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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

PUBLISHED AT LONDON, ONTARIO. JULY 6, 1905. WINNIPEG, MANITOBA. No. 667

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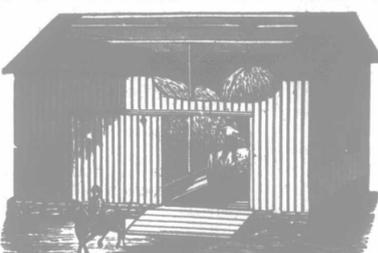
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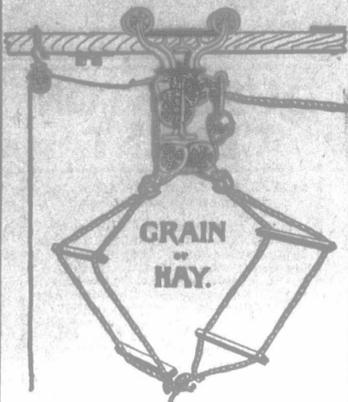
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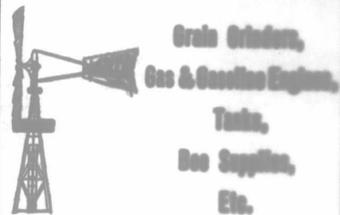
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The Farmer's Advocate

"PERSEVERE AND SUCCEED" and Home Magazine.

ESTABLISHED 1866

VOL. XL

LONDON, ONT., AND WINNIPEG, MAN., JULY 6, 1905.

No. 667

EDITORIAL.

The "Devil Machine."

The automobile fad is again abroad in the land. Our readers will probably agree with us in saying that he is the most unmitigated nuisance that ever struck the public highways of this country. As a general rule, he has more money than brains, and should either be put under restraint or inoculated with common sense, if only some modern pathologist would discover an effective serum of that character to inject under his cuticle. We think of offering a reward for the discovery of such a preparation, and John D. Rockefeller might do worse than set apart a few millions to endow an institute for the treatment of motorists, who would be required to produce a certificate therefrom before being granted a license by the Provincial Secretary to run one of their "devil machines." He is a pretty hopeless subject, but if caught in time and given heavy doses at frequent intervals for a considerable length of time, he might reach a condition in which it would be safe for him to be at large.

Farmers have been heavily taxed for the construction of the roads upon which they and their families are supposed to have the right to travel unmolested in the pursuit of their business, but the advent of the wealthy automobile idiot has changed all this. His ill-smelling machine rushes furiously along in a cloud of dust which would render invisible his tag number even if it were seven times as large as the law prescribes. If the hapless farmer or his wife do not wish to be run over and maimed they can get out of the road or take to the nearest side line, providing they are smart enough and the horse does not die of fright in the interval. Most horses are likely to die of old age before getting used to the sight and sound of the automobile, which more nearly resembles a Western cyclone than anything we know of. Meanwhile, about all the farmer can do is to exercise patience, and prosecute for damages whenever he has ground for so doing.

In the Province of Ontario every automobile must carry its number "securely fixed" on the back of the body of the vehicle, and the figures must be five inches in height, instead of three as formerly. Lamps must be carried in the front of the vehicle, and the number of the vehicle must be displayed on the glass of the lamps. The section requiring the motorman to be careful not to frighten horses and to stop on signal, was amended at the last session of the Legislature so as to compel the motorist to slow down within 100 yards, and to pass a horse at a speed not greater than seven miles an hour. The necessity of signalling to the motorist has been removed. The Provincial Secretary is given power to suspend or revoke licenses, and the same Minister is required to send to every municipal clerk on 1st May and 1st September a list of licenses granted. In case of accident through runaway of a horse, the onus of proof as to cause of damage is cast upon the owner or driver of the motor vehicle. This law comes into force on the 15th of this month.

Like other crazes, the automobile will have its day, and will then be thrown in the scrap-iron heap. Fortunately, in Canada, at least, there are seasons of muddy roads—fall and spring—and a good long winter, with its deep snows, when the old and well-tried friend of humanity, the horse, has the right of way, and will be found with us long after the present fad has disappeared from the King's highway, which, in their present rough condition, have one good effect, viz., dislocating the mechanism of the automobile and rapidly

wearing out its pneumatic tires. This is a small mercy, and about the only justification for maintaining bad roads we can think of at the present time.

The War with Weeds.

The complaint of a correspondent in this issue against the Ontario Statute requiring that farmers cut the weeds on the side of the public roads on which their lands front, in addition to the performance of statute labor, not always fairly apportioned or applied, calls attention once more to the urgent need of combating at every point the forward march of the weed nuisance. For statute labor laws, as commonly carried out, we confess to a wholesome lack of respect, believing a judicious commutation of the time required for cash, and its expenditure on well-directed permanent road improvement, to be a more businesslike principle, and one more capable of satisfactory results than the present system. But, "eternal vigilance is the price of liberty" from the curse of weeds, and farmers should declare a perpetual war against them. We do not think it should be considered a hardship to be required to cut down weeds by the roadside opposite one's own farm. The principles of self-preservation should lead farmers to attend to this duty apart from the feeling of personal pride accompanying an appearance of neatness. When we consider the potentialities for damage and desolation wrapped up in the seed sacs of noxious weeds, we should make it a strict rule to allow as few as possible to ripen. One plant may shed a thousand seeds and send them out on the wings of the wind on a mission of mischief that years of labor and care may not overtake. Farmers, as a rule, in the past, have not exercised sufficient care in the purchase of seed grain and grass seeds to avoid introducing noxious weeds. The danger from this source has been emphasized by the reports of official tests of clover and grass seeds placed upon the market, in which many thousands of weed seeds have been found in a single pound of the samples offered for sale, and for which farmers have been paying high prices to seed their land. The organization of a Canadian seed-growers' association for the production and dissemination of pure seed of improved quality, a report of the annual meeting of which appears in this issue, should serve a good purpose in directing attention to the importance of sowing clean seed. In the meantime, every available means should be employed to destroy weeds in their incipient stages by frequent cultivation in all hoed crops, a process which, at the same time, pays well in the increased growth and yield of the crop, as well as improving the condition of the land for the production of future crops of any kind.

The seeds of certain weeds, such as mustard and ox-eye daisy, being of an oily nature, will lie dormant in the land for years if plowed under, and when turned up to the influence of sun and air will germinate and reproduce in profusion. With these, where too numerous for pulling by hand, care should be taken to check them before ripening their seed, the mustard by spraying, and the daisy by the use of the mower, as it usually appears in meadows or pasture land. In the corn and root fields, keeping the cultivator going as regularly and as often as time and circumstances permit, is one of the most effective ways of eradicating weeds, commencing the siege when they are young, and keeping them cut down below the surface of the ground, as it is only through their leaves they can breathe, and when deprived of this privilege they must succumb.

Government Ownership Not Profitable.

The deficit of nearly \$2,000,000, announced by Hon. Mr. Emerson, Minister of Railways, in connection with running the Government railway, the Intercolonial, is somewhat of a blow to the advocates of Government ownership of public utilities. True, the Intercolonial has not the most advantageous location for a dividend-paying road, but authorities on such matters claim that were the road managed by a private company, the deficit would not be nearly so large. Members of the Government agree that a Government-owned road cannot be or is not operated so economically as a privately-owned road, and the general tone of the discussion upon the subject in Parliament seemed to indicate that the Intercolonial would, in the near future, be turned over to some company to operate. It is something of a reflection upon the executive ability of our Governments of both parties that they cannot operate a road as profitably as do railway companies, but they are willing to admit that political considerations have a great deal to do in the matter. Of course, it is but natural for the present Government to take this view of the situation, as it vindicates their policy in connection with the construction and operation of the Grand Trunk Pacific. However, under the previous Government, proportionally great deficits had to be annually faced, so it is probable that the question of Government ownership, at least of railways in Canada, will soon be a dead issue. If for no other reason, the enormous financial burdens that would require to be assumed by the country in taking over our great transcontinental railway systems would probably stand in the way of the adoption of such a policy. What with the heavy interest charges involved, and the hazards of politically-controlled railways, it is seriously open to question whether the people would fare any better in the long run than they will under regulation of rates, service and facilities by the Canadian Railway Commission.

If the Intercolonial had been constructed and run on business principles, rather than as political machinery, it would have stood a chance of paying, though it might not be quite as satisfactory to some of the people who use it. What is more, had the Government extended the Intercolonial to the Upper Lakes, where it could tap direct the business of the West, by acquiring the Canada Atlantic line to Depot Harbor, on Georgian Bay, it would have held the key to the transportation problem in Canada; but the Grand Trunk has scooped in the Canada Atlantic, so that chance is gone. The only other way in sight to control the situation is a 20-ft. French River ship canal from Georgian Bay to the Ottawa River and Montreal, but the big railways intimate that they won't allow that to be done! But that is another story. In the meantime, before abandoning the Intercolonial, why not try, as a last resort, the expedient suggested of running it by a commission constituted something after the fashion of the Railway Commission?

Prof. F. H. King states that it will often happen in farm practice, after a field of corn or potatoes has been brought into perfect condition, so far as being free from weeds and in possessing a good mulch are concerned, that a rain may come, making it advisable to cultivate the field once more, in order to restore the earth mulch and to retain the matter which has been brought up within the reach of root action.

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Address—THE FARMER'S ADVOCATE, or
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HORSES.

The Farmer Boy and the Horse.

An old friend of mine who has spent all his life on the farm without becoming even a fair judge of a horse, said to me a few days ago, while in a confidential mood: "If I had life to live over again, I would endeavor while a boy to study horse-judging, so that I could pick out the good ones," said he. "I know I have lost a lot of money and failed to make a great deal because I was not so good a judge of horseflesh as I might have been." I fancy, if the majority of old farmers were to speak their mind on this question, they would say the same thing.

To the young man of the present day the experience of those who have preceded them ought to be of great interest on this question. It is much easier for a young man to obtain an intimate knowledge of horse-judging to-day than it was twenty years ago, and hence it is that the farmer of the future will require to know more of horses than his father. Whether it is the intention to breed horses or not, the necessity for being able to judge them is important, because every farm must needs have them, and every farmer must own a number.

It is safe to say that there is not a young farmer in Manitoba who has any aptitude for judging who may not become a good judge of a horse. Like everything else that is learned, it requires that an interest must first be taken in the subject, and secondly, that that interest be maintained. No one should expect to become proficient in judging any class of stock in a short time; that would be impossible. It takes time to become a horse-judge, but the greater the interest in the subject, the sooner may a fair knowledge be obtained.

But when a fair knowledge of the subject has been obtained, the danger point has been reached, with some men. It is then, unfortunately, that far too many get the idea that they "know a horse," and after they have become recognized in their localities as judges, they soon feel that there is little to be learned.

Not long ago I ran across a fine-looking horse that had been bought in Winnipeg last spring for a long price. The purchaser was known in his

district as a horseman, but, upon examination, the horse was found to have very bad sidebones. The buyer admitted he was not aware of their presence until his attention was drawn to them, and no one could fail to realize that far too much money had been paid for the animal. This is merely one example of a supposedly good horseman being badly fooled, when there was no occasion for it, had he been more careful in his examination. I would, therefore, like my friend, the farm boy, to realize that there is a lot to be learned about the horse, but there is no more interesting nor, in fact, valuable subject than horse-judging, and there is not a Western boy who cannot improve his knowledge of our noble friend if he will.

Manitoba.

Automobiles Slower Than Horses.

Virtue is said to be its own reward, and per contra, it may be said that sinning brings its punishment in due time. On this latter score the automobilists have of late been suffering. So contemptuous of the law were many users of the machine that officers and constables everywhere were licensed to make arrests, whether there was cause for them or not. Any number of innocent victims to this spirit of persecution could be cited. It would seem, really, that the time had arrived when

"But man, proud man,
Drest in a little brief authority,
Most ignorant of what he's most assur'd—
His glassy essence—like an angry ape,
Plays such fantastic tricks before high Heaven,
As make the angels weep."

Like the famous school teacher who always boxed a boy's ears when he met one, "because if he hasn't done mischief, he is contemplating it," the average constable and policeman, too, has come to look upon the automobile occupant with the most insolent suspicion. On the way to and from the races at Sheephead Bay, Suburban Day, the motor cars crept along, particularly after reaching Brooklyn, through Prospect Park, New York, and down the magnificent driveway to the ocean. Speeding horses, training for the light-harness race-tracks and speedways, swept by the machines as though the latter were standing still. There was no fear or hesitation on the part of the horse-drivers, but the chauffeurs had lost their nerve, and couldn't be coerced nor cajoled into going faster. It was a slow, and, at the pace, in a cramped space, tedious means of travel. On top of a four-horse coach, when the pace may be as slow as you like, the sensation is always agreeable, because of more room, the elevation and the opportunity for enjoying the scenery, watching the horses at work, the skill of the whip in making every horse go up in his collar, and the always-contagious good fellowship of the dozen or more passengers. As the old coaching song ran:

"The team trots merrily o'er the road,
The rattling bars have charms;
Eleven and four is our average load,
And we change at the Coachman's Arms."

We learn with pleasure that the various interests in Connecticut that have been urging an automobile law which shall be fair to automobiles and the public, have finally agreed upon a measure which it is expected will be adopted. The speed limit of the bill fixes the rate at twelve miles an hour in cities and boroughs and twenty miles an hour in the country, with heavy fines for violations. The legislative committee on public health and safety favored the suspension of the licenses of persons violating the speed limits, but finally decided to omit this penalty after a conference with the attorney-general, who questioned its legality. Motor bicycles come under the same law, and must carry license numbers the same as an automobile. The wisdom of the horseman and the autoist will eventually prevail, to the end that we may have everywhere rational speed laws and a respectful observance of them.—[Rider and Driver.

Mr. D. Messenger, Guelph, Ont., writes the "Farmer's Advocate": "I am much pleased with article on page 916, in your issue of June 22nd, entitled 'Draft Horse Breeding.' It carried me back to my boyhood days, and brings to my mind afresh the land of my birth, as also the home of the best live stock of all breeds in the world."

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STOCK.

Holstein-Friesian Records.

Following is the report of the sub-committee appointed May 23rd, 1905:
To the Members of the Executive, Canadian Holstein-Friesian Association:

Gentlemen,—Your sub-committee, as instructed, proceeded to Ottawa, and were favored by the Minister of Agriculture, giving us a lengthy interview, in which we availed ourselves of the opportunity of explaining in detail:

1st.—That many years ago, the Holstein-Friesian Association were favored with an invitation from Mr. Fred Hodson, on behalf of the Minister of Agriculture of the Province of Ontario, to locate our offices at the Parliament Buildings, Toronto. We then took the ground that as our association was registering stock from all parts of the Dominion, we did not wish to become involved with the provincial authorities.

And, also, that the system of affiliation then proposed would destroy the usefulness of our organization for business purposes. We explained that we were then in our infancy, and the proposition of assistance was very tempting, but to-day we are very pleased we did not yield, for, in comparison with the progress made by other associations, we are well pleased with the course we then adopted, and, consequently, regard the present invitation for affiliating with the other breeders' associations at Ottawa as a probable danger, and are naturally cautious in our movements regarding same.

2nd.—We also showed the Minister that through the discussion which then took place, the Holstein people determined, if possible, to secure the creation of a Dominion Live-stock Cattle-breeders' Act, and, consequently, to-day, by the impulse of the Canadian Holstein-Friesian Association of Canada, who were successful in so doing, the nationalizing of all breeds was made possible.

We also emphasized the fact that we considered when we were incorporated by the Dominion Act we then became the only "National Holstein Record Association," as the Act does not permit more than one association for one breed of cattle, and as we were entitled to show in our seal evidence of our Dominion incorporation, there could not be any possibility of deception being practiced upon the railroad authorities.

We also endeavored to satisfy the Minister that, although the affiliation of all small and weak associations seemed necessary, at the same time experience has shown us that under that condition these small associations did not grow to any extent, for where the business of two or three breeders' associations was conducted by one official it was like an individual serving two or three masters at the same time, and that if our association found it necessary to remove their offices and, consequently, their officers to Ottawa, and accept of the generous offer made by the Minister's Department to supply us with stationary, office accommodation and free postage, this would not be a sufficient inducement, unless we were thoroughly satisfied that our business interests would not suffer, and, to guard against this, we found it necessary to demand an individual office for the conducting of our affairs.

And, as to the part of the agreement referring to the Live-stock Commissioner, we pointed out that we did not consider the Live-stock Commissioner's actions were at all discreet, and, by his actions, he has already forfeited our respect, and, consequently, our Executive were very emphatic on the question of the present Live-stock Commissioner being barred against having anything to do with the inspection and management of their work. The Minister, on the other hand, pointed out the difficulty of his complying with our request, as the Live-stock Commissioner was his officer, and it was in his department that such work would be performed. On the other hand, regarding the individual office demanded by us if we locate in the Departmental Building, the Minister promised very kindly to look further into that question.

Your committee, later on in the day, visited the office accommodation set apart for the purpose of keeping the affiliated National Records, interviewed the different clerks, examined the system which had been inaugurated, and are sorry to have to report we were not at all satisfied with the accommodation already afforded, and consider the affiliation plan a serious blunder, the room so far set apart for their accommodation not being more than sufficient to properly carry on the work of the Shorthorn Association, let alone the affiliated associations. But, as it was stated, they had not yet completed their arrangements, the future may reveal a different state of affairs. Your committee also enquired from the proper officials regarding the possibility of being discriminated against in the matter of freight rates, and, as far as they can learn, there is very little likelihood of this being inflicted upon a Dominion incorporated cattle-breeders' association. With this matter we are still occupied, and expect to make a report later on.

Your committee also enquired into the cost of our work being conducted as it should be conducted in Ottawa, and find it will make an immediate annual increased difference of about \$350.00.

All of which we respectfully submit.

Signed on behalf of the sub-committee,
MATT. RICHARDSON, President.

Sheep at the Royal Counties Show.

To breeders who have visited England during the summer show season, there is probably no show that has a greater attraction to them than that of the Royal Counties Agricultural Society, held this year at Bournemouth, June 8th to 12th.

The Hampshire Downs, a breed that is rapidly forcing its way to the front in countries beyond the sea, and well does it deserve its reputation, made an excellent showing. In a strong yearling ram class Mr. James Flower secured a notable success, with sheep of superior type, winning first and third. Following close after the leader came one of very good type and first-class scale from that well-known flock of Mr. Carey Coles. Mr. T. F. Buxton had the reserve number in a first-class sheep. The two-year-old ram section was one of very fine merit, and here Mr. Carey Coles won with a typical ram, the second prize going to Mr. Buxton, whose sheep had fine masculine appearance and character, Mr. H. C. Stephens taking the reserve number.

In the yearling ewe class Mr. J. Flower scored another great success, winning first and second with two of the best pens of ewes it has been our pleasure to see for many years. The leading pen was afterwards made champion pen of the female section of the breed. Two pens with great scale and excellent flesh, from Mr. Buxton's flock, followed, and then a very fine pen from Mr. H. L. Cripp's. The contest in the class for single ram lambs was a long one, and, ultimately, one of the best specimens of the breed, so far as early maturity, development, size and substance are concerned, from Mr. H. C. Stephens' flock, was selected for leading honors. Two lambs owned by Sir W. G. Pearce were then placed second and third, and the reserve number went to one from Mr. Buxton's flock, whose fine flesh and capital spread indicates the making of a fine stud sheep in the future. The pens of three ram lambs were particularly strong in merit and type. The winners here were from Sir W. G. Pearce's flock, who certainly secured a notable success in bringing out so well and evenly matched a pen of sheep. They were subsequently made the champion pen of the show, winning over leading animals in other classes. Mr. J. Flower, with a pen of quality, type and character, took second honors, and the third prize went to a well-matched pen from Mr. Stephens' flock, Mr. Buxton again having to be content with the reserve number.

The ewe lamb class had for its winners three typical sisters of the leading ram lamb in the single ram lamb class, owned by Mr. Stephens.

The Southdowns were well represented. Champion honors as well as the gold medal for the best male in his class were awarded to the Duke of Richmond's yearling ram, whose fine type and excellent fleece and flesh fully entitled him to the same. Mr. C. R. W. Adeane took second honors with a sheep fully equal to the high reputation his flock has secured. Mr. E. Henty, a breeder who is coming well to the front, secured third honors for a wide deep, and good-fleshed ram, and Mr. J. Colman took the reserve number. The Duke of Northumberland won first prize in the two-shear ram class with a very wide and good-fleshed ram, who was reserve number for champion honors. Two other sheep of very superior merit, particularly in respect to the quality of their flesh, won second honors and reserve number for Mr. Ellis. Probably one of the best ram lambs that has been seen out for some considerable time was found in the class for single ram lambs, and was owned by Mr. Adeane, who won first honors in the class. Mr. Ellis followed; then came Col. Walters' entry and that from the Pagham Harbor Company, which was a lamb of superior merit. In the yearling ewe class Mr. J. Colman went to the top with a wide pen, good in their fleece and straight on their legs. These were made champion of the female section. Their victory, however, was only won with a narrow margin, for Mr. Ellis with a very fine pen of yearling ewes that had not been shown before, took second honors in the class, and reserve number for championship. The Earl of Cadogan won the reserve number in this class with a neat and evenly-matched pen. Mr. E. Ellis was first for pen of ram lambs, and also took similar honors in the ewe lamb class with a pen of notably fine merit. Mr. Adeane was second for ram lambs, and the Pagham Harbor Co. third.

Shropshires.—In consequence of the Shrewsbury Show being at the same time, there was only one exhibitor—i. e., Mr. R. P. Cooper—in these classes, and he secured first honors in each class with very typical sheep.

Oxford Downs.—Mr. A. Brassey, M. P., continued his successful career again at this show, his unbeaten yearling rams and yearling ewes being at the top of their respective classes. Mr. J. T. Hobbs was third with a fine, deep-fleshed sheep, and he also won second honors for yearling ewes, the reserve number going to Mr. J. Horlick. The latter exhibitor won first with a very fine pen of ram lambs.

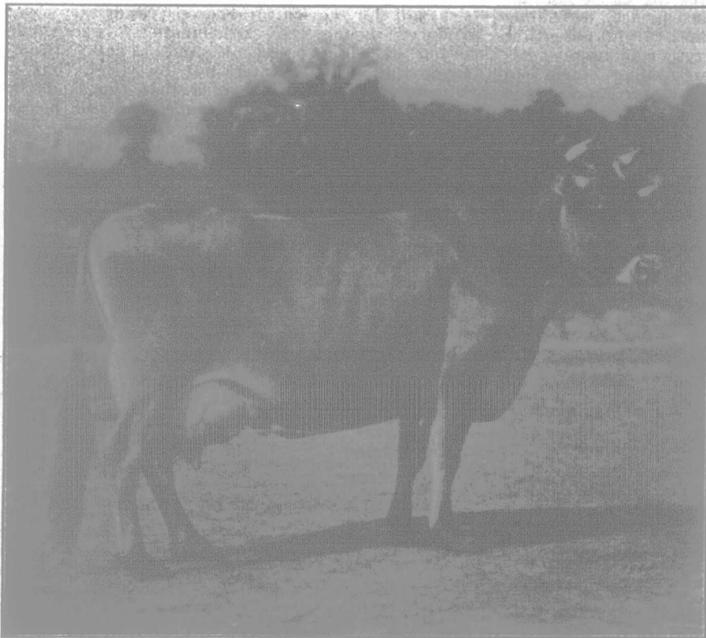
Dorset Horns.—It may have been, but not in recent years, a fact that this breed had made a larger entry than was the case at this show, but

if this is so, they have never been better in merit and quality. Mr. Jas. Attrill was owner of the yearling ram that won in its class. Mr. W. R. Flower taking second honors, and F. J. Merson reserve number. All the 8 pens of yearling ewes were of such merit that the judge gave a decoration to each, and commended the class as a whole. Mr. W. R. Flower won here with a notably fine pen, to which went the champion honors of the section. His second entry was reserve number, and Mr. E. A. Hambro took second honors with a pen of wide and deep ewes. In the ram lamb class Mr. Flower was first and second, their merit being most superior. The class for ewe lambs consisted of ten pens. Here again all were commended, a worthily even and uniform class, at the head of which stood the very fine pen owned by Mr. Flower. Mr. T. F. Todd was second, and the reserve number went to Mr. Flower's second entry.

Shropshires at Shrewsbury

At no English show are Shropshire sheep so largely represented as at the Shropshire and Midland, held as usual at Shrewsbury, and this year on June 7th and 8th.

It would appear that, as a rule, outstanding sheep in the yearling classes this year are not so numerous as usual, but the average merit was very good. To Mr. M. Williams belongs the honor this year of winning the Mansell Memorial Challenge Cup, the blue ribbon of the Shropshire show-yard season. He won this prize with the grand yearling ram, of immense scale and splendid character and substance, that headed the yearling ram class of twenty-two entries. Mr. R. P. Cooper, with one of superior merit, was second. Then



Loretta D 141708.

Jersey Cow, born Dec, 1896. Owned by estate of W. S. Ladd, Portland, Oregon. First in Classes A and B, awarded diplomas as Champion Cow, and as First in Best Five Cows any breed, classes A and B in Dairy Cow demonstration, World's Fair, St. Louis, Mo., 1904.

followed Sir P. A. Muntz, P. L. Mills, and R. Tanner, in the order named.

The old ram class had at its head a notable sheep, whose show-yard record proves his constitutional vigor and inherent merit, the two-shear owned by Mr. Cooper. He made a keen fight for the Mansell cup, but was r. n. He had won first as a lamb, and first as a yearling at the Royal Show, and now as a two-shear takes first in this important show.

A notable class was that for pens of three yearling rams, in which Mr. Cooper secured a grand victory, winning first with three, which were winners of the 50-guineas challenge cup, but he was also second with three nearly equally good. Sir P. A. Muntz, and Messrs. E. Nock and J. Harding occupied the succeeding places, in the order named.

In the ewe class, with a pen of five, well-deserved first honors went to Mr. R. P. Cooper, for a grand pen. Sir P. A. Muntz, Mr. P. L. Mills, Sir W. Corvett and Mr. T. Penn were the other winners.

Mr. Nock and Mr. Harding came out top in the two classes for ram lambs and ewe lambs, the merit and character of which was highly creditable, and Mr. Nock had the satisfaction of winning the champion prize for the best pen of lambs in the show.

Both Up-to-date.

I have received premium knife, for which I thank you. "Farmer's Advocate" and knife are both first-class and up-to-date.

B. C. RICHARD GOURLAY.

Successful Hog Raising.

In an address delivered by Dean Curtiss, of the Iowa State Agricultural College, he said, in part:

"The hog is pre-eminently the most profitable corn and grain condensing animal on the farm. No other domestic animal is capable of converting so large a part of the feed it consumes into edible meat, and no other animal yields so large a percentage of dressed meat to live weight. The hog will make from 12 to 15 pounds of pork, live weight, from a bushel of corn; the sheep from 5 to 8, and the steer from 4 to 5. The sheep will kill from 50 to 60 per cent. of net meat; the steer from 55 to 65 per cent., and the hog from 75 to 85 per cent. As an economical meat producer the hog has no rival. Viewed as a machine for converting farm feedstuffs into finished products the hog stands pre-eminent. Eliminate the hog's part in the economy of farm feeding operations, and you will remove the factor of profit in many cases.

"During the growing period, grazing is especially important and conducive to health and profit. A practical and scientific system of feeding should provide for an ample supply of succulent pasture grasses and forage crops for hogs throughout the spring and summer and autumn months. Combined with this, the system of management should enforce exercise. The entire farm, or as much of it as possible, should be fenced for hogs.

"Three pounds of rape and five pounds of clover, seed per acre sown with the small-grain crops will afford an abundance of good feed on the stubble fields after harvest, at a merely nominal cost. The utilization of this feed for graz-

ing hogs or sheep often affords more profit than the crop of grain. As high as \$10 per acre has been obtained by Iowa farmers from the rape and clover aftermath, following a crop of small grain in the manner indicated.

"The old-time pigsty should be banished forever. There is no place for it on the modern farm. It has given the hog his reputation for filth. They are breeders of disease.

"Even the permanent hog barn is of questionable value. The same money invested in movable hog-houses and hog-fences about the fields, will give much better returns for all purposes, except for fattening hogs and farrowing sows, and the large buildings are not necessary, even for fattening. The movable houses permit the brood sows and pigs to be moved out into the ideal surroundings afforded by a clean pasture, or a clover or alfalfa lot. They make it possible to distribute the hogs in clean, fresh quarters, thereby utilizing grass and forage

crops to the largest degree, and at the same time reducing the danger of disease to a minimum. They favor economical production. They promote the health and thrift of the herd, and insure greater fecundity and more profitable breeding qualities. Thirty-five sows of different breeds on the College farm farrowed 312 pigs during the present season, and raised 280 to weaning time.

"Experiments conducted at the Experiment Stations show that an acre of rape has a feeding value equivalent to the production of 500 pounds of pork. An acre of alfalfa is even more valuable than an acre of rape for grazing hogs, though it cannot be grown as a catch crop for a single season.

"On the College farm we sowed some ground adjoining the hog yards to alfalfa last August, and I think we have had the best returns from it of any crop we have ever grown for hogs. We expect to largely increase the acreage of alfalfa on the College farm during the present season. In a blue-grass pasture we have pastured 36 prospective show barrows since the first of May. These hogs have had no grain whatever since the date named, yet they are in excellent condition and growing, though making but little, if any, increase in weight.

The principle which I wish to emphasize in feeding hogs is that, in order to insure the best of health, vigor, fecundity and profit in hog-raising, the herd should be handled as largely as possible in the open field and pasture, and that during a period of six or seven months of the

year, alfalfa, clover, rape and other forage crops should constitute an important adjunct to the grain ration, and at times the green fields may furnish even the major part of the ration, with marked advantage and profit.

Care of Brood Sows.

Writing in the Iowa Register, Professor Kennedy states from his observations during his recent trip abroad:

"In the estimation of the English breeder, the brood sow, during the gestation period, requires and must have certain feeding stuffs for best results, and to withhold these on account of a slight difference in price, is short-sighted economy, if not very disastrous. On those farms where skim milk was available the brood sows were fed bran, oats and skim milk, or bran, shorts and skim milk or bran, barley meal and skim milk. In addition, the sows were grazed on grass, or soiling crops during the summer months, and were fed on raw mangels, turnips, beets or steamed potatoes during the winter season. Where skim milk was not available, the rations were composed of cooked bran, shorts and middlings, or soaked bran, shorts and barley meal, with the same kinds of succulent food as previously mentioned. This method of feeding was continued up to within a week or so of farrowing time. At this time the amount of roots fed was decreased. This was done for the purpose of keeping the digestive organs in a loose condition. On many good farms from four to eight ounces of Epsom salts, in accordance with the size of the sow, was fed in the food to each sow about two days before farrowing. This was given for the purpose of cooling the system and preventing an early flow of milk, which so often is the cause of an inflamed udder, and, as a consequence, a vicious mother at farrowing time. That careful attention to all of the little details pays, was amply demonstrated on a large pig-feeding farm in Cheshire, where 180 sows reared on an average nine living pigs per sow. On some farms even higher averages were obtained, but the number of brood sows was much less.

