coarse sand to give a good, smooth, hard a drench or in feed. If you have man-finish. Otherwise follow directions fregels or sugar beets, throw them a few to quently given in these columns for buildscoop. Keep bedding dry.

FOUNDED 1806

HORSE INSURANCE.

Would you please give me the address of some reliable live-stock insurance company. SUBSCRIBER.

Ans .- The only company we know is the English company, known as Lloyds, for which, we understand, Major C. C. Harbottle, Confederation Life Building, Toronto, is agent. A Canadian company, we believe, has applied for incorporation, but has not got down to business yet.

LEG-BANDS FOR POULTRY.

Kindly give name and address of maker of number rings for hens, also charge per dozen, or more. SUBSCRIBER. Ans.-Numbered leg bands may be purchased from dealers in poultry supplies advertising in these columns; for instance, A. J. Morgan, 264 Dundas St., London, Ont. The cost is about 20c. a dozen,

or \$1.10 per hundred, according to catalogue in our office.

UNTHRIFTY PIGS.

I have seven pigs, four and a half months old. Since they were weaned, they have grown very little; will, perhaps, weigh 25 or 30 lbs. For about two months, I fed scalded shorts, 1 quart, and chop, 1 quart, twice a day, and roots at noon. I was told I was feeding too heavily; so I dropped the shorts and fed mangels, twice a day, but see no difference. We have very little milk. The pen is warm, and they are bedded twice daily. Please let me know why they will not grow. J. B. S.

Ans .- The feeding and treatment as stated appears to have been all right, and we see no reason why they should not thrive. We would try feeding the meal and shorts dry, and give kitchen swill in separate trough, and continue throwing a mangel or two in the pen for the pigs to scoop.

ICE-CREAM MAKING AT CREAMERIES.

Please give me information about how the factories pack and put out ice cream, I mean in connection with the butter factories.

1. Would it be handled in cans, and what kind?

2. What kind of tubs?

3. Where can I get a freezer that will freeze four gallons ?

4. Can you give some man's experience in that line? R. M.

Ans.--1. The cream is usually handled in cans, which are packed in wooden tubs with broken ice around the cans.

2. These wooden tubs are usually about 18 or 20 inches in diameter, with a lid, which fastens down firmly, and they shut down tightly on the can inside. The tubs are usually painted on the outside.

3. The freezer can be got through any of the firms, or hardware men, which deal

All stock inspected before being accepted. Only good representatives of the various breeds will be offered.

Special Inducement to Purchasers in Ontario.

Freight Paid-The freight on any animals purchased at these sales by residents of Ontario, shipped to purchaser's station in Ontario, will be paid by the Ontario Department of Agriculture. The original receipted freight bill containing the point of shipment and destination, name and registration number of the animal purchased and shipped, the estimated weight for billing, and the rate charged per cwt., should be sent immediately to the Live-stock Branch, Ontario Department of Agriculture, Toronto.

For catalogues and particulars regarding any of the sales, address the Secretary at the point of sale, or make application to

Live-stock Branch, **Ontario Department of Agriculture, Toronto**



Every Subscriber

should be a member of our Literary Society and wear one of our handsome Rolled Gold and Enamel Stick Pins. They are beauties. Send us only one new subscriber to THE FARMER'S ADVOCATE AND HOME MAGAZINE, at \$1.50, and we will send you a pin, and enter your name on our Society membership roll.

4. The only way to get some man's experience in the ice-cream trade, is to write such a man. I do not know of any creamery men in Ontario who are following this line, but probably some reader may be able to give the information asked for. H. H. DEAN.

CEMENT FLOOR FOR GRANARY.

Being a reader of your valuable paper, which every farmer should take, I have read a good bit about basement stables, cement walls and floors, but, no reference to a cement floor in a granary. I an putting a cement wall under my barns and my granary is beneath. I would like to know about putting a cement floor in the granary. Would it draw dampness and spoil the grain on the bottom? About what proportions of cement and gravel should I use? T. N.

Ans.-If the site of the granary floor is raised above level, so as to shed water, and made dry by means of good drainage, there should be no trouble from dampness. We judge this from experience with stable floors; but, perhaps, some teacher. We would like t_0 hear from such ing floors

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FEBRUARY 21, 1907



There are three periods of a woman's life when she is in need of the heart strengthening, nerve toning, blood enriching action of

MILBURN'S HEART AND NERVE PILLS

The first of these is when the young girl is entering the portals of womanhood. At this time she is very often pale, weak and nervous, and unless her health is built up and her system strengthened she may tall a prey to consumption or be a weak woman for life.

The second period is motherhood. The drain on the system is great and the exhausted nerve force and depleted blood require replenishing. Milburn's Heart and Nerve Pills supply the elements needed to do this.

The third period is "change of life" and this is the period when she is most liable to heart and nerve troubles.

A tremendous change is taking place in the system, and it is at this time many chrenic diseases manifest themselves. Fortify the heart and nerve system by the use of Milburn's Heart and Nerve Pills and thus tide over this dangerous period. Mrs. James King, Cornwall, Ont., writes : "J have been troubled very much with heart treuble—the cause being to a great extent due to "change of life." I have been taking Milburn's Heart and Nerve Pills for some time, and mean to continue doing so, for I can truthfully say they are the best remedy I have ever used for building up the system. You are at liberty to use this statement for the benefit of other sufferers."

Price 50 cents per box, three boxes for \$1.25, all dealers, or The T. Milburn Co., Limited, Toronto, Ont.

KOW

THE FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS. Miscellaneous.

FOR GRUB IN SHEEP'S HEAD.

A Quebec subscriber writes: "I have cured some very bad cases of grub in the head of sheep by injecting salt and water into the nostrils with a hand syringe, holding the sheep's head up slightly while making the injection."

PIGS WORRYING EACH OTHET.

I have had several batches of pigs, at different times, fattening, all sired by a Yorkshire hog, but fed entirely different rations; some on cooked beans, corn meal, etc., others on dry feed entirely, with an occasional feed of charcoal, sulphur and ashes. After being in the pen for a time, and apparently doing well, quite thrifty in appearance, one or more pigs would take after a smaller one, biting it until they would kill it, unless parted or let loose. On one occasion, we removed four pigs from a pen, one after another, only to find that they would pick on another. The weather being too cold to leave them outside, we had to sell them before they were as heavy as we wished. Would be much obliged if you could tell me the cause of trouble, and how to E. C. M. remedy it.

Ans.-Will any reader who has had similar trouble suggest the cause and a remedy?

ARE TURNIPS GOOD FOR EWES. Are turnips good for ewes in lamb? If not, what is the best food for them?

R. M. Ans.-A moderate quantity of turnips is good for in-lamb ewes, but heavy feeding of turnips is very apt to prove injurious to the lambs, causing them to come soft, flabby, and lacking in ambition to get up and seek nourishment. The best plan to feed turnips to ewes is to give them whole, scattered on straw, snow or clean ground, and let them scoop them; this gives the ewes exercise, and, as the roots are eaten slowly and well mixed with the saliva of the mouth, digestion is aided; while, if the roots are sliced or pulped, they are less thoroughly masticated. Lambs generally come stronger when ewes are kept principally on dry food, as clover hay, oats and Our best success in raising lambs bran. was from ewes fed lightly during winter on unthreshed peas, without any roots. Of course, if fed heavily on this diet

GOSSIP.

they would get too fat.

Mr. Duthie, of Aberdeenshire, on the occasion of his recent visit to America, heard of a very candid lady who did not want a man. This American lady said she already had a chimney that smoked, a dog that growled, a parrot that swore, and a cat that staid out at night! A man in that establishment would have been a superfluity.



The property of JAMES A. CRERAR, Shakespeare, Ont., on

Wednesday, March 13th, 1907

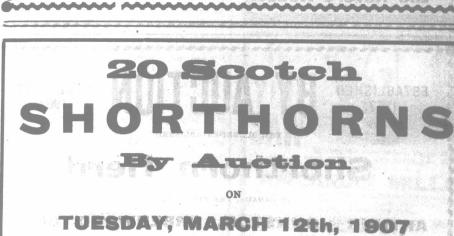
At his farm, one mile north of Shakespeare, Ont., on above date, he will sell his entire herd of **45 head** of Imp. and Canadian-bred Shorthorns, representing the Datsy, Bellona and Roan Duchess strains, the get of high-class prizewinning bulls. Very many to be sold are Toronto and London winners. All are in splendid condition. There are 35 females and 10 bulls, including the stock bull, Trout Creek Choice 57962.

Shakespeare is on the main line of the G. T. R., a few miles east of Stratford. Conveyances will meet all morning trains.

Terms: Six months' credit, or 5 per cent. per annum off for cash.

Lunch at noon. Catalogues ready by end of February.

CAPT. T. E. ROBSON Auctioneers. SANDY FRASER JAS. A. CRERAR, Shakespeare, Ont.



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PETITE, MILK FEVER AND RETAINED AFTERBRITH. Ridott, Illinois, "I have used Kow-Kure for three or four years. With it alone I have cured all ailments that afflict cows. As a milk producer it has no equal." G. P. Lanterman. We have thousands of similar is

no equal." G. P. Lanterman. We have thousands of similar indorsements. A trial will convince you, if your dealer cannot supply you write us direct. Send for free booklet, "The Cost of a Lost Cow." It contains money-making information for every cow owner. You can't afford to be without it-remember it's free. Write for it today. DAIRY ASSOCIATION CO., Mfre. Lyndonville, Vt., U. S. A.

MONEY IN CANARIE

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

COTTAM BIRD SEED 38 Bathurst St., London, Ont.