"During the nursing period, which varies in length from five to seven weeks, the sows are very liberally fed. The feeding stuffs used are of the kind that are conducive to a liberal supply of milk. For this purpose, rations of equal parts bran, shorts and barley meal, scalded and fed in conjunction with skim milk, or two parts bran, two parts middlings, one part barley meal and one part corn meal, soaked or steamed and fed in conjunction with skim milk, or equal parts of bran, shorts and cooked potatoes, fed with or without skim milk, were in general use, and gave highly satisfactory results. Ground oats, in conjunction with the other feeding stuffs, were also used by some, but the price of oats usually prohibits the same. The brood sows were always fed three times per day, and in some instances four times per day. Whenever skim milk or buttermilk could be had they were used in the feeding of the sows during the nursing period. The young pigs are encouraged to eat at an early age, as at the end of three weeks some milk and finely ground oatmeal or shorts are supplied in low troughs where the little ones may partake of the same. In this manner they are taught to eat early, and thus can be weaned at an earlier age, a point which is of much importance to the man who rears two litters per year."

Ventilation of Stables.

As this is the season of the year that new barns and stables are being built, or old ones torn down and remodelled, a few words on ventilation may not be out of place, as this is a subject which is not given enough attention by some farmers.

As cattle and horses at the present time and so much in replenishing the farmer's pocketbook, and as they are generally housed during winter in the same sort of stables, they at least should be given as sanitary and healthful stabling as possible, and this cannot be provided without good ventilation.

I do not profess to be an expert on this particular question, but from what I have read and observed, I will here enumerate a few of what I consider the best, and some of the cheapest systems of ventilation.

The system which I consider the best, although somewhat expensive, and more adapted to large stables than some others, is to have the stables so arranged that two rows of stalls face each other, fresh air being brought in from the outside by means of a galvanized iron pipe, situated some fifty or one hundred feet from the stable, and about twenty or twenty-five feet high, with a movable cowl or hood on top. From this pipe, and two or three feet underground, have tile to run up between the two rows of stalls, connections being made with every stall by means of smaller tile. This supplies good fresh air, which, coming in at heads of cattle, drives the foul air out through pipes at ceiling connected with ventilators on the roof of barn.

Another and much less expensive system, is to

have stalls arranged same as in the preceding plan, but instead of having the feed passage level with the rest of stable, have it raised a foot or more, and underneath it run large tile or pipe from outside the full length of passage, with smaller tile running to each stall, coming out at head of cattle, the outlet pipes being at the ceiling, and running to the ventilators at roof of barn.

Then there is the U-shaped pipe system, which is recommended by those who have tried it. This is to have pipes starting just above the ground on outside of stone wall, and, passing underneath the wall, come out above floor on the inside, thus forming a U. The foul air goes out at ceiling with connection with ventilator at roof.

The cheapest, and last which I shall mention, is to have simply a series of three-inch tile, about five or six feet apart, all around the top of the barement wall, arranged so that one can shut off or close, according as much or little ventilation is required. This, although much the cheapest system, is open to the objection that it is somewhat difficult to keep the stables at an even temperature, although followed successfully by some prominent stockmen. S.

FARM.

A Perfect Soil.

Some years ago an extremely important experiment was completed by a French scientist, since dead, who had been endeavoring to ascertain as conclusively as possible what actually constituted a model or perfect soil. Crops were grown with great diligence under various conditions, and the result was the conclusion that the best soil for agricultural crops, and they were produced during the experiments, was one consisting of equal parts of sandy, chalky (lime), clayey and peaty matter, not by weight but by volume. It will be observed that the sand supplied the material which made the soil porous and mechanically adapted for its purpose; the peat provided the organic matter and the resulting humus, in addition to which it assists immensely in the retention of moisture at a time when moisture is most needed, and in the warming of the soil as it gradually undergoes decomposition; the clay furnishes the retentive and substantial matter which gives a soil compactness and consistence, and which helps to consolidate and to provide a firm seed-bed, apart from which it also furnishes essential constituents of plant life. Again, the chalk (limestone) soil would provide the lime, which has so many functions, more, perhaps, than any other constituent of the soil, and which would adapt it to the growth of crops other than those which are commonly found upon the average farm.—[H. A. S. Transactions.

Nature Study and Birds'-nesting.

Sir,—To-day as I was cultivating down a row in the cornfield, I was suddenly aroused by a wild commotion and shrieking of something on the ground just ahead of my horse. Stopping him, and going forward a few paces, I found a specimen of that handsome bird, the Killdeer plover, floundering in a very paroxysm of demonstration. I immediately suspected the presence of a nest to be the occasion of her distress, as I knew of the habit which various birds have of trying to lead the intruder away from its locality, by feigning injury, and I therefore stopped to look about me. I should inadvertently tread upon it. It took a minute's careful scrutiny before I detected it, within two feet of where I stood—a mere depression in the earth, lined with pieces of straw. It contained four eggs. There they lay, a dirty white in color, heavily blotched with black, the color scheme effectually harmonizing with the ground to form a protective coloration. Quite evidently it was never meant that they should be discovered and admired by human eyes.

Knowing, even if the poor bird did not, that her treasures were now as safe as they ever had been, and that in a few minutes her anxiety could yield to her accustomed domestic bliss, I determined to indulge in the tyrannical pleasure of watching her actions for a little. As I strode up to the spot where her nest was secreted, she had been charging about me, with wings a-flutter and shrilly crying. Presently she ran from me a few yards, and, throwing herself on her side, with wings stretched limp, began to struggle in a helpless manner, as though wounded, at the same time uttering the most piteous screams. In a twinkling she was up, only to repeat her tactics again and again. As she finally saw me stoop to examine the eggs she ran somewhat farther away before dropping over, and I began to pursue her. As she led me away her hopelessness appeared to give way to a rising sense of success, until she was seen content to run back and forth, with her eyes, however, riveted on my every motion.

Such an exhibition of mother-love and solicitude was impressive. Though I probably never being life-willingly took or injured any birds' eggs, I tried to imagine myself at that moment in the

perpetration of a deed so foul. I knew of one or two who would doubtless thank me heartily for so fine a prize to add to their "specimens." I wonder if such a one could as cheerfully obtain the coveted treasure from the presence of that frantic mother bird as he might from my hands. To me the monstrous nature of the act asserted itself in all its repugnance.

I know that a great many people have collected birds' eggs, and they truly make an interesting collection; but I have long felt that teachers and students of nature, particularly, should be taught to see a difference between collecting birds' eggs and such objects as insects, plants or rocks. Insects, with perhaps a few exceptions, live independently of either their mates or their offspring; therefore, their death, if humanely brought about, need cause no appreciable pain. There may be a few who could feel a slight sentimental pang at the violent termination of the life of an insect or plant, but it will be generally granted that there is no sound objection here, and the same may be said of a wide range of natural objects. On the other hand, a collection of birds' eggs represents the aggregate of the grief of a great number of parent birds, in their helpless surrender of what are their own exclusive belongings, in which are centered all their hopes. There may be few so capable of showing their anxiety, but there is no less surely planted in them all the same parental affection which actuated this plover.

In the case of a very few birds, like the cowbird or the English sparrow, the destruction of both birds and eggs may be justifiable, and in the interests of science a certain number must be sacrificed; but against the indiscriminate destructiveness of the great army of mere collectors I most vigorously protest. Let as many birds' eggs as are needed be found in public institutions, where they can be available for whosoever is sufficiently interested in them, and let teachers and parents discourage, instead of sanctioning, this base counterfeit of nature study, formerly branded as birds'-nesting.

Collecting is an excellent incentive and aid to nature study, but COLLECTING IS NOT NATURE STUDY. I trust that by my chance intrusion into the affairs of this bird I learned more of nature, though I did not touch an egg, than anyone possibly could by boldly disregarding her actions and hurriedly slinking away with his booty.

Is nature study to be regarded as a sort of juvenile edition of science, with knowledge and "specimens" as the manifest fruit of its effect upon the child? Is not rather its best educative influence this selfsame interest and sympathy begotten towards all things, which would repel the thought of doing anything without cause to mar the perfect order of nature? Oh, for teachers who can grasp the vital significance of this distinction!

H. GROH.

Top-dressing Winter Wheat.

Having seen an article in the "Farmer's Advocate" some time ago, asking readers to give their experience with top-dressing wheat in winter, and as I now see the results, will give my experience for the benefit of my brother farmers. The field in question contains twelve acres; one half was top-dressed in the fall and the manure worked in the soil with disk and cultivator before sowing the wheat, with good results. The other half was top-dressed with manure direct from the stables every other day during the winter, carefully spread, and with fatal results—scarcely anything, except where the snowbanks were and where I did not put any manure; there is good wheat there. There are also a few lands in the field on which manure was spread upon heavy falls of snow, and which are easily distinguished, as there is really nothing on them, which shows that the wheat was practically smothered; so I have learned a lesson I will never need to learn again. The experiment has been carefully watched by all passers-by, as it lies by the public highway where all can have a full view.

CONSTANT READER.

Haldimand Co., Ont.

The Statute Labor Law.

In your last issue I noticed an article on "Cutting Weeds on Roads." I claim that the amendment to the Ontario Municipal Act referred to is very unfair to farmers in some respects. Have we not already statute labor enough to do without cutting weeds on roads? But aside from that, look at the difference in the amount of roadwork different farmers have to do. For instance, one man owns two hundred acres, a mile long, and from one road to the other. He has two hundred rods of road to see to. The next man has a corner farm, and perhaps has not over a hundred acres, and in all probability has more road to look after than the larger farmer. I know of several fifty-acre farms with twice as much road to see to as some twice as large, and of one-hundred-acre farms with nearly two miles of the worst road in the country. Do you call that fair?

Elgin Co., Ont.

SUBSCRIBER.

Rapid Hay Curing.

My experience in curing hay rapidly is, on the whole, quite satisfactory. I find that much depends upon the weather conditions. In handling clover, I find it better to allow about a quarter to one-third of the heads to turn brown before cutting, as it wilts much more rapidly than when it is cut in full bloom. I know that I sacrifice to some extent the digestibility of the plant, yet the greater surety of handling the hay in the mow without spoiling compensates for that loss. If the ground is dry the hay wilts rapidly, and, instead of putting up in coils the afternoon of the day in which it is cut, I leave it in the wind-row over night, unless, of course, it looks showery. Next forenoon I spread out the too-green parts some, and in the afternoon I put it into a large mow where considerable bulk is to be placed, and spread it around evenly in the mow. I find, if it is allowed to remain in a heap where dropped in the mow, it ferments too much and gets dusty. I expect such hay to sweat out in the mow, and it does sweat, but the hay comes out all right in the winter and spring. At first, when I found it sweating, I would pitch out the center and let the air in, and put some dry straw in to absorb the moisture. I find that was a big mistake, so that now I leave it alone and let it sweat out. It cools off after a while, and the stock relish and do well upon the hay. I also like the practice of putting a sprinkling of salt on the hay as it is mowed away. It is not essential to the keeping qualities of the hay, but does add to the palatability.

Of course, it will be understood that I avoid putting in any hay that has outside moisture on it, as when that is the case I find it gets more or less dusty and mouldy. When the ground is wet I find it better to cure clover in the coil, as well as that which is cut early when very green, with a view of getting a crop of clover seed.

When coiling green, wilted clover hay, I use the medium-sized coil, and leave it long enough to sweat well before opening up. It then cures green, and is a fine quality of hay.

T. G. RAYNOR.

DAIRY

The Feeding of Dairy Heifers.

The opinion prevails among breeders of dairy cattle that generous feeding of heifers in calf-hood and before coming into use as milkers has a tendency to impair their milking propensities and to fix the disposition to produce beef rather than milk. While there may be some ground for this opinion, if whole milk and rich fat-producing grain rations are fed in the growing period, we are persuaded that going to the other extreme and practicing a system of semi-starvation, as too many do, may seriously handicap the animal as a worker in dairy production when she comes into use, and throughout her life. We are all agreed that the development of a strong and vigorous constitution is essential to the best results in a dairy cow, and the question arises, can a strong constitution be founded in a calf fed, as many are, on insufficient rations of skim milk with poor pasture, exposed to the extreme heat of the summer and the attacks of flies, with no grain feed to strengthen them and to help build up bone and muscle and to expand their lung capacity? In the desire to secure a big middle and a capacious stomach, we often see, as the result of such a system of feeding, a narrow chest, a ewe neck, a wasp waist and a drooping rump; in short, a dwarfed and imperfectly-developed cow, incapable of enduring heavy feeding or working up liberal rations into milk in large measure, but predisposed to indigestion and bloating, an easy prey to disease, lacking the power to cope with sickness, or to throw it off when it comes, and failing to fill the bill as a satisfactory and good-wearing cow.

There is, we are persuaded, a happy medium in feeding, midway between these extremes, by which a heifer born of healthy parents may be kept growing and thriving from birth until called upon as a milker, without being stunted at any period, and without being made unduly fat at any time. Skim milk, fed warm and in moderate quantity after the first three weeks, during which time whole milk fresh from the dam is given, is the ideal principal food of a dairy heifer, but should be supplemented by a liberal ration of bran and oats during the first eight months at least, and the calves should, during that time, be kept in clean, roomy boxes or sheds, and, if practicable, will be the better for access to a yard or pasture lot in summer, where, by free exercise, their muscles may be strengthened, and the animals better prepared to rustle for a living in the second and following summer of their lives. A liberal feeding of roots and nutritious roughage, of which clover hay, if available, is the best, will also tend to producing a vigorous and healthy cow, without impairing her usefulness as a milker, but rather developing her powers to the full in that direction. We have known many instances of a heifer liberally fed, and declared by

connoisseurs to be too much after the beef type, proving an extra milker, and later becoming satisfactorily refined and cowy in appearance as well, while her strong constitution, built up by generous feeding while young, made her a healthy and vigorous mother and milker throughout a long and successful life. On the other hand, the constitution of many a cow has been cramped and spoiled by careless feeding of the calf, cold milk being given irregularly in over supply, causing bloating and scours, checking growth, predisposing to attacks of indigestion and other disorders, and detracting from the usefulness of the cow as a breeder of healthy stock, and as a producer in the dairy, as well as shortening her life term.

The points it is desired to emphasize are that there is a great difference between fat and flesh; that flesh, which is lean meat or muscle, is a healthy, wholesome and natural quantity in either a dairy or a beef animal; that the feeding of an excess of fat-producing foods, such as corn, peas and oil meals, to young and growing animals is a mistake, and that muscle-producing foods, such as oats and bran, may safely and profitably be fed in liberal rations to either class of cattle at any period.



F. M. Logan, B. S. A.



A. Leitch, B. S. A.

A Question of Cows for Profit.

To the Editor "Farmer's Advocate":

In your issue of June 15th appeared a very interesting article under the heading, "A Cheese Experiment," which, while very helpful to the dairyman would, I think, have been more helpful had it given the number of cows and pounds milk from each cow in the different tests. Here is a statement from our factory, which may be of interest to your readers: From our last sale report I find that A delivered to factory from May 18th to June 13th, from five cows, 2,772 pounds of milk, testing 4 per cent. fat; and B in the same time sent, from eight cows, 2,317 pounds of milk, testing 5 per cent. fat. Report also shows that A's milk gave 110.88 pounds fat, and after expenses at \$17.25, he received \$19.02; and B's milk gave 115.85 pounds fat, and after expenses of \$17.25, he received \$19.98. A's milk is worth 68.91 cents per hundred pounds, and B's worth 86.23 cents per hundred pounds, showing an advance for B of 17.32 cents per hundred

pounds milk. A delivered to factory daily from each cow 20.53 pounds milk, and B delivered 10.72 pounds from each cow. Now the question arises, which lot of cows is the most profitable to the dairyman? Will someone competent please answer through the "Farmer's Advocate."

R. G. D.

"Gassy" Milk.

The value of milk for the manufacture of butter and cheese is largely influenced by the care it receives previous to delivery. As, during the warm summer months, dairymen will be face to face with the important problem of how to avoid "grassy" milk, a few hints on the subject may be considered timely. Although much has been said and written on the matter, it is evident that many continue to produce a very indifferent quality of milk, not so much because of intentional neglect as the lack of clearly understanding the fundamental principles that should be observed.

Milk is an ideal medium for almost any species of bacteria, and ordinarily contains large numbers, ranging from a few hundred to many millions in a single drop, according to the surrounding conditions. For practical purposes they may be classified as harmless, useful, and harmful. Passing over the first, the second class is very necessary to dairy operations, but must be kept under control, while the third is directly important to the farmer who is trying to deliver good, pure milk. Gassy milk being one of the most frequent troubles in this connection, we will mention the gas-producing bacteria particularly as a type of that class. The species is technically known as the Colon Bacillus, because it is found in large numbers in the large intestine of the animal body, the great colon. It is always associated with filth in some form or other. Investigations at the Ontario Agricultural College show that the ratio of gas-producing germs to other species in some seventeen examinations of manure was as 250 to 1. Flies were found to be a very prolific source of these undesirable bacteria, 20,000 having been frequently obtained from a single fly. Watering troughs, dairy utensils, the hairy coats and udders of the cows, all proved to be the means by which milk was contaminated. It should be noted that there are three essentials effecting bacterial growth, viz., food, warmth and moisture. Antagonistic to their development are light, lack of food, extremes of temperature and dryness. When properly used, these may become effectual weapons in checking the increase of undesirable germs, and reducing the same, under ordinary circumstances, over 95 per cent. Care should be taken to have the flanks and udders of the cows well brushed before milking, so as to avoid particles of manure, dried mud, hair, etc., dropping into the milk pail along with the innumerable bacteria adhering to them. As the bacterium is susceptible to moisture, it is well to use a damp cloth for this work, the germs being unable to leave a wet surface.

Bacteria thrive best in milk at about 90 degrees F., the rate of their multiplication decreasing with both the rise and fall of temperature. Hence, as soon as milking is done, the can should be set in cold water, and the milk thoroughly stirred until the temperature has been reduced to about 60 degrees. It is very important that cooling is not delayed, or these micro-organisms develop very rapidly. An experiment is reported in which a difference of 18 degrees in the temperature of two samples of milk caused in 15 hours a difference of almost 75,000,000 bacteria per cubic centimeter, a quantity equal to half a thimbleful.

If patrons realized the direct financial loss they sustain in allowing their milk to become "gassy" there is reason to believe the trouble would soon cease. As it takes from one to three pounds more of this milk to make a pound of cheese, it is evident that, at a factory receiving 10,000 pounds per day, if three or four cans of milk are affected in this way, the loss would be considerable. Adding to this the decrease in price for an inferior quality of cheese, the profits are still further reduced. In conclusion, it cannot be too strongly emphasized that the production and care of milk is the foundation of the dairy industry, and that eternal vigilance is the price of success.

J. H. M.

Good for the Merchant.

Although I have given up farming, and am in general-store keeping, I would not like to be without the "Farmer's Advocate and Home Magazine." I am trying to get up a subscription list for your valuable paper.

M. A. HOLMES.

IF YOU HAVE A FARM FOR SALE OR WANT A SITUATION, PUT AN ADVERTISEMENT UNDER THE HEADING OF "WANT AND FOR SALE" IN THE "FARMER'S ADVOCATE."

POULTRY.

Possibilities in Egg Production.

To the Editor "Farmer's Advocate":

In your issue of June 8th, under the above heading, it is pointed out that 140 eggs per year for a single hen is no mean record, and is greatly above the average obtained.

According to the reports of the Poultry Manager, Experimental Farm, Ottawa, the average of all their pure breeds for the year 1901-02 is barely over 60, and the year 1902-03 is only 70½ eggs per hen.

I thought the performance of a hen of mine might be of interest to your many readers. She is a Barred Rock—good shape, tidy and compact, but not perfect color; was hatched in May, 1903, and I have no record of her work up to Sept. 19th, 1904, when she was 16 months old. From that date an accurate account has been kept, and she has produced 177 eggs to date (June 26th), and now is laying well and in the pink of condition. During this time she has never offered to sit. When starting to lay she was partially moulted, but production seemed to stop moulting. In March she quit laying for 19 days and cast the rest of her old coat, but before the new one had made much progress she began supplying eggs again, and continued producing both eggs and feathers in good order. She has nearly three months of the year to spare yet, and I consider her a good one. The gratifying part of it is that she did best laying when eggs were the best price. Here is the record: September, 11; October, 26; November, 21; December, 20; January, 20; February, 20; March, 8; April, 19; May, 14; June, to date, 18; and, upon consulting memo re prices obtained when these eggs were produced, I find their value to be \$3.65 (Hamilton market prices for corresponding dates).

Her care has not been the best, and the housing almost the worst conceivable—drafty, and with scarcely any sun.

These facts, well considered, prove to me that the possibilities of the hen are very much in excess of anything ordinarily conceived of by the farming community up to the present time. There is no doubt but breeding from such individuals as the above and keeping careful records, will produce the desired class of fowl, and the man who devotes attention to looking after these essentials will achieve a greater feat than he who succeeds in producing exact markings, regardless of the usefulness of the specimen outside of the show-pen.

J. R. HENRY.

Wentworth Co., Ont.

NEWS OF THE DAY.

Canadian.

Another oil well, flowing at the rate of 500 barrels per day, has been struck near Leamington, Ont.

A promising discovery of copper and silver has been made in Awege township, Ont., ten miles from the Soo.

The socialist element in Toronto, which disapproved of the Boer war, is raising a strenuous objection to having Lord Roberts open the Toronto Exhibition.

Discoveries of oil have been reported from New Ontario, and an exploring party will be sent out by the Temiskaming Railway Commission to look for it along the Abitibi River.

The Provincial Government of Nova Scotia has been reorganized. Hon. Arthur Drysdale, Commissioner of Works and Mines, has been appointed as Attorney-General, in place of Attorney-General Longley, who retired on being appointed to the Supreme Court Bench; and Hon. W. T. Pipes has been made head of the Works and Mines Department. Both Mr. Drysdale and Mr. Pipes are lawyers, and are regarded as exceedingly able for the positions which they are to fill.

British and Foreign.

Serious fighting, in which the rebel Marengo has been reported victorious, has again occurred in German Southwest Africa.

The drum has been banished from the French militia, on the ground that it is a serious incumbrance in marching, and that it causes confusion in detecting signal calls. By its banishment 10,000 drummers will be added to the fighting force of the French army.

Paderewski, the pianist, has been paid \$7,000 by the N. Y. Central Railway for injuries sustained by him in an accident near Syracuse, and which have prevented him from fulfilling engagements which would have netted him in the neighborhood of half a million dollars.

The Russian revolutionary spirit has spread to part of the Black Sea fleet, where, on the battleship Kniaz Potemkin, the sailors mutinied, and threw the captain and most of the officers overboard. A naval battle may be expected.

The Danish cadet-training schooner Georg-Stage, was run down near Copenhagen recently by the British steamer Ancona. The schooner sank in two minutes, and of the 129 cadets on board, 72 were drowned. The Ancona has been placed under embargo at Copenhagen until an investigation has been made.

The peace delegates in connection with the Russo-Japanese war are to meet in Washington in August. Russia has already selected two representatives, M. Muraviev, former Minister of Justice, and Baron Rosen, the newly-appointed ambassador at Washington. Japan's delegates to the conference will be Baron Komura, Minister of Foreign Affairs, and Mr. Takahira, the Japanese Minister to the United States. In addition to these, there will be army and navy officers, and officials from Tokio and St. Petersburg. Negotiations regarding an armistice are in progress, but no announcement has been made as yet.

The anarchist outbreak in Poland seems to have reached a crisis. During the past week riots, in which over 1,200 lives were lost, occurred in almost every part, most seriously in Warsaw and Lodz, where barricades were raised by the strikers, and veritable battles took place between the workmen and the Cossacks. Both of these cities have been placed under martial law. Among other demands the strikers ask for better pay, 8-hour working days, and 82 half-holidays in the year, whereas they already have 30 holidays. Serious disturbances have also been reported from Odessa and other points, and the red revolutionary flag is fluttering everywhere.

The Moroccan affair still hangs fire. In answer to Germany's demand for an international conference, France has despatched a note to the German Government, stating that, in connection with Morocco, her Government entered into certain engagements towards other nations which were final and irrevocable, hence beyond revision by any conference. Accordingly, France will not agree to a conference without a preliminary agreement as to the matters to be discussed. Germany, on the other hand, will hear of no arrangement which will limit the scope of the conference. So far the negotiations, carried on principally between the French ambassador at Berlin and Chancellor Von Buelow, though firm, have been amicable in tone. A rather novel development is the foment which has arisen in the German papers, asserting that Great Britain is urging France on, in the hope of stirring up a Franco-German war, an event which would, in effect, break the power of Britain's two most powerful political rivals in Europe. In consequence, the attitude of Germany towards England has seldom been more resentful than at present, and it is hinted that the German Emperor has already caused the Sultan of Turkey to be sounded as to whether he will be willing to send troops against Egypt in event of an Anglo-German war. In Russia public feeling is especially bitter against Germany, since the Kaiser is everywhere looked upon as having encouraged the war with Japan merely in order that his own hands might be more free. The most hopeful feature in the situation lies in Germany's fear of giving England a similar advantage, and it is now generally thought that the Kaiser will be willing to grant the French many concessions rather than give chance for any such possibility. England's intentions towards France, however, are of a different nature, and it is evident that, in this respect, Germany's suspicions are unfounded. England can afford to be warlike on occasion, but her natural sentiment favors peace, and the greatest of her ministers is deemed to be he who can, by delicacy of diplomacy, engineer her through a difficult situation so as to obtain it.

THE FARM BULLETIN

The licenses of several milkmen in the vicinity of Brantford, Ont., have been suspended, because of the discovery of formaldehyde in the milk.

According to Mr. E. W. Day, in the Globe, ninety per cent. of the immigrants pouring into Alberta, N.W. T., are Americans. They are said to be the very best class of settlers.

At the third annual open-air horse show in Queen's Park, Toronto, on Dominion Day, there were 400 entries and over 600 horses in the parade, the procession being about two miles long. Attendance was large, and the show a pronounced success in every way.

The Provincial Farm at Compton, P. Q., to be Sold.

The Quebec Government has decided to sell at public auction, on or about July 1st, the 160 acres of land and appurtenances thereof, comprising the Provincial Model Farm at Compton. This property, acquired in 1893 at a cost of \$11,000, has cost the Province up to date about \$75,000, with no return whatever, except that the dairy, erected at an expense of \$7,000, has been very successful, butter made here carrying off the prizes at different fairs and provincial exhibitions. As an agricultural college the institution has been a complete failure, being nothing more or less than an asylum for younger sons across the sea, and the annual net cost to the Province was about \$5,000.

Seed-growers' Field Meeting.

The Seed-growers' field meetings, now in progress throughout the various clover-growing sections of Ontario and Quebec, are, according to reports, meeting with decided success, and have been productive of much interest. It is, perhaps, quite safe to say that the greatest clover-growing section in Canada is found through the counties of Victoria, Ontario, Hastings, Northumberland and Prince Edward, and it is of the meetings held in these districts, therefore, that those interested will be most anxious to learn. As a delegate for this particular section, I have much pleasure and no hesitation in saying that the future awaiting the clover-seed growing industry is by no means so dark as many seemed to think it would be should the new Seed Bill become law. It is presumably safe to say that it is the superabundance of one particular weed which is particularly troublesome, rather than a number of different kinds, that keeps much of the alsike and red clover seed from grading up to the requirements of the Bill. In Victoria County, for instance, the presence of night-flowering catchfly in the alsike fields, together with the fact, of course, that this has been harvested with the crop, has been accountable for the low grading of much of this valuable clover. The seed of catchfly bears a very close resemblance in size to the seed of alsike, which renders it practically impossible to thoroughly separate the two. The only practical way of securing clean seed when such plants are found in the field is to remove them before they go to seed, or, at least, before harvesting the crop. This is one of the important points brought out in connection with the meetings, and one which, if carried out, will well repay the grower for his trouble.

The clover-seed midge has been found in large numbers, working in the heads of the red clover plants, and has aroused the curiosity and created considerable alarm on the part of those who heretofore "have seen, yet noticed not." Many weeds and seeds have been brought out to these meetings for identification, and information respecting practical methods of eradicating and combating them has been given.

In the light of present conditions it is quite obvious that much greater care will necessarily be required on the part of the growers themselves to "clean their fields," which method is in many cases vastly easier and safer to follow than to attempt to separate foul seeds from the seeds of clovers of similar size when found together in a mixture.

The practical nature of these meetings is readily apparent, and, judging from the interest shown and the discussions which have taken place, there is every reason to hope that the good effects will be widespread.

L. H. NEWMAN.

Temiskaming District.

After a somewhat wet and cold spring, the present weather comes as a great boon. Many here were unable to seed as soon as they wished, owing to the cold dampness, but those who are late seeding have the very opposite to complain of, for it is so hot and dry that seeds and plants have hard work to strike at all.

Present prospects, however, are good, and the main crops of the district—oats and hay—give promise of good yields. Red clover is coming into bloom, and alsike is already in full flower. Large red clover seems to be more popular here than any other, with alsike a good second. Swedes are showing well so far, as also are potatoes.

These are practically the only crops grown in bulk, though I have seen a very fair sample of fall wheat, now in ear, this week. The owner of the wheat has also half an acre of fine-looking field peas. The latter should, I think, do very well in this district. I believe, also, that wheat will be grown here of first-rate quality when the settlers have time to attend to it. At present it is more experimental than depended upon.

Fruit is conspicuous by its absence in most parts of the district, though some of the older settlers who have cleared enough are trying it on a small scale. I have seen a few beds of strawberries this spring, which looked promising. Small bush fruits should do very well up here, for in a wild state they are plentiful and prolific; but up to the present they are only seen cultivated as a small addition to the kitchen garden. There will be, or even now is, a good opening for a man who can successfully grow small fruits, and run a market garden for vegetables. Pure-bred poultry are being gone into more extensively this year, and incubators are becoming common. This is a good market locally for eggs, and in the winter for table birds. At present the demand is filled by wholesalers in old Ontario, but in a few years the local supply will probably catch up and capture the home market. Dairying is not much touched yet, the average settler simply keeping a cow or two to supply home needs, and perhaps a neighbor or two.

We expect to get good meetings to hear two of the professors from the Agricultural College this month. All the settlers near enough to the selected centers will be in attendance, and we expect to hear something good.

Much satisfaction is expressed over the announcement made by Hon. Frank Cochrane last month, viz., that land in future would be free, instead of 50 cents per acre as hitherto, but it is a pity the "actual residence" clause is not more strictly enforced. We might say one day bring its reward!

June 24th, 1905.

G. W. W.

The Canadian Seed-growers' Convention.

"Seeds and weeds are the two great things in crop production that loom up for the consideration of farmers," said Prof. Jas. W. Robertson in his presidential address before the Canadian Seed-growers' Association, which held its annual convention at Ottawa, June 27th, 28th and 29th. "I believe," said he, "this association is laying out work that will enable the farmers of Canada to get hold of a few great fundamental principles and apply them in practice. When they do this they will raise good crops, clear of weeds, and the millennium will be ten years hence instead of ten thousand years in prospect." His words epitomized the objects of the organization, and sounded the keynote of the convention. Although a comparatively small delegation had been arranged, the information presented in the valuable papers read will be broadcasted through the press and annual report, so that the educational effects of this representative national gathering will be widespread.

RESOLUTIONS AND BUSINESS.

On Tuesday morning, 27th, an executive and afterwards a directors' meeting were held, the opening regular session being in the afternoon. At the latter meeting certain recommendations of the directorate, regarding a few changes in the constitution, were adopted. Clause 7, as printed in the annual report, had provided that the Chief of the Seed Division of the Branch of the Commissioner of Agriculture and Dairying should, by virtue of his office, be secretary-treasurer of the association. It appears that a departmental regulation prevents consulting officers of the Minister from being directly connected with any organization which might look to the Government for financial aid; hence Mr. G. H. Clark, formerly Chief of the Seed Division, now Seed Commissioner, is debarred from the above office, although he will continue to assist the organization. Provision was made for the employment of a salaried secretary-treasurer, the choice of the directors later falling upon Mr. L. H. Newman, who has been doing excellent work as district superintendent in the Province of Ontario.

The necessary alteration, with a few accompanying changes, are embodied in amendments to clauses 4, 5, 6 and 7, the new provisions being substantially as follows:

The general officers of the association shall consist of a president, three vice-presidents, a secretary-treasurer and ten directors, which body shall have power to add ten directors to its number, and the vice-presidents shall be elected by and from the completed directorate. The president and ten directors shall be elected each year at the annual meeting, and the secretary-treasurer shall be appointed by the directorate.

In clause 10 a requirement is inserted, that applicants for membership carry on selection according to the rules of the association for one year before being admitted.

A resolution was passed, affirming the principle of using any surplus funds of the association for the offering of prizes for selected seed at district seed exhibitions.

The report of the secretary-treasurer was brief, and mainly statistical, he having delegated most of his report to the four district superintendents. The financial estimate indicated that \$1,200 would be required to defray the expenses of this meeting and finish up the work of the association for the current year, and that \$2,550 would be required next year. The meeting later received Hon. Mr. Fisher's assurance that the grant would be forthcoming, the needs of the Seed-growers' Association being one of the first claims upon the revenue of the country. Prof. Robertson jocularly remarked, that with a first mortgage upon Canada's revenue the prospects of the association were bright. The reports of the district superintendents indicated satisfactory progress. In the Maritime Provinces, Superintendent F. W. Broderick had found the greatest drawback to be a general lack of interest in all matters of this kind. He recommended short courses in seed-grain judging. Joseph Cote said that in Quebec the farmers had long been duped by unscrupulous dealers making all sorts of false representations concerning seeds, and were disposed to welcome a disinterested Government expert, upon whose advice they could rely. He emphasized the necessity of great care in the admission of members.

In Ontario, L. H. Newman has the work of seed selection fairly well established, almost every county being represented, but although the membership has grown considerably, it is still far from commensurate with the importance of the work. The largest quota of members in his district are interested in corn. He thought a more aggressive policy of pushing the work was necessary, particularly with a view to securing more general dissemination of the improved seed, and suggested local organization. He thought prominent farmers here and there might be induced to act as representatives in their several localities, being allowed a certain sum for each new member secured. They might thus act as nuclei for the work in their respective sections.

Jas. Murray had found peculiar difficulties in the West. A deplorable practice prevails, of selling all the good wheat and buying inferior, sometimes feed wheat, to sow, many persisting that quality of seed makes no difference in yield. However, the work is gradually progressing, as instanced by the following sample of letters received: Thomas Thomson, of Roden, Man., who last year sold 250 bush. of seed wheat at \$2.00

a bushel, said: "I think every farmer ought to sow yearly a small plot with wheat got from hand-selected heads. In this way he could always be sure of having the greater part of his crop sown with pure seed. Owing to the extent of the field it has become necessary to divide the work in the West, by confining Mr. Murray to the eastern portion, viz., Manitoba and the new Province of Saskatchewan, assigning Alberta and British Columbia to a new appointee, Mr. W. C. McKillican, of Glengarry County, Ont., who leaves some time this month, to establish his headquarters in Calgary.

At a business session on the final afternoon, it was resolved to provide in the constitution for the appointment of a couple of auditors, one by the Department of Agriculture, and one by the Board of Directors; also that provision be made for naming the head office of the association, which meantime should be in Ottawa.

It was further decided that, as the C. P. R. had intimated its willingness to provide next summer a train of one or two cars to travel all over the West and hold seed meetings, in which case it would be desirable to distribute a large number of copies of the association's report, an edition of 50,000 copies should be printed. Resolutions of thanks were passed to the Minister of Agriculture, Hon. Sydney Fisher, for his interest and support; to Mr. Clarke, retiring secretary, and to the four district superintendents, who (with the exception of Mr. Newman), though serving henceforth under somewhat different titles and acting as attaches of the Agricultural Department, will continue in alliance with the association. With regard to the issuance of a catalogue of seed for sale by members, Prof. Robertson stated that although such a publication might in many ways seem desirable, it would not be a sound principle for the association to use any of the funds received by it as a grant from the public treasury in doing that which might be considered as interfering with private business interests, by giving the members a form of free advertisement. Whatever action of this kind were taken at any time would have to be the outcome of individual members co-operating among themselves.

The full complement of officers stands: President, Prof. J. W. Robertson. Vice-Presidents, Prof. C. A. Zavitz, O. A. C., Guelph, Ont.; G. A. Gignault, Quebec, Que., and John Mooney, Valley River, Man. Secretary-Treasurer, L. H. Newman, Ottawa.

Directors elected: Thos. A. Peters, Fredericton, N. B.; G. A. Gignault, Quebec, Que.; Prof. C. A. Zavitz, O. A. C., Guelph; John Mooney, Valley River, Man.; Thos. H. Woolford, Cardston, Alta.; Thos. S. Waugh, North Bedeque, P. E. I.; W. L. Davidson, Bethel, Que.; J. O. Duke, Olinda, Ont.; Hugh W. Gibson, Wolseley, Assa.; Morris Middleton, Vernon, B. C.

Directors appointed: Prof. M. C. Cumming, Truro, N. S.; Geo. Harcourt, Winnipeg, Man.; J. W. Wheaton, Toronto, Ont.; W. L. Smith, Toronto, Ont.; Geo. Batho, Winnipeg, Man.; W. J. Black, Winnipeg, Man.; W. Thompson, London, Ont.; J. C. Readey, Charlotte-town, P. E. I.; L. S. Klinck, St. Anne, Que.; D. Innes, Tobique River, N. B.

PROGRAMME.

In order to present them more fully, we are holding for later publication a number of the papers delivered. The list of contributors included: Dr. H. J. Webber, Physiologist, in charge of the Laboratory of Plant Breeding, Washington, D.C.; Dr. Wm. Saunders, Director Experimental Farms, Ottawa; G. H. Clark, Seed Commissioner, Ottawa; Prof. W. Lochhead, formerly of the O. A. C., Guelph, Ont., now of Sir Wm. Macdonald's College at St. Anne, Que.; Prof. Frank T. Shutt, Chemist, Experimental Farm, Ottawa; Prof. C. A. Zavitz, Experimentalist, O. A. C., Guelph; Prof. L. S. Klinck, Agricultural College, St. Anne, Que.; Prof. J. H. Grisdale, Agriculturist, Experimental Farm, Ottawa; S. E. Briggs, Toronto; Wm. Thompson, London, Ont.; W. L. Smith and J. W. Wheaton, Toronto. Hon. Sydney Fisher addressed the first evening meeting briefly, and a few papers were read by men who have been carrying on seed selection, viz., Donald Innes, Tobique River, N. B., and F. Kirkham, Saltcoats, Assa.

Prof. Robertson opened the Tuesday evening meeting with a few characteristic observations. He urged the value of the work of seed improvement for its effects upon the people. Training people, especially boys and girls, to think was a greater gain than an increased yield of ten bushels of grain per acre. It's the seed we sow in our minds that enables us to put thinking into all our operations, that yields the greatest return. First we observe facts, then we should try to observe the relation of things in our attempts to evolve principles. The great value of the Seed-growers' Association work is its intellectual force. It will not only increase our crops, but deepen and broaden and improve our whole national life.

Following Dr. Saunders, the gist of whose paper will be given next issue, Dr. Webber gave a scientifically interesting paper, on "Pedigree or Grade-breeding of Plants." We used to read in the geographies, he said, of the prescribed limitations of various crop zones. The northern winter wheat area used to be Iowa; now, through the efforts of the plant breeder, this crop is grown in Wisconsin and Minnesota. Similarly the orange area will be extended from Florida up into Tennessee, Arkansas, and Oregon. In this great work of plant breeding the U. S. Department had followed the lead of Dr. Saunders, of Ottawa.

Hon. Mr. Fisher said that he had been struck with the results of corn-breeding in the United States, and affirmed his belief in the claims of the Canadian Seed-

growers' Association, that our farmers could grow much heavier and cleaner crops by using better seed. He had not hesitated in his Department to establish a Seed Division, and he hoped that the work of the association would go on prosperously.

On Wednesday morning, after business had been despatched, the delegates heard Mr. Clark's paper on the scope of work for the Canadian Seed-growers' Association, and after that Prof. Shutt's on "The Action of Certain Smut Preventives on the Vitality of Seed." Bluestone and formalin, he said, are the two principal smut preventives. Iron sulphate had also been used, and likewise a mixture of iron and copper sulphates, in varying proportions, called agricultural bluestone, which had been sold in the Northwest. By means of charts, giving tabulated results of experiments, Prof. Shutt showed that copper sulphate had a somewhat deleterious effect upon the seed, the degree of injury increasing with the length of time the seed was kept after treatment. Iron sulphate had little bad effect, and agricultural bluestone affected the seed mainly in proportion to the amount of copper sulphate it contained. It may be noted that, unlike copper sulphate, iron sulphate appeared to have no injurious after effects, the length of time the seed was kept making no difference in the germination. Bluestone, however, was an effective fungicide, whereas iron sulphate was not, and the fungicidal properties of agricultural bluestone depended principally upon the amount of copper sulphate contained.

Another set of experiments to try immersion in lime water to neutralize the action of copper sulphate on the vitality of the seed revealed the fact that while it lessened the effect on the germination it also decreased the effectiveness of the bluestone as a smut preventive. Prof. Shutt's advice, therefore, is to sprinkle the seed or immerse it five minutes, using a solution of bluestone, 1 lb. to 8 gals. of water, allowing the seed to dry spontaneously. With this treatment there will be no serious loss of vitality, and although the grain may be a few days later in appearing above ground, it will almost or quite make up for the delay before harvest. Leaving the sulphates, the speaker turned to formalin, which had been tested considerably at Ottawa as a smut preventive. While not without a certain injurious action on the germ of the grain, investigation indicated that a sprinkling of the seed with a solution of 9 ozs. commercial formalin to 10 gallons of water could be used with impunity, and that it was completely effective in destroying spores of smut. The Professor stated that analysis had failed to disclose any Canadian samples of formalin seriously below the mark in strength; it should contain 40% of chemically pure formaldehyde.

Inquiries had been received from the Northwest regarding some samples of formalin which were milky, and in some cases partly solid. This was due to a certain physical change in the liquid, technically called "polymerizing." While not pronouncing finally upon this point, Prof. Shutt expressed his opinion that this change, which in no way affects the chemical composition, would lessen the effect of the formalin, not only upon the germ of the grain, but also upon the spores of the smut.

A practical paper was that of Mr. Briggs, on the "Seedmen and the Canadian Seed-growers' Association," who stated that the educational work of the Seed Department was being appreciated by the seedsmen. It has in the past been difficult for them to find supplies of pure seed, and the past year, owing to seasonal causes, was the worst yet. He touched upon the Government free distribution of samples of seed through the Experimental Farms, doubting whether the benefits were commensurate with the cost. What cost the farmer nothing was lightly valued.

Regarding the ways and means of disposing of the pedigreed seed, he suggested sale on the basis of a co-operative society, but thought those interested would find it to their advantage to dispose of the seed through two or three leading seed firms, who afforded the most natural channel for dissemination. In discussion it was agreed that any farmer growing selected seed should receive for his general crop seed a premium of at least 15 cents per bushel above market price, though there is no reason why a man producing very superior seed should not get a greater reward for his enterprise and pains.

Thursday forenoon, 29th, the delegates spent in a most enjoyable visit to the Central Experimental Farm, where they listened to Prof. Grisdale's paper on "Some Common Principles which Underlie Improvement in Animals and Plants," to which space forbids reference at this time.

Determined to Bring Autoists to Time.

It is reported that the Wentworth County Council has decided to grant \$25 for every conviction made under the new Ontario law regarding automobile traffic. This will make it worth while to watch the roads. Men will be on guard at Grimsby, Winona and Stony Creek—all points along the main road from Hamilton to Niagara Falls, which is a favorite highway of motorists—to watch the roads and telephone along, thus keeping track of every machine, and thereby facilitating arrest and conviction of law violators. The taxpayers have stood imposition long enough.

A Fine Knife.

I beg to acknowledge with thanks the receipt of the premium farmers' knife. It is a fine one, and I am well pleased with it. F. SLATER, June, 1905.

International S. S. Convention.

The triennial meeting of the International Sunday-School Association, which met in Toronto, Ont., recently, was without doubt one of the great events of the year; in fact, the event of the year, in so far as religious education in America is concerned. Some 2,200 regular delegates were present, and all told probably 6,000 persons, including many of the brightest and brainiest people in America. It was an effective demonstration of Christian church union in actual practice. In this great gathering of many days' duration, Episcopalians, Presbyterians, Methodists, Baptists, Congregationalists and others dealt with many and varied interests of vital importance, without a trace of trouble or discord arising from denominational differences. While the general scheme of the International Lesson is adhered to as the best for all purposes, the Lesson Committee were directed to prepare an optional advanced course for use where desired. The special primary course, which covers some two years' school work for children up to seven years old, is reported giving good satisfaction where tried. A Canadian, Justice J. J. McLaren, was chosen President of the association, and Louisville was selected as the next place of meeting. Visitors from the U. S. and other countries all expressed themselves delighted with Canada.

Macdonald Institute Graduates.

Following are the results in order of merit of the examinations in domestic science, nature study, and manual training at the Macdonald Institute, O. A. C., Guelph:

COURSE IN DOMESTIC SCIENCE (YEAR'S WORK).

Senior Normal.—The Misses: 1, F. G. Williamson, Burlington, Ont.; 2, M. I. Johnston, Islington, Ont.; 3, E. Berry, Midway, Ont.; 4, C. G. Kent, Toronto, Ont.; 5, M. K. Armstrong, Mitchell, Ont.; 6, H. Dieke, Guelph, Ont.; 7, L. L. Ross, Ross Corner, P. E. I., and E. M. Ferguson, Stratford, Ont.; 9, M. M. Livens, Seaford, Ont.; 10, M. A. Rath, South Augusta, Ont.; 11, A. E. Smillie, Bluevale, Ont.; 12, L. C. Culham, Hamilton, Ont.; 13, A. M. Bell, Tavistock, Ont.; 14, F. Howitt, Guelph, Ont.; 15, L. F. Sheffield, Toronto, Ont.; 16, R. McCrimmon, Vankleek Hill, Ont.; 17, M. Powell, Guelph, Ont.; 18, * F. Marshall, Rat Portage, Ont.; 19, * J. J. Pease, Toronto, Ont.; 20, * A. I. Brown, Stratford, Ont.

* Conditioned in practice teaching.

Junior Normal.—The Misses: 1, C. T. McCaig, Colingwood, Ont.; 2, H. M. Card, Wicklow, Ont.; 3, A. DeLury, Manilla, Ont.; 4, H. McMurchie, Harriston, Ont.; 5, M. M. Beattie, Seaford, Ont.; 6, M. P. Shaw, Penobscis, N. B.; 7, M. R. Davis, Woodstock, Ont.; 8, A. Robertson, Chateauguay Basin, Que.; 9, H. McDunnough, Montreal, Que.; 10, R. V. Gardner, Niagara Falls, Ont.; 11, E. B. Bickell, Toronto, Ont.; 12, * A. W. Fleming, Owen Sound, Ont.; 13, M. I. Cameron, Durham, Ont.; 14, O. M. Winchester, Toronto, Ont.; 15, * C. M. Cameron, Durham, Ont.; 16, * M. E. Winchester, Toronto, Ont.; 17, * A. L. Johnson, Seaford, Ont.

* Conditioned in "Foods."

1903-'05 Housekeepers' Course.—The Misses: 1, E. Tennant, Toronto, Ont.; 2, N. Harcourt, Guelph, Ont.; 3, J. McFee, Vankleek Hill, Ont.; 4, J. G. Allan, Hamilton, Ont.; 5, J. McCallum, Guelph, Ont.

Junior Housekeepers' Course.—1, Mrs. E. Dunbrack, St. John, N. B.; the Misses: 2, E. Shand, Port Dover, Ont.; 3, J. M. McKenzie, Galt, Ont.; 4, E. A. Sadler, Hamilton, Ont.

Homemakers' Course—1 year.—The Misses: 1, H. Monk, Montreal, Que.; 2, S. Shand, Port Dover, Ont.; 3, M. I. Watt, Brantford, Ont.; 4, L. I. Singleton, Newboro, Ont.; 5, A. Butchart, Guelph, Ont.; 6, B. E. Watson, Eden Mills, Ont.; 7, K. F. McIntosh, Arkona, Ont.; 8, W. Powell, Guelph, Ont.; * I. Brown, Woodstock, Ont.

* Part of year only.

COURSE IN NATURE STUDY.

The following students have completed the three months' course in nature study, ending June 20th, and are entitled to certificates:

Misses A. Fyfe, Stanley Bridge, P. E. I.; M. MacCannell, Charlottetown, P. E. I.; A. Stewart, Charlottetown, P. E. I.; H. Carter, Truro, N. S.; S. J. Gordon, Lansdowne, N. S.; E. M. Hiltz, Dartmouth, N. S.; J. H. Stephens, Ellershouse, N. S.; Whitman, C., East Inglesville, N. S.; M. Colpitts, Forest Glen, N. B.; M. Curran, Fairville, N. B.; M. Richetson, Hatfield Point, N. B.; A. Arkley, Leeds Village, Que.; M. E. Armstrong, Aylmer, E. Que.; M. S. Belknap, Montreal, Que.; L. Doddridge, Little Cascapedia, Que.; L. A. MacCrae, Black Cape, Que.; G. Miller, Bromo, Que.; L. Nelson, Melboro, Que.; M. Nugent, Leeds Village, Que.; L. Shaw, Kingsley, Que.; W. M. Watson, Mystic, Que.; G. H. Whitehead, Waterloo, Que.; M. Whitehead, Foster, Que.; L. Clark, Cherry Valley, Ont.; S. L. Fetheringham, Toronto, Ont.; E. A. Hockley, Welland, Ont.; L. Lege, Gananoque, Ont.; J. Mowbray, Eagle, Ont.; E. M. Phillips, Cedar Dale, Ont.; A. Powell, Woodstock, Ont.; L. Rankin, Toronto, Ont.; A. Sheppard, Toronto, Ont.; L. M. Sinclair, Guelph, Ont.; M. C. Steadth, Sault Ste. Marie, Ont.; A. Spankie, Wolf Island, Ont.; L. M. Thompson, Charing Cross, Ont.; L. M. York, Ottawa, Ont.; Miss E. B. Palmer, Cobourg, Ont.; and Messrs. A. H. Matthews, Alberton, P. E. I.; L. A. Fitzsimons, West Point, N. S.; M. P. Foster, Port Lorne, N. S.; C. MacDuns, St. George's Channel, N. S.; A. P. Floyd, Titusville, N. B.; W. C. Jonah, Hillsboro, N. B.; F. S. Small, Apohaqui, N. B.; S. K. Smith, Blissville, N. B.; W. J. Blakeston, Dundalk, Ont.; P. H. Buchanan, Mar-

den, Ont.; G. A. Clayton, Arkell, Ont.; and C. Klinck, Victoria Square, Ont.

COURSE IN MANUAL TRAINING.

The following students having fulfilled the prescribed conditions as laid down by the Ontario Education Department, and passed successfully the examinations in the various subjects, are entitled to professional certificates, as follows:

Teacher's certificate, as specialist in manual training—W. W. Snider, Guelph, Ont.

Teacher's certificate in manual training—J. E. Runions, Cornwall, Ont.

Mr. H. B. McLean, Charlottetown, P. E. I., and Mr. Chas. T. Yeo, Little Britain, Ont., have completed part of the prescribed course, and have successfully passed in primary work and woodwork, and woodwork and metal work, respectively.

The Cornstalk Borer.

Last week we received from a Kent County subscriber a specimen of a small corn plant, with a hole eaten in one side by an insect found working in the pith. The correspondent stated that it had attacked a good many stalks in certain fields, and he feared that unless something could be done the corn crop was doomed. The insect has been identified as the cornstalk borer (*Gortyna nitela*), a boring cutworm, ordinarily present to a greater or less extent, but never known to do any very extensive damage. The life history was thus described to us by Prof. Lochhead, O. A. C.: The moth lays her egg on the young plant, and the larva as soon as hatched bores into the stalk and then works in the pith. By about the first of September it gets down into the root, or, possibly, into the soil, and there pupates. In the spring the moth emerges and lays her eggs, not confining her attentions to corn by any means, as an affected thistle was sent us along with the corn. At this date, practically all the damage that will be done this season is noticeable. Prof. Lochhead could advise no remedy, except the preventive one of cutting out affected stalks, so as to prevent the larvae from developing into mature insects to lay eggs on next year's crop. He did not regard the pest with any alarm.



"When de Boss Am Away."

By James Frise.

Eastern Ontario Fairs.

(Ottawa correspondence.)

The following is the final draft of the Eastern circuit of fairs, and the names of the expert judges who will attend them:

Winchester, Sept. 7; Cornwall, Sept. 8; Brockville, Sept. 12; Williamstown, Sept. 14; Perth, Sept. 15; Almonte, Sept. 19; Alexandria, Sept. 20; Metcalfe, Sept. 21; Vankleek Hill, Sept. 22 and 23; Richmond, Sept. 26; Renfrew, Sept. 27 and 28; McDonald's Corners, Sept. 29 (two judges); Maberly, Oct. 3 (two judges); Carp, Oct. 4 (two judges); Beachburg, Oct. 5 and 6.

Judges.—Horses—Dr. H. G. Reed, Georgetown; beef cattle and sheep, Andrew Whitelaw, Guelph; dairy cattle and swine, D. D. Gray, Chute au Blondeau, Sept. 7-15; James Rettie, Norwich, Sept. 19, Oct. 6. Poultry, R. E. McKinstry, Ottawa, and Chas. Libby, Frankville, who will place the awards at Winchester, Almonte, Metcalfe and Richmond.

Mr. Jas. Irving, of Winchester, will judge the light horses at Brockville, Almonte, Vankleek Hill, Richmond, Beachburg, and R. McDonald at Metcalfe, Lansdowne and Renfrew.

Judging will take place at Maxville, Sept. 26, and at Russell, Sept. 27. The judges are: Horses, Alex. McLean, Carleton Place; beef cattle and sheep, G. R. Bradley, Carleton Place; dairy cattle and swine, D. D. Gray, Chute au Blondeau.

Judging at Delta takes place Sept. 26. Judges are: Horses, John Forsythe, Cedar Hill; beef cattle

and sheep, Peter Cochran, Almonte; dairy cattle and swine, A. Yuill, Carleton Place.

Cobden, Sept. 22. Horses, John Forsythe; beef cattle and sheep, G. R. Bradley; dairy cattle and swine, A. R. Yuill.

A number of Eastern Ontario men have been employed as expert judges this year. The judges receive from \$2.50 to \$3 per day and expenses. The societies pay \$5 for each judge per day.

South Waterloo.

The scanty precipitation of the whole of the period between last year's growing season and this was causing some forebodings of a more droughty season than has lately been the rule, until the beginning of May, since which there have been frequent and abundant rainfalls, with cool and pleasant weather. Consequently, vegetation has grown luxuriantly on our high and light soils, and farmers are confident of another of the series of "fat" years. We are glad for them when they come; but let us never fall into the habit of letting our success depend on their coming. The contrast between good and bad farming is least marked during such a time as this, because anybody can raise crops when there is sufficient rainfall; it is in a dry season that the virtue of the fertile farm and the studious farmer is most in evidence. While we enjoy the bounties of nature's generous moods, let us also use these same conditions to fortify against the future. When clover "catches" and grows as it has for some years now, why not work the clover method of soil improvement for all it is worth, and apply this principle all around. These favorable years are going to give some farmers a splendid start, while some others will be surprised to find themselves after a while away back again where they used to be.

Pastures, though late in starting, are holding up well; hay is a heavy crop, and both fall and spring grains promise to yield heavily of straw at least. Many of the heavier fields of clover, and some of barley, have become lodged by the last rains. The growing of peas is spreading again, the weevil (naturally) having become less troublesome since it induced farmers to quit growing this much appreciated crop. Whether or not it ever would be practicable to exterminate the pest by stopping the growing of peas, it is evident that the time for any such attempt is past for the present.

Our various flourishing towns provide a first-class market for all kinds of produce, with prices usually ranging high. Butter, at 15 cents a pound, is the principal exception now. As there are no cheese factories or creameries in this district, the amount of dairying which ordinarily meets the local demands promptly glut the market during the periods of flush production; whereas the surplus should be exported as cheese and creamery butter. According to one stock buyer, quite a few fat cattle are still on the hands of farmers who wanted the price to rise still higher. Calves are in good demand, with few disposed to sell.

During June, the month for improvements and repairs, considerable fencing, mainly of woven wire, has been done. In one locality wire is replacing the pioneer stump fences, without the intermediate "rail" stage. Cementing of stable floors is also a perennial employment for slack time.

H. G.

Missisquoi County, Quebec.

The season has been very satisfactory so far for the dairymen of this county. Cattle came through the winter without much sickness, and went on the grass in good condition. As the weather has been almost ideal for pasturage, the yield of milk has been large. The quality of the butter and cheese seems to be better than in previous years, judging from the lack of fault-finding on the part of exporters. Although large quantities of butter and cheese are being made for export, prices are higher than usual at this time of the year. Last week finest creamery butter sold at 19¢ to 20¢ per pound, while cheese was weaker, only 9¢ being paid. The trade in fat hogs has been active, and about two carloads per week are shipped from here to Montreal markets. Buyers have paid from \$6.25 to \$6.50 per cwt. at the car all summer. Young pigs do not appear to be so plentiful as usual this summer, and very few unfinished hogs are being shipped, consequently prices should keep up well. Fat cattle are very scarce, and milk cows are about the same. Very few sheep are kept, owing to the low prices of mutton and wool. Farmers found that cattle paid better than sheep, so the sheep were sold. Good horses are not very plentiful, and bring good prices.

General-purpose horses, weighing from 1,050 to 1,100 lbs., are most in demand, and sell for from \$100 to \$150. A few fancy drivers have changed hands at \$200 to \$300 each. Grass is looking well, and it appears as though there will be a large hay crop. New-seeded is particularly heavy, but in many cases is very foul with dock—a weed that seems to be spreading rapidly. Grain is growing rapidly, though much of it was sown later than usual. Corn, which is an important crop for silage and also for grain, came up rather unevenly, owing largely to the poor quality of the seed. Crows have been very troublesome, and the methods usually employed to drive them away failed entirely.

During May the weather was quite cool and wet, but the records for June have broken those of past years. Quite a number of days have been very warm, followed by warm nights and rainy weather, thus giving crops a good start. For a few days just past, however, it has been decidedly cool.

C. A. W.

MARKETS.

Toronto. LIVE STOCK.

Export Cattle—Local shippers are largely buying their supplies at the Chicago market, and they need only a few odd lots to round out shipments. Choice are quoted at \$4.90 to \$5.35; good to medium, \$4.75 to \$4.90; bulls, \$4 to \$4.50, and cows, \$3 to \$3.75.

Butchers' Cattle—Picked are quoted at \$4.90 to \$5.20; fair to choice, \$4 to \$4.90; common, \$3 to \$3.50, and cows and bulls, \$2.50 to \$3.50.

Stockers and Feeders—Stockers are quoted at \$2.50 to \$3.80, and feeders at \$3 to \$4.75.

Milch Cows—\$30 to \$50 each. Calves—3½c. to 5½c. per lb., and \$2 to \$10 each.

Sheep and lambs—Export sheep are quoted at \$3 to \$3.90 per cwt.; culls, \$2.50 to \$3.50 each; spring lambs, \$3.50 to \$5.25.

Hogs—\$5 to \$6.65 per cwt. for selects, and \$6.40 for lights and fats.

BREADSTUFFS.

Wheat—Ontario—No. 2 red and white, 98c.; goose, nominal, 85c. to 86c. Manitoba—\$1.09 for No. 1 northern; \$1.06 for No. 2 northern, and 91c. for No. 3 northern, lake ports, 6c. more grinding in transit.

Flour—Ontario—Millers find it generally necessary to accept buyers' bids to effect sales; 90 per cent. patents, \$4.20 to \$4.30, buyers' sacks, east and west; choice, 15c. to 20c. higher. Manitoba—Steady; first patents, \$5.40 to \$5.50; second patents, \$5.10 to \$5.20; bakers', \$5 to \$5.10.

Milled—Ontario—Bran, \$11.50 to \$12, and shorts, \$17 to \$17.50. Manitoba—\$17 for bran, and \$19 for shorts, Toronto and equal points.

Oats—Firm and scarce, 44c. to 45c. for No. 2, outside.

Rye—60c., outside. Corn—Canadian, 53c. to 54c., Chatham freights; American, firm; No. 2 yellow, 65c.; No. 3 yellow, 64½c. to 65c., lake and rail freights.

Peas—71c. to 72c. for No. 2, west and east; 75c. for milling.

Rolled Oats—\$4.75 for cars of bags, and \$5 for barrels, on track, here; 25c. more for broken lots here, and 40c., outside.

COUNTRY PRODUCE.

Butter—All kinds of butter are coming forward freely, and the market has an easy tone.

Creamery, prints ... 18c. to 20c. do, solids ... 18c. to 19c.

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

do, medium ... 13c. to 14c. do, tubs, good to choice ... 14½c. to 15½c.

do, inferior ... 12c. to 13c.

Cheese—Good supplies are arriving, but the demand is active. Quotations are unchanged at 10½c. to 10¾c. for job lots, on track, here.

Eggs—The receipts are fair in the matter of quantity, but the quality is very much mixed, and on account of the great shrinkage, the market is firm in tone. Quotations are unchanged at 16½c. to 17c.

Potatoes—New are selling at 80c. to 90c. per bushel.

Baled Hay—Dull; quoted easier at \$7.50 to \$7.75 per ton for No. 1 timothy, on track, here.

Farmers' Market (Retail Prices).

Table listing various farm products and their prices, including wheat, oats, hay, eggs, and butter.