In response to the request of a new subscriber for an illustration and description of a typical Shropshire sheep, we present, on another page in this issue, a photogravure of an English prizewinning ram. In size, Shropshires are considerably larger than Southdowns, but not so large, as a rule, as the other Down breeds. They mature as early as any other breed, except Southdowns, and are valuable for crossing upon longwcolled grades or common sheep, as the records of the fat-stock shows attest. The quality of the meat is excellent, being about equal to that of the Southdown; while the quantity is considerably more, and they dress well in proportion to live weight. They are hardy, healthy aad prolific. Their wool is finer than that of the Oxford Down, and less fine than that of the Southdown, and should be even and dense. The average fleece of ewes from a good, well-kept flock should weigh nine to ten pounds, unwashed. In general appearance and character, the Shropshires are symmetrical, stylish in carriage, short-legged, and elastic in movement. The head is short and broad, wide between the ears and eyes; ears, short or of medium size; head, well covered with white wool; color of face and legs, dark brown; neck, medium length, thick and strong, especially in the ram; bone, medium fine; twist, full and deep; breast, wide and standing well forward; fleece. dense, of medium length, fine, even, free from black strands; scrotum of rams, wall covered.

1907

Belonging to the estate of the late WM. HAY, Tara, Ontario. Will be sold at the farm, 1¹/₂ miles east of the Village of Tara, where conveyances will meet morning trains from north and south. Nine breeding cows, 5 beifers and 6 bulls, including the stock bull, Scottish Knight 58248, representing the Marr Floras, Cruickshank Lovely, Stamford and Wildame strains. There will also be sold the **Imp. Clydesciale stallion**, Kelvinside, by Baron's Pride, dam by Macgregor, and **two registered Clydesciale mares**.

Terms: 10 months' credit on bankable paper. Six per cent. off for cash. Tara is on the Owen Sound branch of the G. T. R.

Shorthorns at Auction

Oatalogues.

At the farm, ½ mile west of **Hawkesville**, 5 miles west of St Jacob's Sta. G.T.B. branch crossing main line at Berlin, and 3 miles south of Wallenstein Sta., C.P.R., on

THURSDAY, FEB. 28th, 1907,

When 20 head of high-class Shorthorns will be offered, consisting of 7 bulls, from 10 to 20 months old, 5 of which are by Good Morning (imp.), and 13 females, all of breeding age, are in calf to Good Morning (imp.). Noon train met at St. Jacob's on day of sale. Sale at 2 p.m.

Terms cash, unless otherwise arranged on day of sale.

MR. JOSEPH MICKUS, Auctioneer.

JAMES CASS.

L. K. WEBER, Proprietor.

Auctioneer.



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THE PROPERTY OF

MR. T. MERCER, MARKDALE, ONT.,

IN THE VILLAGE OF MARKDALE, ON

Thursday, Mar. 7, '07

Representing Scotland's richest blood, many of them winners last year. A big, flashy, quality lot. Part of them bred in Scotland, and safe in foal. Several matched pairs.

TERMS—Cash, or 12 months on bankable paper, with 5% interest.

Capt. T. E. Robson, Rudd Mathews,

Auctioneers.

CATALOGUES.

Markdale is on the Owen Sound branch of the C. P. R. Morning trains leaving Toronto reach there at 11.80. Sale will be held at the Revere House.



THE FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS. Miscellaneous.

STUBBLE GROUND FOR CORN.

Would it be advisable to put corn on

stubble ground manured? P. M. Ans.—We would not put corn on stubble ground if we had a suitable piece of sod; otherwise, we should manure the stubble and make the best of it.

PROBABLY BLACKHEAD.

Hens are dying of disease. On examination find they are very thin, and liver spotted with white spots. Some are worse than others. C. S. K.

Ans .- From such meagre description of symptoms, we can only guess at the cause. The whitish spots indicate blackhead. For a more positive diagnosis examine the calca, or elongated blind pouches, at the lower end of the small intestines. Normally, these are of uniform diameter throughout, the walls thin, and the mucous membrane pale, and they are filled with a rather dry, greenish excrement. In cases of blackhead, one or both calca have the walls greatly thickened, either throughout or in spots. The mucous membrane is deeply reddened and eroded, and from the inflamed surface there is poured into the calca a quantity of creamy material or exudate, more or less tinted with blood. The disease was formerly considered a turkey ailment, but chickens are liable to it also. Destroy and burn the sick, and thoroughly disinfect the houses of the healthy. Guard especially the young birds, which are more susceptible to the contagion. If at all possible, remove the healthy birds to new quarters, as it is difficult, if not impossible, to be sufficiently thorough in disinfecting the old runs. Authorities believe that the runs of infected birds are not safe for yarding fowl for a year or more after the diseased birds have been removed. Of course, as we said at the outset, our diagnosis may be wrong. We, therefore, described the symptoms of blackhead in order to help our inquirer and others to a conclusion.

IDENTIFYING A STEER.

A and B are neighbors, living on adjoining farms, the line fence dividing. In the fall, when they brought in their cattle off of their pasture farms, they both claimed the same steer—a pure white one. A had a mark upon it, and claimed it was rising three years old this spring; while B has no mark on his that he knew of, but his was rising four years old this spring, and he claims the steer on the ground that the teeth of the steer in dispute prove that it is his, and that it is four years old. 1. Will A have to register his mark to

stand law, or is it necessary to have a mark registered in order to go to court to stand law?

2. Can the age of the steer in question be proven by the teeth, or in any other way, it being dehorned? FOUNDED 1866

A TAXPAYER.

The schoolhouse in this section has just been rebuilt. Do I, a tenant farmer, have to pay the debenture tax to pay for same? In my lease it says I am to pay all taxes that may arise, but there is no special clause to the effect that I am to pay taxes for local improvements. Ontaric.

Ans.—Judging from your statement of case alone, we would say that you are liable to pay such tax.

CAUSING A MARE TO BREED.

I wrote you last summer, telling how I got my mare (20 years old) in foal, and asked others to try the same and report results. As I never heard anything more, I presume it was not tried. My mare raised a colt a year ago last summer, and I tried her the season through, and could not get her in foal again. Last year I bred her several times, and the last time I bled her and she caught all right. I know of two other cases just the same. I wish parties having such mares would try it, and report results through "The Farmer's Advocate."

SICK SHEEP.

P. M.

Will you kindly tell me what you think is wrong with my ram? He became very dull, and would lie with his front part higher than his hind part. He seemed to want to cough, but made no noise; he only passes a few drops of water—a sort of dribble; he eats and chews his cud; of late, he got lame on a hind leg. He has no cold in his head; he keeps his head downward, and seems to breathe harder when urinating.

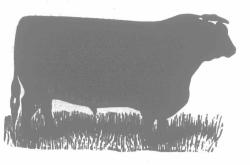
Ans.—The symptoms appear to be those of urethral calculi (a calcareous deposit in the urinary canal, setting up inflammation). This trouble is liable to occur if rams are fed mangels freely, or it may be due to an excess of lime in the drinking water, but may come from some other cause. Relief in the case of horses and bulls is sometimes effected by means of a surgical operation. It is doubtful whether any treatment will give relief in the case of a sheep. The animal should be allowed free access to salt, and a purgative of two ounces of Epsom salts will do no harm, and may be helpful.

DISPOSAL OF WASTE HOUSE WATER.

I would be thankful for any information you would give me, through your valuable paper, regarding the disposal of dirty waste water from the house. About one hundred yards from the house is a drop in the land of about thirty feet. The soil is clay for a considerable depth. We would like a system as cheap as possible that would work satisfactorily both summer and winter. J. R. W.

Ans .-- A sink can be placed in kitchen or wash-room, where most convenient with a trap in water pipe underneath to hinder escape of offensive odors from drain. If there is no handy place in the house, where it can be kept from freezing in winter, then have at most convenient point outside, instead of sink, a large funnel over vertical pipe, without trap. A trap is but a crook in a pipe, the shape of an S set upright, a portion of which is always full of water to check any air or gas from arising. From lower end of vertical pipe, below funnel or sink, a drain laid with glazed tile, with cemented joints, should extend 160 feet or more to a cess pit. The cess pit should be about eight feet deep and six in diameter, either square or round, and the sides lined with plank, brick or cement. The top should be finished as outdoor cisterns are to keep out frost. Leading from cess pit, there should be an overflow drain of ordinary tile to a good surface outlet, such as you have. We believe such a system would give good satisfaction. The settling in cess pit would remove most of the offensive matter from water, and once a year or so the cess pit can be opened and the contents dipped up and poured over the manure pile. All drains should be below frost line, and, of course, care should be taken to have all ground soakage at a safe distance from well. To hinder contamination from that source is the reason that glazed tile, with cemented joints, should be used in first part of drain. If there should be trouble with open mouth of drain in winter, a heap of straw over it would remedy matters.

Wed., March 6th, 1907



Positively without reserve, the whole herd of **65 HEAD** of imported and the get of imported Scotch Shorthorns, representing the Cruickshank Nonpareils, Lavenders, Duchess of Glosters, Village Maids, Marr Princess Royals, Emmas, Claras, Bruce Mayflowers and Fames, Campbell Minas, Kilblean Beauties, Kinellar Bessies, Miss Ramsdens, Bridesmaids, etc. Also the Imp. Bruce Mayflower and the Marr Clara stock bulls. The whole, without doubt, making the choicest lot ever sold by auction in Canada.

Terms: 6 months' credit on bankable paper; 5% per annum off for cash.

Conveyances will meet the east and west bound trains at Pickering, G. T. R., and Claremont, C. P. R., the evening before and morning of the sale. The sale will be held under cover in case of bad weather.

Catalogues on application.

Capt. T. E. Robson, Auctioneers. Geo. Jackson,

3. Describe, if possible, the growth of the teeth as to represent the age.

Ans.-1. No.

2 and 3. Following are the specifications adopted as a basis for determining ages of cattle by the International Livestock Exposition Association, of Chicago: At 12 months.—An animal of this age shall have all of its milk (calf) incisor teeth in place.