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

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED. Special attention given to accounts of Cheese Factories, Drivers and Grain Dealers, and all out-of-town accounts. Farmers' Notes discounted, Farmers' Sales Notes collected and advances made against their security.

SAVINGS BANK DEPARTMENT

Deposits of Twenty cents and upwards received, and interest at 3 per cent. per annum, compounded four times a year, without presentation of passbook. No delay in the withdrawal of any portion or the whole of the deposit.

G. de C. O'GRADY, General Manager.

Table listing prices for various agricultural products like potatoes, apples, cabbages, and livestock.

HORSE MARKET.

Trade the past week has been practically featureless. One of the most notable events of the week has been the visit of the British remount commissioners, who visited the Repository and inspected a large number of horses.

Burns & Sheppard's list of prevailing prices is as follows:

Table listing prices for various horse types and equipment, such as single roadsters, carriage horses, and draft horses.

The range of prices for the week as reported by the Canadian Horse Exchange, Jarvis St., is as follows:

Table listing prices for various horse types and equipment, similar to the previous table.

Chicago.

Cattle—Good to prime steers, \$5.25 to \$6.25; poor to medium, \$3.75 to \$5; stockers and feeders, \$2.50 to \$4.40; cows, \$2.50 to \$4.50; heifers, \$2.50 to \$5; canners, \$1.50 to \$2.50; bulls, \$2.40 to \$4; calves, \$2.50 to \$6.25; Texas-fed steers, \$3.50 to \$4.75.

Montreal.

Butter—Local market firm, in sympathy with the English. Fancy Township creamery, 20½c.; fine to finest, 19½c. to 20c.; good to fine, 19½c. to 19¾c.

Cheese—Exporters complain of the quality. Finest Quebec, around 9½c.; finest Ontario, 9½c. to 9¾c. New York shipments have dwindled away to almost nothing.

Eggs—Dealers' attempts to put prices down in the country are not succeeding very well. Straight-gathered still selling in Montreal at 16c.; very large, 18c. in single cases, and small, or No. 2, 14c.

Potatoes—Market for old stock in an excited condition, some getting up to 80c. per bag of 90 lbs., delivered into store in small lots, and average price being about 65c.

Beans—Price a shade firmer, due to continued wet weather, and fears throughout the West for the new crop. No export, but fair consumption demand, and dealers ask \$1.65 per bushel for prime pea beans.

Honey—Lowest wholesale price for 60-lb. tins of white strained, 7 to 7½c.; dark, or buckwheat, being quoted at 6½c.

Oats—Market in an unusual position. Canadian oats being very scarce, and price controlled by American stocks in store. No. 2 oats, 50c., store.

Live Stock—Export market fairly steady this week. Improved demand for ocean freights, especially from the West, indicating that there will soon be quite a little activity in the shipment of ranch cattle. No enquiry as yet, it is said, for grass-fed Ontario cattle. Price of freight has stiffened nevertheless. The local livestock market was about steady this week.

Receipts of hogs and other animals were lighter than usual, but as demand was also light, prices were not strengthened. Packers were not very eager for hogs, so that they sold at 6½c. to 6¾c. for heavy and mixed, according to quality, light selects being 6½c. to 7c. Best cattle sold at 5½c.; fine at 5c. to 5½c., and the bulk of the good butchers' stock at 4½c. to 4¾c.; medium selling at 3½c. to 4c., and common at 3c., while the thin, poor stuff varied below that figure. Sheep were steady at 8½c. to 4c., lambs being \$3 to \$5, according to quality, and milch cows, \$30 to \$55. Calves were in demand, and some of the fine animals brought \$10 each, others ranging down to \$2 each.

Cheese Board Prices.

Quotations from the cheese boards, the latter part of last week, are: Winchester, 9½c.; Kingston, 9½c.; Tweed, 9½c.; Madoc, 9½c. to 9 9-16c.; Brockville, 9½c.; Belleville, 9½c. to 9 11-16c.; Alexandria, 9½c.; Vankleek Hill, 9 9-16c.; Cornwall, 9 11-16c. to 9½c.; Watertown, N. Y.; 8½c. to 9c. for large, and 9c. for small; Canton, N. Y., butter, 20c., twin cheese 9c.

Buffalo.

Hogs—Heavy and mixed Yorkers, \$5.75 to \$5.85; roughs, \$4.80 to \$5; dairies, \$5.60 to \$5.75. Sheep and lambs—Spring lambs, \$6 to \$9.50; yearlings, \$6.75 to \$7; wethers, \$5.75 to \$6; ewes, \$4.25 to \$4.50; sheep, mixed, \$2.50 to \$5.50.

British Cattle Market.

London.—Cattle are quoted at 11c. to 12½c. per lb.; refrigerator beef, 8½c. to 9½c. per lb.; sheep, 13c. to 14c. per lb.

Contents of this Issue.

Table listing the contents of the issue, including illustrations, editorial, stock, farm, dairying, poultry, and questions and answers.

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



Life, Literature and Education.

A Versatile Canadian.

The other day the "Farmer's Advocate" office was favored by a chance call from Mr. J. W. Bengough, whose genial countenance appears on our page to-day, and will be recognized with pleasure by thousands of our readers.

"I heard you lecture several years ago in a village away up near —," one of the staff remarked.

"Oh, yes," he laughed, "I don't think many of the villages escaped."

It is to be hoped that not many of them did "escape," for to see an instance of "Bengough's" wonderful talent, and to observe the versatility with which he turns from drawing to lecturing, or reciting from poems which he has himself composed, is an event to remember.

His plan usually is to "strike" a town or village a day or half a day before the time set for his lecture. The intervening time he utilizes in hunting up the celebrities of the place, taking a good look at them, and learning some little "hit" in regard to them which may be successfully worked off before an audience. When the night arrives, chalk in hand, he begins to draw his "subjects," and the audience follow with unflagging interest from the making of the first stroke until the finish, when, with a final touch or two, the face is completed, and the "subject"—who is probably somewhere in the audience laughing—stands before the people, complete as in a photograph, and many times more interesting. Such a power is truly a gift, for the cartoonist, like the poet, "is born, not made."

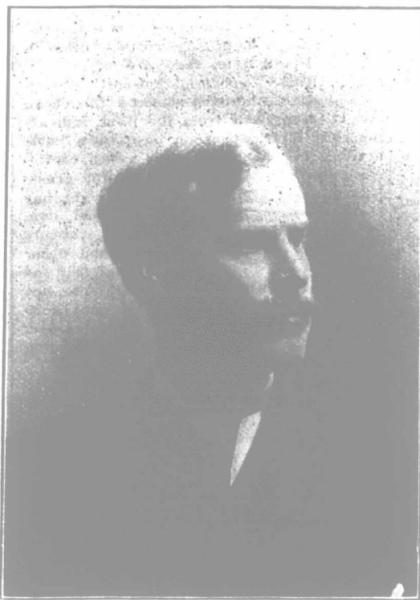
Mr. Bengough was born in Toronto, April 7th, 1851, the second son of John Bengough, a native of St. Andrew's, Fifeshire, Scotland, and Margaret Wilson, of Bailieborough, County Caven, Ireland. When the future artist and poet was two years old the family moved to Whitby, Ont., and there the young J. W. started to school, where he became noted among his playmates for his wonderful skill in drawing and carving figures from wood, potatoes, carrots, or whatever happened to be handiest, and also for his aptitude for reciting and singing. Although not of a studious nature, he displayed considerable talent in English and composition, and was endowed with a marvellous memory, the same memory which to-day stands him in good stead when drawing his cartoons.

After leaving public school he spent some time at the High School, where he matriculated at an early age. He also spent a short time in a law office, but threw up his position to go on the staff of the *Whitby Gazette*. In 1872 he secured an appointment on the *Toronto Globe*, and while filling the position of local reporter, he started the well-known publication, "*Grip*," the only one of its kind in Canada that ever made its mark. In 1874 he made his first appearance as a lecturer, and has filled engagements every season since, having visited every part of the Dominion,

besides making appearances in Great Britain and the United States.

Mr. Bengough has published two volumes of verse, "*Motley*," and "*In Many Keys*," and has enough poems collected to fill another volume, all of these poems having previously appeared in various newspapers. He has also published semi-humorous works on economics—"The Gin Mill Primer," on the temperance question, and the "Up-to-date Primer," on the labor question—besides contributing cartoons regularly to the *Chicago Public* and other journals. His "Caleb Jenkins" letters will be well remembered by "Farmer's Advocate" readers. In addition to all this varied work, he has written several comic operas, comedies, and a tragedy. One of his operas, "*Bunthorne Abroad*," was produced with great success in Toronto in 1887.

Mr. Bengough has, for a long time, been deeply interested in the social question, and is a devout follower of Henry George's philosophy, in support of which he has written



Mr. J. W. Bengough.

several books, which may shortly be before the public. With all his geniality and fund of humor, he evidently regards life as a serious proposition, and its possession as a sacred trust. He is a Presbyterian, a staunch believer in the orthodox Gospel, and an out-and-out "Grit." In his poems his political leanings often crop out, but the politician of either party must recognize in them, as well, the basic principles for which he has ever battled: right, truth, and the high ideals which can bring dignity to the humblest life.

Selections from Bengough.

"So, tho' the separate creeds reflect one heaven
In differing views and varied modes and forms,
All hearts may be Canadian, and one stream
Of patriot faith in liberty and right,

And in one flag, one empire and one king,
May grandly flow in ever-widening power
To match our one St. Lawrence."

"Unity Day": In *Many Keys*, page 17.

"We rear the shaft that by such outward sign
Our nation's reverence may be told abroad
For mouldering graves that make this spot divine
And consecrate its old historic sod,
On which our soldiers, by the grace of God,
Won this True North and kept our boundary line."

—Lundy's Lane Monument: I. M. K., page 24.

"Ennobled by no title but his name,
We hail him Gladstone, homespun gentleman,
The peer of all our hearts."

—Gladstone: *Mot.*, page 76.

"The 'old, old fashion, Death,'
that doth not change
And doth not know our niceties of caste,
But to this stark estate, so ever strange,
Brings all at last."

—Death of Prince Victor: *Mot.*, page 77.

"Her face, though all wrinkled,
is radiant with truth,
And has an expression more lovely than youth;
Her form, though 'tis bent,
has a beauty more real
Than Romancer's, or Poet's,
or Painter's ideal,
'Tis the beauty of goodness—a halo divine,
The ideal woman—your mother and mine."

—Ideal Woman: *Mot.*, page 81.

"His nature was a rushing mountain stream,
His faults but eddies which its swiftness bred."

—Geo. Brown: *Mot.*, page 83.

"Better than great, he stood
for what was right—
Just plain Mackenzie—nobly commonplace,

Who knew no sacred barr'd from secular,
But worshipped God by doing honest work.

Whether with mason's tools as artisan,
Or in high place of state."

—Alex. Mackenzie: *Mot.*, page 104.

"From out our heavy statutes shall be torn
the crime-stained leaves
That have turned the world, God's temple,
into a den of thieves."

—From "Restitution": *Mot.*, page 18.

"Like Titan matrons silent sit aloft,
Nursing the baby clouds upon their giant breasts."

—The Rocky Mountains: *Mot.*, page 39.

"A thousand varying pictures float and glow
Like water on the wall of Recollection"

—The Old Church: *Mot.*, page 45.

"So long all hearts he swayed
Like merry monarch of some olden line,
Whose subjects questioned not his right divine,
But just obeyed."

—Sir John A. Macdonald: *Mot.*, page 51.

"By this handful of poor ashes—all that's left of him we knew—
Let us swear the wrong he fronted shall be turned to ashes, too!
See! before our stricken columns goes his spirit like a flame,
Close the ranks and forward! forward! in his talismanic name."

—Death of a Reformer.

Beside the grave's new-rounded sod
By some dear instinct close we come,
Heart draws to heart, tho' we are dumb

And dumbly seek to share the rod;
We do not know what is to be,
We cannot guess, we cannot see,
We can but stand and wait for God.

As when the winter tempests fall
With blinding snow-wreaths on the steep,
And clouds and darkness dread appal,
What can they do, th' unknowing sheep,
But gather close and silence keep,
And listen for the shepherd's call.

"'Tis but a cloud of splendor rolling by,
An empty cloud, that has no blessed rain
For famished hearts of men."

—The Czar's Coronation, page 175.

"Yet, as the sunlight, genial, pure and kind,
Falls on the bronze of Burns's mortal mould,
To mark its virile beauty, not to find
The dust in crevice or in mantle-fold,
So let our thought fix on his spirit bold,

His broad humanity, his love of truth,
His scorn of meanness and ingratitude,
The things that give his work immortal youth,
And henceforth stand as they have ever stood

T'assure him place in good men's hearts
amongst the good"

—On Burns's Monument, page 93.

Preserve Ideals.

There is no virtue in destroying other people's ideals. If a friend admires what is good in anyone, and has not discovered the weak place in the armor, there is no reason for pointing it out, unless there is something at stake. Our critical judgment can be put to better use.

Works Read by the Japs.

The study of English literature in Japan is represented by Prof. Yuse Tsubuchi, who has translated into Japanese some of Shakespeare's plays, among them being "*Othello*," "*Macbeth*," and "*The Merchant of Venice*." The most widely-known English writer in Japan is Carlyle. Nearly all students of English literature read his works. Next to Carlyle comes Macaulay. Emerson is greatly admired. Tennyson, Longfellow, Wordsworth, Byron and Milton are the most popular poets, and in fiction Thackeray and Dickens are the favorite authors.

The New Observatory at Ottawa.

(Ottawa correspondence.)

Standing on one of the highest points surrounding the City of Ottawa is situated the new Observatory of the Dominion of Canada, on the northern limits of the Central Experimental Farm. The magnificent new building is just about completed, and in a few days the Dominion astronomers will be translated from dingy offices in the city to the brand-new dome-capped building at the Experimental Farm. The intention is that the Experimental Farm is to be the Greenwich of Canada. A new fifteen-inch telescope has been erected with which to help on the good work.

Things happen to the sun; things happen on the earth. The scientist believes that there is a direct relationship between these things, but he has yet to find it. It is the missing link in meteorology. When the astronomer finds out what comes between the monkey and the man in the solar system he will, so he declares, have done the greatest of all great things for the material welfare of mortal man. Canada's new telescope may yet be the means to this end.

This telescope cost a thousand dollars an inch, when you come to consider it as a "15-inch" telescope, which means that the lens—the important part of the instrument—is 15 inches in diameter. The whole cost was a little over \$15,000. The telescope is only a baby compared with the big spy-glasses of the Lick and Yerkes observatories, but it is a powerful magnifier all the same. It is as perfect as the age has learned to make it, and is big enough for the work it has to do. A telescope may be too large. Some of the big ones of the scientific world—36 inches and over—cannot be used to their full capacity except for part of the year. The explanation is that they magnify the atmospheric waves, and so make trouble for themselves.

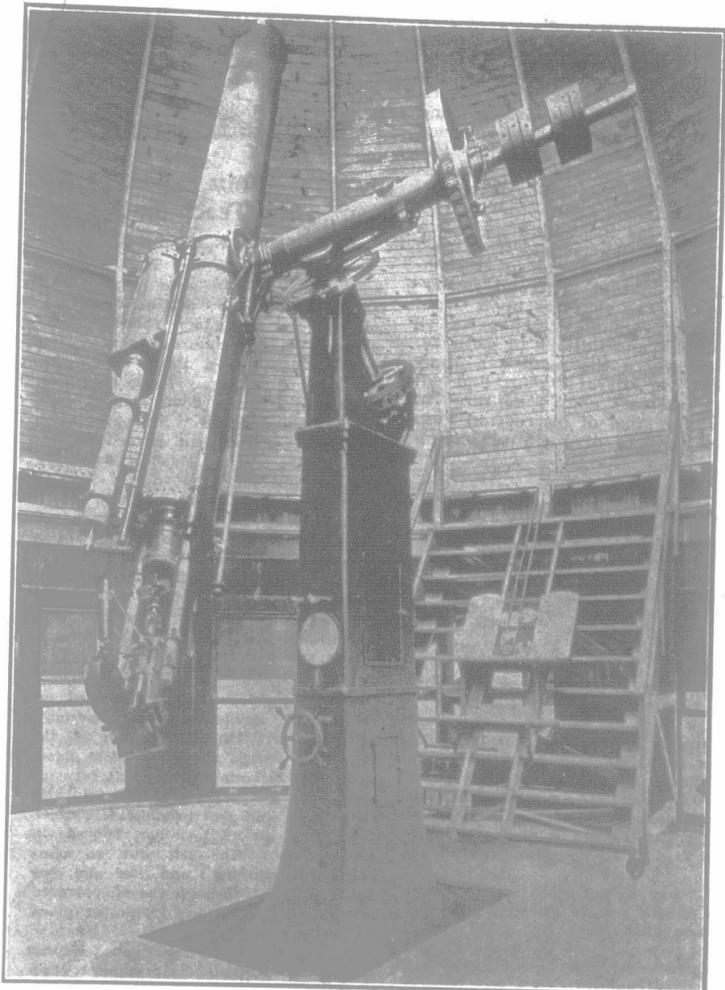
Prof. King's new telescope is 19 feet long. The mechanical part was built in Cleveland, the birthplace of the Lick and Yerkes machines. The glass was ground in Allegheny, Pa.

Down below the foundation of the observatory walls there begins the substructure of a huge pier, which goes right up into the dome and ends with an iron column. On top of the iron column is the telescope. The whole mechanism of this huge magnifier is of the finest and most delicate kind. You can swing the telescope up or down or any way at all with one hand and the turn of a little wheel, and it moves without the faintest squeak. A photographic apparatus is attached to it, and the whole thing turns on an axis, which turns on another pointing due north and south. The angle at which any telescope works must be determined according to the exact latitude of the particular locality.

You get to Canada's telescope by climbing a succession of stairways. When you find yourself in the dome the chances are that you will be surprised. You will see the roof suddenly come apart; or you may discover the whole dome to be moving round. Your suspicions will be set at rest when you see that somebody is pulling a rope, that there are wheels everywhere, and indications of ball bearings. The dome, you will be told, is made on a huge steel frame, which came from Cleveland.

Before very long you will find that there is something else that moves. You ascend a wooden structure like miniature baseball bleachers, preparatory to a look through the telescope. You find that the bleachers are moving. The thing is on wheels. Moreover, the contrivances are such that the astronomer can sit up aloft and move his telescope and his perch around without coming down.

All this is necessary because there are different stars in different places—there are three hundred thousand in the catalogue of the astronomy—and every star moves. Even the so-called fixed stars move, though in circles of their own. The astronomer aims his telescope at a star, and settles himself to watch. The telescope follows the star. It is all down to a fine point. There is a clock in the mechanism of the telescope. The clock knows all about the star, and keeps the telescope in the right path.



The \$15,000 Telescope.

One of the queer things that this big telescope enables you to do is to look around corners. It is done by means of a little brass elbow fitted with reflectors on a principle which has before now been employed in unconventional ways. The elbow is convenient when the telescope is pointing almost straight up in the air, and the astronomer can't very well get under it.

The big fifteen-inch telescope has a number of attachments to assist the astronomers in their work. Among them are a stellar spectroscope for determining the constitution or elements of

the sun and stars, and for measuring their velocity in the line of sight; a position micrometer for measuring the angular distance between stars and their position angle; a photometer for measuring the magnitude or relative brightness of the stars; a stellar camera for photographing stars and nebulae, and a solar camera for photographing the sun. In addition to these there is an instrument called a meridian circle, for determining the position of stars, and several transit instruments for determining time and longitude and latitude.

One of the most important functions

of the observatory will be the operation of an electrical time service throughout all the departmental buildings in Ottawa. For this purpose two large sidereal clocks have been installed. The Observatory is also equipped with a large number of surveying instruments, as the fixing of boundaries and the securing of data for map-making purposes, etc., which will be among the principal works of the new institution. The Observatory staff will consist of about fifty hands, but during the summer months about thirty of these will be engaged in survey work throughout the Dominion. The chief astronomer is Dr. W. F. King, while Dr. O. J. Klotz and Mr. J. S. Plaskett are among the other officials. The building itself, as the accompanying engraving will show, is a handsome, substantial structure, built of red granite. The architecture is of no particular date.

"Working with the Hands," or Mixing Muscle with Brains.

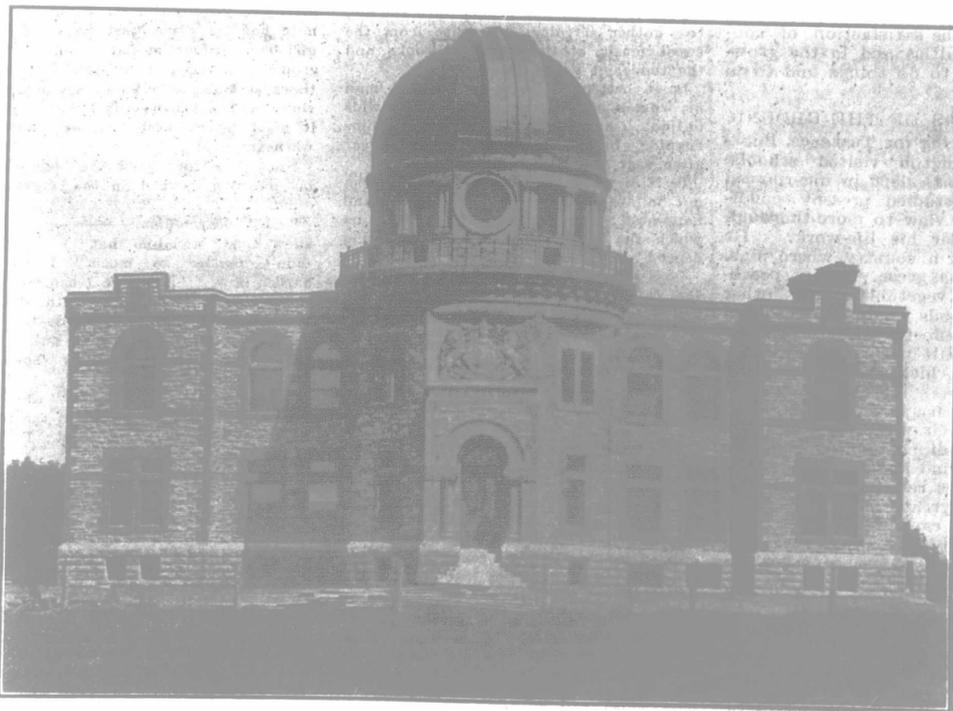
III.

Beyond offering a few quotations from Booker T. Washington's second book, "Working with the Hands," I dare not attempt the further tracing of his successful career, but I cannot too emphatically commend it to the attention of the readers of the "Farmer's Advocate" everywhere. The invitation to inaugurate at Tuskegee the system of industrial training pursued at Hampton was a great step upwards, yet it was but an initial step after all, and it required the exercise of the same indomitable courage and unquenchable perseverance which had led the little negro lad upwards and onwards hitherto to bring about what we may call the series of successes which have crowned those efforts to-day. Not only has Tuskegee itself solved its own wonderful problem, but it can point as its outcome to no less than nine similar institutions, which have been chartered under the laws of their several States.

First there had to be overcome the belief that after two hundred and fifty years of enforced labor, the emancipated race should be as idle as it pleased. The negro had to be taught the difference between "being worked" and being "free to work." The task undertaken was "the teaching of the students to lift labor out of drudgery, and to place it on a plane where it would be something to be sought after, not something to be dreaded, and, if possible, avoided."

SOME PRACTICAL RESULTS.

On page 79 we read "The visitor



The New Observatory on Central Experimental Farm Grounds, Ottawa.

who wishes to inspect the Tuskegee Institute is met at the station by a carriage built by the students, pulled by horses raised on the school farms, whose harness was made in the school shop. The driver wears a trim blue uniform, made in the school tailor-shop, and shoes by the student class-work. The visitor is assigned to a guest room in a dormitory designed, built and furnished by the students. His bathroom plumbing, the steam heat in his room, and the electric lighting were installed by the students. The oak furniture of his room came from the shops. The young woman who takes care of his room is a student working her way through the institute. After supper she will change her wearing apparel to a blue uniform dress and a neat straw hat, all made in the school. The steam laundry sends over to ask if the visitor wishes some washing done, and girl students send it back, proud of the snowy polish of shirts and collars. The visitor is asked to be a guest in the teachers' dining-hall, and most appetizing is the bill of fare laid before him; the ham, roast beef, vegetables, corn bread, syrup, butter, milk, potatoes, etc., are all products of the school farms, cared for and produced by student labor. Lest the above quotation might lead to the conclusion that in the instruction given, muscle predominates over brains, I would refer you to the book itself for its confutation. Head and hand were the twin influences brought to bear upon the pupil. Theory and practice were welded together into a harmonious whole, the busy fingers obeying the mandates of the intelligent brain, and of these united came perfect knowledge and accurate performance. The master mind decreed for his student that, "It would be wronging both him and the system to keep him at the work-bench all the time. Everything likely to help him in his career was provided for his training, because academic teaching was as important to his future calling as his skill with the plane or saw. It was made clear to him that he could not become a really good carpenter unless he had been also a diligent scholar." So, likewise in the agricultural classes. "The real examination comes in the spring—not in the written papers, but in the school orchard. Amongst the peach trees they are required to identify the 'borer' and apply to the trees the remedies laid down in their books and pictures," and this is the system applied to every branch of the education of those intelligent colored students at Tuskegee. Booker T. Washington never forgot the uplifting effect upon himself, of success in conscientious work, even in the very smallest thing, the self-respect which grew out of the satisfaction of conquering difficulties and in the growing ability "to do things and to do them well."

THE TILLERS OF THE GROUND.

When preparing for Tuskegee, Booker T. Washington visited schools, churches, farms, slept in one-roomed cabins, and studied present conditions, with a view to more thorough preparation for his life-work. He found that in a country where pigs, chickens, ducks, geese, berries, peaches, plums, vegetables and other wholesome foods could be produced with little effort, school teachers were eating salt pork from Chicago, and canned chicken and tomatoes from Omaha. The countryside abounded in fragrant flowers, but none found their way into the houses or upon the dinner-tables. The few text-books found in their cabins were full of pictures relating to city life—pictures of great office buildings, ships, street cars, warehouses; but not a single farm scene—spreading apple tree, field of grass or corn, a flock of sheep, or a herd of cows. Then followed

A BATTLE AGAINST PREJUDICE.

"The methods in vogue for getting enough out of the soil to keep body and soul together were crude in the extreme. The people themselves referred to this heart-breaking effort

as 'making a living.' I wanted to teach them how to make MORE than a living. I have little respect for the farmer who is satisfied with merely 'making a living.' For the young farmer to be contented, he must be able to look forward to owning the land he cultivates, and from which he may later derive not only all the necessities of life, but some of its comforts and conveniences." Out of these experiences, and as an important factor in this noble effort for the "uplifting of a race, grew Farmers' Institutes, Mothers' Congresses, and other gatherings for mutual help and encouragement. The chapters upon these, with many valuable testimonies as to successes and failures of methods, are well worth the reading. Many of them are full of humor, and all full of interest, and, I venture to believe, full also of instruction, even for the farmers of our own Dominion. H. A. B.

Does a Vacation Pay?

Does it pay to regain your cheerful personality?

Does it pay to slip power from its very fountain head?

Does it pay to increase your creative power and originality?

Does it pay to get a firmer grip on your business or profession?

Does it pay to regain your lost confidence by up-building your health?

Do you want to get rid of the scars and stains of the year's campaign?

Will a fresh, vigorous brain serve you better than a fagged, jagged one?

Does it pay to exchange flaccid, stiffened muscles for strong, elastic ones?

Does it pay to get a new grip upon life and to double your power to do good work?

Does it pay to put iron into the blood and to absorb granite strength from the everlasting hills?

Does it pay to renew the buoyancy and light-heartedness, the spontaneity and enthusiasm of youth?

Does it pay to get in tune with the Infinite by drinking in the medicinal tonic from the everlasting hills?

Does it pay to get rid of your nagging, rasping disposition so that you can attract people instead of repelling them?

Does it pay to get rid of some of our narrow prejudices, hatreds, and jealousies that are encouraged by the strenuous city life?

Does it pay to add to the comfort and happiness of ourselves and those about us by being brighter and more cheerful ourselves?

Does it pay to make the most of all the powers that God has given you by bringing superb health and vitality to your aid in developing them?

Does it pay to develop our powers of observation; to learn to read "books in the running brooks, sermons in stones, and good in everything"?

Does it pay to put beauty into the life, to gather serenity and poise from the sweet music of the running brooks and the thousand voices in nature?

Is it better to be a full-rounded man or woman with large views and a wide outlook, or a mere automatic machine running in the same old grooves year after year?

Is it a good investment to exchange a few dollars for a great deal of health and happiness; to economize on that on which the very wellsprings of our being depend?

Does it pay to be free, for a time, from the petty annoyances that vex, hinder, and exasperate; to get out of ruts and the old beaten tracks and take in a stock of brand-new ideas?

Is it better to go to your task with a hopeful outlook than to drag yourself to your work like an unwilling slave; to go through life halting, weak, inefficient, pessimistic, or to be strong, vigorous, self-reliant and optimistic?

Does it pay to save five per cent. of your income by economizing on your vacation this year and break down next year from the continued strain and be obliged to pay fifty per cent. for doctor's bills, besides the time lost in enforced idleness?

Does it pay the hard-worked, nerve-racked, desk-bound man to lock his business cares in his office or store and be free once more; to exchange exhausted and irritable nerves for sound, healthy ones which will carry pleasurable sensations instead of rasping ones?—[Success.



Do I Teach My Pupils, or Do They Teach Me?

(Mrs. F. E. Hughey.)

It was a dull evening. The rain beat against my window-pane in a pitiless fashion, as if to add a diminished seventh to the minor chord already vibrating in my heart-strings. Altogether it had been a dreary day. Mud was tracked on to my pretty new rug, paid for by so many hours of hard work and throbbing nerves. My pet canary, grown discouraged, had surrendered his place in life, and the sight of his empty cage brought the tears to my eyes, already tired with eight hours of black notes dancing on horizontal lines. I drew my chair up to the blazing fire in the grate, and settled down for a wailing "warum" concerning the hard lot assigned to me, of trying to convert stupidity into genius, vacuum into brains, and sticks or tow strings, in human anatomy, into things of beauty from the viewpoint of the technic.

But a bright fire is not a good developer of unreasonable dependency; and as I felt the warm glow of the coquettish flames, there seemed to dance from their flickering light, right into my heart, the picture of a little girl with yellow hair and eyes brimful of mischief. Dear little girl, I love her, but she is so heedless. She left out so many notes this morning; and over and over again we went through the simple exercise to get each note in its proper place. At last I said:

"Alice, if I should ask you to spend a month with me next summer, how would you like me to forget your breakfast once in a while, or your dinner? Or, if I should promise to take you fishing and then forget to do it, would you like it?"

Her face dimpled with amusement as she answered brightly: "I think I should remind you."

"Ah! but suppose I kept forgetting, do you think you would have a nice time?"

"No, Miss ———."