At 15 months.—Center pair of incisor milk teeth may be replaced by center pair of permanent incisors (pinchers), the latter teeth being through the gums but not yet in wear.

At 18 months.—The middle pair of permanent incisors should be fully up and in wear, but the next pair (first intermediate) not yet cut through gums.

At 24 months.—The mouth will show two middle permanent (broad) incisors fully up and in wear, and next pair (first intermediate) well up, but not in wear.

At 30 months.—The mouth may show six broad permanent incisors, the middle and first intermediate pairs fully up and in wear, and the next pair (second intermediate) well up, but not in wear.

At 36 months.—Three pairs of broad teeth should be fully up and in wear, and the corner milk teeth may be shed or shedding, with the corner permanent teeth just appearing through gums.

At 39 months.—Three pairs of broad teeth will be fully up and in wear, and corner teeth (incisors) through gums, but not in wear.

T. B.

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FEBRUARY 21, 1907

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TO BREED.

r, telling how I ld) in foal, and same and re heard anything not tried. My ago last sumseason through, in foal again. eral times, and and she caught other cases just s having such report results dvocate." P. M.

what you think He became with his front hind part. He but made no few drops of ; he eats and got lame on a in his head; he and seems to ting.

ar to be those eous deposit in up inflammale to occur if y, or it may in the drinkom some other of horses and by means of a is doubtful give relief in nimal should salt, and a Epsom salts be helpful.

SE WATER.

any informahrough your e disposal of ouse. About house is a rty feet. The e depth. We as possible y both sum-J. R. W.

i in kitchen convenient

THE FARMER'S ADVOCATE.

Get Ready for Spring CARNEFAC SEASON

It pays immensely to use CARNEFAC for all Farm Stock and Poultry. The cost is but a trifle. It brings the **stock** out in excellent shape, and prevents untold losses at the critical time, when colts, calves, pigs and lambs arrive.

Try it for this season, the results will convince you.

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THE LA FAYETTE STOCK FARM

Largest importers in America of German Coach. Percheron and Belgian stallions. Over 200 head on hand at all times. All have the best of bone, style and action, and on which we will put a gilt-edged guarantee they must be satisfactory, sure breeders. Won more prizes in the American show-ring in 1906 than all other importers combined. Our guarantee is the best. Terms to suit buyers. Importations arriving every few weeks insure prospective buyers a large selection from which to make a purchase.

J. CROUCH & SON, La Fayette, Ind. La Fayette is but six hours' ride from Detroit via Wabash Railroad.

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It's a mighty comfortable feeling to know that the carriage you buy has a 50 years reputation behind it.

There's no likelihood of there being any cause for complaint against a Tudhope Carriage. But if there should be, you have the guarantee of a firm that has been in business, right here in Canada, since 1855. TUDHOPE NO 3

A great favorite all over Canada. Light — easy running—with rubber tires if desired. Gear, wheels and shafts best hickory. Complete with lined rubber apron, wrenches, quick shifters and 2 sets of washers. Detailed description in our free illustrated catalogue. Write for it. THE TUDHOPE CARRIAGE CO., Ltd. · ORILLIA Ont



QUESTIONS AND ANSWERS. Veterinary.

COW VOMITS.

Cow has been vomiting for four or five months. She can eat mashes and pulped mangolds all right, but vomits everything coarse or dry. J. W. Ans .-- There is doubtless a dilation of a

portion of the gullet; soft food passes down, but ccarse or dry food lodges in the sac, and when it and the gullet become full, she vomits it. Nothing can be done to rectify this condition. I would advise you to endeavor to fatten. her on bran and chop and pulped roots, and sell her for beef. If given hay, etc., she will do no good, and each time this sac becomes engorged, the case becomes worse V.

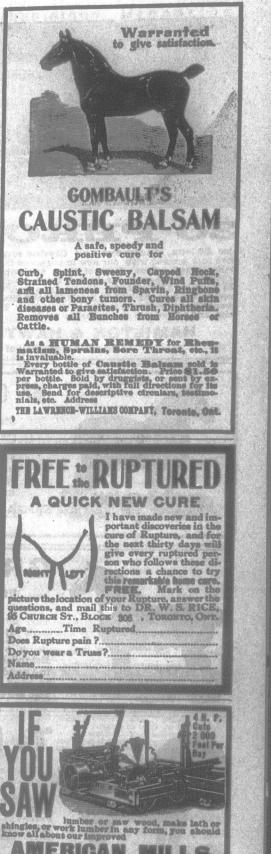
Miscellaneous.

SOME DETAILS WE CANNOT FURNISH. A Bruce Co., Ont., subscriber asks for advice as to best roor and cost for house, and another reader asks for plans, full directions and estimates for building basement stable As between different styles of roofings we could not undertake to decide, and to prepare and publish plans for individual barns is plainly too much to expect us to do. In most cases, we have not the requisite data, and, though we spent \$20 or \$25 on the work, the plan might not suit. All this can be more satisfactorily done by conferring with a competent local builder.

GAS TAR NOT SO GOOD AS PAINT FOR FRUIT-TREE WOUNDS.

Will gas tar answer for wounds, etc., as well as paint? I notice in some journals some are recommending its use. Do you think it as safe as paint? J. A. R.

Ans.-Gas or coal tar is not as safe a dressing to use for wounds on trees as paint. Many of the foresters in the Old Country recommend coal tar for wounds on forest trees, but it must be remembered that the climate there is different from here. In our hot climate, the great heat absorbed by the black tar is often very injurious to trees, and sometimes causes sever injury-practically the same " sun-scald." I notice that one European writer, in advising the use of coal tar for forest trees, remarks that it is not a safe application for many kinds of fruit trees, especially the stone fruits, although he claims it is not injurious. upon the pome fruits, such as apples and pears. I think, however, it is best to



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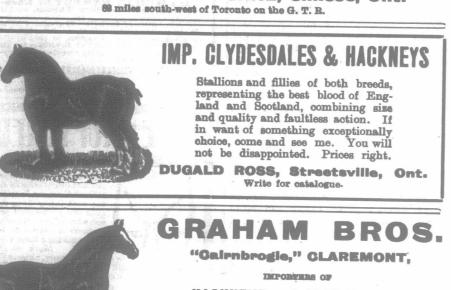
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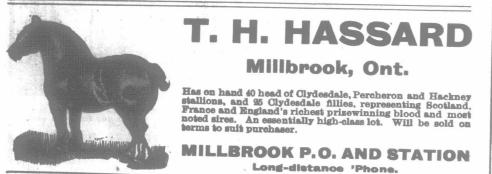
▋▔▃▋▋▋▋╡╡▞▁●▋〓▐▋ Also Shires, Hackmeys and Civies and 12 Percheron Mares (5, 9 and 1 year old) have just arrived with our new importation from Scotland, England and France, of high-class indicates and mares. Many of them prisewinners in their native lands. Bred by the best preders. Feroherons, blacks and grays, weighing 1,600 to 2,000 pounds. Shires at two years old weighing 1,700 pounds. Civies, bays and blacks, 4 and 5 years old, weighing 1,800 to 9,000 pounds, bred by the best in Scotland. Our Hackneys are bays and chestnuts, combining size, quality and breeding that cannot be beaten. These horses can be seen at Toronto and London hars, and all for sale at reasonable prices.

HAMILTON & HAWTHORNE, Simcoe, Ont.



HACKNEYS and CLYDESDALES

Established 30 years, and winners at all large shows in Canada and United States. Best of stock always on hand for sale. New importation of Royal winners just arrived.



QUESTIONS AND ANSWERS.

Veterinary.

INDOLENT SORE

Colt got stuck in fence, and got leg hurt, both above and below hock. The upper wound has healed, but the lower one has not, and there is an enlargement that people tell me is proud flesh. J. H.

Ans .- Apply butter of antimony with a feather once daily, until the proud flesh disappears. Then, keep clean, and dress, three times daily, with a five-per-cent. solution of carbolic acid in water. V.

SWOLLEN JAWS.

Calf, ten months old, has had swollen jaws for two days. The swellings are on both sides, involving both jaw and neck, and it has difficulty in breathing, but eats and drinks all right. J. B.

Ans .- Apply hot poultices, or bathe long and often with hot water, and, after bathing, rub with a liniment composed of equal parts spirits of ammonia, raw linseed oil, and oil of turpentine. Then cover warmly with flannel cloths. If matter forms, lance, and allow its escape, and flush the cavity out, twice daily, with a five-per-cent. solution of carbolic acid.

MARE PERSPIRES TOO FREELY.

Pregnant mare, while standing in the stable after working, perspires very freely, especially about the head and fetlocks. The perspiration freezes on the forelock on cold nights. She does not suffer.

N. M. Ans .-- It is hard to say why an animal should perspire more freely from one place rather than another, but such is occasionally noticed. You need not be alarmed about it. You may be able to check it by dressing the parts well, twice daily, with corrosive sublimate, 11 drams; solid extract of belladonna, 2 ounces, and water, 1 gallon. Heat to 160 degrees Fahr. before applying.

FATALITY IN CALVES.

Spring calves still nursing their dams and fed clover hay, turnips and three gallons whole oats, twice daily for ten calves, and apparently doing well; in October, one took sick and died in twenty-four hours. Three weeks ago, another took sick. I sent for my veterinarian, who thought some oats had got into the windpipe. This one died in twelve hours. Two weeks ago, another took sick, and the veterinarian cannot tell what is wrong. It has trouble in swallowing. I am keeping it alive by drenching with warm milk, which it swallows with difficulty. W. A. B. Ans .- The symptoms given are not

sufficiently definite to enable me to give a definite opinion. If any more die, get your veterinarian to hold a post-mortem. am of the opinion the trouble is digestive. Purge all the living ones with 4 ounces Epsom salts; then reduce the grain ration. Get the oats finely chopped,



FOUNDED 1866

0

is a special remedy for soft and semi-solid blemishes — Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't imitate and can't be imitated. Easy to use, only a little re-quired, and your money back if it ever fails.

Fleming's Vest-Pocket **Veterinary Adviser** describes and illustrates all kinds of blem-iahea, and gives you the information you ought to have before ordering or buying any kind of a remedy. Malled free if you write, FLEMING BROS., Chemiste, 45 Church Street. Toronto, Ontario

The Repository

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Oer. Simcos and Nelson Sts., Torente

Auction Sales of

Horses. Carriages, Buddies, Harness sto., every Tuesday and Friday, et 11 c'elost

Special Sales of Thoroughbred Stock conducted

Consignments solicited. Correspondence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

Bawden & McDonne EXETER, ONT., Have arrived home from Scotland with another im-portation of **12 Clydes and** 2 Hackneys

selected from the best breedselected from the best breed-ers in Scotland, and sired by Baron Pride, Montrave Mac and other noted horses. We have in all about 20 stallions in the barn-Olydes, Shires and Hackneys. Intending purchasers will do well to inspect, as these horses are all high class, and cannot be beat for true breeding quality and size.



Oure the lameness and ove the bunch without scarring the be-have the part looking just as it did ire the blemish came. upind? = S Fleming's Spavin Cure (Liquid)



W. C. KIDD, LISTOWEL, ONT.

Importer of Clydesdales, Shires, Percherons, Belgians, Haokneys, Standard-breds and Thoroughbreds

of highest possible quality and richest breeding. Have sold as many stallions the last year as any man in the business, with complete satisfaction in every case. I have always a large number of high-class horses on hand. My motio: "None but the best, and a straight deal." Will be pleased to hear from any one wanting a rare good one. Terms to suit. Long-distance 'phone. LIGTOWEL P. O. AND STATION.

and sift the hulls out, and feed less. If the throat is sore, rub well, twice daily, for three or four days, with a liniment composed of equal parts liquor of ammonia, oil of turpentine, and raw linseed oil.

SUPPURATIVE MAMMITIS-ABORTION.

1. Mare became lame in hind leg, and that side of her mammæ became swollen and sore. I bathed with hot water; the mammæ broke and discharged matter; the lameness disappeared, and the swelling is almost gone. Will it be safe to breed her in the spring?

2. I have bred a mare twice. In both cases, in three or four months after conception, the mammæ enlarged, wax formed on the ends of teats, and in two or three weeks she aborted. A. M.

Ans.-1. The lameness was caused by the mammary trouble, which occasionally occurs without apparent cause. If any more abscesses form, lance them, and then flush the cavaties out, twice daily, with a five-per-cent. solution of carbolic acid until healed. Give her 30 drops carbolic acid, mixed with a pint of water, and sprinkled on her food, twice daily for three weeks. It will be safe to breed her.

2. Occurrences of this kind are unexplainable, and very hard to control. After breeding her again, give her regular but light work, and feed little grain. If the former symptoms appear, give her 1 dram iodide of potash, three times daily for ten days, and keep her as quiet as possible on dry food.

Lymphangitis, Bruises and Swellings, Lameness and Allays Pain Quickly without Blistering, removing the hair, or laying the horse up. Pleasant to use. 52.00 per bottle, delivered with full directions. Book 5-C, free.



W.F.Young,P.D.F.,78 Monmouth St., Springfield, Mass. Canadian Agents, Lyman, Sons & Co., Montreal.





Have now on hand about a dozen. nearly all imported. A high-class lot and very richly bred. Combine size and quality. and all in foal. Also one-year old stallion. Write me, or come and see them.

Nelson Wagg, Claremont P.O.&Sta

SHETLAND PONIES!

P. McCullough & Son Breeders and importers of Shetland ponies, Markdale, Ont. We showed 8 ponies at Toronto Exhibition in 1906, and for a state of the showed 8 ponies at the showed at the showed 9 ponies 1 poni showed 8 ponies at Toronto Exhibition in 1905, and got 8 prizes: 3 firsts. 4 seconds and 1 third. All our ponies are imported. Our stallion, Fox-glove, took first prize at Toronto. Our mare. Bessie, took first prize, and their foal, Bruce, took first prize also. Good accommodation for mares sent from a distance to breed. Ponies for sale. Our address: **Markdale P. O., Ont.**



We Will Import Welsh Ponies and Shropshire Sheep.

Write for terms and prices.

Lloyd-Jones Bros., Burford, Ont.

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carring the (Liquid) d semi-solid horoughpin, It is neither ut a remedy to and can't a little re-it ever fails, cket ser ds of blem.

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e best breed-Baron Pride, ses. We have arn-Clydes. g purchasers orses are all rue breeding



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FEBRUARY 21, 1907

GIRLS ENTERING FIND BILEANS A BOON.

Mothers who have daughters just on the critical borderland over which the girl passes into the fuller life of womanhood, will find Bileans a great boon. They make rich, red blood, and strengthen and invigorate the internal organs involved in the great change. Mrs. T. Beadle, of Home Place, Toronto, says "My daughter, Elsie (13), was feeling far from well this winter. She complained of frequent headache, and was always weakly, tired, and drowsy. She seemed altogether without energy or strength. Each morning her tongue was coated and her appetite failed. She was sometimes so dizzy that on stooping she almost fell, and she was also troubled a great deal with constipation. One single box of Bileans made a world of difference in her, and so I continued to give her this remedy. Within a few weeks they built her up wonderfully, and they are keeping her in the best of health.'

Bileans also cure anemia, green sick ness, debility, sick headache, constipation, piles, rheumatism, sciatica, and all liver and kidney ailments. They tone up the system and enable it to throw off colds, chills, etc. All druggists and stores sell Bileans at 50c. a box, or obtainable from the Bilean Co., Toronto, for price. 6 boxes sent for \$2.50.

For Sale - Leap. or exchange for Clyde fillies. Well No. 4528, 16 hands. 1400 lbs; kind and sure. and a good getter. Selling to avoid inbreeding. J. O. ANDERSON, Morganston P.O. Colborne Sta., G.T.B.

Clydesdale Stallions for Sate—Two import ed, five and seven years old; first-class animals; also two Canadian-bred, registered, rising three years old. For further particulars apply to Fiesherton Sta. C.P. R. Swinton Perk, Don't Buy Herefords Until you know our prices The stock that Marchon 2nd is producing is worth your in-spection. Write at once for spection. Write at once i full description and prices. 5 11.9 A. S. Hunter, Durham, Ont. Grey Co. Sunnyside Herefords Present offering: 19 bulls, ser-Vicable ages. Cows safe in call or calves at foot or open beifers. Younger stock carrying the blood of the great March On and Protector. Prices within reach of all. AL. D. P of all. ARTHUR F. O'NEIL. Maple Grove, Ont BROXWOO HEREFORDS. A few choice bull calves from my imported stock. R. J. PENHALL, NOBER P. O., ONT. FOREST VIEW FARM HEREFORDS Four bulls from 8 to 18 months old; prisewin ners and from prisewinning stock. Several heir ers bred on the same lines; choice individuals for sale. JOHN A. GOVENLOOK, o Forest Sta. and P.O

THE FARMER'S ADVOCATE.

GOSSIP.

Official records of 115 Holstein-Friesian cows, from January 17th to January 31st, 1907, are reported by the American Holstein-Friesian Association. Of these, 111 produced, in seven consecutive days, 45,035.6 lbs. milk, containing 1,552.834 lbs. of butter-fat; showing an average of 3.45 per cent. fat. The average yield for each animal was 405.7 lbs. milk, containing 13.99 lbs. butter-fat; equivalent to 58 lbs., or 28 quarts milk per day, and 16 1-3 lbs. of the best creamery butter per week.

The following Canadian cows appear in the list :

Rose Rattler 68640, age 5 years 8 months 7 days; days from calving, 15: Milk, 435.2 lbs.; per cent. fat, 8.95; fat, 17.118 lbs. Fourteen-day record-Days from calving, 8: Milk, 824.6 lbs.; per cent. fat, 4.18; fat, 33.491 lbs. Owner, Geo. Rice, Tillsonburg, Ont.

Gaza Aconeth Pietertje Netherland 57591, age 6 years 28 days; days from calving, 24: Milk, 409.0 lbs.; per cent. fat, 3.12; fat, 12.780 lbs. Owner, Geo. Rice.

Clarice Clothilde 2nd 70289, age 3 years 5 months 25 days; days from calving, 23: Milk, 326.5 lbs.; per cent. fat, 8.19; fat, 10.413 lbs. Fourteen-day record-Days from calving, 18: Milk, 624.1 lbs.; per cent. fat, 3.26; fat, 20.356 lbs. Owner, Geo. Rice.

Carrie De Kol of Howell 72249, age 2 years 8 months 25 days; days from calving, 25: Milk, 284.9 lbs.; per cent. fat, 3.15; fat, 8.981 lbs. Fourteen-day record-Days from calving, 18: Milk, 560.0 lbs.; per cent fat, 3.14; fat, 17.608 lbs. Owner, Geo. Rice.

Madonna Butter Girl 79665, age 1 year 11 months 20 days; days from calving, 67 : Milk, 222.5 lbs.; per cent. fat, 3.15; fat, 7.656. Owner, Geo. Rice.

BURNSIDE AYRSHIRES.