"Now, dear child, think how many times I have reminded you to put in those notes you leave out, and you still forget. Have you ever thought that your own life is like a tune, and that you cannot neglect a single duty without leaving a hole in the melody? Just as the composer knows how to use his tones, so God has a beautiful plan for each life, and if you omit one duty, one privilege, your outline is spoiled. Every note has its place, just as every little girl has. Sometimes it is on the playground, sometimes in school. It is sometimes serious, sometimes gay, sometimes slow, and sometimes fast; but always it must be its best wherever, however, whenever used."

Sweetly serious grew the blue eyes as my meaning dawned on the bright little mind.

"Oh! dear Miss ———, I never knew music was like that; I thought it didn't matter so much. I will try harder now. I am sure I can get every note in next time," and with a loving kiss she gave place to a little boy.

Here I leaned forward to put a stick on the fire. I took off my shoes and put on my slippers.

"Oh, dear!" I thought, "why must I think of that boy! He is the plague of my life, and I am tired; I won't think of him."

But thought asks no permission to enter the brain, and, besides, that boy had suggested to me a lesson, an uncomfortable one, 'tis true, but one I might as well work out. So I closed my eyes and set about the task.

In the first place, his hands are never clean. His mother dresses exquisitely. She always looks as if just liberated from a band-box. But she is too daintily gotten up to be rumpled or crumpled by children, so she goes to a reception and leaves the lad to his nurse, or his own devices, the latter generally

leading him into the dirt, from which he emerges too late to stop for anything, and comes to me tardy and dirty, with a rebellious look on his face.

Lesson one: Neglected duty by one is an added burden to another.

This morning I got his hands washed, and then asked for his scales. He hadn't practiced them.

"Why?"

"They are no good anyhow."

My heart sank. I wondered if they were. "Charley," I said brightly, "how do you like that new picture of mine?"

"I say," he answered, "that's great! Where did you get it? What's that man doing on the wall?"

"Don't you see? He has scaled the wall of the fort, and in spite of the fire of the enemy, has placed his flag on the highest point."

"You bet, he was brave!"

"Yes, he was. How do you suppose he grew so?"

"Born of the right stuff."

"So he was, and just as well bred.

He went to school where he had to do a lot of silly things. To put his gun

down, to put it up, to walk forwards, to face about. He had to do what the officer told him, silly or wise, over and over again every day for months. It was very poky. It seemed foolish; but he learned the greatest and hardest lesson of life. The lesson that makes great men, wise men, rich men, good men—self-control. He learned to do his duty patiently, promptly, thoroughly, cheerfully; and to do his best, whether he saw the sense or not. And now he is famous. He saw the chance to capture the fort, and because he had learned to obey, he faced death just to raise a flag; but it has introduced him to the admiration of the world. I guess you wouldn't have done it; would you, dear?"

The boy sat still and thought earnestly, his eyes on the picture, and then he played his scales. One mistake after another. His thumb on the wrong key. The wrong finger over. A natural for a sharp, then the wrong note sharpened. A muttered "Gee!" His forehead in a pucker. But finally we got the tangle straightened, and it went smoothly. Putting my hand on his shoulder, I said, "Bravo, my soldier boy! You have conquered your worst enemy. Never forget: 'His not to question why, his but to do or die,' and this will be a lesson well learned."

Now I must face the same lesson, for a general is not fit to command until he has learned to obey. A guide is not to be trusted until he has learned the way, every step. Can I teach until I have learned the lesson first? Am I sounding every note in the melody of my life, true, and in the right place? Am I striking wrong notes? Am I obeying my Master in the practice of daily duties? Am I honest in every move, doing His will, even when longing to follow my own whims? "Oh, my Master," I cried, "teach me to yield my will, and to obey Thee as well as my little ones obey me; and, oh, help me to be patient with them as Thou art with me."

Verily, "A little child shall lead them." God bless to us the lessons they teach. For they return to us far more than we give to them.—[Part of a Prize Essay from "The Etude."

Gems of Thought.

It is worth five thousand dollars a year to have the habit of looking on the bright side of things.—Samuel Johnson.

He who resolves to do one thing honorably and thoroughly, and sets about it at once, will attain usefulness and eminence.—F. P. Roe.

The greatest wisdom of speech is to know when, and what, and where to speak; the time, matter, and manner. The next to it is silence.—Robert Southey.

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Puzzle Competition.

XVIII.

The initials of the two sets of words, read downwards, will name two famous painters.

- 1.—A bird—change the first letter and it is a form of rain.
- 2.—Part of a verb—change the first letter and it is a geological substance.
- 3.—To chatter—change the first letter and it is a fireplace.
- 4.—A pronoun—change the first letter and it is to point.
- 5.—Assistance—change the first letter and it is to release.
- 6.—Part of the body—change the first letter and it is a sailor.
7. The greatest Christian grace—change the first letter and it is a town in Sussex.

XIX.

My whole is a well-known country.
My 134 is often used in hot weather.
My 2 3 5 6 is going at great pace.
My 5 3 4 6 all boys fear, more or less.
My 1 3 5 6 is what we all possess.
My 4 6 3 2 is never far away,
My 1 2 3 4 5 is a coin.
My 5 2 3 4 6 is a large bird.

XX.—A Charade.

A beggar asked an alms
Of a person in the street,
And for an answer got my "first,"
Which oft his ears did greet.
He told another man
Whom unto him he beckoned;
He did not seem at all surprised,
But only said, my "second."
My "whole" a voyage made
In a very ancient ship;
'Twas not for purposes of trade
He took the wondrous trip.

XXI.—A Lipogram. (Supplying missing vowels.)

"I l k th b y wh wh st l s
Wh n th n g s r l l wry.
Wh b l s t r s p h s c r g
nd n v r s t p s t cry."

XXII.

Why is a room full of married people like an empty one?

XXIII.

When is a cigar like a ham?

The answers to the puzzles given in the last three numbers of the "Farmer's Advocate" should be sent in one list. Number your answers correctly—from I. to XXIII.—even though you may only be able to solve a few of the problems given. All under sixteen may compete. Write your name, age and address plainly at the end of the list of answers and send before the end of July to
COUSIN DOROTHY,
Box 70, Newcastle, Ont.

The Blind Man.

He was an old man—an old blind man. No friends! No home! No friends, did I say? Yes, he had one—his faithful dog. Once old Daniel, as we will call him, had a happy home, a bright, happy home; but the loved forms who had dwelt there had faded by his side. He had looked on, and felt himself powerless to prevent the grim form of death from coming and robbing him of his loved ones; but one by one they had perished, all save one, and she was married, and gone, he knew not where. She had married against his will, and he had promised never to speak to her again. When he was left alone in the world, he would have gladly sought for her, but he knew not where to seek.

Very soon he began to drink (to deaden his sorrow), and then to gamble, until he lost all his money.

One night, in a drunken row, he had his eyes so badly damaged that they became of no more use to him. Since then he had roamed through the streets, led by his faithful dog, "Trot." Sometimes he would be chilled through by the keen frosts of winter, and, again, weak with the fierce heat of summer. Truly, it was a sad life that old Daniel led. One cold day, when he had been out

from early morning and had received nothing, the wind was piercing, and the old man shivered and trembled so that he was unable to walk any farther, and he sank on the sidewalk. Soon he felt the cord jerk, which he held his dog by, and he knew that some one was putting some money in the little basket which the dog carried. Then a soft voice said: "Why do you sit here in the cold?" "Because I have nowhere else to go," said Daniel, feebly. "Oh, then, come home with me," cried little Marion. "Come," she repeated, taking his hand; and old Daniel, not knowing what else to do, allowed her to lead him away. They soon came to a large house, and his little guide led him up the marble steps and into the warm hall. "Mamma," said Marion, as her mother came to meet her, "this old man has nowhere to go, may he stay here?" "But, Marion, my pet," exclaimed Mrs. Russel, "who is this old man?" "Oh, mamma, I don't know, but mayn't he stay?" Mrs. Russel led Daniel to a seat, and by degrees got him to tell her his sad story. When he spoke of his lost daughter, Mrs. Russel grew white. "And," continued Daniel, "I'll never hear of her again, madam." "Father, dear father," was all the answer he got, as Mrs. Russel threw her arms around his neck, "I am she; you have found your daughter at last."

I do not need to say that old Daniel was well cared for until he died. Trot, his faithful dog, who had served well in times of hardships, was not forgotten in times of ease. Now he lies blinking at the fire, and wonders (if dogs can think) if the past is not a horrid dream.

(The end.)

LUCY COWAN (aged 13).
Hintonburg, Ont.

A Day on a Canadian Farm.

Some people like the city better than the country. I think I prefer the country, where there are lots of birds and flowers. It is beautiful to see the little lambs and calves playing about in the fields.

One day we had two cousins, Harry and Lucy, visiting us. As they had lived in the city all their lives, it was a treat to take a trip to the country. We planned to have a picnic all by ourselves. So the next morning we were up with the lark, had our breakfast, and did our work. We made up our lunch, and about nine o'clock my sister Grace, my two cousins and myself started on our trip. We went through lane and meadow, until we came to a beautiful wood—you can imagine how beautiful it would look in the autumn when the trees are decked in their robes of yellow, green and red. So we went through the wood first.

There were many things to see, such as birds flying about among the trees going to their different homes, squirrels hopping among the branches, and once in a while you will see a rabbit or fox. We played hide-and-seek among the trees for a while. All at once a curious kind of bird flew right in front of me. We traced it until it flew into a large tree; we waited until it flew away. When we looked we saw a nest still more curious; it consisted of two leaves, a dead leaf sewed to the living one, and lined with fine down, and in it were five little eggs. We afterwards heard that it was called the tailor-bird, on account of its sewing leaves together for a nest. We heard Tiny, our dog, barking, and going in the direction of the bark, we saw Tiny in the middle of the creek fighting furiously with a ground hog. "Just you wait," said Harry, "and you will see some fun." The ground hog turned, spitting and hissing. The dog seemed afraid to attack him, but at last he summoned up enough courage and made a dash at him, grabbed him by the neck and shook him until he was sure he



The RUTH SELF FEEDER does not consist simply of a device for cutting the bands and another for forcing the grain into the threshing cylinder. The RUTH differs from all other feeders because it holds the cut bundles and bunches until the feeding cylinder thins them out properly, and then lets them go steadily to the threshing cylinder.

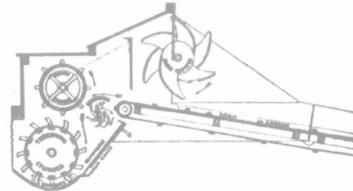
Study the sectional view and see that the grain is brought under the band knives (detachable and renewable) on a grain-tight carrier that does not leak and has no sprocket chains to break. Then the grain passes under a swinging deflector to the retarder, which positively holds the bundles and bunches until the feeding cylinder combs them out to the proper depth, passing the grain directly downward to the threshing cylinder at the proper angle. All of this operation is perfectly controlled by the governor.

Compare this with the action of any other feeder. No other feeder has the positive retarder. All others have one or more devices for pushing the grain in, instead of holding it back, as was done in hand feeding.

RUTH SELF FEEDERS and repairs are kept in stock at London, Ont.

All thresher companies can supply and attach RUTH SELF FEEDERS, which fit readily on any make of thresher.

For catalogues and other information call on or address



PARSONS BAND CUTTER &
SELF FEEDER CO.

LONDON, - - ONTARIO.

Box 433,

was dead. He then buried him for another time. As we were at the creek, we got out our fishing-rods and tackle and started to fish. We got on fine, landing about a dozen small ones and two or three large ones. We then got our baskets and found a shady spot, where we ate our lunch. After lunch we went down the creek until we came to a place where the road crossed; we took the one to the right. We had only gone a little piece when we came to the

place where there were quite a few nut trees, so we filled our baskets with bechnuts, butternuts, and hazelnuts. Then we turned towards home. When we reached home we were glad to see supper was waiting for us, as we were as hungry as bears. We went to bed at night pretty tired, but we all said it was the happiest day we had spent for a long time. RUBY WILSON.
Hawkestone, Ont. (Aged 15.)



Hot Weather Hints from Helponabit.

Dear Dame Durden,—I thought the Ingle Nookers would like a recipe for salad dressing, so I send one that I have used for years. I make a Gem jar full, and keep it ready: Three eggs, 1½ cups of milk, 3 tablespoonfuls melted butter, 1 of mustard, 1 teaspoonful of salt, ¼ cup of sugar, 1½ cups vinegar. If you have cream the butter will not be needed. Put the milk or cream into a double boiler, and while it is coming to a boil mix the sugar, mustard and salt smooth with cream or milk, and beat the eggs lightly; then add all to the milk or cream in the boiler. Let it cook for a few minutes, as for a boiled custard, then add the vinegar when it has cooled a little. This dressing is good for potato, cabbage or lettuce salad.

A Nice Cool Dish for Summer.—Boil hard as many eggs as are needed for the family, and leave them in cold water until needed. Wash and cut up lettuce fine, and mix the dressing with it. Put it neatly into a salad bowl or on a meat dish. Take the shells off the eggs and cut them into halves, then into quarters, and arrange them on the lettuce. The yellow and white eggs look very pretty on the green lettuce. This dish would be liked when meat would not be touched, and is a nice dish for tea or Sunday dinner. I think every member of the Ingle Nook who has a garden ought to have plenty of lettuce all the summer. It is so easily grown, but requires the richest of soil and plenty of water to make it grow quickly, and the more quickly it grows the crisper it will be. The Nonpareil is a good outdoor lettuce. By sowing a little patch every two weeks you can have a supply of this excellent vegetable till the frost comes.

HELPONABIT.

York Co., Ont.

Busy Bee's Budget.

Dear Dame Durden,—Here I am again! Since writing last I have enjoyed so many chats from the other "Nookers" that I am inspired to write again. Indeed, sometimes I have a real longing to put all my thoughts on paper and send them right off to you, but proper expression of those thoughts does not always come easy, and then again, there are so many visitors to be received, and all must have a place at your cosy fireside.

Many are the useful hints thrown out by correspondents, and every time I read them I wonder if any of the writers have discovered as many uses for common coal oil as I. My teakettle became so badly smoked when the wind blew down the chimney that it was difficult to clean. I thought of coal oil; the black marks fled before it. There is nothing better to brighten and clean a copper boiler inside and outside. Any nickel or steel parts of the range respond wonderfully to an application of the oil. Simply saturate a cloth with it and rub the dirt and grease off well, and then polish with a dry cloth. It will clean paint, and remove the gummy mixture from fly paper that has stuck to any-

thing, if not allowed to remain too long. Perhaps I am like the fly paper—sticking too long to my subject.

You spoke of receiving suggestions regarding the furnishing of the dining and sitting room. Our sitting-room is done in green ingrain paper—I think it is the olive shade—with crimson table cover and hangings, though the latter scarcely deserves the name, being only a curtain at the stairs; but the color makes a nice contrast to the cool green walls, and with white curtains on the three large windows, there is no other room so nice to my eyes.

I would like to say, though the subject has been concluded, that I am a town-bred girl, but would very much regret leaving the country if ever I were called upon to do so. We have work in plenty, but we have advantages far superior to our town sisters. I should like very much to add a few more lines to "Cousin Bee" about working single-handed, but am afraid this letter is already on its way to the wastebasket. Wishing you and the chatters a happy summer-time. BUSY BEE.

Lanark Co., Ont.

P. S.—Is it consistent with the rules of the Nook to ask for the names of correspondents, with a view to corresponding with them? If Cousin Bee would care to write me I might give her some suggestions that might help her as they help me, especially if she has little ones. B. B.

If Cousin Bee wishes to write to Busy Bee, and will send me a letter enclosed in a stamped envelope, I shall be pleased to address and forward it. I may say, however, that we shall be very sorry to lose those helpful "suggestions" from the Ingle column, Busy Bee.

An Ironing Board.

Dear Dame Durden,—I just want to thank those who so kindly replied to my query re butter bowls. In fact, I feel quite indebted to them, and I have no doubt their replies would also be helpful to others as well.

Since the warm weather has come, there is so much ironing of little skirts, dresses, etc., that I have been wondering if all our "Ingle Nook" readers have an ironing-board. Mine is a very simple one, but so very useful that I think I must tell how it is made. It is a one-inch pine board, about 16 inches wide at one end and tapered to about 6 inches at the other, and is 4 feet long. Mine is rounded at both ends, but I think it would be better square at the large end. I covered nine on one side with cotton batting, then with the good end of a worn sheet tacked over. Put one end on the table, the other on a chair, and slip the skirts, etc., to be ironed over, so that one part is not crushed while the other part is being done. I have a little screw-eye screwed into one end to hang it up.

I am not going to write on this new subject, re house furnishings, but will be on the tip-toe of expectation for some good letters on this important subject.

Yours gratefully, MARTHA.
Abba.

Five Roses

flour is not kept by any grocers, although it is sold by all. The price and quality of this brand is such that all wise house-keepers insist on having it, as its superiority over ordinary brands is beyond question.

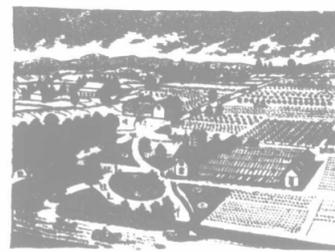
Ask your grocer for it.

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and SHRUB STOCK,

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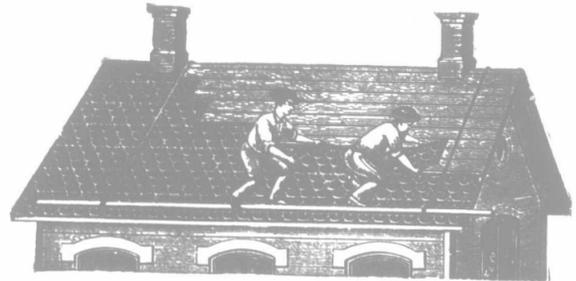
Write for terms and catalogue, and send 25c. for our HANDY ALUMINUM POCKET MICROSCOPE, useful to Farmers, Fruit Growers, Florists, Teachers, Students, everybody.

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FIRE, WATER AND LIGHTNING PROOF.

Send in your order for as many squares (10x10 feet) as you require to cover your new or old building. The very best roofing for this climate. We can supply Nave Spikes, Tubes

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

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Write Your Nearest Office.

WE WANT TO HELP YOU MAKE THE FARM PAY

If you can do away with two or three helpers and one or two horses, this will mean money in your pocket. The harvest months are near at hand, and during the summer there will be a constant demand for help for various work around the farm.

Fairbanks-Morse "Jack-of-all-Trades" Gasoline Engine

is the assistant you want, strong and hardy, never strikes, never kicks, always works, never sleeps, wants but little care, asks no salary, needs no watch, and works for your interest alone. **It Saws Wood, Grinds Feed, Shells Corn, Pumps Water, Runs Cream Separator, Runs Thresher, etc., etc.** The Jack-of-all-Trades Gasoline Engine is sent to you

all set up and ready to run or delivered ready to connect to your pump. **There are over 40,000 in use at present.**

The labor one of these engines saves will pay for itself in a few months. We want to explain further regarding our proposition, and if you will cut out the coupon below and mail it to us we will send you free particulars and pictures showing the engine in actual operation on different farms.

Write to-day. Don't delay, and we will show you how the up-to-date farmer runs his farm economically.

Clyde, N. Y., Sept. 25, 1904.
Fairbanks, Morse & Co.:
Gentlemen,—
I have used one of your 2 h.-p. Jacks for a year in my evaporator and on the farm, sawing wood, cutting feed, grinding feed and pumping water. I can saw stove wood as fast as two men can handle it, and cut cornstalks with an eighteen-inch cutting box as fast as two men can handle the stalks. To sum it all up, it is the best and cheapest power I ever saw. I have run it 6 or 8 days on 5 gallons of oil. I have sold five of your engines, and every man who has bought one is more than pleased with his machine.
Yours truly,
JOHN M. GILLET.

CUT OUT AND SEND US THIS COUPON

The
C. F. CO.
Please send me a copy of "Ideal Help Talk," and all information regarding your Jack-of-all-Trades Engine for general farm use.

The Canadian Fairbanks Co., Ltd.
444 St. James St., Montreal.

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This distressing and disfiguring trouble that you have tried in vain to get rid of yields to

GOITRE SURE CURE

We've used it for years in our work here with gratifying success. External and internal treatment. Price, \$2, express paid.

SUPERFLUOUS HAIR eradicated by Electrolysis. Satisfaction guaranteed. Send 10c. for books and sample of Cream.

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

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

BARGAIN—\$3,500 for 200-acre farm, about 40 miles from Toronto. Good buildings and stream. F. A. Mason, 158 Bay St., Toronto.

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

WANTED—Parties having land, village property or a business for sale to write us. We have buyers who will pay cash for good propositions. Address, Western Business Agency, 505 Main St. Winnipeg.

WANTED—Married man having experience with Shortorns and fattening cattle, to take position on stock farm. Apply Box 581, London, Ont.

WANTED, at the Mt. Elgin Industrial Institute, a man for general work—single and of middle age preferred. Permanent employment. References needed. T. T. George, Principal, Muncey, Ontario.

Notes from Penelope.

Dear Dame Durden,—I had intended to write to the Ingle Nook to ask as "Edith" did, how the clever "Octavia" earns so much money advertising, and I shall write anyway to tell you how much we enjoy the Ingle Nook, especially that much-discussed question started by the Illinois woman's letter. Everyone in the house was watching what would be said next, as the subject is often discussed here, as I think, in every farmhouse, playfully or otherwise, and really it was very provoking when we read that the Illinois woman shouldn't have complained. I presume she had nothing to complain of. Of course, a complaint doesn't remedy the evil, unless her husband reads our letters, and if he does, we have not been half hard enough on him. She does little more than my mother used to do, and many of our mothers who were early settlers; but what I do think wrong is that the wife does work on the farm, or used to, her work being of a great deal of value, and when the husband wills his property he leaves it to "the boys," and the mother is assigned her "keep." This is not, as a rule, fair nor pleasant when the boys marry.

I am sure "A Wisher to be Helpful" has a happy, cheerful home, as her plan of housekeeping shows.

Here is a recipe for roll jelly cake which is excellent: One cup sugar, 2 heaping teaspoons baking powder, 3 teaspoons water, the yolks of 3 eggs, 1 cup flour. Stir well together, then add the whites of the three eggs beaten stiff. Bake at once in a rather hot oven.

Could anyone tell me how to make a chocolate drink? Also how to clean gilt picture frames without injuring the gilt?

I have just one housecleaning suggestion: A strip painted dark red or brown down the center of uncarpeted stairs is much preferable to having them painted all one color.

For anyone who is interested in

poultry, I would suggest millet seed for little chicks, even for their first feed. We find it the best for chickens, and it is so convenient. Wishing the Ingle Nook continued prosperity.
PENELOPE.

The following recipe for a chocolate drink has been taken from a "cook-book" which is generally regarded as an authority: For each cup required use one cup milk and one square chocolate (equal to a little over a tablespoonful of grated chocolate). Put the cold milk in a saucepan; grate the chocolate and dissolve in a little warm water, then add to the milk. Stir until the chocolate is thoroughly incorporated, and let the milk boil up once. Beat well to make smooth, sweeten a little if necessary, and serve at once. Add a little more hot milk if this seems too rich. Some use one-third water instead of all milk. This, of course, is a matter of taste.

The following methods of cleaning gilt frames may be found satisfactory: (1) Dissolve one tablespoonful of washing soda in one-half pint hot water, and when cold add one-half pint lime water. Sponge the frames carefully with this, then with cold water, and dry with cotton batting. Do not have the sponges too wet for fear of softening the glue which fastens the gold leaf to the frame. (2) For the cheaper so-called "gilt" frames: Mix one ounce of soda with the whites of three eggs, and apply to the frames with a soft brush, rubbing till the dirt comes off. If there are any scraped patches, cover the spots with a little Diamond gold paint. (3) Washing the frames with water in which onions have been boiled, has also been recommended, but we do not know where in the efficacy of the onions lies.

All is not gold that glitters, and all do not shine in society who think they do.

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

An Englishman was accosted thus: "What will you take to stand all night in the dome of St. Paul's?"

"A beefsteak and a pint of beer," was the frank reply.

The next one accosted was a Scotchman:

Says Sandie: "What will ye gie?"

Lastly came along Patrick, and when he was asked what he would take to stand all night in the dome of St. Paul's, he willingly answered:

"Shure, an' I'll be apt to take a bad cowlid."

IT MUST BE WELL FOUNDED

Steady Growth in Popularity of Dodd's Kidney Pills.

Made by Cures Like that of Simon V. Landry—He Tells About It Himself.

RIVER BOURGOIS, Richmond Co., C. B.—July 10th.—(Special).—Among the many men in this part of Canada whom Dodd's Kidney Pills have relieved of aches and pains and weakness and made strong and able to do a good day's work is Mr. Simon V. Landry. Mr. Landry has numerous friends who can vouch for the story he tells of his cure.

"I was bothered for over a year," he says, "with lame back, weak legs, palpitation of the heart, general weakness and shortness of breath; in fact, I could not work and was a total wreck."

"I could not get anything to help me till I tried Dodd's Kidney Pills. But they did me good and no mistake. I used three boxes and I'm back at work again."

It is the cures they make that make Dodd's Kidney Pills so popular. Their popularity has grown steadily for thirteen years. It must be well founded.

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

THE LEAVENWORTH CASE.

By A. K. Green.

CHAPTER XXXIII.—Continued.

"And is that all?" I asked, "Did she never give you any information in regard to the transaction which led to her flight?"

"No, sir. Neither then nor when upon the next day, I confronted her with the papers in my hand and the awful question upon my lips as to whether her flight had been occasioned by the murder, did she do more than acknowledge she had run away on its account."

"Mrs. Belden," I interrupted, "pardon me, but you said in the beginning of this interview that you did not believe Mary herself had any direct hand in her uncle's murder. Are you ready to repeat that assertion?"

"Yes—yes, indeed. Whatever I may think of her influence in inducing it, I never could imagine her having anything to do with its actual performance. Oh, no; whatever was done on that dreadful night Mary Leavenworth never put hand to pistol or ball, or even stood by while they were used. Only the man who loved her, longed for her and felt the impossibility of obtaining her by any other means, could have found nerve for an act so horrible."

"Then you think —"

"Mr. Clavering is the man? I do, and oh, sir, when you consider that he is her husband, is it not dreadful enough?"

"It is, indeed," said I.

Something in my tone or appearance seemed to startle her. "I hope and trust I have not been indiscreet," she cried.

"You have said nothing," I said. "No one can blame you for anything you have either said or done to-day. But I wish to ask one thing more. Have you any reason beyond that of natural repugnance to believing a young and beautiful woman guilty of a great crime, for saying what you have of Henry Clavering?"

"No," she whispered, "none but that." I felt the reason insufficient, and turned away with something of the same sense of suffocation with which I heard that the key sought for had been found in Eleanore Leavenworth's possession.

By some indefinable impulse I went immediately upstairs, and took my stand at the western window of the large room directly over Mrs. Belden. Did the circumstantial evidence even of such facts as had come to our knowledge preclude the possibility that Mrs. Belden's conclusions were correct? Was it impossible to find evidence yet, that Henry Clavering was, after all, the assassin of Mr. Leavenworth?

Filled with the thought, I looked across the room to the closet where lay the body of the girl who, according to all probability, had known the truth of this matter, and a great longing seized me. Oh, why could not the dead be made to speak?

Carried away by the fervor of the moment, I made my way to her side. Ah, God, how still!

With a feeling that was almost like anger, I stood there, when—oh, what was it I saw protruding from beneath her shoulders where they crushed against the bed? an envelope? a letter? yes.

I stooped in great agitation and drew the letter out. It was sealed, but not directed. Breaking it hastily open, I took a glance at its contents.

This is what I saw rudely printed in lead pencil on the inside of a sheet of common writing paper:

"I am a wicked girl. I have known things all the time which I had ought to have told, but I didn't dare to, he said he would kill me if I did I met the tall splendid-looking gentleman with the black mustash who I met coming out of Mister Leavenworth's room with a key in his hand the night Mr. Leavenworth was murdered. He was so scared he gave me money and made me go away and come here and keep everything secret, but I can't do so no longer. I seem to see Miss Eleanore all the time crying and asking me if I want her sent to prison. God knows I'd rather die. And this is the truth and my last words and I pray everybody's forgiveness and hope nobody will blame me and that they won't bother Miss Eleanore any more but go and look after the handsome gentleman with the black mustash."

(To be continued.)



Royal Household Flour Yields Most Nutriment.

Only when flour is absolutely pure do you get highest nutriment and least waste.

Purity in flour is secured only by the highest development of the science of milling, and the makers of Royal Household Flour have developed milling to the highest point of perfection in this country.

The Royal Household Electrical Purifying and Sterilizing Process is the most thorough in the world—it is controlled exclusively in Canada by the Royal Household Mills—and that is why Royal Household quality cannot be duplicated in Canada.

That's why Royal Household Flour is the richest in nutriment, greatest in purity—That's why it is the flour every family should use—the kind that gives the sweetest, best flavored bread and most toothsome pastry.

If you want that kind of flour see that you get Royal Household, then **send for the recipes** so that you may use it in the Royal Household way.

Ogilvie's "Royal Household" Flour.



Central Canada Fair

AT OTTAWA

Sept. 8th to 16th, 1905

A Great Show for the Stockman

28 Gold Medals as Special Prizes in Horse and Cattle Classes

Enlarged Grounds

New Buildings

This Year, \$86,000 being Expended

Write Secretary E. McMAHON for a Prize List

ADVERTISE IN THE ADVOCATE.

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

Recipes.

Oat Cakes: Two and a half cups "Five Roses" flour, 2½ cups oatmeal, 1 cup sugar, 1 cup butter; rub these together, and mix to a dough with half a cup of lukewarm water in which 1 teaspoonful of soda has been dissolved; roll thin; cut like cookies, and bake in a rather hot oven.

The gravel and manure loading machine manufactured by A. S. Milne, of Leaskdale, Ont., and advertised in this paper, appears to have passed the experimental stage, as we are informed that one of these machines is successfully loading 500 yards of gravel per day on the James Bay R. R. in common wagons, which will be replaced with dump wagons in a short time. Note the advertisement, and write for particulars.

LAST MOUNTAIN VALLEY

Steamboat Service now in operation.

Railway Service to Strassburg by July.

Write for Free Books, Maps, etc.



"OPENING OUT NEW FARM."

The finest Wheat Land in North-east Assinibolia. "A section is a fortune." Average crops for five years, 25 bushels per acre.

WM. PEARSON & CO.
WINNIPEG, MAN.

No other Soap has ALL the qualities of **Baby's Own**

King Baby Reigned

Baby's Own Soap
Pure, Fragrant, Cleansing
The best for delicate skins
Albert Toilet Soap Co., Mfs.
MONTREAL.

IS INVALUABLE TO SUFFERING WOMEN



It is a Grand Remedy, having brought health and happiness to thousands of ladies all over the world. It will cure you, too. A free sample will be sent by addressing, with stamp, Mrs. F. V. CURRAH, Windsor, Ont.

ELM GROVE SHORTHORNS

We have for sale some good young cows and helpers, of the Fashion and Belle Forest families, in calf to Scottish Rex (imp.) or Village Earl (imp.), our present herd bull. For prices and particulars address

W. G. SANDERS & SON,
Box 1133, St. Thomas, Ont.

"I must confess," said Maud, "that I am disappointed in Harold. He isn't a bit original or quick at repartee."
"How do you know?" asked Mamie.
"I said I couldn't express my feelings, and he didn't tell me to send them by freight."

With the Flower's

Re Tulips.

Miss M. M., Dunganon, Ont., writes: "Will you please publish in the flower department instructions regarding the treatment of tulips? Should the bulbs be taken up as soon as they are done flowering? Where should they be kept if taken up? How soon should they be planted again in the fall? Should the bulbs be divided? . . . I like the 'Farmer's Advocate' very much. It is a very helpful paper."

Ans.—When the tulips have ceased blooming and the foliage has ripened off thoroughly, take the bulbs up, dry them, and store them away in a cool place—the cellar will do very well if it is not too damp. In the fall, just before hard-freezing weather sets in, divide the bulbs and reset them. In preparing the bed, dig the soil up and pulverize it thoroughly to a depth of about a foot. Sandy loam, enriched with leaf-mould and well-rotted manure, is best, and should be given the bulbs if possible. At all events, do not put fresh manure near the bulbs; fresh manure, in fact, should never be placed near bulbs of any kind. Having prepared the bed, make holes 4 inches apart each way, and of such a depth that the bottom of each bulb may be 4 inches below the surface. Place a handful of sand in each, set the bulbs, and firm the soil about and above. When the ground begins to freeze cover the bed with light, loose litter of any kind—dry leaves, straw manure, etc.—placing brush over to keep it down. In the spring, when all danger of severe frost is past, remove the covering gradually, and work the soil a little to suppress weeds. The tulips will require very little care other than this until after they have bloomed.

GOSSIP

Mr. T. S. Cooper, Coopersburg, Pa., is reported to have purchased from the Gedney Farm herd at White Plains, N. Y., a Jersey bull calf, by Golden Fern's Lad, and out of Blue Bell, for \$3,000.

Desirable horses are in better demand than for a number of years, and prices are ruling higher. Once more the prophets of evil, who declared that the bicycle and auto would drive the horse out of business, have proven false. So long as the money circulation remains high, the demand for horses will be good.

Young stock gain faster to the amount of feed than older stock. The same feed will make more pounds in the yearling than in the two-year-old, and so on. Hence, if one wishes to get the highest possible price for his feed, he should give it to calves and yearlings—let others feed the three- and four-year-olds.

A Durable Machine
To be a permanent benefit a Cream Separator must be durable. The improved

U. S. Cream Separator

will outwear any other. We'll tell you why: All the working parts are enclosed and protected from dust, grit and damage. Those moving at high speed run in oil on steel balls, which greatly reduce wear. All the steel, bronze and tin used is carefully inspected, and is of the highest quality money can buy. Throughout the whole machine the parts are few, simple and easy to get at. Each completed machine is put to a thorough test before shipped. The U. S. Factory is supplied with the most accurate and efficient machinery to produce exact duplicate parts, and only skilled workmen are employed.

PRactical PROOF
But the best proof of durability is what the machine has done in actual use. In our "Dairy Separator Catalogue" we have printed a few of the thousands of letters received from satisfied users. (Some of them have used the U. S. for ten years or over.) Their testimony is worth something to you. Write for this book now. It will interest you.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.
Prompt deliveries. 18 Distributing Warehouses in United States and Canada.

TRADE TOPICS.

THE SUCCESS LINE.—Among concerns very well known to threshermen for the general excellence of their products is the Parsons Band Cutter & Self-Feeder Co., who were the pioneers in making a successful band cutter and self-feeder for threshing machines. This company has lately made transfer and storage arrangements in London, Ont., and will keep in stock such machines and repairs as are offered to the trade here, chief of which, for this season at least, will be the well-known Ruth Self-feeder, for a number of years made at Halstead, Kansas, but now owned by the above named company. The "Success Line," the trade name so fitting to that company's goods, comprises the Parsons feeder, the Ruth feeder, the Buffalo hay press, Success corn husker and shredder, Success engine stoker, Success engine tender, Success belt guide, and Success feed water strainer. The "Success Line" is represented in Ontario, at London, by Mr. A. H. Shoemaker, and in Western Canada, at Winnipeg, by Mr. C. D. Kimble, manager for Parsons Hawkeye Mfg. Co., sales agent.

THE ONTARIO WINTER FAIR, 1905.
It has been decided that the next Provincial Winter Fair shall be held at Guelph, Ont., December 4th to 8th. These dates are the week following the International at Chicago, so that the exhibitors may be enabled to show their animals at both exhibitions. The total value of cash prizes to be offered amounts to \$9,000. This means that large increases have been made this year to the prize money of several departments. The prize list will be ready for distribution shortly, and any person wishing a copy may obtain one by sending his name and address to A. P. Westervelt, Secretary, Parliament Buildings, Toronto. Judges have been appointed as follows: Cattle: J. T. Gibson, and one other not

finally appointed. Beef Carcasses: Prof. G. E. Day, A. W. Tyson. Sheep: Southdowns, Shropshires and Dorset Horns—J. C. Duncan, Lewiston, N. Y.; reserve, Robt. Miller, Stouffville, Ontawolds, Leicesters and Lincolns—Jas. Snell, Clinton; reserve, Geo. Weeks, Glanworth, Oxford, Suffolks and Hampshires—Lazarus Parkinson, Greenock; reserve, Wm. J. Arkell, Teeswater. Grades and crosses and sweepstakes—J. C. Duncan; Jas. Snell; referee, Prof. G. E. Day. Sheep Carcasses—Prof. G. E. Day; Geo. F. Morris, London. Swine: Yorkshires and Tamworths: Wm. Jones, Mt. Elgin; reserve, A. C. Hallman, Breslau. Berkshires—R. H. Harding, Thorndale; reserve, J. C. Smith, Hintonburg. Chester Whites and any other breed, grade or cross—G. B. Hood, Guelph; reserve, Peter McEwen, Kertch. Live Bacon Hogs—Prof. G. E. Day; Wm. Jones, and Dr. F. J. Smale, Toronto. Bacon Carcasses—M. Cumming, Truro; a second judge to be appointed. Dairy—Prof. H. H. Dean. Dressed Poultry—W. R. Graham, Guelph, and Wm. Barber, Toronto. Judging Competition—Prof. G. E. Day.

Volume 61 of the American Shorthorn Herdbook has, through the kindness of the Secretary and editor, Mr. John W. Groves, Chicago, been received at this office. It is a bulky, well-bound volume of 1,216 pages, containing pedigrees of animals calved before Dec. 27th, 1904, of 5,791 bulls, numbered from 225,614 to 231,405, and about twice as many females.

Some fifteen miles east of Stirling, Alberta, there is gathered together practically all the sheep in the Territory, some 75,000 being herded there, for the shearing. About 40 men, under charge of contractor J. Harman, are piling up the fleeces, and it is expected that nearly a month more will be required to finish the shearing.

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

TRADE TOPICS.

DAIRY APPARATUS.—C. Richardson & Co., St. Mary's, Ont., have issued a very complete new catalogue (illustrated) of all the lines of dairy supplies which they handle, both for cheese and butter making.

JACK-OF-ALL-TRADES GASOLINE ENGINE.—In another column will be found an advertisement of the "Jack-of-all-Trades" Gasoline Engine, an implement for which the manufacturers claim an unexampled combination of the qualities which make gasoline engines so useful on the farm. Convenience, safety, economy, efficiency, are but a few of its many superior points. The ad. is convincing, but if after reading it you still doubt, write for further particulars and information to the Canadian Fairbanks Co., Ltd., 444 St. James St., Montreal.

CENTRAL CANADA FAIR.—Ottawa's Great Fair, the Central Canada Exhibition, which is to be held September 8th to 16th, promises this year to be the best in the association's history. The sum of \$86,000 is being expended in enlarging the grounds and adding new buildings. The prize-list has also been increased. Special inducements are offered stockmen, and no less than twenty-eight beautiful gold medals are given as special prizes in the horse and cattle classes. The exhibit of live stock is always first-class at this fair, as the directors leave nothing undone to please stockmen and breeders. Every want of the breeder is filled. The accommodation is second to none in Canada, and those who have not yet exhibited at Ottawa can not do better than give the show a trial. The grounds, as enlarged, are almost seventy acres in extent. Mr. E. McMahon, the Secretary, will be pleased to forward prize-lists on application.

Sheep are still holding their position as the steadiest element in the live-stock market, and it would be well to increase the breeding flocks by holding from market the best ewe lambs.

Messrs. S. Price & Sons, of Erindale, Peel County, Ont., have secured from the herd of Sir Wm. Mulock the grand yearling Shorthorn bull, York Pilot =50758=, now eighteen months old, and weighing 1,500 lbs. His sire and dam were imported from the Windsor Farm herd of His Majesty King Edward, and his breeding as well as his individuality is said to be of exceptional merit. At present he is located in temporary quarters until the completion of a fine set of buildings which are being erected on the farm.

Messrs. John Dryden & Son, Brooklin, Ontario, write: "Since writing you last, we have sold three young Shorthorn bulls, all sired by Prince Gloster =40998=, as follows: To Mr. H. O. Avenst, Mount Royal Man, Royal Prince =52678=, a bull of exceptional scale and substance, carrying a great amount of natural flesh, and as smooth as an apple. He should prove to be an extra sire, as his mother is one of our very best breeding cows, which, with the breeding back of that, should surely make an impressive sire. To H. R. Seymour, Robcavegon, Ont., the very promising young bull, Northern Duke =52677=. Some have said that this bull is the most like his sire of any calf he ever left, and if he develops into as good an individual and as prominent a sire, Mr. Seymour will have a valuable stock bull. To Mr. Alex. Morrison, Homewood, Man., Border Prince 57644. This young chap is a full brother to Beatrice, the first-prize yearling heifer at London last fall, and Blossom, the second-prize heifer calf at the same show. Border Prince is young yet, but promises to hold up the reputation of his two elder sisters. We have for sale now one Cruickshank Lavender bull ready for service. Now is the time for parties intending to buy rams to send in their orders. We have had considerable enquiry already for our Shropshires, and will do well if we can supply the demand. We are always glad to have interested parties visit our farm, and will furnish prices and further information on application."



CHATHAM Incubators

can be depended upon. If the eggs that go into them are fertile they will hatch as surely as the sun rises. Simplicity of working parts makes the Chatham so easy of operation that the women folks and children can run it as well as anybody. There is no danger of overheating. The regulator is so perfect that it can't "go wrong." No sad experience with roasted chicks if you use a Chatham. There's good money in poultry if you get started right. Buy the time-tried and well-known Chatham and be sure of results. We are so sure of results that we give you two years to pay for the incubator. **No Cash until November, 1906.** Our superb **FREE BOOK** entitled "How to make Money out of Chicks," gives you the whole story of successful poultry raising by incubators. Send for it.

The Manson Campbell Co., Limited
Dept. 1 Chatham, Ontario.

WONDER OF THE AGE

Milne's Manure and Gravel Loader

To operate a platform is let down to the ground, gravel or dirt is hauled on to platform with a large road shovel sufficient for a two-horse load, which is quickly lifted and automatically tipped into wagon. Time is saved, as team does not have to stand in pit. In handling manure a 2-horse fork is used instead of shovel. To use fork as litter carrier, strong horse is attached, and will wipe out the stable as fast as horse can walk, depositing wherever wanted.

One of these machines is loading 500 yards daily on James Bay Railroad. Write for particulars. Orders promptly attended to. Manufactured by
A. S. MILNE, - Leaskdale, Ont.

GOSSEP.

Feed the pigs well, but don't plan to feed them too long. The heaviest hog at the fewest months is the most profitable one, and this result cannot be secured on pasture alone. No matter how good the pasture, feed grain.

Just before Lou Dillon, 1.58½, was shipped East from California, Mr. Rudolph Jordan, Jr., a wealthy gentleman who has long been more than casually interested in trotting-horse affairs, went to the San Jose track and took some exceedingly interesting measurements of the champion trotter's gait. A hundred yards of the track was smoothed off on the back stretch, over which Mr. Doble moved Lou Dillon at a 2.10 gait, after which Mr. Jordan went to work with a steel tape-measure, making accurate measurements of her strides, and the peculiarities of her gait. Of these he made a chart. Mr. Jordan found by his measurements of 25 strides made by the mare, that the average was 19.26 feet, or about 19 feet three inches to each stride for every leg.—[Horse World.]

W. D. FLATT'S CLYDESDALE SALE.

Mr. W. D. Flatt, Hamilton, Ontario, announces that in the near future he will sell, at auction, his new importation of 50 registered Clydesdale mares and fillies, selected by Messrs. A. & W. Montgomery from leading studs in Scotland with a view to their suitability to the requirements of the Canadian trade, combining size and quality. The sale will be held at the Hamilton Stockyards, and this will be the last sale of Clydesdale fillies Mr. Flatt will hold this year. The advertisement and further particulars may be looked for in next week's issue.

MAPLE SHADE



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

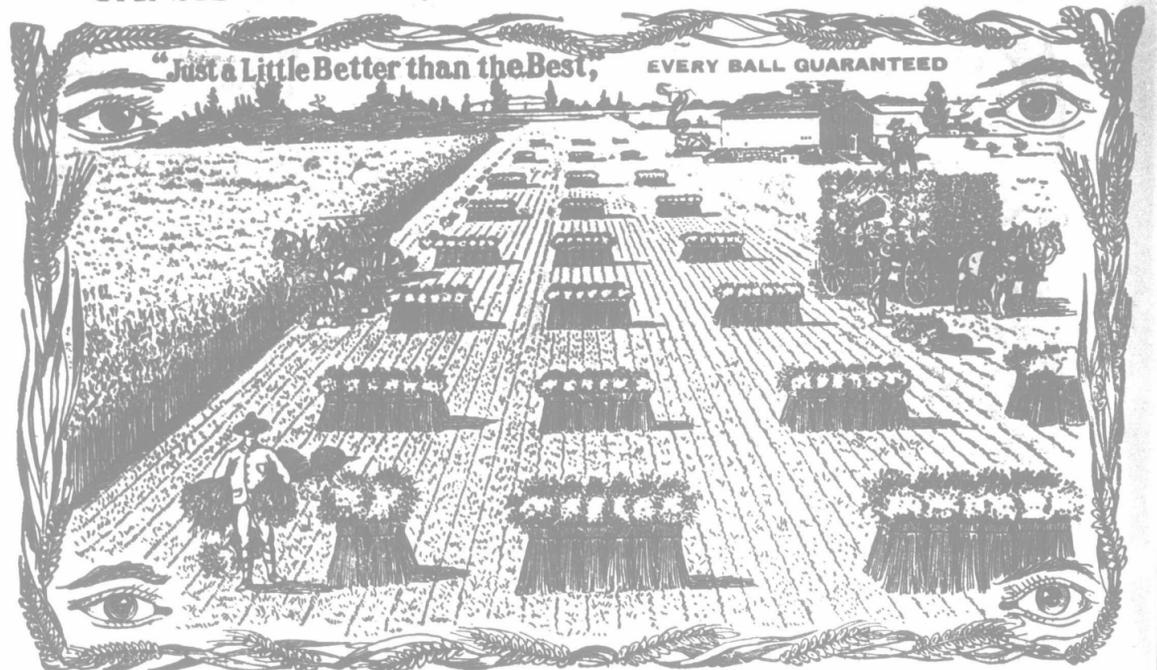
JOHN DRYDEN & SON, Brooklin, Ont.

Stations (Brooklin, G. T. R.
Myrtle, C. P. R.)
Long-distance telephone. om
Pacific Coast Excursions.

During June, July, August and September the Chicago and North-Western Ry. will sell from Chicago, round-trip excursion tickets to San Francisco, Los Angeles, Portland, Ore. (Lewis & Clarke Exposition), Seattle, Victoria and Vancouver at very low rates. Correspondingly cheap rates from all points in Canada. Choice of routes; best of train service; favorable stopovers, and liberal return limits. Rates, folders and full information can be obtained from B. H. Bennett, General Agent, 2 East King St., Toronto, Ont.

Mr. H. Fairbairn, Thedford, Ont., writing of his Shorthorns, says: "We have for sale three young bulls, two reds and one red and little white, a full brother to Fair Queen and Queen Ideal, and he is a crackerjack. He girthed 5 feet 7 inches, June 1st, and will make someone scratch gravel for first place; have also a roan heifer, eight months old, which will make a grand show calf, and is in show fix now. If I sell any of these, I may not show this fall."

CANADIAN CORDAGE & M'F'G. CO., LIMITED

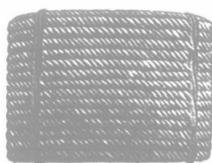


VIEWED FROM EVERY POINT, THE BEST
Hard Work in the Harvest Field becomes a
Pleasure to the farmer who ties his grain with

BINDER TWINE

MADE BY THE

CANADIAN CORDAGE & M'F'G CO., LIMITED, PETERBOROUGH



IF YOU REQUIRE ROPE

WRITE US

Our Rope recognized by the Trade as Absolutely the Best.

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

"Time's the King of Men" and



The ELGIN WATCH is the royal time-keeper

Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches in men's and women's sizes and in all varieties of cases.

"Timekeepers and Timekeepers," an illustrated joint history of the locomotive and the watch, sent free upon request to ELGIN NATIONAL WATCH CO. ELGIN ILL.

GOSSIP.

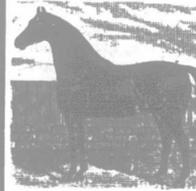
At the Royal Counties Show at Bournemouth, England, on June 19th, a one-day butter test was conducted, in which only Jersey and Guernsey cows competed. The first-prize and gold medal in Jerseys went to Dr. Watney's Oxford Ixia 3rd, who at six years old, 124 days in milk, gave 31 lbs. milk and 2 lbs. 1 oz. butter; ratio, lbs. of milk to lbs. of butter, 15.03. The second-prize Jersey cow, seven years old, 113 days in milk, gave 39.4 lbs. milk and 2 lbs. 1 1/2 oz. butter. The first-prize Guernsey cow, six years old, 76 days in milk, gave 38 lbs. 6 ozs. milk, and 1 lb. 13 1/2 ozs. butter. The second-prize cow, ten years old, 49 days in milk, gave 47.9 lbs. milk and 1 lb. 14 1/2 ozs. butter.

In April, Mr. Andus King, of Lefroy, Ont., bought from Mr. Arthur Johnston, of Greenwood, the capital young Short-horn bull, Royal Derby, of the famous old Kinellar Bessie tribe, one of the purest and straightest bred Scotch tribes in the great Kinellar herd. Royal Derby was sired by the imported Cruickshank Secret bull, Derby, and his dam was Bessie Lady, by the imported Golden Drop bull, Royal Prince, grandam Bessie Girl, by the imported Cruickshank Bra with Bud bull, Craven Knight, great-grandam Imp. Bessie Lass, by Mr. Wm. Duthie's well-known bull, Banner Bearer. There are few pedigrees recorded in any herdbook equal to the above, and the bull, Royal Derby, will do credit to his blood.

The American Jersey Cattle Club has issued a beautiful album in ooze calf binding, entitled "The Jersey Cow at St. Louis, 1904," containing in 103 pages the portrait and official record of each of the cows in the Jersey herd, which participated in the six-months' test at the Louisiana Purchase Exposition. The price of this beautiful souvenir of the cow demonstration of 1904 is \$1. The American Jersey Cattle Club has also issued a very complete and handsomely-illustrated pamphlet, entitled "The Dairy Cow Demonstration at the Louisiana Purchase Exposition," in paper binding, containing in 72 pages the portraits and official records of the Jersey cows in the St. Louis test. Either of these may be obtained from Mr. J. J. Hemingway, 8 W. Seventh St., New York.

As an illustration of the practical value of a dairy cow, the London Livestock Journal publishes the record of a Red Polled cow named Hester, which died recently at eighteen years of age, and who yielded during her lifetime over 50 tons, or quite one hundred times her own weight, in milk, having given in one year 10,766 lbs. She was also a prize-winner at local shows for several years in succession. From three to eighteen years she was a prolific breeder, often producing two calves within the twelve months. She was seldom dry more than a fortnight before calving, sometimes for only a few days. Of thirty-five pedigree Red Polls sold by auction by her owner, thirty were her descendants, and all of the sixteen cows and calves retained in the herd trace to this same cow.

Dr. Page's English Spavin Cure



For the cure of Spavins, Ringbones, Curbs, Splints, Windfalls, Capped Hocks, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements, this preparation is guaranteed to kill a Spavin or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FRANK A. PAGE & SON, 7 and 9 Yorkman Road, London, E.C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: J. A. JOHNSTON & CO., DRUGGISTS, 171 King Street East, - Toronto, Ont.

IMPORTED Clydesdales



My lot of selected stallions and fillies just landed were got by such noted sires as Senator's Hero, Lord Lovat, Prince of Carrochan (S1), Monroff's Marquis (S1), and others noted for their individual quality.

GEO. STEWART, Howick, P.Q.

IMPORTED Clydesdale Stallions

For sale, reasonable. Come and see them or write to

Phillip Herold, V. S., Tavistock.

CIDER MAKING

Can be made profitable if the right kind of machinery is used. WE MAKE THE RIGHT KIND.

Send for catalogue.

BEOMER & BOGERTY Press Co., 303 West Water St., Syracuse, N. Y.

TWO FARMS FOR SALE

In Guelph Township.

Containing 250 and 300 acres, respectively. These are first-class stock and grain farms, well fenced, good brick dwelling houses and first-class outbuildings. Seven miles from Guelph and the O. A. C.

G. D. HOOD, Guelph, Ont.

ARE YOU EARNING MONEY? IF NOT, WHY NOT?

30 days only studying ROYD'S SHORT-HAND brings the CASE to YOU. Master Harold Bannerman, 8 McGill College Ave., Montreal, and only 12 years old, increased his salary from \$12 to \$30 per month in 24 days. So can you.

Moon's Correspondence School, 2362 St. Catherine St., Montreal. W. T. Moon, Pres.

QUESTIONS AND ANSWERS. Miscellaneous.

REGISTERING CLYDES.

I have a draft filly, with four crosses of registered Clydesdale stallions in her breeding. To whom should I apply for information and terms of registration?

J. C.

Ans.—Write Mr. F. M. Wade, Department of Agriculture, Ottawa, who is registrar, and will furnish the needed information.

THE LAW RE DEHORNING.

A New Brunswick correspondent enquires: "Is there any law against dehorning? Can the Society for Prevention of Cruelty to Animals take action against any one for dehorning cattle? Have been cautioned by members of that society not to do so."

Ans.—There is no New Brunswick law covering this matter, except that in a law entitled "Respecting the Society for the Prevention of Cruelty to Animals" it refers to section 512 of the Criminal Law of Canada, but we understand that the construction put upon it by the courts is that dehorning, if done in a proper manner, is not considered to be a criminal act or offence. As a matter of fact, it is more humane to dehorn than not to dehorn. The operation is not inhuman, nor more painful than some other operations that are considered necessary for the best interests of stock-breeding, such as castration and docking lambs.

BLACK APHIS.

Last week there was left at our office by a Middlesex County subscriber a stalk of curled dock, bearing a swarming cluster of small, lustreless black insects, identified as species of the black aphid, a sucking insect, which is abundant upon all kinds of vegetation. In this case there were two kinds, one winged, the other wingless; the former, it may be observed, lay eggs, the latter kind produce living young. Both kinds are enormously prolific, as a single aphid may produce thousands of young in a very few days. They are injurious to vegetation, sucking the juice from tender shoots, and when they occur on useful or ornamental plants means should be adopted to combat them. They have, of course, many natural enemies, including certain species of caterpillars and the grubs of the syrphus and laced-winged flies, which destroy myriads of them. Artificial measures are, washing the plant with strong tobacco water, or spraying with kerosene emulsion. A stream of water from a hose will also knock off a great many. Cherry or plum trees badly infested should be sprayed with kerosene emulsion.

BLASTING STUMPS.

Can any reader that has had experience in blasting pine stumps tell us what success he made of it? I have run a stump-puller for years, but now labor is so high it does not pay, and as there are still a lot of large pine stumps, about three and four feet, what is the best way to dispose of them?

Durham, Ont. OLD SUBSCRIBER.

Ans.—In the "Farmer's Advocate" for Nov. 16th and Dec. 1st, 1900, appeared letters from men who claimed to have had considerable experience in blasting large stumps with dynamite, and would not return to more primitive methods of removing them. The requirements are a dirt auger, 1 1/2 to 2 1/2 inches in diameter, with shank about 5 ft. long; a wooden tamping rod, a fuse cutter and cap crimper. Sink the hole till slightly past middle of stump, then insert dynamite and ram tightly to the bottom. This applies only to the first that goes in. The last cartridge with the cap and fuse attached must be inserted with care, and pressed gently home, after which the hole is filled up with sand or dirt, taking care not to tamp it too much till 4 or 5 inches away from cap. The amount of dynamite varies from 1 to 3 lbs., according to nature of soil and size of stump, and the cost of blowing out stumps from 10 to 25 cents each. The materials may be had from any large hardware house. The advantage in blasting with dynamite is that the stumps are generally torn to pieces, so that they can be readily handled for hauling away or piling to burn.

Horse Owners! Use GOMBAULT'S Caustic Balsam



A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scurf of Manes! Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.

The Lawrence-Williams Co., Toronto, Ont.

Fistula and Poll Evil



Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 15 to 30 days.

Fleming's Fistula and Poll Evil Cure

is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it.

FLEMING BROS., Chemists, 45 Front Street West, Toronto, Can.

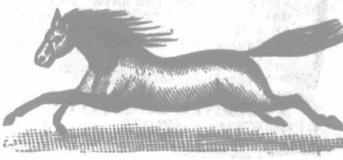
You Can't Cut Out A BOG SPAVIN or THOROUGHPIN, but ABSORBINE



will clean them off, and you work the horse same time. Does not blister or remove the hair. Will tell you more if you write, \$2.50 per bottle, delivered. Book \$1 free. ABSORBINE, J.M. for manking, \$1.00 bottle. Cures Varicose Veins, Yarroweels, Hydrocele, Swelled Muscles or Ligaments, Enlarged Glands, Allays Pain. Genuine mfd. only by W. F. Young, P.O. F., 73 Northmouth St., Springfield, Mass. Canadian Agents, Lyman, Ross & Co., Montreal.

"THE REPOSITORY"

Burns & Sheppard, Proprietors,



Cor. Simcoe and Nelson Sts., TORONTO.

Auction Sales of Horses, Carriages, Buggies, Harness, etc. every Tuesday and Friday at 11 O'clock.

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.

THORNCLIFFE STOCK FARM

CLYDESDALES

ROBERT DAVIES

Has two-year-olds, three-year-olds and aged mares for sale, in foal to "Right Forward," imp. Please write for prices. City address:

36 Toronto St. TORONTO, ONT.

Clydesdale Stallions and Fillies.

Imported and Canadian-bred. For sale: Three 2-year-old stallions and imported mares with foals at foot, from imp. sire and dam. Also SHORTBORN Cows and Heifers for sale. Reasonable prices. For particulars write to

JAS. W. INNES, Cityview Farm, Woodstock, Ont.

IMPORTED CLYDESDALE STALLIONS AND FILLIES.

Also HACKNEY STALLIONS FOR SALE at reasonable prices. Come and see them, or write to

ADAM DAWSON, Cannington, Ont.

Clydesdales, Shorthorns and Leicesters—mare, 4 years old, from imp. sire and dam. Two young bulls (sired by Golden Coat 26446). Prices reasonable.

WM. McINTOSH, Prop., Burgoyne P. O. Port Elgin Stn. and Telegraph.

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

The Successful Dairyman



4 Sizes.
National style B.
National style No. 1.
National style No. 1A.
National style No. 5.

Is the one who is the happy possessor of

The NATIONAL CREAM SEPARATOR

WHY?

Because it makes money.

HOW?

- By saving cream.
- By saving time.
- By saving strength.
- By saving repairs.

The RAYMOND MFG. COMPANY OF GUELPH, Limited
GUELPH, ONTARIO.

A GOOD PICTURE

Of your fancy stock is the best advertisement you can have. To bring out the "points" requires the assistance of an artist who knows. The best stock-artist in Canada is with

THE TORONTO ENGRAVING CO.
92 BAY ST. TORONTO

STOWE PARK STOCK FARM
A few young
BULLS FOR SALE

Of choice quality and breeding, sired by Rupert of Ingleside 2nd.

WALTER BENNETT, Proprietor,
Box 523, Chatham, Ont.

THE SUNNYSIDE HEREFORDS
Imp Onward in service. Six choice bulls of serviceable age; this includes 4 2 year-olds, all of the blocky, heavy type, at prices that will move them. We can yet spare some cows and heifers.

O'NEIL BROS.,
Southgate, Ont.
Hderton Sta., L. H. & B.; Lucan Sta., G.T.R.

MURON CENTRAL STOCK FARM OF ABERDEEN-ANGUS
Our present offering is seven young bulls, 8 to 18 months old. All sired by the champion bull Goderich Chief 37437. All stock registered in the American Herdbook. Also offering the young coach stallion Godolier, winner of 1st at London this year.

E. BUTT & SONS, Clinton, Ont.

Aberdeen-Angus Cattle, Clydesdales and Suffolk Sheep, at Elm Park Stock Farm, adjoining Guelph City Limits. Call and see, or write.

JAMES BOWMAN, Guelph, Ont.

FOREST VIEW FARM HEREFORDS. 4 bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individuals, for sale.

JOHN A. GOVENLOCK, Forest Sta. and P.O.

BARGAINS for 30 days. Durham cow, 7 years, and bull calf, by a Watt bull, \$100; two dark red bulls, 9 months, \$50 each; Yorkshire boars and sows, 30 to 40 lbs., at \$6 each; our yearling stock boar, quiet and a good getter, \$15.

W. R. BOWMAN, Mount Forest, Ont.

Hereford Bulls—Choice animals at close prices, for immediate sale.

STONE & HAMILTON, Guelph.

Shorthorn Bulls—I have for sale two good young roan Shorthorn bulls, fit for service, sired by imported Scottish Peer 4024. Come and see, or address.

JAMES SNELL, Clinton, Ont.

Asthma

Cured to Stay Cured
Attacks stopped permanently. Cause removed. Breathing organs and nervous system restored. Symptoms never return. No medicines needed afterwards. 21 years of success treating Asthma and Hay Fever. 55,000 patients. Book 57¢ Free. Very interesting. Write P. HAROLD HAYES, Buffalo, N.Y.

Shorthorns

Of choice quality and breeding. Young stock of either sex usually for sale. Inspection of herd invited.

N. S. ROBERTSON, Arnprior, Ont.

SHORTHORNS FOR SALE

A few young cows and heifers, either with calf or calves at foot. At a bargain if taken soon.

JOHN FORGIE, Proprietor,
Claremont Sta. and P. O.