Some men spend a lifetime in fruitless endeavor to reach the enviable position occupied by Mr. R. R. Ness, of Howick, Que., namely, in the very front rank among the leading importers and breeders of Canada, a position gained by him in the incredibly short time of ten years. As a young man, imbued with the idea that the Ayrshire was par excellence the dairy cow for Canada, he centered his whole attention on improving the productive powers and type of his favorite breed, and seeing the necessity of new blood to accomplish his ends, early in his career he made a trip to the fountainhead of the breed, "Bonnie Scotland," and returned with a lot that were a revelation not only to the breeders of this country, but also in the show-rings, practically sweeping everything before them, and the trade that he has worked up for high-class stock extends practically all over this continent. For next sea son's trade, two of Scotland's leading breeders are already buying up choice animals in his behalf, namely, Mr. Mitchell, of Barcheskie, and Mr. Barr, of Monkland. Already a number of choice animals have been secured, and Mr. Ness intends to sail early to bring over the shipment. On hand at present are about 90 head, 40 of which are imported and the progeny of imported stock, principally sired by the Toronto, Ottawa and Halifax grand champion, Imp. Barcheskie King's Own, pronounced to be one of the best bulls of the breed alive. Second to him in service is Imp. Monkland's Speculator, that last fall won second at Toronto, third at Ottawa, and first at Halifax in the two-year-old class. At the present time, fourteen of the herd are in the test for A. R. honors, two of which have already qualified and still have a considerable margin of time. From this herd, the milk is all shipped to Montreal, and the test there has never been below 4 per cent. of butter-fat for the mixed milk as it is taken from the cans. From such a record it is quite evident that Mr. Ness has a pump in very poor working order. Last year's importation numbered 60 head, all but six of which are sold. In all, during the last year, Mr. Ness has sold something over 100 head, part of which went to the States, the balance to different parts of Canada, every Province from the Atlantic to the Pacific getting its quota. Orders are now being booked for high-class stuff from the new importation.

Mr. Bertram Hoskin, The Gully P. O., Northumberland Co., Ont., writes : "During the past season we have had a good trade for our Holsteins and Tamworths. The demand is increasing each year, and, during the past season, we have had satisfactory reports from every animal sold. Sales, since January 1st, 1907, are as follows : A bull to each of the three following gentlemen-Mr. John Mc-Carl, Lakeport; Mr. Grant Goodfellow, Codrington, and Mr. J. L. Ross, Tren-All these bulls are sired by Queen ton. De Kol's Duke, a son of Queen De Kol (imp.), whose butter record is 16 lbs. 8 ozs. in seven days. The dams of the bulls milk from 56 to 60 lbs. a day on grass, and they are daughters of Duke Concordia De Kol, whose grandam, Sadia Vale Concordia, made a butter record of 30 lbs. 10 ozs. in seven days, the highest butter record ever made in her time. Another young bull went to Mr. M. Dunn, of Brookside; his dam gave 40 lbs. milk in 1 day at one year and eleven months. We have sold 18 head of Tamworths since January 1st, for breeding purposes. may say that the stock advertised are all first-class. A few of the boars will make good show pigs, and should win in the strongest of company. Everything will be sold well worth the price asked."

QUESTIONS AND ANSWERS. Miscellaneous.

BREEDING DUROC-JERSEY SOW.

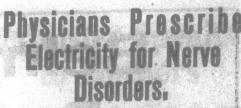
I have a nice light red Jersey sow I am thinking of breeding. Are they a good kind of pigs, and what class of boar would be the best to breed her to? Do hogs of the breed above mentioned grow into large, heavy hogs, and are they easily kept ? R. J. M.

Ans .-- Duroc-Jerseys are, as a rule, thrifty, easily kept, and grow large enough for any purpose, but many of them are somewhat short in body, and, if well fed, are apt to get too fat to make the best class of bacon. It would probably be wise to breed this sow to a long-bodied Yorkshire or a lengthy Berkshire boar.

WORMS.

Three-year-old colt is passing worms, a foot long, every day. What is good to give her? She is loose in her bowels all the time. Am feeding clover hay and oats. R. J. M.

Ans .- Try half pint raw linseed oil and one ounce, or four tablespoonfuls, of spirits turpentine, given as a drench. If this is not effective, take one and a half ounces each of sulphate of copper and sulphate of iron; pulverize and mix, and make into a dozen powders. Give a powder morning and evening in food, till all are taken. Then, follow up with a purgative ball of eight drams aloes.



321

There is nothing new about the prin-ciples of Electrical Treatment for all diseases of Nervous origin. Physicians know it to be the most effective method for treating such ailments. Because of the great expense of undergoing treatment at a sanitarium or hospital, but few of the real sufferers have been able to get relief. With my modern home Electrical treatment-no sufferer need remain It is within the reach of everyone. ill. Simple and easy to apply-certain in results.

My new method Electric Belt appliance Rheumatism, Nerve Disorders, Weakness, Cures Lame Back, Lumbago, Indigestion, Sciatica, Dyspepsia, .etc.

The claims I make for my Belt are based upon actual cures. It has never failed where there has been a possible chance for it to succeed. I do not say it will cure organic disease, but it will, and does, and has cured the above disorders and many others. I cannot cure those who lack the faith to try it. want every sufferer to give this marvellous appliance a fair test.

White to-day for my exceptionally low terms for this belt.

Accept this opportunity to learn

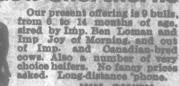


how to be forever rid of all Nervous Disorders, Rheumatism, Lumbago, Weakness, etc. My book on curative electricity will tell you. Although it has, cost me thousands of dollars to publish-I will send it free to every sufferer who writes for it.

This offer entails no obligation on your part. Write for it to-day. Address-



Glen Gow Shorthorns



WM. SMITH, Brooklin & Myrtle Stns.

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d Borses. vorid that will o days, but requires from according to bottle., the interest of the

Ponies ep.

d. Ont.

HEREFORDS—We are now offering a few a number of females—a low-down, even, been lot. If in want of something extra good, corre spend with us. We can please you. J. A.LOYERING. Coldwater P.O. and Sta

Angus Cattle The kind that get market toppers We have for sale 7 young bulls from 9 to 16 mths old; also females all ages. All eligible for the American Herdbook. From good families and good individual merit. J. W. BURT, Aberdeen Farm.Comingsby P 0. 33 miles from Erin stn., C P. R.

ABERDEEN - ANGUS Erica and Blackbird families Young bulls and females. All sges. Write:

JOHN UNDERWOOD, GRAFTON, ONT

For Sale Choice registered Holstein bull calves at \$15 each, sied by Prince Gretqui De Kol, whore dam made over 18 be of butter in reven days at three years old; also one yearling and one two-year old bull at a one year bargain.

W. A. BRYANT, Cairngorm, Ont.

Home-seekers!)|Why go West to Home-seekers () Why go West to Better come to Virginis! We have good land at low prices: raise good crops: bave good mar-kets; get good prices for what we sell. We have good schools, churches, social advantages, and everything worth while. Write us about it, and send 5c. for our descriptive literature. PIEDMOVT & TIDE-WATER LAND CO, Inc. Columbia Virginia II S. A

Columbia, Virginia, U. S. A.

WEAK PIGS.

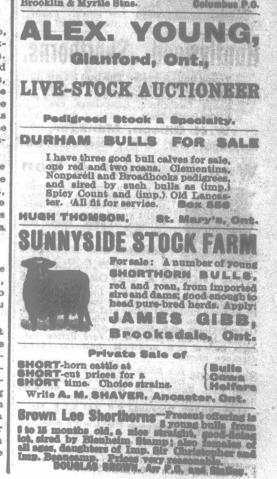
We had a sow farrow a few days ago. and the pigs were either dead or so weakly that they died shortly after birth. Previously, she has been a splendid breeder. She was fed on chopped oats, wheat bran and what sugar beets she would eat up clean. Could you give me an idea as to cause of weakly litter, as I have two more sows I am feeding the same way ? Sows were running in barnyard all winter. J. R. W.

Ans .- Lack of exercise in the case of the pregnant sow is generally supposed to be the principal cause of weak litters; but, since this has evidently not been the trouble in this case, and the feeding seems to have been well balanced, we are at a loss to assigned a cause.

SCRAPING APPLE TREES.

Is there any advantage in scraping the loose outer bark off apple trees? If so, what is the best time of the year to do it? What kind of arrangement do you use to do it with? E. W. M.

Ans .-- This is a good practice to adopt with old trees where the scales or loose bark may afford a lodgment for the codling moth and other insects. The scraping may be done any time of year, although it is usually done in the spring when the bark is somewhat softened with the spring rains. An old hoe with a short handle is a very convenient tool for doing this work. Care should be taken not to scrape so deeply as to expose live bark. H. L. HUTT.









FEBRUARY 21, 1907

THE FARMER'S ADVOCATE.

We Offer for Private Sale **10 HIGH-CLASS SCOTCH SHORTHORN BULLS 10 HIGH-CLASS SCOTCH SHORTHORN HEIFERS** No herd in America can offer a better selection of young cattle than these. Our prices are consistent with quality. One black yearling **Clyde Stallion** and **Yearling Filly** also for sale. R. A. & J. A. WATT, Salem, Ontario. Blora Station, G.T.R. and C.P.R. Visitors always welcome. WESTSIDE SHORTHORN HERD AND BORDER LEICESTER FLOCK. All Registered in the Herd and Flook Books of Great Britain. We invite all interested to inspect the cattle and sheep on this farm. The Shorthorns are long-tried families, tracing to the pioneer herds of Scotland through channels of repute. The Border Leicester flock is one of the oldest in Scotland, and embraces blood of the highest breeding. Scientions for Sale. Visitors from the States and Canada will be cordially welcomed. A. Cameron & Sons, Westside Farm, Brechin, Scotland. **Special Offering of Scotch** SHORTHORN BULLS 2 just past two years old; 15 just over one year old; 7 just under one year old. The best lot we ever had to offer in individuality and breeding, and prices are right. Catalogue. John Clancy, H. CARGILL & SON, Manager. Cargill, Ont. " MAPLE SH Our young bulls are the best that our herd has ever produced. We can furnish Cruickshank bulls of high quality to head the best herds, and some that should produce the best prime steers. We have a bull entalogue. Send for one. JOHN DRYDEN & SON, Brooklin Stations : Brooklin, G.T.B. Myrtle, C.P.B. Long-distance telephone. Brooklin, Ont. Prince of Stars =49804=. Rich roan Shorthorn herd bull. Kind, sure, a good han dler. The low-down kind. Will sell to avoid in breeding. Look up this pedigree, and write SHORTHORN BULL H. M. Vanderlip, Cainsville, Ont.

Queenston Heights SHORTHORNS

Special offer now: Several choice Scotch bulls, two of which are show bulls, a roan yearling and a red two-year-old by Derby (imp.) -89059=. Their dam is Bessie's Maid =47779=, by the great sire Royal Prince =26062=. There is no better breeding. Also some young cows and heifers at low prices for prompt sale.

HUDSON USHER, Queenston, Ont.

GEORGE D. FLETCHER Breeder of Sootch Shorthorn

WE ARE OFFERING FOR SALE IMP. SCOTTISH PRIDE =36106=. 3 bulls just two years old. 6 bulls one year old. 7 bull calves from 8 to 12 months. (12 of these bulls are from Imp. cows.) Choice females of all ages; 100 to choose from. 2 Imp. Yorkshire sows due to farrow in March. 10 young sows 5 months old. Write for catalogue and prices. Our farms are only one-half and one and one-half miles from Burlington Junction, G. T. R. Long-distance telephone in residence.

Shorthorns

Scotch

Pure

W. G. Pettit & Sons, Freeman, Ont.

GOSSIP.

H. M. Vanderlip, Cainsville, Ont., writes : "Our Berkshires are wintering well, and we have some very choice stock for sale--in brood sows for March litters, young boars and sows at six months old, and pairs not akin, ready to wean. Sales this month so far have been: To I. L. Howlett, Keldon, a pair of ten-months-old sows; to J. Coleman, a young stock boar; to H. Able, Troy, a young boar. Early buyers get the choice. Selections are carefully made for our mail-order patrons." Write Mr. Vanderlip for what you want.

ELMHURST BERKSHIRES AND SHORTHORNS.

A short distance from Cainsville Station, on the C. P. R. and G. T. R., is the well-equipped stock farm, "Elmhurst," the property of Mr. H. M. Vanderlip, breeder of Large English bacontype Berkshire hogs and Scotch Shorthorn cattle. Mr. Vanderlip is one of the leading breeders of pure-bred stock in Ontario, as well as one of the most successful, from the fact that he uses none but the best procurable for breeding purposes. His herd of Berkshires stand second to none in the country. The bulk of the brood sows, as well as the main stock boar, are imported, and it is safe to say that no better representatives of the breed can be found. The main stock boar is Elmhurst's Compton Duke (imp.). He belongs to the noted Compton strain, better than which there is none. His sire was a noted show hog, and won at the leading shows in England in 1903, and his grandsire, Baron Kitchener, was probably the most noted Berkshire boar in England, having won the 100-guinea prize at the Royal Show, and his dam and grandam were equally noted show sows. Second in service is Elmhurst Swell, by the great show hog, King of the Castle (imp.), winners of first prize at the Bath & West of England Show in 1904, dam Polgate Desire (imp.), one of the best sows ever imported. Among the brood sows is the grand good one, Compton Dawn 2nd (imp.), a daughter of the great sow, Compton Dawn, pronounced to be the best sow in England in 1904, having won over all comers at nearly all the leading shows. She was sired by Polgate Dragon, one of the most noted sires in England. In the herd are four of her daughters, an ideal lot, one of which has a litter, the others bred to farrow in March. Another of the good sows is Flashlight (imp.), a sow of remarkable length and quality; she has a grand litter by the main stock boar. Still another is Imp. Queen Bee, an ideal in type, with great size, a rare nice sow. Then there are several others bred from imported stock, the whole



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The following letter has been sent to Dr. T. A. Slocum, Ltd., for publication.

Dr. T. A. Slocum, Limited :- Dear Sin : Within the last two years my wife (who is of a delicate constitution) has had two severe attacks of the pripe, both of which have been specific corrected by the us of Psychine. We have such faith in the endoiney of your remedies that as a family we have no other. For toning up a debilitated system the heart and lungs, and as a modifie for all wast-ing diseases, your Psychine and Oromulation are simply peeries. Your sincerely, New 7. J. Blos, all Walker Avenue, Toronto.

PSYCHINE, Pronounced Si-keen is a scientific preparation, having wonderful tonic properties acting directly upon the Stomach, Blood and weak organs of the body, quickly restoring them to strong and healthy action. It is especially adapted for people who are run down from any cause, especially Coughs, Colds, Catarrh, LaGrippe, Pneumonia, Consumption and all stomach or organic troubles. It has no substitute.



is for sale at all dealers, at 50c and \$1.00 per bottle, or write direct to Dr. T. A. Slocum, Limited, 179 King St. W., Toronto.

There is no other remedy "Inst as Good" as PSYCHINE.

Dr. Root's Kidney Pills are a sure and permanent cure for Rheumatism, Bright's Disease, Pain in the Back and all form of Kidney Trouble. 25c per box, at all dealers.

Centre and Hillview Holsteins

Bulls 1 year and under for sale, from great-testing dams and sires, all in A. B. O. Records. Our prises in milk test in America's A. B. O. Records is, lat prise in 30-day; 5th in 7-day; 5th in 7-day, over 8 months milking.

P. D. HDH, Oxford Centre P.O. Woodstock, C.P.B. or G.T.B.

Ridgedale Farm Holsteins Present offerling bull, also six bull calves, from one to four months old, sired by Prince Pauline De Eol Shi, and from rich, heavy milking dam. Come and see them or write for prices. Enlipting metions : Port Perry, G T. E., or Myrile, C.P. E., Ontario Co. E. W. MALKER, Utics P.O., Ont.

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Blanwood Stock Farm Hotstoless and Holsteins all sold ont Have a few round Tech-thire sows, about 5 months old, for sale dhasp true to type and Anth-laws. Bred from imported stock. 1905. B. dail.AW & sold, Wartwerth P.O. Campbellford Str. HILTON STOOK FARM - Hotestating Conservation and Tannaverities fro onioficting : Some young court : a plea i of young plea : fow board sto nonthis old, and over in ple. b. O. worknow, a some Hilton Brighton Tol. and the Imperial Heisteins An Advanced Bestein old buil, a Toronto champion, four buils from to Smonths of esc. A. B. on both sides. Imp. in dam from the U. S. W. H. Simmons. New Durham P.O. & Ste MAPLE BROVE HOLSTEIN HERI is made up of Record of Merit cows and heiter with large records, and headed by Lord Wayne Mechthilde Calamity. Young buils fit for service Walburn Rivers, Folden's, Ont.

Evergreen Farm Holsteins is headed by DeKol, which we are offering for tale : size of 10 daughters in Record of Merit ; also a choice lot of young buils fit for service, from Record of Merit cows with large records. Morit cows with large records. F. C. PETTIT & SON, Burgessville Ont

LYNDALE HERO Offer a number of young bulls fit for service, out of Record of Merit cows, and sired by Beryl Wayne Paul Concordia, four of whose nearest dams have official records averaging 20 lbs. It oss. each. Eight heifers coming two, and due to calve in spring. Younger stock, either set. BROWN BROS. Lyn. Ont



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THE FARMER'S ADVOCATE.

GOSSIP.

Attention is again called to the important sale of the 20 head of Shorthorns, advertised by L. K. Weber, of Hawkesville, Ont., to take place at his farm on Feb. 28th. The animals in this offering are said to be an extra good lot. As to breeding, size and quality, full particulars of which will be given on day of sale. Parties attending the Guelph Provincial Sale can reach the farm on same evening, or in forenoon on day of sale, either by G.T. R. via Berlin, or C. P. R. to Wallenstein. Noon train will be met at St. Jacob's on day of sale. Any other trains met by appointment.

Among the Angora goats exhibited at the Louisiana Purchase Exposition, says an American magazine, were two prizewinners, which, owing to the long fleeces they carried, attracted axtraordinary attention. One was a doe, and the other a buck—both being from New Mexico. The doe ''sheared'' fourteen pounds of fleece, the longest of which was eighteen inches; the buck yielded sixteen pounds, of a staple that exceeded twenty inches in length.

The mohair from these two very remarkable animals was sent to a certain dealer in New York City, who is a maker of wigs, hair nets and switches for which last, of course, only a very long fibre could possibly be available. The lady who owned the doe received fortythree dollars for its fleece, while the owner of the buck sold its shearing for fifty dollars.

In the annual report of the Clydesdale Horse Society of Great Britain and Ireland, it is shown that the number of export certificates issued during 1906 was 1,317. The certificates were distributed as follows : Canada, 1,049; United States, 86; Argentina, 163; Australia, 3; Denmark, 3; New Zealand, 8; South Africa, 5. The revenue from certificate fees was £167 7s. 6d. In accordance with advice received from Ottawa, duplicate certificates for horses exported to Canada are no longer issued. To meet the requirements of the United States Customs, the Secretary was authorized to give numbers to horses and mares exported to the United States of America. As a result, it will be found in Vol. XXIX. that several numbers appear out of their due order. The alphabetical order, however, is maintained so that there should be no difficulty in finding entries as before. The Council have been guided in this matter by a desire to foster exportation in every way possible, by meeting the views of purchasers, and reducing, as far as possible, difficulties in

FOUNDED 1866

FELL DOWN FLIGHT OF STEPS.

PROVED ZAM-BUK BEST IN 3 DIFFERENT EMERGENCIES.

One of the most valuable points whout Zam-Buk, the herbal balm, is the variety of uses to which it can be applied.