SHORTHORNS FOR SALE

Six young bulls, 20 cows and heifers, by that grand bull, sire of unbeaten Fair Queen and sister Queen Ideal, first-prize senior heifer calf at the International, 1904.

H. K. FAIRBAIRN, Thedford, Ont.

SHORTHORNS and CLYDESDALES

Spicy Count (Imp.), 5 thick, fleshy bulls, 12 months old; a few heifers and 6 splendid Clydesdales; 3 mares registered. All young.

JAS. McARTHUR
Pine Grove Stock Farm, GOBLE'S, ONT.

8 First-Class Young Bulls

And an excellent lot of cows and heifers. Scotch cattle, imp. and home-bred. Rich man's cattle at poor man's prices. Also high-class Yorkshire and Berkshire swine.

DAVID MILNE, Ethel, Ont., Huron Co.

ROWAN HILL STOCK FARM OF SHORTHORNS

Greengill Archer (Imp.) 45184, at head of herd Present offering: Young cows and heifers at reasonable prices. Correspondence or inspection invited.

A. DUNCAN & SONS, Carlisle P. O., Ont.

J. WATT & SON—Some very superior Bulls and Heifers for sale. Apply for particulars.

Salem P. O., Elora station, G.T.R. & C.P.R. O.

Shorthorns—We have for sale several young bulls ready for service, sired by Royal Duke, he by Royal Sailor (Imp.). Also a few heifers and cows, bred to Wandering Count, by Wanderer's Last (Imp.).

J. R. McCALLUM & SONS, Zora Stn., Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

TRANSPLANTING SPRUCE TREES.

1. How late in the spring may you transplant Norway spruce trees? Mine are about five feet high.
2. Would it be better to leave them until fall?
3. Give general directions for transplanting.

A SUBSCRIBER.

Ans.—1 and 2. Spruce trees may be moved with success at almost any time of the year, except when the young shoots are growing. It is well to avoid transplanting immediately before dry weather sets in. As a rule, June is considered a favorable month in which to transplant spruce, but June will be nearly gone by the time you read this; and unless there is a prospect of continued showery weather it may be better to leave yours till fall.

3. In planting evergreens, one must bear in mind that he is handling a tree in full leaf, which will rapidly lose its moisture through the leaves if it is exposed to sun or wind. The sap, too, has in solution a large proportion of pitch, which becomes solid and insoluble in both root and branch very soon when the tree is out of the ground and exposed to air, hence the roots are best kept in mud or water, and the tops covered from the sun. It is best to transplant when the weather is cool and damp and the sun obscured by clouds. A plow may be used to open out the furrows wide and deep. The roots of the spruce are shallow and spreading, and this natural position should be secured in transplanting. For best results spruce trees require cultivation for two or three years at least. Keep a loose soil mulch about them, and you will be practically independent of rain. Cultivation will induce deep rooting, and result usually in the production of a better growth than will mulching, which is employed by some instead of cultivation.

PROBABLY CANKER IN TURKEYS.

I have young turkeys three weeks old, which a few days ago some showed signs of being sick, and would not eat. Three have died, and, on examination, found a white substance under tongue, down the throat, and in the roof of mouth. Have fed them bread squeezed out of sweet milk, hard-boiled eggs and onion tops; have them in shed in wet weather, and have old turkey in coop, and chicks in pen in dry weather. What ails the young turkeys? What can I do to save the rest of them? Have they had proper care?

J. V. B.

Ans.—If the birds were older, I would have no hesitation in saying that they were affected with one of the forms of canker. I have never known as young birds as these to be affected with this disease, but it may be possible that they have canker in the mouth. If this is the case, your correspondent will find the disease very contagious. It will be necessary to disinfect the coop and the ground with some disinfectant, such as Zenoleum or lime and carbolic acid. The former disinfectant is said to be effective and non-poisonous, which is a point in its favor. You will also require to put a little Zenoleum or potassium permanganate in the drinking water. You would not require to use of the potassium permanganate more than you could hold on a five-cent piece to a gallon of water. The other should be used according to the directions on the tin.

I cannot see anything wrong with the system of feeding, but would suggest in its place the use of curds, shorts and onion tops, about a third in bulk of each. Feed only on absolutely clean boards, or out of the hand. Do not allow the turkeys to eat off the ground. I would also suggest that the birds be removed to fresh quarters. Turkeys do not seem to thrive when feeding and roosting on the same ground night after night. Examine the turkeys carefully for lice.

I would suggest that you examine these turkeys very carefully. If canker is the trouble, the white patches on the throat, roof of the mouth, and under the tongue, will be more or less of a cheesy nature, and have an offensive odor.

W. R. GRAHAM,
Ontario Agricultural College.

Awaken The Liver

AND YOU REMOVE THE CAUSE OF INDIGESTION, BILIOUSNESS AND CONSTIPATION.

DR. CHASE'S KIDNEY-LIVER PILLS.

The liver, when in health, filters bile from the blood, where it is poison, and pours it into the intestines, where it is necessary to digestion and a proper working of the bowels.

Once the liver becomes torpid and sluggish in action the "bile poison" is left in the blood, where it causes biliousness, jaundice, indigestion and headache.

- The tongue is coated.
- The breath bad.
- The stomach sour.
- The complexion muddy.
- The bowels irregular.
- The kidneys clogged.

Besides the pains and aches consequent on the poisoned condition of the system, there is the greatest danger from such diseases as Bright's disease and appendicitis.

Dr. Chase's Kidney-Liver Pills thoroughly cleanse the kidneys, liver and bowels, and by their direct action on the liver cause a healthful flow of new bile to aid digestion and ensure the natural and healthful action of the bowels.

There is no means known by which indigestion, biliousness and constipation can be so promptly and thoroughly cured as by Dr. Chase's Kidney-Liver Pills.

Dr. Chase's Kidney-Liver Pills, one pill a dose, 25 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto. The portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

R. A. & J. A. WATT

Salem P. O., Elora Station, C.P.R. and G.T.R. Telephone in house.

Our herd of seventy-five head of Scotch-bred

SHORTHORNS

compares favorably with the best. Inspection and correspondence invited.

SHORTHORNS FOR SALE

Four young bulls, including 22-months son of Mayflower 3rd, champion female at Winnipeg and Toronto, 1904; also a few good heifers of same family. Primrose Day (Imp.) at head of herd.

WM. McDERMOTT,
Living Springs, Ont.,
Toronto Station.

Forest Hill Stock Farm Shorthorns—3 choice serviceable age, and a few good heifer calves. For particulars apply.

G. W. KEAYS, Hyde Park P. O., Ont.

SCOTCH SHORTHORNS FOR SALE

Two young bulls 12 and 16 months old, both royally bred; also fifteen heifers and cows, most of them in calf to a son of Lord Gloucester, No. 26985. DE. T. S. SPEOCLE, Oedardale Farm, Markdale P.O. and Station.

MAPLE LEAF STOCK FARM

4 Choice Young Bulls For Sale. Also some cows and heifer and prizewinning Berkshire pigs. Terms reasonable.

ISRAEL GHOFF, Alma P. O. & Sta., G.T.R.

SHORTHORNS and DORSETS

Write for what you want. Also a number of young Yorkshire sows for sale.

D. Bartlett & Sons, Smithville, Ont.

Scotch Shorthorns—Three young bulls. One by Scottish Beau, Imp., dam Lady Ythan 5th, Imp.; 2 others by Invincible, second prize, Toronto, 1904; also heifers of like breeding and quality.

G. H. O'KEE, Alvinston, Ont.

SHORTHORNS FOR SALE

I am offering for sale my imp. bull, 13 months old, and two red bull calves (one of them is a Golden Drop) ready to wear. Also two good heifer calves.

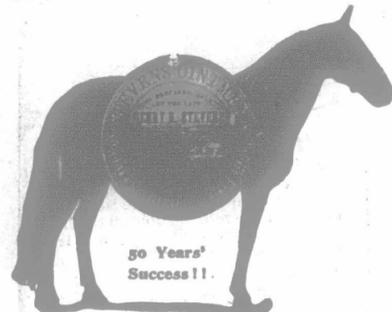
Hugh Thomson, Box 556, St. Mary's, Ont.

Cedar Vale Stock Farm is offering for sale a few Scotch Shorthorn Bulls of excellent breeding and quality at low prices for the next 60 days. For particulars, write to **JOHN SCOTT, Dumbane P. O., Port Elgin Stn. and Telegraph.**

River View Stock Farm—Present offering: A couple of thick young Shorthorn Bulls; ready for service, of excellent breeding; price extremely low considering quality. For particulars, write to **A. J. ROWAN, Dumbane P. O., Port Elgin Stn. and Telegraph.**

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

BRITAIN'S BEST BLISTER



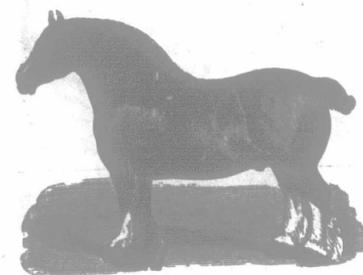
It takes time, trouble, knowledge and special chemical apparatus to produce

STEVENS' OINTMENT

as used in the Royal Stables. It is the result of a lifetime's knowledge among lame horses saved up and given to you in concentrated form for use on your lame or disfigured horse. It will surely cure Splint, Heavin, Curb, Ringbone, and all enlargements in horses and cattle.

Evans & Sons, Ltd., Montreal, Que. Agents for Canada.

JOHN CHAMBERS & SONS



Holdenby, Northampton, Eng.

Farm over 2,000 acres of land just in the centre of the Shires, and breed the very best and soundest of the

SHIRE HORSE

which from birth are kept in their natural condition, neither forcing nor overfeeding for showing purposes. Canadian buyers visiting England are invited to call and see what we have to show them and obtain their stallions and mares direct from the men that breed them.

Station—Althorp Park, L. & N.W. Ry

GREENGILL HERD SHORTHORNS

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

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

AN OPPORTUNITY

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

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

1864 - HILLHURST FARM - 1905 SHORTHORN BULLS

ready for service; also bull calves, Scotch-topped, from good milking families, for sale at low prices. Write for catalogue and particulars. Inspection invited.

JAS. A. COCHRANE, Hillhurst Station, Compton Co., P. Q.

Belvoir Stock Farm SHORTHORN BULLS

SHORTHORN BULLS, various ages; imported and home-bred, by imp. Gay Lothario, a Cruickshank Lavender. OLYDESTALLION, 2 years old; sire imp., dam a winner, granddam 1st Highland Show. YORKSHIRES—Sows and boars, various ages; not akin. Three imp. boars and 5 imp. sows to select from, and their progeny. Prices right. Also honorable dealing.

RICHARD GIBSON, Delaware, Ont.

ELMHEDGE SCOTCH SHORTHORNS

Stamfords, Minas, Nonpareils, Crimson Flowers, Marr Floras and Lavinas. Our herd will stand comparison with any. We reserve nothing: 45 head of both sexes, all ages, for sale.

James Bowes, Strathairn P.O., Meaford, Ont.

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

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

Shorthorns and Leicesters

Present offering: Some choice young bulls and heifers of the best Scotch families. Also yearling rams and yearling and two-shear ewes, and this season's crop of lambs at reasonable prices. Address: W. A. DOUGLAS, Caledonia Station, Tuscarora P. O.

Green Grove Shorthorn and Lincoln Sheep

Herd headed by Royal Prince (Imp.) = 36092 = W. G. MILSON, Goring P. O., Markdale Station.

TROUT CREEK SHORTHORNS

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

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

THREE IMPORTED Shorthorn Bulls

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

Robert Miller, Stouffville, Ont. Representative in America: Alfred Hensell & Co., Sherbrooke, England.

Queenston Heights Shorthorns

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

HUDSON USHER, Queenston, Ont.

A. EDWARD MEYER SCOTCH SHORTHORNS

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

Two Grand Scotch Bulls

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

A. D. MCGUGAN, Rodney, Ont.

BELMAR PARO SHORTHORNS

Bulls in service: Merryman, imp. (77263) = 32075 =; Pride of Windsor, imp. (Vol. 50) = 50071 =; Nonpareil Archer, imp. (81778) = 45092 =. Our females have been carefully selected and are of the best Scotch breeding, many of them imported. Address correspondence to PETER WHITE, JR., PEMBROKE, ONT.

Shorthorn Bull

Provost = 57885 =, 4 years old, in prime condition, sure and active; a grand stock bull. Will sell or exchange for another. RICHARD WILKIN, Springfield Stock Farm, Harriston, Ont.

SCOTCH-TOPPED SHORTHORNS

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

QUESTIONS AND ANSWERS. Veterinary.

ENLARGED HOCK ECZEMA.

1. When two weeks old my colt's hock became enlarged, and is somewhat swollen yet, but is not lame.

2. Mare had eczema, or mud fever; legs very itchy. My V.S. cured her, but she broke out again. What will cure her permanently? D. H.

Ans.—1. Leave the colt alone until it is weaned, and if there is still an enlargement apply a blister.

2. This cannot be permanently cured in an animal that is predisposed to it. Purge her with 8 drams aloes and 2 drams ginger. Follow up with 2 ozs. Fowler's solution of arsenic, night and morning, every second week. Dress the legs with corrosive sublimate, 1 part to 700 of water, twice daily. V.

WEAK KNEES—SORE EYES.

1. Two-year-old draft colt, weighing 1,200 lbs., has never become straight on his knees.

2. Horse hurt his eye three weeks ago, and now there is a bluish scum over the eye, which interferes with sight.

M. W. S. Ans.—1. Congenital weakness of the knees, such as your colt has, cannot be removed. When in the stable keep him in a box stall, and feed him off the floor, and it is possible they will become stronger. Applications of blister liniments or lotions do no good.

2. Take nitrate of silver, 8 grains, and mix with 2 ounces distilled water, and put a few drops in the eye twice daily with a dropper or a feather. The cloudiness disappears. V.

Miscellaneous.

ARE HOLSTEINS HARD-KEEPING?—GLASS IN HENHOUSE—BEEKEEPING IN B. C.—CEMENT FLOOR IN BARNYARD.

1. Are the Holsteins hard to keep, compared with other cows?

2. Is it true that too many glass windows in a henhouse are bad?

3. Is it hard to raise bees profitably near the Pacific coast? I intend to go to B. C. next spring. I haven't decided what part of it, but I want to try beekeeping.

4. Do you think a cemented barnyard would answer well? Would it need much of a foundation? Would frost be apt to spoil it?

5. Is the date of Toronto Exhibition fixed yet? F. L. S. Chateaugay, Que.

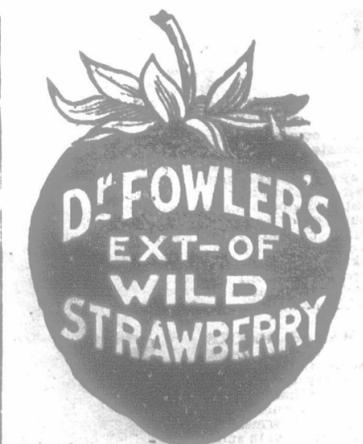
Ans.—1. Being large, the Holsteins require and can utilize a large quantity of feed, but they are certainly not hard-keeping. From a given amount of food, an ordinary Holstein will extract fully as much nutriment as an average cow of any other breed. Provided with a sufficiency of roughage and a proportionate quantity of concentrated food, Holsteins are about as thrifty and will make as good use of the surplus nutriment as any breed of cattle we have.

2. It is possible to overdo any good thing. In a house enclosed with too large a proportion of glass, it would be difficult to control the temperature and prevent drafts. An excess of glass would attract heat from the sun during the day, and the temperature would fall very rapidly and very low at night. The difficulty, of course, would be very much lessened by having double windows, but it is important that good ventilation be provided.

3. We see no reason why beekeeping should not be practicable and profitable in British Columbia. Can some readers from that Province contribute to our "Apilary" department their experience in beekeeping?

4. If the site is fairly well drained, there is no reason why a cement floor in a barnyard should not stand well and give good satisfaction. Dig or plow and scrape out the ground basin-shape, making sure that the bottom on which the cement is to be put is firm and hard. If necessary, fill any low spots with stone and gravel thoroughly rammed down, then put on a bottom coat of concrete, four inches thick, and a finishing coat, say an inch and a half. Eight or ten inches of good gravel alone makes a very satisfactory floor for a barnyard, if the buildings are eavestroughed as they ought to be.

5. Yes, see list in "Gossip" columns, last issue.



CURES

Dysentery, Diarrhoea, Cramps, Colic, Pains in the Stomach, Cholera, Cholera Morbus, Cholera Infantum, Sea Sickness, Summer Complaint, and all Fluxes of the Bowels.

Has been in use for nearly 60 years and has never failed to give relief.

FLETCHER SHORTHORNS

Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families. Among the really good ones which have been used are Spicy Robin 28360, winner of 3rd prize at Dominion Exhibition, Toronto, and Joy of Morning (imp.) 20070, winning 1st prize at same exhibition, 1901. Stock of either sire for sale. GEORGE D. FLETCHER, Bingham P. O., Ont. Erie shipping station, C. P. R.

Ridgewood Stock Farm SCOTCH SHORTHORNS.

Present offerings: Elytheos Ruler = 62288 =, sire (imp.) Chief Ruler = 45165 =, dam (imp.) Missie 1604 = 34154 =; young stock, either sex. R. C. ATRELL, GODFRICH, ONTARIO. Breeder of Shorthorns, Shire and Hackney Horses.

12 SHORTHORN BULLS

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

MAPLE GROVE STOCK FARM SCOTCH AND SCOTCH-TOPPED SHORTHORNS

Present offering: Two choice nine-months-old bulls, by Captain Mayfly 2nd; also young cows and heifers at very reasonable prices. For particulars write to L. E. POWELL, Walshestein P. O., Elmira Stn. & Tel.

Wm. Oranger & Son

Hawthorn Herd of HORNS, Aberdeen Hero (imp.) at head of herd. Two grand young bulls by Prince Misty = 57804 =. Also a few females. Londonboro Stn. and P. O.

First-class Shorthorns—Young cows and heifers of fashionable breeding.

Also Shropshires of different ages. Write for prices, etc., to T. J. T. COLE, Bowmanville Stn., G. T. R. or Tyrone P. O.

J. A. Lattimer, Box 16, Woodstock, Ont. Breeder of High-class SCOTCH SHORTHORNS

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

SHORTHORNS AND BERKSHIRES

Present offerings, young cows and heifers safely in calf to Prince of Banff (imp.); also a few Large English Berkshire pigs, either sex, nearly ready to wean. DAVID HILL, Staffa, Ont.

THOS. MERCER, Box 33, Markdale, Ont. Breeder and importer of CLYDESDALE HORSES, SHORTHORN CATTLE and YORKSHIRE PIGS. Car lots a specialty.

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

SOLOMON SHANE, Haysville P. O., Finn Grove Stock Farm, Baden Sta.

WILLOW BANK STOCK FARM Established 1855

Large and old-established herd of SHORTHORNS. Good milking qualities. Splendid offering of either sex. Scotch and Scotch-topped. JAMES DOUGLAS, Caledonia, Ont.

SPRING VALLEY SHORTHORNS

Good bulls at reasonable prices, out of good Scotch cows, and by such bulls as Bapton Chancellor (imp.), Scottish Beau (imp.), Nonpareil Archer (imp.), Clipper Hero, etc. For further particulars, apply to KYLA BROS., Ayr, Ont.

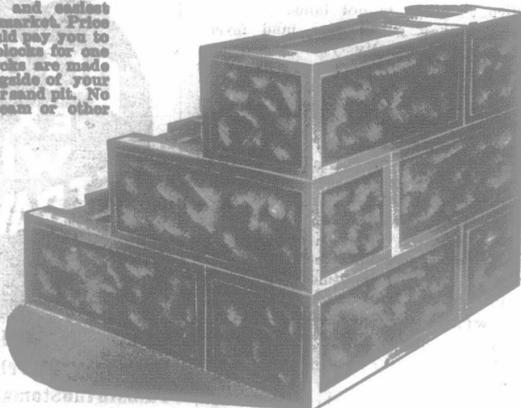
In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

Dunn's Hollow Concrete Block Machine

Most compact, portable and easiest operated machine in the market. Price so reasonable that it would pay you to buy one if only to make blocks for one fair-sized building. Blocks are made out in the open air, alongside of your building, or down by your sand pit. No firing or baking; no steam or other power required. Skilled labor not necessary. Full directions furnished with machine.

MAKES BLOCKS for houses, bank barns and buildings of every description. Cheaper than brick or stone and much hand-somer. Warmer in winter; cooler in summer; and indestructible.

Write for particulars to Dept. O. om



The JAS. STEWART MFG. CO., Ltd., Woodstock, Ont.

Sunshine Furnace

Will Save your Dollars

McClary's

London. ~ Toronto. ~ Montreal.
Winnipeg ~ Vancouver ~ St. John N.B.

QUESTIONS AND ANSWERS. Miscellaneous.

POLLED DURHAM CATTLE

Can registered Polled Durham cattle imported from the U. S. be registered in Canada? If so, where and what is the fee? T. C.

Ans.—There are two classes of Polled Durhams in the United States. The class called "double standard" are eligible to registry in the American Shorthorn Herdbook, being bred straight from ancestry recorded in that book, and would probably register in the Dominion Shorthorn Herdbook; but it would be prudent to submit the pedigrees to the Registrar, Mr. H. G. Wade, Department of Agriculture, Ottawa, for acceptance before purchasing, as not all cattle eligible to the American Herdbook are eligible to the Dominion book. The second-class, or single standard, Polled Durhams do not trace to importations from Great Britain, and are not eligible to the American Shorthorn Herdbook, or to any record in Canada.

WANTED, AN ENCYCLOPEDIA.

1. Does manure lose any strength when heating?
2. How can I destroy small white grubs that work in radishes?
3. How should ginseng seed be planted, and when?
4. What is the best plan to get rid of a lot of mustard?
5. I have garden peas out in bloom now. Would it be safe for me to sow the seed when ripe and grow a second crop?
6. What should be done with small, mud-turtle-shaped, brown insects, about an eighth of an inch long, on twigs of young plum trees?
7. What would be best to buy to feed to about 500 chickens?
8. What should be sprayed on cows to repel small flies? N. H.

Ans.—1. Yes, whenever manure heats it loses nitrogen, which is the most expensive element of fertility.

2. Discontinue growing radishes on ground infested with the maggot, and also avoid using fresh manure on radish land; rather choose rich land left in good condition by some previous crop. There is no practical remedy for affected plants.

3. The seed is dropped in light furrows or ruts about three inches apart and one inch deep; plants about one or two inches apart in the rows. The bed is made ready for fall sowing. Fuller directions on page 609, issue April 20th; or a complete treatise on ginseng culture, by M. G. Kains, may be ordered through this office, price 50 cents.

4. Spraying with bluestone solution. See article in June 22nd issue.

5. It might be worth trying a few; we won't insure the crop.

6. It is probable these insects are the dark aphids, which are often found on the twigs of plum and cherry trees, and do much injury by sucking the juice, causing the twigs to wither and the leaves to curl up. Spraying with kerosene emulsion is the remedy, and the earlier it is done the better, as after the leaves have curled it is difficult to reach the insects on the under side of the leaves. It is possible the insects seen may be the larvae of the lady beetles, which prey upon the aphids. If so, they indicate the presence of the aphids. You should have cut off a couple twigs and forwarded them in a wooden or tin box.

7. It depends upon markets, age of chickens, and the purpose for which you are feeding them, whether growing, fattening or laying. For growing or laying fowl, no one grain can beat wheat screenings; with this use oats, buckwheat and whatever other grains can be purchased reasonably. Some milk is very beneficial, as is also a proportion of meat scrap, even in hot weather. Don't forget grit, as with such a number of fowl about very long the natural supply of sharp grit would hardly go around.

8. There are many good fly mixtures advertised, and a recipe for a home-made one will be found in June 29th issue in the "Stock" department.

POWER—The 21st edition of the Ontario Wind Engine and Pump Co. catalogue is a good one. Write for a copy to Toronto, Ont.

Better Fruits—Better Profits

Better peaches, apples, pears and berries are produced when Potash is liberally applied to the soil. To insure a full crop, of choicest quality, use a fertilizer containing not less than 10 per cent. actual

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Send for our practical books of information; they are not advertising pamphlets, booming special fertilizers, but are authoritative treatises. Sent free for the asking.

GERMAN KALI WORKS
93 Nassau St.,
New York.

Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from Imp. sires and dams. For particulars write to

ED. ROBINSON, Markham Sta. & P. O. Farm within town limits.

For Sale—Some Young Cows, with calves at choice

BELL BROS., The "Cedars" Stock Farm, Bradford, Ont. om

MAPLE LODGE STOCK FARM

1854.
15 Shorthorn heifers, sired by imp. bull, and in calf to imp. bull. Also two first-class young bulls. Cows are large milkers. om

A. W. SMITH, Maple Lodge P. O., Ont.

PINE GROVE STOCK FARM

ROOKLAND, ONTARIO, CANADA.
Brooders of choice

SCOTCH SHORTHORNS and SHROPSHIRE.

W. C. EDWARDS & CO., Ltd., Props. JOSEPH W. BARNET, Manager. om

T. DOUGLAS & SONS,

Strathroy, Ontario.

SHORTHORNS and GLYDESDALES

Present offerings: 12 young bulls of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. bull and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from own. om

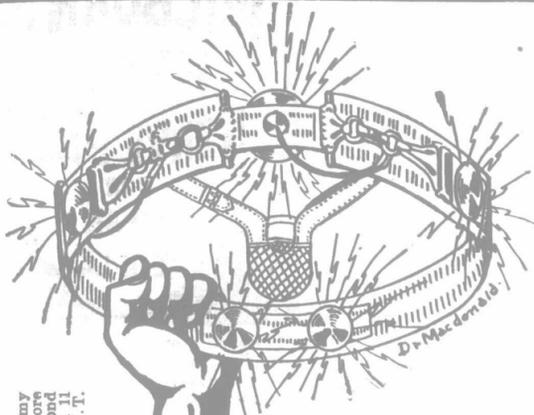
JOHN GARDHOUSE & SONS

Highfield P. O., Ont., Brooders of

Scotch and Scotch-topped Shorthorns, Hired Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scotch Prince (Imp.) Vol. 43, sired of herd, Royal Albert (Imp.) sired of herd of Vol. 44, sired of herd of Vol. 45, sired of herd of Vol. 46, sired of herd of Vol. 47, sired of herd of Vol. 48, sired of herd of Vol. 49, sired of herd of Vol. 50, sired of herd of Vol. 51, sired of herd of Vol. 52, sired of herd of Vol. 53, sired of herd of Vol. 54, sired of herd of Vol. 55, sired of herd of Vol. 56, sired of herd of Vol. 57, sired of herd of Vol. 58, sired of herd of Vol. 59, sired of herd of Vol. 60, sired of herd of Vol. 61, sired of herd of Vol. 62, sired of herd of Vol. 63, sired of herd of Vol. 64, sired of herd of Vol. 65, sired of herd of Vol. 66, sired of herd of Vol. 67, sired of herd of Vol. 68, sired of herd of Vol. 69, sired of herd of Vol. 70, sired of herd of Vol. 71, sired of herd of Vol. 72, sired of herd of Vol. 73, sired of herd of Vol. 74, sired of herd of Vol. 75, sired of herd of Vol. 76, sired of herd of Vol. 77, sired of herd of Vol. 78, sired of herd of Vol. 79, sired of herd of 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A Terrible Pain in the Stomach Cured



Disappeared
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Second
Time He
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Worn
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January 24th, 1905.
DEAR SIR—I have now worn your Electric Belt for 30 days and my health has improved wonderfully. Every day for one or two hours before meals I had a most terrible pain in my stomach, which disappeared the second time I had worn your Belt, and has not returned since. I have gained 11 pounds in weight. Yours respectfully,
ROBT. MACDONALD, Gravelle, Y. T.

Sufferer, why don't you give my marvellous cure a trial? A trial will cost you nothing. After 30 days, unless your case is one of the most stubborn, you will be almost well, indeed in 10 or 15 days' time you will experience great relief.

Disease cannot exist in a body that has been strengthened, built up and fed by this marvellous curative Electricity. That is why I offer you a free trial. I want to make you well. I want to banish Rheumatism, Weakness, Nervous Disorders, Indigestion, Liver and Kidney Troubles, Scrofula, Constipation, Eczema, Lumbago and many other complaints from the system.

I will cure every case I take in hand. There are specific quantities and peculiar properties about the Electricity as generated and applied by my method, which acts as a tremendous healing and curative force which simply overwhelms disease and ill health.

My fascinating book on the cure of disease should be in everyone's hands. It is free. Write for it, stating your case fully.

Remember I offer to every responsible person a free trial of the marvellous curative properties of my belt for 30 days. This is the strongest test that any cure could have.

DR. J. Q. MACDONALD, 8 Blouy Street, MONTREAL, QUE.

AYRSHIRE BULLS

Two 13-months-old bulls, choice individuals, from grand milking cows, at very much reduced prices. Also an extra lot of last fall bull calves, away down in price if taken soon.

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

W. F. STEPHEN,
P. O. box 101, Huntingdon, Que.
MAPLE CLOVE DAIRY AND STOCK FARM
Brooders of Oldendale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times.
R. W. WALKER & CO.,
Farm adjoins Central Experimental Farm.

Ayrshire Bulls for Sale—One 2-year-old, one 1-year-old, one 10 months old. All bred from long-teated, deep milking stock. Also Shropshire sheep, Berkshire pigs, B. Orpingtons and B. P. Rocks.
A. E. YULL, Carleton Place, Ont.

HOLSTEIN-FRIESIANS at RIDGEDALE FARM
6 bull calves for sale, from 3 to 9 months old, bred from rich milking strains. Special prices to quick buyers. For Perry, G. T. R., and Myrtle, C. P. R. Shipping Stations, Ontario County. R. W. Walker, Utica P. O., Ont.

HOLSTEINS and TAMWORTHS
One choice yearling bull, excellent quality and breeding. Will be sold at a bargain to a quick buyer; also a few bull calves. One boar ready for service. Young pigs ready to wean. Write at once for bargains.

A. C. HALLMAN,
Waterloo Co., Breslau, Ont.

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

IMPERIAL STOCK FARM HOLSTEINS.
For Sale: Four bull calves, 6 months old, whose sire's three nearest dams average 21.79 lbs. of butter in 7 days. Also young bulls by the sire of first-prize herd at London.
W. H. SIMMONS, New Durham, Ont.

HOLSTEIN COWS

We want you to remember that owned by me (formerly at Brookbank Stock Farm, Currie's) was all sorts of honors in milk tests at Toronto, Ottawa and Guelph (5 years), and among many other prizes in the show-ring, including sweepstakes at Toronto and Pan-American in competition with the best in the world. Our herd is always improving. We have now 5 cows whose official test average 24.4 lbs. butter in 7 days, 10 cows whose official test average 20.4 lbs. butter in 7 days, 15 (3 yrs. and up) whose official test average 19.6 lbs. butter in 7 days, 10 (3 and 4 yrs.) whose official test average 17 lbs. butter in 7 days, 10 heifers (average age 2 1/2 mos.) whose official test average 11 lbs. butter in 7 days. That is our idea of a dairy herd, and the kind of stock I handle. A few good young bulls, 1 to 13 mos., for sale.