Mrs. A. Livernois, of 131 Sydenham St., Toronto, says : "I have used Zam-Buk for colds on the chest, and found, when well rubbed in, it gave almost instant relief to the "tightness" and "stiffness." One day I slipped when descending the stairs and fell to the bottom. My right arm was terribly discolored and swollen, and became quite stiff. As I still had a supply of Zam-Buk I rubbed some on the bruised limb, and it was really surprising how quickly it removed the discoloration, cured the stiffness, and restored the arm to its proper form. Since that time I have had occasion to use Zam-Buk for rheumatism, and I have found it equally good."

Zam-Buk is so uniformly good because it is composed of the finest herbal balms, essences and juices known to medical sciencé, compounded and refined in a special and peculiar way. It has such high germ-killing power that it is unequalled as an antiseptic. Its healing virtue is very great, and as a household balm, Zam-Buk is absolutely unique. It is a sure cure for eczema, itch, blood poison, ulcers, chronic sores, ringworm, children's rashes, spots, etc. It also cures cuts, burns, bruises, chapped hands, enlarged veins, piles and all diseased or injured conditions of the skin and subjacent tissues. All druggists and stores sell at 56c. a box, or post free from the Zam-Buk Co., Toronto, for price. 6 boxes sent for \$2.50. Send one cent for dainty trial box.



Pat, 1903-04.

We manufacture Steel Cheese Yats, Gream Yats, Curd Sinks, Water Troughs, Hog Troughs, Steel Tanks, Tanks to Water Stock, Feed Cookers, Evaporators for Making Maple Syrup, Grain Boxes, Thresherf Steel Tanks, Smoke Stacks, Steel Whey Tanks.

Ask your implement agent for our free catalogue.

The Steel Trough & Machine Co., Limited,

about them now.

for circular and sample.

F. G. JAMES, Bowmanville, Ont

Write to-day

of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 18c. Don't delay if you	dam, the others bred from imported Cross of Knockdon. Anything in the herd is for sale.	reducing, as far as possible, difficulties in respect of customs regulations.	TWEED, ONTARIO.	
wast one from this herd.	nout. Hunter & Sons, Maxville, Ont.	SHORTHORNS AND CLYDESDALES AT	W. W. CHAPMAN.	
H. E. GEORGE, Grampton, Ont.	tors combined Vernet that all other competi-	AUCTION.	W. W. UNALMAN,	
A HOLSTEIN BULLS	tors combined. Young stock of either sex for sale. H. C. HAMILL, Fenelon Falls, Ont. Islay P.O. or Lorneville Stn.	The wise and wide-awake farmer will prepare for a sharing of the profits prac-	Secretary of the National Sheep Breeders' Association.	
fit for service, for sale at reasonable prices. Choice females, all ages. If you are willing to pay good prices for good	Ayrshire Bulls A select pair (13 months old) by a son of the champions	tically sure to become available in the near future by securing good cattle now,	Secretary of the Kent or Rommey Marsh Sheep Breeders' Association.	
eeun, write me.	(imp), and out of daughters of imp comet also	when they can be bought comparatively cheap. Another good opportunity for	and late Secretary of the Southdown Sheep Society.	
W. OLEMONS, St. George, Ont.	two March calves and one May (all select). W. W. BALLANTYNE, Long-distance 'phone. Stratford Ont.	laying a foundation, or increasing a herd already founded, presents itself in the	Pedigene Live Garak T	
GLENARCHY " HOLSTEINS S head of big, deep flanked, heavy-producing		auction sale, on Tuesday, March 12th,	stock personally selected and experied	
industrial in the second secon	Glenhurst Ayrshires Oldest-established herd i Ontario. Imp. and Canadian-bred. Average B. F. test for the	1907, when the old-established herd of the late Mr. Wm. Hay, of Tara, Ont.,		
the sale. A straight, smooth lot.	whole herd. 4 2; milk yield, 40 to 60 lbs. a day For sale: females of all ages, and several young bulls; all by Imp. Fire and some out of Imp. dams.	will, as advertised, be sold without re- serve. The herd numbers 20 head of	Address: MOWBRAY HOUSE, Norfalk #4. LONDON, W. C., ENGLAND.	
Greenwood Holsteins and Yorkshires	James Benning, Williamstown P. O., Lancaster Sta.	Marr Floras; Cruickshank Lovelys, Stam- fords, Wildames and Red Roses, the lat-	Cables-Sheepcote, London.	
Her sale: A few richly-bred bulls from one to eighteen months old. Also a few choice females of all ages. Yorkshires of either sex.	Ayrshires ³ prizewinning bulls fit for service at reasonable prices, also younger ones for quick buyers.	ter two being especially noted for their	Ship Your HIDES	
D. Jones, Jr., Caledonia P. O. and Sta	N. DYMENT, Hickory Hill Stock Farm, Dundas Stn. and Tel. C'appison, Ont.	heavy-milking qualities. Among the lot are 9 breeding cows, 5 heifers, 5 bulls	THE ADDRESS OF THE ADDRES	
Holsteins and Yorkshires HONEY, Brickley, Ont. offers & very	HIGH GROVE JERSEYS AND YORKSHIRES	from nine to thirteen months of age, and the stock bull, Scottish Knight =53248=.	SHEEPSKINS	
disto hate.	For sale cheap, several choice young bulls and a few heifers, some of them prisewinners at Toronto this fall; bred from the best. Twenty	There will also be sold the imported		
MAPLE PARK HOLSTEINS	young sows just ready to breed. Prices. ex-	Clydesdale stallion, Kelvinside, a bay six- year-old son of Baron's Pride, and a sire	FURS TO E. T. CARTER & CO., TORONTO.	
finne of the great De Kol. Pietertje and Poseb families. Schulling Sir Poseb, son of Annie	ABRING. WOST. JUF1S & SON. Tweed P.O. and Sta.	of show stuff. Also the two registered Clydesdale mares, Nell Gleanor 5332,	Canadian Agents for the Original	ik.
and grandson of Altje Posch, stock bull.	from 6 to 18 mths.	aged, and her ten-year-old daughter, Kate	McDougall's Sheep Dip & Cattle Dressing	34
A. MAOKLIN, PROP., STREETSVILLE	The Alle Temples of all adag The All	Sargano 5334. Tara is on the Owen Sound branch of the G. T. R. Morning	imperial half galler fice: Imperial pints, 35c.	
Grove Hill Holsteins Herd consists of fifty- four head, containing blood'tof De Kol. Pietertje. Korndyke, Keyes,	'Phone 68. Brampton, Ont	trains from Toronto reach there about	allon ting THE Wonarges prepaid on one-	
Inka, and other families of good testing quali	THE HUNDE VERSEYS THE Short	11 a. m. Conveyances will meet mern- ing trains. The terms are ten months' on	Sheep and Cattle Labels.	
in limited quantities. Write for prices.		approved paper, or 6 per cent. off for	You will need them soon. See	

in limited quantities. Write for prices. Ideal type; also a few heifers and heifer calves. A proved paper, or 6 per cent. off for cash. Catalogues may be had on applitrenton station, G. T. B.



FEBRUARY 21, 1907

THE FARMER'S ADVOCATE.

TRADE TOPICS.

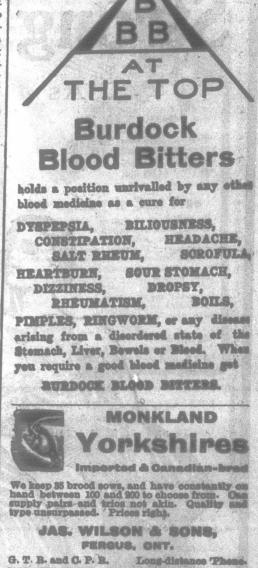
THE PRESIDENT'S MESSAGE .-- The message recently issued by President Roosevelt has occasioned probably more discussion than the message of any Presi-dent for many years back. It has been blamed and praised generously, depending upon the viewpoint of the reader, but one paragraph seems to have attained almost, if not absolutely, universal approval. It is as follows :

"We should establish shooting galleries in all the large public and military schools, should maintain national target ranges in different parts of the country, and should, in every way, encourage the formation of rifle clubs throughout all parts of the land. The little Republic of Switzerland offers an excellent example in all matters connected with building up an efficiant citizen soldiery."

All of this is in direct line with the teachings which have been put out for some years back by the J. Stevens Arms & Tool Co., High St., Chicopee Falls, Mass., who will be very pleased to send their catalogue, without charge, to anyone who is interested in the subject.

"BRANTFORD ASPHALT " AND 'BRANTFORD RUBBER " ROOFING, manufactured by the Brantford Roofing Co., Limited, of Brantford, Ont., are rapidly coming to the front as standard qualities of ready roofing. Their advertisement appears on the cover of this issue. It is pointed out that they are very suitable for roofing dwelling houses, barns, warehouses, rinks, sheds, being both fireproof and waterproof. Each roll contains enongh cement and nails to lay it. It is claimed that this roofing is cheaper and better than shingles, and will not discolor or harden rain water. Asphalt roofing is coated on both sides with silicate; while the rubber roofing is finished on both sides with mineral rubber, and is durable and cheap. Each roll of roofing will cover one square, including nails and cement, 10 feet by 10 feet. One particular reason why farmers are urged to try this roofing on barns is because of its particular value during threshing time as a fireproof material against sparks from the steam engine.

BARN-DOOR LATCHES .- The requirements of a modern latch for the barn door, as is known by every farmer giving this matter a thought, and that every manufacturer of them knows and attempts with more or less success to embody, are : ability to automatically catch and hold a door, either closed or open; one that has handles of convenient shape for opening the door from either side; convenience of adjustment to doors of varying thickness without fitting, attractive design, material and design to possess the greatest strength for the weight; while the most essential feature and least often produced is a latch with no projecting hooks or points for catching a harness or the animal itself while passing through the door. The working parts should be protected from the weather, and the finish should, as far as possible, prevent rust. These features are embodied in the Whitcomb Steel Barndoor Latch, advertised in this paper, and it should certainly receive the consideration of readers interested in labor-saving improvements.



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Scotch Collies. Robt. McEwen, Byron, Ont.

WE are offering SHROPSHIRE EWES, bred to Prolific, imp., at \$15.00. Ram and ewe lambs, \$10.00 to \$12.00. Six-weeks YORKSHIRES, \$7.00 each. Pekin ducks and Barred Bock cockerels. W. R. BOW-MAN, Mt. Forest P. O., Co. Grey, Ont. Newcastle Herd of Tamworths and Shorthorns. We have for quick sale a choice lot of boars and sows from 2 to 6 months old, the produce of sows sired by Colwill's Choice and Newcastle Warrior, both our own breeding, and winners of sweepstakes and silver medal at Toronto, 1901-08-03-05. Several very choice sows due to farrow in March and April. Pedigree fusnished with every pig. Several choice heifer calves and heifers in calf to our present stock bull. All of high show quality. Prices right. Daily mail at our door. COLWILL BROS., Newcastle, Ont. Newcastle Herd of Tamworths and Shorthorns.

50 IMPORTED AND CANADIAN - BRED 50 Motto : "Good as Represented." Mail orders receive careful attention.

AND

Long-distance 'Phone.



P. O. COLLINS, Bowesville P.O., Ont. Manotick Sta., C.P.R. OAKDALE BERKSHIRES, Of the largest strains Imported fresh from England. The produce of these and other noted

order for a pair or trio not akin.

The largest herd of bacon-type Chester White hogs in Canada. Strictly high-class, have won highest awards. Young stock of both sexes always on hand. Satisfaction guaranteed

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Norfolk St. AND.



Original e Dressing pints, 25c.1 gallon, \$1.35 paid on one-DN DRUG

le Labels. soon. See Vrite to-day ole. anville, Ont

Maplehurst Herd of Tamworth Swine, Bronze Turkeys, Toulouse Geese, Pekin Ducks, S.-C. W. Leghorns.

For sale: A large herd of Tamworths, of excel-lent breeding and ideal bacon type. This herd won sweepstakes at Toronto and London, 1905-6. Among our winnings at World's Fair, St. Louis, 1904, both premier championships, sweepstakes aged and junior herd, and two grand champion-shins. Inspection and correspondence solicited. ships. Inspection and correspondence solicited For further particulars apply to

D. DOUGLAS & SONS, Mitchell, Ont.

MOUNT PLEASANT TAMWORTHS and

MOLSTEINS. For sale: An extra choice lot of pigs of either sexes, from one to six months old, and two sows bred to farrow in March They are nearly all sired by Colwell's Choice No. 1343; won sweepstakes and silver medal at Toronto in 1901-2-3. Also four bulls and one heifer from one to two months add and one heifer from one to ten months Phone in resi ence. BERTRAM HOSKIN. The Gully P. O.

Maple Lodge Berkshires - A number of nice thrifty Berkshire sows, bred and ready to breed. Young stock on hand of both sexes. Stock registered and crated f.o.b. Prices reasonable. JOSEPH NAUMAN, Fisherville, Ont. Nelles' Corners Sta., G T.B.

For Sale-Ohio Improved Chester Whites, the istered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedi-grees and safe delivery guaranteed. Address: I. D. GBORGE, Putnam, Ont.



Ohio Improved Chester Whites

100 Pige to Offer of the long, deep, heavy sort. Breeding stock selected from the most noted families, with a view to size and quality. Booking orders for choice spring pigs; also a few fall pigs for sale. Pairs furnished not akin. Express charges prepaid. Pedi-grees and safe arrival guaranteed.

H. E. GEORGE, Crampton, Ont SUNNYMOUNT BERKSHIRES. Sunnymount Berkshire are unsurpassed for ideal bacon type and superior breeding. For immediate sale: A few choice boars from 5 mos. up to 15 mos. old, JOHN MeLEOD Milton P.O. and Sta., C.P.R. & G.T.R. APRE YORKSHIRES

Choice young stock from imported prinewinning stock for sale.

GEO. M. SMITH. HAVEVILLE. ONT.

Duroc Jerseys-Imported and home-bred sows and boars ready for service. Pigs fit to wean; also Buff Orpingtons and Buff Leghorn cockerels.

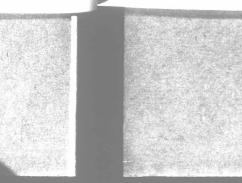
MAC. CAMPBELL, Harwich, Ont.



GUERNSEY RECORDS.

It is just five years since the establishment of The Advanced Registry for Guernseys in the United States. In this time, 35 bulls have entered same, their qualifications being that each must have two or more daughters in this Register. Four hundred and fifty-three cows have completed their year's record, and entered this department of the Register, and 21 have re-entered it, making a second year's record. The best year's milk record for one cow is 14,920.8 lbs.; best year's butter-fat record, 857.15 lbs., or equivalent to 1,006 lbs. butter. One hundred and seventy cows, five years old on over, average 9,157.6 lbs. milk, testing 5.01 per cent., and containing 452.8 lbs. butter-fat, equivalent to 528 lbs. butter.

Average of all the classes, two years old and over, show 7,997.68 lbs. milk, testing 5.06 per cent., and containing 405.29 lbs. butter-fat, equivalent to 473 lbs. butter .- Wm. H. Caldwell, Secretary Guernsey Club.



FOUNDED 1866

Strong Evidence for the Sick

As a Family Remedy Nothing Can Equal

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DR. MCLAUGHLIN'S ELECTRIC BELT

And No Household Should Be Without It.

A few days ago I received the following letter from MR. GEO. A. MULLETT, Elm Springs, Assa., who states his whole family were cured by my Belt:

Dear Sir,—I purchased one of your Belts four months ago, and though I have only worn it half of the time since, I find it all your claim for it, and more. I suffered for over twenty-five years with dyspepsia and indigestion, as bad as a man could and live at all. I have lived for weeks upon any wheat bran and a few mouthfuls of other food once a day, and my friends thought me near my last. With this I became badly run down, and suffered from lost manhood and rheumatism. After wearing your Belt for a few days my appetite returned, and I began to improve, and to-day I can eat anything any other man can. I am strong and weigh heavier than I ever did before. I have not tasted a single drop of medicine since using the Belt, whereas before I was constantly taking something. I was able to walk very little, and laid in bed nearly all the time. My wife has also used the Belt, with splendid results, for lame back and rheumatism, and two of my boys who were run down with hard work and felt themselves getting weak and poorly, are all right again after wearing my Belt.

It will do the same for you. If I fail to convince some people it is because they will not use their own judgment. I do not ask you to take my word only—ask those who have used my Belt. Every man or woman who comes into my office gets a practical illustration of my method of treatment; when they see how the cure is made, it appeals to their common sense. There is no mystery about it. I give a free test to all who call.

After you have read the letters published in this space, write to me, explaining your case. I will at once tell you whether I can cure you or not. To prove the confidence I have in the curative power of my Belt, I am willing to take your case, and

AFTER I HAVE CURED YOU PAY ME

All I ask is that you give me security for the price of my Belt and I will send it to you with all necessary attachments suitable for your case.

I want a test case for my New Belt. I will pay \$1,000 in gold for a case of Rheumatism, Pains in the Back, Weak Kidneys, Sciatica, Lumbago, Varicocele, Prostatic Trouble, Torpid Liver, Indigestion or Dyspepsia that my Belt will not relieve in one month's use according to my directions.

There is no evidence like that of the cured, and I make a friend of every man who wears my Belt. I only wish I knew of some plan whereby I could reach every man or woman who is sick and suffering. You go on from day to day in torture, paying doctors' bills (without benefit), bringing unhappiness to yourself and those with whom you are associated. As I say, if I could only reach you I could furnish you with evidence and proof sufficient to convince any human mind that Electricity as I will apply it will cure almost any disease man-

kind is subject to. I have volumes of it, which I will send to you if you will only tell me where you are. Get the evidence of what my Belt is doing and judge for yourself. I don't want you to take my unsupported word. Let me send you the names of some of my patients and communicate with them. Space will not permit me to publish even a small portion of it through the papers.

I have used your Belt for thirty days, and find that it is helping me. I feel better when I get up in the morning, and I can walk steadier. I have gained two pounds in weight. Roy H. Stuart, Sussex, N. B.

I am pleased to be able to tell you that I have derived great benefit from your Electric Belt. When I started to wear it I was very much run down and felt weak, but after using it for three months I must say that I feel perfectly restored to my usual health and vitality. Thanking you for the great benefit received from your treatment, I remain, R. L. Harris, Trenton, Ont.

Your Belt cured me of rheumatism and sore back a year and a half ago, and I have had no reason to put it on again. You know how bad I was before I got it: I had such a soreness across loins and kidneys I could not turn in bed without catching hold of something. The first night I had it on it was a little better, and I used it as directed by you. This, I think, is part of the cure. I do not state these few lines as a person who does not know what he is talking about. I am not built that way. Robt. Cameron, P. O. Box No. 98, Port Hood, C. B.

Tell Me Where You Are and I'll Give You the Name of Somebody You Know That I've Cured.

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Free Book. Consultation Free. I want you to call and examine my Belt, I will talk over your case with you. I will prove to you

the electricity, when properly applied, will cure. You can test the Belt. For those who cannot call, I have a Free Book, which gives many hundreds of letters from men and women whom I have cured. Tells all about the signs of decay in men, how they are caused, how they first appear, the way the vital force is wasted, and how all those troubles are cured by Electricity. It inspires a man to be "a man all over." I will mail it, closely sealed, free. All correspondence strictly confidential.

Office Hours: 9 a. m. to 6 p. m.; Wednesday and Saturday till 9 p. m.

	DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can,	Send	
	Please send me your book for men, sealed, free.	it	
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