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

Lyndale Holsteins

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

BROWN BROS., Lyn, Ont.

WOODBINE HOLSTEINS

Herd headed by Sir Mechthilde Posch, absolutely the best official-backed sire in Canada. Dam Ianthe Jewel Mechthilde, 26.8 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Aaltje Posch 4th, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale.
AYR, C. P. R.
Paris, G. T. R. A. Kennedy, Ayr, Ont.

Maple Grove Holsteins—In official tests they for 3-year-old, 1st 2-year-old and 1st yearling 2 years old. Special inducements are offered in high-class bulls to quick purchasers. For particulars address,
H. BURGESS, Canal, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

MILK PAINT.

Can some reader tell how to paint out-buildings with milk instead of paint oil and what preparations it takes? I know of one building that has stood for twenty years painted with milk, but do not know how it was prepared. G. B.

WATERPROOFING COTTON—PEANUTS
G. O., Alvinston, Ont., wishes to know how to waterproof cotton; also information as to peanut culture.

Ans.—For question re waterproofing, see answer to R. S., elsewhere in this issue. As to the peanuts, we do not feel confident that it would be wise to risk much time on them in Ontario. We understand a few have been grown at the O. A. C. at Guelph. You might write there for further information.

FATALITY IN COWS

Have had two cows die recently without apparently any cause whatever. They both gave full flow of milk until day before death, when they reduced to about one pound. Is it a case of poison, or sunstroke, and would stagnant water affect them? G. T.

Ans.—It is impossible from this information to form any idea of the nature or cause of the malady. Only a post-mortem by a competent person could reveal the secret, if, indeed, anyone could. Death may have been due to the causes you mention.

A BUDGET OF QUESTIONS.

A subscriber, Whitfield, Ont., writes: Would you kindly answer the following questions:

1. Is celery a healthy vegetable to eat? Give me some information how to cultivate and grow it successfully.
2. I sow radishes in good soil every year, and when they begin to grow nicely, small white worms begin to work in them so that we cannot use the radish at all. Could you give me a preventive?
3. Is lettuce a healthy vegetable to eat?
4. I cannot keep black ants out of my pantry or cupboard. Can you tell me how to get rid of them?

Ans.—1. Celery is considered very wholesome, and especially beneficial in nervous or rheumatic troubles. As the seed is very slow to germinate, it should be started early in the spring, say in March, in a hotbed or in boxes in the house. Transplant later to a cold frame, leaving the plantlets there just long enough to send out a new set of roots; then transplant to the open ground. The old system of trenching is not now generally used, the plants being placed on the level. Moist, peaty soil is best, but celery does very well in well-enriched, sandy loam, or in any good garden soil. Set the plants from six inches to a foot apart in the rows, and when well grown blanch. For the early varieties this is usually done by means of boards set edgewise each side of the rows, and drawn almost together at the top, where they are secured by wooden cleats; but for the late varieties, banking up with earth may be substituted. From two to four weeks are usually sufficient for blanching purposes. Celery needs plenty of water, and this precaution must not be forgotten throughout its entire growing season.

2. Perhaps you have used fresh manure on the radish bed, or have planted them too many years in the same place. It is best not to manure the soil for radishes, but to use soil that has been put in good order for some other crop in a preceding year. If this is done, and plenty of water given to ensure rapid growth there will be very little trouble from maggots.

3. Lettuce is very wholesome to the majority of people, although a few find it rather indigestible. It is supposed to have a very soothing effect on the nerves.

4. Directions for disposing of ants were given on page 965 of last issue. When possible to find the hill, any of these methods will be found effective. If the hill cannot be found, you may obtain temporary relief by moistening a small sponge and sprinkling it with sugar. The sponge will soon be full of the ants, when it may be dropped into hot water and the process repeated.

Boog Spavin

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

BARREN COW CURE

makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from
E. F. SHELLECK, Morrisburg, Ont.

Hampshire Down Sheep

GREAT ENGLISH PEDIGREE SALES
July, August and September, 1905

WATERS & RAWLENCE, Salisbury, England, will sell by PUBLIC AUCTION during the season upwards of
50,000 PURE-BRED EWES, LAMBS and RAMS
Including both rams and ewes from the best registered prize-winning flocks in the country. Commissions carefully executed. Address:
WATERS & RAWLENCE,
SALISBURY, ENGLAND.

W. W. CHAPMAN,
Secretary of the National Sheep Breeders' Association.
Secretary of the Kent or Romney Marsh Sheep Breeders' Association.
and late Secretary of the Southdown Sheep Society.
Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock especially selected and exported to America; quotations given, and all enquiries answered.
Address: HOWBRAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.
Cables—Sheepsale, London.

THE RIBY HERD and FLOCK

OF SHORTHORN AND LINCOLN CATTLE AND SHEEP
The largest of each in England. Established 150 years, with world-wide reputation both in the show ring and sale yard. Holders of the 100-guinea champion prize at Smithfield Show, London, 1902, against all breeds, and breeder of the two 100-guinea rams, and also the heaviest sheep at Chicago Show, 1902. Selections for sale.
Cables—Dudding, Keelby, England.

THE MARHAM COTSWOLDS

Largest flock of the breed in England, numbering 1,200. Over 200 rams dropped of annually. 100-guinea annual ram letting.
JULY 27th, 1905.
T. BROWN & SON, Market, Norfolk, Eng.
Downham Market, Norfolk, Eng.
Telegrams: Marham.
Railway station: Downham, G. T. Ry.

DORSET HORN SHEEP and SCOTCH SHORTHORNS

The latter representing the Nonpareil, Miss Rameaden, Miesse and Glister families exclusively, and the former comprising more Royal winners and more St. Louis prizewinners than any other flock in the world. Stock for sale always on hand.
John A. McGillivray, North Toronto, Ont.
FAIRVIEW SHROPSHIRE
Have retired from showing at full fair. But show sheep are up fitting. FOR SALE. For 22 years won more firsts than all competitors. At St. Louis won more than any three flocks. At last International won 9 of 14 firsts offered. Including champion ram and reserve to name. All making the greatest winnings on record. Have now the best breeding stock ever offered. Who wants good ones to strengthen their flocks?
JOHN CAMPBELL,
Fairview Farm, Woodville, Ontario
Leicester Sheep—Choice ram and ewe lambs; also a few yearlings for sale. For particulars write to **CHAR. F. HAW,** Milton Sta. and Tel. Omaha P. O.

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



THE 20th CENTURY TREATMENT,
The source of all Power, discovered
The Fountain of Youth, in the Laboratories of Dr. Jules Kohr.
The result of 50 years of scientific research. Lost manhood brought back after years of weakness and despair. Nature's Secret restored by combining three of the rarest chemical reagents in the world. This is no experiment. It is proved by its use in the Hospitals of Europe. Tens of thousands of weak and hopeless cases cured by 30 days treatment. This is a fact! Prove it yourself by a test. A 5 days treatment with full particulars sent absolutely free: All packages are carefully sealed in a plain wrapper with no mark. A full 30 days treatment (180 doses) with guaranteed cure or refund of money, for \$3.00.

Send for sworn Canadian testimonials received within the last twelve months. (7)
Dr. KOHR MEDICINE CO., P.O. Drawer 2341, MONTREAL

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

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

WOOL

E. T. CARTER & CO., Toronto.

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

W. H. ARKELL, Teeswater, Ont.
R. R. Stn.—Mildmay, G. T. R.; Teeswater, O. P. R.

Farnham Oxford Downs
We are offering 70 ranch rams, 20 flock headers, some of them imported, being St. Louis winners. Also 50 yearling ewes and 50 ram and ewe lambs.

HENRY ARKELL & SON, Arkell, Ont.

Lincolns are Booming

We have only a few more ewe and ram lambs and breeding ewes for sale. We have seven choice young bulls, Scotch topped, and a grand lot of heifers and young cows for sale at reasonable prices. Write or come and see us.

F. H. NEIL & SONS, Telegraph & R. R. station. LUCAN, ONT.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEVERING, Secretary, Lafayette, Indiana.

COTSWOLD SHEEP

MR. RUSSELL SWANWICK, breeder and owner of the Royal Agricultural College noted flock of pedigree Cotswold sheep. Rams and lambs of good type. Address: CIRENCESTER, or to JOHN THORNTON & CO., London, England

SHROPSHIRE

20 yearling ewes, 45 lambs, both sexes included, from Imp. ram. For particulars write to GEO. HINDMARSH, Ailsa Craig P. O., Ont.

Champion Cotswolds—Silver medal ram, silver medal ewe. Won all first prizes except one at Toronto, 1904. A number of choice ewes, bred to imported ram, for sale. E. F. PARK, Burgessville, Ont.

LINDEN OXFORDS

I have some good yearling rams; also a choice lot of ram and ewe lambs, sired by first-class imp. rams. Come and see them, or write.

R. J. HINE, Dutton, Ont.

NEWCASTLE HERD OF Tamworth Swine and Shorthorn Cattle

We have for quick sale some 50 head of Tamworths, consisting of boars ready for service, young sows bred and ready to breed. A whole lot of beauties, from 6 weeks to 3 and 4 months old, both sexes. Pairs not akin. These are nearly all the direct get of Colwill's Choice, our sweepstakes boar at Toronto for several years. Also a beautiful red Shorthorn bull calf, ready for service. Several calves of both sexes, and a number of heifers about ready to breed, and others well forward in calf. All at moderate prices. Daily mail at our door. All correspondence answered promptly. Write for what you want—we can generally supply you.

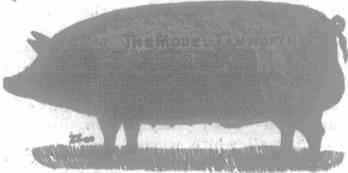
COLWILL BROS., NEWCASTLE, ONT.

TAMWORTHS AND HOLSTEINS

We have for quick sale a choice lot of spring pigs from winning sows. A few boars fit for service and one yearling boar. Also a choice lot of full calves, from 1 to 6 months old. **Bertman's**, The Gully P. O. Graton Station.

TAMWORTHS

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

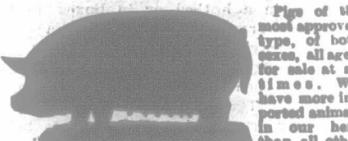


Improved Chester Whites and Tamworths

From this herd have been winners at leading exhibitions of Ontario and Quebec for a number of years. New importations, direct from England, will arrive in May. We have for sale choice lot of young sows, bred; also boars, 3 to 4 months old. Am booking orders for spring pigs. Pairs furnished not akin. Express charges prepaid. Pedigree and safe arrival guaranteed.

H. GEORGE & SONS, Crampton, Ont.

LARGE ENGLISH YORKSHIRES



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

D. O. PLATT & SON, MILLGROVE, ONT.

ENGLISH BERKSHIRES

For Grass the Duchess of Devonshire's Berkshire Herd Winners of 103 awards in 1904, including champion against all breeds in carcass competition, London Fat Stock Show. The breeding sows are sired by the champion boar, Baron Kilchener 8403; Polegate Decoy, Polegate Dame; Polegate Dawn—winners in England, Canada and United States—were exported from this herd. For prices and particulars apply to: C. Oompton Estate Office, Eastbourne, or to F. A. Walling, 7 Cavendish Cottages, Eastbourne, Sussex, England.

ORCHARD HOME HERD (Registered)

Large English Yorkshires and Berkshires

Present offering: A number of good Berkshire sows, due to farrow in August; also choice young stock of both breeds, at reasonable prices. We ship, express paid. Take stock back if not satisfactory. We buy our breeders, therefore best not reserved. Our stock are of the large, smooth bacon type that respond to the feed.

S. D. CRANDALL & SONS, Cherry Valley, Ont.

English Berkshires



A fine lot of young pigs of the Sallee and Highclere families. Prices reasonable.

JOHN RACEY, Jr., Lenoxville, Ont.

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

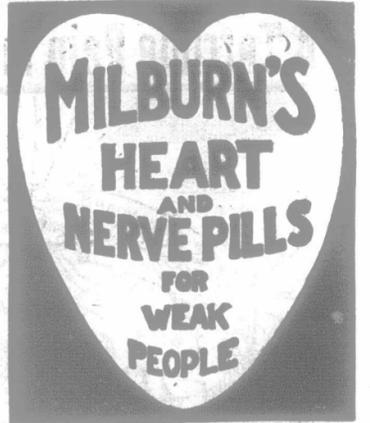
GOSSIP.

The report of the 20th annual meeting of the American Holstein-Friesian Association, held at Syracuse, N. Y., June 7th, reveals a very healthy condition of that organization. The report of the treasurer showed the total receipts (including a balance on hand from last year of \$32,295.06) to be \$51,775.29, and the disbursements of the year \$13,673.69, leaving a balance on hand of \$38,079.60, and a net gain for 1905 of \$5,788.54. Registrations for the year ending May 15th, 1905, were: Cows, 6,537; bulls, 3,226; transfer certificates issued, 10,505. The total number of cattle registered is 134,975, of which 91,000 are cows and 43,000 bulls. Mr. Malcolm H. Gardner, Darien, Wisconsin, was elected president. Mr. F. L. Houghton, Brattleboro, Vermont, is secretary.

The Jersey cow Loretta D., whose portrait appears on another page in this issue, will be recognized as a splendid type of a vigorous-working dairy cow. She made the best all-round record of all the Jerseys in the 120 days' test in the dairy cow demonstration at the World's Fair at St. Louis, and the highest record of net profit or difference between value of product and cost of feed of any cow of any breed in the test, her official record for the 120 days being as follows: Milk, 5,802.7 lbs.; fat, 280.16 lbs.; estimated butter, 330.03 lbs. Averages per day: Milk, 48.35 lbs.; estimated butter, 2.75 lbs. She was bred by Moore & Gilbert, Muncie, Indiana; owned by estate of W. S. Ladd, Portland, Oregon; sired by Ida's Rioter of St. Lambert 9th 41010, by Ida's Rioter of St. Lambert 18656, dam Cicero's Chemical Test 101087, by Cicero's Tormentor, by Tormentor 3533.

A small but good quality herd of Scotch and Scotch-topped Shorthorns are to be seen at Maple Grove Stock Farm, in Waterloo Co., Ont., situated nearly four miles from Elmira (G.T.R.), and it is expected there will be a C. P. R. station near the farm, as the Guelph and Goderich branch is being constructed near there now. This herd is being gradually increased by the enterprising proprietor, Mr. Lemuel B. Powell, Wallenstein P. O., who has not made the mistake that many make, viz., buying a fancy pedigree without much of an animal to back it up, but his practice has been to give individuality the preference rather than pedigree, but it does not follow that his cattle are plainly bred. The stock bull is a worthy son of Mayfly (imp.), a Toronto first-prize winner, his dam being by a son of Imp. Royal Sailor, one of the best sires that ever crossed the water. The bull referred to, Captain Mayfly 2nd =49532, a red two-year-old, is both deep and lengthy, with an excellent front. He was considered good enough to win first at Elmira last fall against keen competition, and would be a credit to any show-ring, were he fitted, and what is better still, he transmits his good qualities to his get, as his calves bear witness, among which are a pair of 9-months-old bulls, thick, soggy, red fellows, with plenty of masculine character, such as, if we mistake not, will finish into choice individuals. The females are made up of Lillys, Matchless, Red Ladys and Floras, perhaps the choice among them being Roan Daisy, rising 4 years, sire Red Duke =31789, dam Missie B., by Tupper. This is a choice large cow, with a good conformation; in short, she would be a valuable addition to many a show herd, with a little extra fitting. Mr. Powell will dispose of any that he has, and will meet visitors at Elmira by appointment, take them to his place, show them through his herd, and deem it a pleasure, whether they buy or not. See his ad. in this issue.

THREE SPECIAL LINES—Pamphlets from the International Harvester, which our readers can obtain on application, contain interesting information regarding gasoline engines, manure spreaders, and hay presses, all of which are rapidly coming into use on Canadian farms.



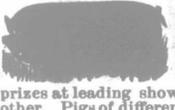
These pills cure all diseases and disorders arising from weak heart, worn out nerves or watery blood, such as Palpitation, Skip Beats, Throbbing, Smothering, Dizziness, Weak or Faint Spells, Anæmia, Nervousness, Sleeplessness, Brain Fog, General Debility and Lack of Vitality. They are a true heart tonic, nerve food and blood enricher, building up and renewing all the worn out and wasted tissues of the body and restoring perfect health. Price 50c. a box, or 3 for \$1.25, at all druggists.

WOODSTOCK YORKSHIRES



Summer offering: A choice lot of young pigs, from two to four months old, direct from imported stock of best strains. A number of imported young sows, bred to an imported show boar. Prices right. Write to H. J. DAVIS, WOODSTOCK, ONT.

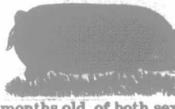
SNELGROVE BERKSHIRES



A number of large, good sows in farrow; also some choice young pigs for sale. Now is a good time to order. Our herd has won more first prizes at leading shows in Ontario than any other. Pigs of different ages for sale. Write for prices.

SNELL & LYONS, Snelgrove, Ont.

LARGE ENGLISH BERKSHIRES



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

WILLIAM WILSON, Box 191, Brampton, Ont.

GLENBURN HERD OF YORKSHIRES

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

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

Oakdale Berkshires



Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not akin.

L. E. MORGAN, Milliken Stn. and P. O.

Bargains in **YORKSHIRES** during March and April. Orders booked for Holsteins calves of both sexes. For description, price, etc., write

R HONEY, Minster Farm, Brickley, Ont.

CHESTER WHITES

Good bacon type, and **SHROPSHIRE SHEEP**. Write for prices.

W. E. WRIGHT, Glanworth, Ont.

Large English Berkshires—Boars fit for service and ready to breed. Choice stock, both sexes, from 6 to 8 weeks old. Pairs and trios not akin. Express prepaid.

JOHN BOYES, Jr., Rosebank Stock Farm o Churchill, Ont.

Owing to unforeseen circumstances, I have been unable to supply customers for **Poland Chinas**. Write me if you want any. For sale, cheap, pure-bred Berkshire boar, registered.

F. S. Wetherall, Rushton Farm, Cookshire, Que.

YORKSHIRES

for sale, all ages, from imported prize-winning stock, of both sexes. Pairs not akin.

GEO. M. SMITH, Haysville P. O., Ont.



Turns mother's drudge
Into child's play

Its double-acting rub does the work in one-half the time required by other machines, and it absolutely takes all dirt out of collars, cuffs, wristbands and neckbands.

It makes washday a pleasure—not a drudge.

If your dealer doesn't sell it, write

Thomas Brothers, Limited.
ST. THOMAS, ONT.

BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes invite applications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mostly between 11 and 13 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 214 Farley Ave., Toronto.

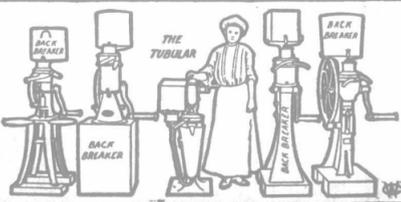
A woman always retains a large corner in her heart for her first love.

A skeptic is a man who doesn't share the good opinion we have of ourselves.

TUBULAR--or "Back Breaker?"

When you see the waist low Tubular you can't be driven into buying a back-breaking, "bucket bowl" separator. Can and crank are just the right height on the Tubular. Here is the largest Dairy Tubular along side four "back breakers." The girl with her hand on the Tubular is 5 feet, 4 inches tall. This is an exact reproduction from a photograph. Which kind for you? Makers of "back breakers" try to get their cans low by setting the cranks low. High cans break your back backward—low cranks break it forward. Unless you are a double jointed giant, you'll find a high can is no joke. To show you how high these "back breaker" cans really are, when the machines are set high enough to turn easily, we raised these "back breakers" 'til their crank axles were level with the Tubular crank axle. "Back breaker" makers don't like this picture—it's too true. They try to squirm out of it. You wouldn't like turning cranks as low as "back breaker" makers put them.

The low can is only one of many advantages Dairy Tubulars have over all others. Dairy Tubular bowls are simple—"back breakers" are complicated. Tubulars are self-oiling—no oil holes to fill up. "Back breakers" are oil drippers and oil wasters. To learn a lot more about Tubulars, write today for catalog N-198



The
Sharples Separator
Company
West Chester, Pa.

Chicago, Ill.
Toronto, Can.

WE CAN SELL THAT FARM FOR YOU

A small advertisement in our "WANT AND FOR SALE" column will be read by thousands of people throughout Canada and other parts of the world. Full particulars and terms under "Want and For Sale" heading in this issue. Address:

THE FARMER'S ADVOCATE AND HOME MAGAZINE, LONDON

QUESTIONS AND ANSWERS
Miscellaneous.

LOOKING FOR A COLLIE.

Could you give me any information as to where I might get a collie pup, or dog that is broken? G. A. F.

Ans.—From time to time advertisements of reputable breeders of collie dogs appear in our columns, and you would do well to consult some of these persons, by mail or personally.

NEW COLLEGE OF AGRICULTURE.

Would you please give me some information about Sir Wm. Macdonald's College at Ste. Anne, Que.?

1. What is the proper address of the College?

2. When will it be ready for admitting students?

3. Will it offer more advantages to a resident of Quebec than the Ontario Agricultural College? SUBSCRIBER.
Pontiac Co., Que.

Ans.—1. "The Sir William O. Macdonald Teachers' College and College of Agriculture, St. Anne de Bellevue, P. Q."

2. We understand in the autumn of 1906.

3. The proof of the pudding will be the eating.

UNSURE SIRE.

I bought an Ayrshire bull in June, 1904. He was then 18 months old, and good size for age. I let him serve 15 cows, and he only left 2 calves. This spring I let him serve 8 cows, and two have come back the second time. Would you advise me to get rid of him? N. M.

Ans.—It frequently happens that a young bull taken into new surroundings and subjected to different feeding and treatment is not sure for the first few months. We should not be disposed to discard him on the statement given, as the percentage of cows settled this spring so far is a considerable improvement, but if after a fair trial his record does not improve we would feed him for beef and get another.

WATERPROOFING COTTON - PRESERVING HAMS.

"Farmer," York Co., asks:

1. What preparation would you advise to apply on strong factory cotton, so as to make it waterproof and yet not crack, peel off, nor rot the cotton? I intend using it for a binder cover.

2. What is the best way to keep hams and shoulders of pork through the summer, that have been salted and afterward dried?

Ans.—1. To every 3 pints of boiling water add 2 ozs. yellow soap. When dissolved, stir in 1 quart boiled oil, and when cold add 1/4 pint gold size. The latter is a drier, and known as brown Japan. A hardware man tells us he has sold raw oil for the purpose, and that the canvas is simply well painted with that and nothing else.

2. Sew the hams and shoulders up in covers made of factory cotton, and hang in any cool, airy place.

FATALITY IN PIGS.

Two sows, farrowed a week ago, had no milk. Pigs seemed smart for first day, made a screeching sound, and died in two or three days. Sows did not care for their young. Sows were on pasture in orchard, where nothing disturbed them, and were fed one gallon daily, crushed oats and barley, with a little milk. I put three rings into the nose of each sow three weeks previous to farrowing. Do you think the ringing affected their young? What was cause of sows not having milk when liberally fed? A. S. F.

Ans.—We would not have risked ringing the sows when so far advanced in pregnancy, but if they went their full time and the pigs were smart when born it may not have had any injurious effect. If the sows had not sufficient exercise in the earlier months of gestation the pigs would be likely to lack vitality or the ambition to hustle for nourishment; or if their side teeth were grown long and sharp they may have irritated the sows in the attempt to suck, and caused them to desert their young. In such case these little tusks should be broken off with pinchers. It is difficult to account for such conditions sometimes.

Free to Weak Men



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

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

DR. McLAUGHLIN'S ELECTRIC BELT

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

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

READ WHAT THE CURED SAY:

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

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

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

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

FREE BOOK.

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

DR. M. S. McLAUGHLIN, 130 Yonge Street, Toronto, Can.

Dear Sir—Please forward me one of your Books, as advertised.

Name

Address

Office hours—9 a.m. to 8 p.m. Wednesday and Saturday till 8.30 p.m.

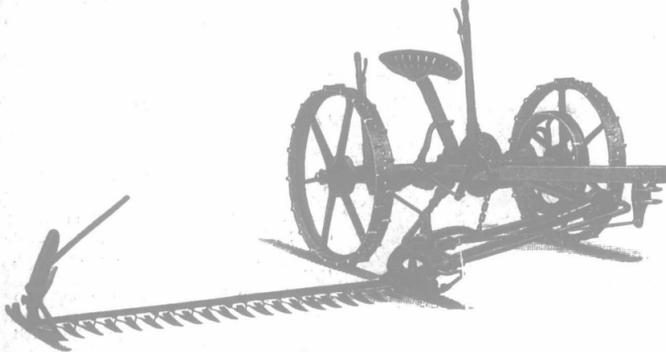
In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

DECIDE QUICKLY

You have very little time left in which to decide upon the Mower you are going to cut your HAY CROP with this year. Your old machine will be more bother than good to you—the most satisfactory thing you can do is to purchase a

New Frost & Wood No. 8 Mower

We guarantee that you will save Time, Trouble and Hay if you do so.



Frost & Wood New No. 8 Mower.

“This Machine is the acknowledged leader of the day, and is used on the farms of CANADA'S MOST PROSPEROUS FARMERS. The satisfaction our customers are deriving from its use is the best recommendation we can give you for it.

Internal Gear Spring Foot-Lift Durable Finish

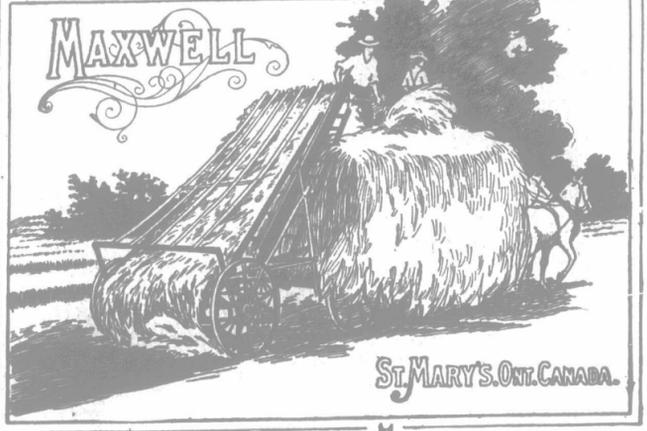
WRITE NOW for our Illustrated Catalogue “F.” and see sample machines at any of our agencies.

The Frost & Wood Company Head Office and Works:
Smith's Falls, Ont.

Toronto, Montreal, Quebec, St. John, Truro, Charlottetown.

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS *MAXWELL TEDDER, SIDE DELIVERY RAKE & LOADER.*

MAXWELL

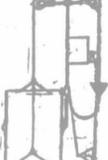
St. Mary's, Ont., Canada.

IS THERE AN AGENT IN YOUR DISTRICT IF NOT ADDRESS THE FIRM DIRECTLY

DAVID MAXWELL & SONS, ST. MARY'S, ONTARIO, CANADA.

WHEN WRITING PLEASE MENTION “ADVOCATE.”

THREE NEW PATENTS FOR FARMERS



The Automatic Aerator.
Driven by water. Will operate the whole night, and give to the milk its first quality.



Stone Lifter—Strong and durable. Can raise a stone weighing 18,000 lbs.

Snow Plow for making roads in winter. Will do more than 25 men and make better roads.

Address:

A. LEMIRE, Wotton, Quebec.
OR
WM. L. AMIRAUX, 40 Lansdowne Avenue, Toronto.

Grand Trunk Railway SYSTEM

LEWIS & CLARK CENTENNIAL EXPOSITION PORTLAND, ORE.
\$66.75 from London.
Good going daily until SEPTEMBER 30th. Valid returning within 90 days from date of issue.
Special side trips to California Points.

HOME-SEEKERS' EXCURSIONS
To points in Manitoba, Assinibola, Saskatchewan and Alberta. Rates, \$30 to \$39.50. Good going June 13th, 27th and July 12th. Valid returning within 60 days.

For tickets and full information, call on E. DE LA HOOKE, P. & T. A., Cor. Richmond and Dundas Sts., or E. RUSE, Depot Tkt. Agt., London, Ont.
J. D. McDONALD, District Passgr. Agent.

PLYMOUTH BINDER TWINE

This Trade-mark is on every ball of the best twine made.



Is matchless for its quality. It is the one kind that does not contain inferior fibre, free from tow, which in the common twine gathers and chokes at the binder needle, causing breaks and stoppages, wasting time of men and horses.

PLYMOUTH is made of the purest fibre obtainable, this allows it to be spun even and long, and in ordinary everyday use has, times without number, proved its right to first place. You will find PLYMOUTH imitated. The genuine may cost a little more, but there is reason for it in the quality.

SALES AGENTS IN MOST EVERY TOWN.

Wholesale Distributors: **PLYMOUTH BINDER TWINE AGENCY, Toronto, Ont.**

2 Tons in 1 Hour with 1 Good Horse

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



We also make Hand Feed Presses 2 1/2 Strokes to 1 Revolution; Saw Mills; Shingle Mills; Planers; Edgers; Lath Mills; Corn Mills; Water Wheels, etc. Write for Catalogue.

DeLoach Mill Manufacturing Co., Box 1487 Atlanta, Ga.

When Writing Advertisers Please Mention Farmer's Advocate

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CANADIAN PACIFIC

WILL SELL HOMESEEKERS' EXCURSION TICKETS TO THE NORTHWEST

Winnipeg	\$30.00	Estevan	\$33.00
Mowbray		Yorkton	
Deloraine	31.50	Sheho	33.50
Souris		Regina	
Brandon	31.55	Lipton	33.75
Lyleton		Moose Jaw	34.00
Lenore	32.00	Saskatoon	35.25
Miniote		Pr. Albert	35.00
Binscarth	32.25	Macleod	35.00
Moosomin	32.20	Calgary	35.50
Arcoia	32.50	Red Deer	39.50
		Strathcona	\$40.50

Going June 13th, returning until August 14th.
Going June 27th, returning until August 28th.
Going July 15th, returning until Sept. 16th.

Full particulars from Canadian Pacific Agent, W. FULTON, C. P. & T. A., London, Ont., or write to C. B. FOSTER, D. P. A., Toronto.

BISSELL'S STEEL ROLLER



Has a list of real good improvements. It runs on ROLLER BEARINGS, no cutting, no grinding, no squealing. Has closed heads in all drums, and is built of extra stiff steel throughout. Adapted for use in all Provinces. Send us your name and address for full particulars.

T. E. BISSELL, DEPT. W., ELORA, ONT.
None genuine without the name "Bissell."

Stock Farm for Sale—Burnbrae Stock Farm containing 149 acres, basement barn, dairy, hen, ice and engine houses, two dwellings, up to date in all respects, together with all thoroughbred stock, implements, etc. Holstein and Jersey stock for sale. Write for particulars. Apply **J. W. ROBERTSON, Vankeek Hill, Ont.**